

2021 Index

IEEE Transactions on Smart Grid

Vol. 12

This index covers all technical items—papers, correspondence, reviews, etc.—that appeared in this periodical during 2021, and items from previous years that were commented upon or corrected in 2021. Departments and other items may also be covered if they have been judged to have archival value.

The Author Index contains the primary entry for each item, listed under the first author's name. The primary entry includes the coauthors' names, the title of the paper or other item, and its location, specified by the publication abbreviation, year, month, and inclusive pagination. The Subject Index contains entries describing the item under all appropriate subject headings, plus the first author's name, the publication abbreviation, month, and year, and inclusive pages. Note that the item title is found only under the primary entry in the Author Index.

AUTHOR INDEX

A

- Abbaspour, A.**, *see* Fattaheian-Dehkordi, S., *TSG May 2021 1978-1988*
- Abbott, D.**, *see* Li, Q., *TSG Nov. 2021 4627-4640*
- Abdalaal, R.M.**, and Ho, C.N.M., Analysis and Validations of Modularized Distributed TL-UPQC Systems With Supervisory Remote Management System; *TSG May 2021 2638-2651*
- Abdelgadir, A.**, *see* Ahmed, B., *TSG March 2021 1761-1771*
- Abdella, J.**, Tari, Z., Anwar, A., Mahmood, A., and Han, F., An Architecture and Performance Evaluation of Blockchain-Based Peer-to-Peer Energy Trading; *TSG July 2021 3364-3378*
- Abiri Jahromi, A.**, *see* Khaw, Y.M., *TSG May 2021 2554-2565*
- Abusorrah, A.**, *see* Yan, M., *TSG March 2021 1314-1328*
- Abusorrah, A.**, *see* Yan, M., *TSG March 2021 1033-1047*
- Abusorrah, A.**, *see* Zhou, Q., *TSG Sept. 2021 3705-3717*
- Abusorrah, A.**, *see* Yan, M., *TSG Nov. 2021 4702-4714*
- Acharya, S.**, Dvorkin, Y., and Karri, R., Causative Cyberattacks on Online Learning-Based Automated Demand Response Systems ; *TSG July 2021 3548-3559*
- Adhikari, S.**, *see* Lakshminarayana, S., *TSG Sept. 2021 4415-4425*
- Aguiar, N.**, Dubey, A., and Gupta, V., Network-Constrained Stackelberg Game for Pricing Demand Flexibility in Power Distribution Systems; *TSG Sept. 2021 4049-4058*
- Ahmad, T.**, *see* Huang, C., *TSG July 2021 3043-3055*
- Ahmed, A.**, Sajan, K.S., Srivastava, A., and Wu, Y., Anomaly Detection, Localization and Classification Using Drifting Synchronphasor Data Streams; *TSG July 2021 3570-3580*
- Ahmed, B.**, Abdelgadir, A., Saied, N.A., and Karrar, A.A., A Compensated Distributed-Parameter Line Decoupling Approach for Real Time Applications; *TSG March 2021 1761-1771*
- Ahmed, S.**, Shamsad, S., Ghaffar, Z., Mahmood, K., Kumar, N., Parizi, R.M., and Choo, K.R., Signcryption Based Authenticated and Key Exchange Protocol for EI-Based V2G Environment ; *TSG Nov. 2021 5290-5298*
- Ai, Q.**, *see* Lu, T., *TSG May 2021 2176-2187*
- Ai, X.**, *see* Yang, Z., *TSG Jan. 2021 4-17*
- Ai, X.**, *see* Hu, J., *TSG Jan. 2021 468-478*
- Ai, X.**, *see* Zheng, C., *TSG May 2021 2611-2624*
- Ai, X.**, *see* Yao, W., *TSG Sept. 2021 4238-4249*
- Akcakaya, M.**, *see* Liu, B., *TSG May 2021 2462-2471*
- Alabdulwahab, A.**, *see* Yan, M., *TSG March 2021 1314-1328*
- Alabdulwahab, A.**, *see* Yan, M., *TSG March 2021 1033-1047*
- Alabdulwahab, A.**, *see* Zhou, Q., *TSG Sept. 2021 3705-3717*
- Alabdulwahab, A.**, *see* Yan, M., *TSG Nov. 2021 4702-4714*
- AlAshery, M.K.**, Yi, Z., Shi, D., Lu, X., Xu, C., Wang, Z., and Qiao, W., A Blockchain-Enabled Multi-Settlement Quasi-Ideal Peer-to-Peer Trading Framework; *TSG Jan. 2021 885-896*
- Alavi, S.A.**, Mehran, K., Vahidinasab, V., and Catalao, J.P.S., Forecast-Based Consensus Control for DC Microgrids Using Distributed Long Short-Term Memory Deep Learning Models; *TSG Sept. 2021 3718-3730*
- Albea, C.**, Bordons, C., and Ridaou, M.A., Robust Hybrid Control for Demand Side Management in Islanded Microgrids; *TSG Nov. 2021 4865-4875*
- Algarni, A.S.**, Suryanarayanan, S., Siegel, H.J., and Maciejewski, A.A., Combined Impact of Demand Response Aggregators and Carbon Taxation on Emissions Reduction in Electric Power Systems; *TSG March 2021 1825-1827*
- Alghamdi, B.**, and Canizares, C.A., Frequency Regulation in Isolated Microgrids Through Optimal Droop Gain and Voltage Control; *TSG March 2021 988-998*
- Alharbi, W.**, and Bhattacharya, K., Incentive Design for Flexibility Provisions From Residential Energy Hubs in Smart Grid; *TSG May 2021 2113-2124*
- Ali, U.**, *see* Jibrán, M., *TSG Sept. 2021 4059-4067*
- Aligholian, A.**, Shahsavari, A., Stewart, E.M., Cortez, E., and Mohsenian-Rad, H., Unsupervised Event Detection, Clustering, and Use Case Exposition in Micro-PMU Measurements; *TSG July 2021 3624-3636*
- Alizadeh, A.**, *see* Azizi, A., *TSG March 2021 1215-1223*
- AlSkaif, T.**, *see* Crespo-Vazquez, J.L., *TSG March 2021 1782-1793*
- Ameli, A.**, Saleh, K.A., El-Saadany, E.F., Salama, M.M.A., and Zeineldin, H.H., Wide-Band Current Transformers for Traveling-Waves-Based Protection Applications; *TSG Jan. 2021 845-858*
- Ameli, A.**, *see* Ghafouri, M., *TSG Nov. 2021 5221-5232*
- Aminifar, F.**, *see* Azizi, A., *TSG March 2021 1215-1223*
- Aminifar, F.**, *see* Nematkhah, F., *TSG Sept. 2021 4039-4048*
- Aminifar, F.**, *see* Heidari-Akhijahani, A., *TSG Sept. 2021 4543-4552*
- Amjady, N.**, *see* Ding, T., *TSG May 2021 2736-2740*
- Anderson, T.**, Muralidharan, M., Srivastava, P., Haghi, H.V., Cortes, J., Kleissl, J., Martinez, S., and Washom, B., Frequency Regulation With Heterogeneous Energy Resources: A Realization Using Distributed Control; *TSG Sept. 2021 4126-4136*
- Andrew, L.L.H.**, *see* Lusic, P., *TSG March 2021 1238-1248*
- Ansari, O.A.**, Chung, C.Y., and Zio, E., A Novel Framework for the Operational Reliability Evaluation of Integrated Electric Power-Gas Networks ; *TSG Sept. 2021 3901-3913*
- Antoniadou-Plytaria, K.**, Steen, D., Tuan, L.A., Carlson, O., and Fotouhi Ghazvini, M.A., Market-Based Energy Management Model of a Building Microgrid Considering Battery Degradation; *TSG March 2021 1794-1804*
- Anwar, A.**, *see* Abdella, J., *TSG July 2021 3364-3378*
- Anwar, M.B.**, and O'Malley, M., Strategic Participation of Residential Thermal Demand Response in Energy and Capacity Markets; *TSG July 2021 3070-3085*
- Apostolopoulou, D.**, *see* Toubeau, J., *TSG May 2021 2663-2674*
- Aprillia, H.**, Yang, H., and Huang, C., Statistical Load Forecasting Using Optimal Quantile Regression Random Forest and Risk Assessment Index; *TSG March 2021 1467-1480*
- Arahata, M.**, *see* Inoue, M., *TSG Jan. 2021 599-611*
- Arani, M.F.M.**, *see* Khaw, Y.M., *TSG May 2021 2554-2565*
- Arani, M.F.M.**, *see* Mohamed, A.S., *TSG Sept. 2021 4471-4483*
- Aravena, I.**, Chapin, S.J., and Ponce, C., Decentralized Failure-Tolerant Optimization of Electric Vehicle Charging ; *TSG Sept. 2021 4068-4078*
- Aravinthan, V.**, *see* Balachandran, T., *TSG Jan. 2021 692-703*
- Ardakanian, O.**, *see* Zishan, A.A., *TSG May 2021 2439-2449*
- Arias, N.B.**, Lopez, J.C., Hashemi, S., Franco, J.F., and Rider, M.J., Multi-Objective Sizing of Battery Energy Storage Systems for Stackable Grid Applications; *TSG May 2021 2708-2721*

- Aristidou, P.**, see Karagiannopoulos, S., *TSG Jan. 2021 268-278*
- Arrieta Paternina, M.R.**, see Mejia-Ruiz, G.E., *TSG May 2021 2425-2438*
- Arroyo, J.M.**, see Munoz-Delgado, G., *TSG Sept. 2021 4113-4125*
- Arzani, A.**, see Nasiri, M., *TSG Nov. 2021 5020-5029*
- Ashok, K.**, Li, D., Gebraeel, N., and Divan, D., Online Detection of Inter-Turn Winding Faults in Single-Phase Distribution Transformers Using Smart Meter Data; *TSG Nov. 2021 5073-5083*
- Asrari, A.**, see Moazeni, F., *TSG Sept. 2021 3680-3691*
- Assi, C.**, see Kabir, M.E., *TSG Sept. 2021 4377-4388*
- Assi, C.**, see Ghafouri, M., *TSG Nov. 2021 5221-5232*
- Athanasiadis, D.**, see Faiya, B.A., *TSG Sept. 2021 4102-4112*
- Attarha, A.**, Scott, P., Iria, J., and Thiebaux, S., Network-Secure and Price-Elastic Aggregator Bidding in Energy and Reserve Markets; *TSG May 2021 2284-2294*
- Avula, R.R.**, Chin, J., Oechtering, T.J., Hug, G., and Mansson, D., Design Framework for Privacy-Aware Demand-Side Management With Realistic Energy Storage Model; *TSG July 2021 3503-3513*
- Ayub, M.F.**, see Badar, H.M.S., *TSG Sept. 2021 4426-4434*
- Azim, M.I.**, Tushar, W., and Saha, T.K., Coalition Graph Game-Based P2P Energy Trading With Local Voltage Management; *TSG Sept. 2021 4389-4402*
- Azimi, S.M.**, and Lotfiard, S., Supplementary Controller for Seamless Transitions Between Microgrids Operation Modes; *TSG May 2021 2102-2112*
- Azizi, A.**, Aminifar, F., Moeini-Aghaie, M., and Alizadeh, A., Transactive Energy Market Mechanism With Loss Implication; *TSG March 2021 1215-1223*
- Azzaoui, M.E.**, Islanding Detection Method With Load Power Factor Improvement and High Frequency Transient Suppressing; *TSG Sept. 2021 4176-4184*
- Azzouz, M.A.**, see El-Sayed, W.T., *TSG May 2021 1904-1917*

B

- Babahajiani, P.**, Wang, L., Liu, J., and Zhang, P., Push-Sum-Enabled Resilient Microgrid Control; *TSG July 2021 3661-3664*
- Badar, H.M.S.**, Qadri, S., Shamshad, S., Ayub, M.F., Mahmood, K., and Kumar, N., An Identity Based Authentication Protocol for Smart Grid Environment Using Physical Uncloneable Function; *TSG Sept. 2021 4426-4434*
- Bae, S.**, see Zeng, T., *TSG July 2021 3353-3363*
- Baek, K.**, Lee, E., and Kim, J., Resident Behavior Detection Model for Environment Responsive Demand Response; *TSG Sept. 2021 3980-3989*
- Baez-Gonzalez, P.**, see Garcia-Torres, F., *TSG May 2021 1893-1903*
- Baharizadeh, M.**, see Golsorkhi, M.S., *TSG July 2021 2822-2833*
- Baharizadeh, M.**, Golsorkhi, M.S., Shahparasti, M., and Savaghebi, M., A Two-Layer Control Scheme Based on $P-V$ Droop Characteristic for Accurate Power Sharing and Voltage Regulation in DC Microgrids; *TSG July 2021 2776-2787*
- Bahrami, S.**, Chen, Y.C., and Wong, V.W.S., Deep Reinforcement Learning for Demand Response in Distribution Networks; *TSG March 2021 1496-1506*
- Bahrami, S.**, see Nematkhah, F., *TSG Sept. 2021 4039-4048*
- Bai, F.**, Yan, R., Saha, T.K., Cui, Y., and Pan, Z., Extraction of Dynamic Frequency Response Characteristics and Modelling of Modern Air Conditioners; *TSG Jan. 2021 897-900*
- Bai, F.**, see Cui, Y., *TSG Sept. 2021 4577-4580*
- Bai, H.**, see Mukherjee, S., *TSG May 2021 2389-2401*
- Bai, L.**, see Zhao, N., *TSG March 2021 1329-1345*
- Bai, L.**, see Chen, H., *TSG July 2021 3150-3162*
- Bajic, I.V.**, see Harell, A., *TSG Sept. 2021 4553-4563*
- Bakhshi-Jafarabadi, R.**, Sadeh, J., Chavez, J.d.J., and Popov, M., Two-Level Islanding Detection Method for Grid-Connected Photovoltaic System-Based Microgrid With Small Non-Detection Zone; *TSG March 2021 1063-1072*
- Balachandran, T.**, Manoharan, A., Aravinthan, V., and Singh, C., Component-Level Reliability Evaluation Model for Cyber Power Devices; *TSG Jan. 2021 692-703*
- Baldi, S.**, see Patel, A., *TSG July 2021 3438-3447*
- Ban, J.**, see Park, J., *TSG Nov. 2021 4641-4654*
- Bao, M.**, see Ding, Y., *TSG Sept. 2021 3928-3939*

- Bao, Z.**, Hu, Z., Kammen, D.M., and Su, Y., Data-Driven Approach for Analyzing Spatiotemporal Price Elasticities of EV Public Charging Demands Based on Conditional Random Fields; *TSG Sept. 2021 4363-4376*
- Bariya, M.**, Deka, D., and von Meier, A., Guaranteed Phase & Topology Identification in Three Phase Distribution Grids; *TSG July 2021 3605-3612*
- Barrena, J.A.**, see Paniagua, J., *TSG Sept. 2021 3868-3876*
- Baskarad, T.**, Kuzle, I., and Holjevac, N., Photovoltaic System Power Reserve Determination Using Parabolic Approximation of Frequency Response; *TSG July 2021 3175-3184*
- Beaude, O.**, see Sohet, B., *TSG Nov. 2021 5146-5157*
- Bellagente, P.**, see Pasetti, M., *TSG Nov. 2021 5310-5321*
- Belmega, E.V.**, see Lakshminarayana, S., *TSG Nov. 2021 5244-5257*
- Bendtsen, J.D.**, see Khatibi, M., *TSG May 2021 2048-2059*
- Bennani, I.L.**, see Wang, Y., *TSG July 2021 3637-3647*
- Bergna-Diaz, G.**, see Ferreira, D.M., *TSG July 2021 3215-3231*
- Bernardon, D.P.**, see Schmitz, M., *TSG Jan. 2021 324-337*
- Bernstein, A.**, see Sagan, A., *TSG July 2021 3097-3106*
- Besanger, Y.**, see Contreras-Ocana, J.E., *TSG Jan. 2021 215-226*
- Bhagavathy, S.M.**, see Samende, C., *TSG Nov. 2021 4584-4594*
- Bhagavathy, S.M.**, see Samende, C., *TSG Nov. 2021 4715-4725*
- Bharati, G.**, see Duan, C., *TSG Sept. 2021 4573-4576*
- Bhattacharya, K.**, see Calero, F., *TSG Jan. 2021 589-598*
- Bhattacharya, K.**, see Hafez, O., *TSG March 2021 1829*
- Bhattacharya, K.**, see Hafez, O., *TSG March 2021 1830*
- Bhattacharya, K.**, see Alharbi, W., *TSG May 2021 2113-2124*
- Bhattacharya, K.**, see Calero, F., *TSG May 2021 2077-2088*
- Bi, T.**, see Jia, K., *TSG Jan. 2021 671-679*
- Bi, T.**, see Jia, K., *TSG March 2021 1022-1032*
- Bi, T.**, see Xu, S., *TSG May 2021 2307-2319*
- Biagioni, D.**, see Zhang, X., *TSG Jan. 2021 420-431*
- Blaabjerg, F.**, see Cao, D., *TSG Sept. 2021 4137-4150*
- Blaabjerg, F.**, see Chen, M., *TSG Nov. 2021 4690-4701*
- Bo, R.**, see Ding, T., *TSG May 2021 2736-2740*
- Bobba, R.B.**, see Rajabi, A., *TSG July 2021 3538-3547*
- Bogdan, P.**, see Shalalfeh, L., *TSG May 2021 2578-2588*
- Bollen, M.H.J.**, see de Oliveira, R.A., *TSG Nov. 2021 5444-5456*
- Bordons, C.**, see Garcia-Torres, F., *TSG Jan. 2021 182-191*
- Bordons, C.**, see Albea, C., *TSG Nov. 2021 4865-4875*
- Botterud, A.**, see Jiang, Y., *TSG July 2021 3016-3029*
- Bottiau, J.**, see Toubeau, J., *TSG May 2021 2663-2674*
- Boulet, B.**, see Lin, W., *TSG Nov. 2021 5373-5384*
- Brandao, D.I.**, see Ferreira, D.M., *TSG July 2021 3215-3231*
- Briegel, B.**, see Schwenk, K., *TSG Nov. 2021 5135-5145*
- Browell, J.**, and Fasiolo, M., Probabilistic Forecasting of Regional Net-Load With Conditional Extremes and Gridded NWP; *TSG Nov. 2021 5011-5019*
- Bu, F.**, see Zhang, Q., *TSG Sept. 2021 3889-3900*
- Bu, F.**, Dehghanpour, K., and Wang, Z., Enriching Load Data Using Micro-PMUs and Smart Meters; *TSG Nov. 2021 5084-5094*
- Buja, G.**, see Giacomuzzi, S., *TSG July 2021 2941-2951*
- Burt, G.M.**, see Syed, M.H., *TSG March 2021 1747-1760*

C

- Cai, M.**, see Zhang, X., *TSG Jan. 2021 420-431*
- Cai, M.**, Yang, R., and Zhang, Y., Iteration-Based Linearized Distribution-Level Locational Marginal Price for Three-Phase Unbalanced Distribution Systems; *TSG Nov. 2021 4886-4896*
- Cai, S.**, Xie, Y., Wu, Q., Zhang, M., Jin, X., and Xiang, Z., Distributionally Robust Microgrid Formation Approach for Service Restoration Under Random Contingency; *TSG Nov. 2021 4926-4937*
- Cai, Z.**, see Xie, P., *TSG Sept. 2021 3780-3792*
- Cakmak, H.K.**, see Weber, M., *TSG Nov. 2021 5409-5419*
- Calero, F.**, Canizares, C.A., and Bhattacharya, K., Dynamic Modeling of Battery Energy Storage and Applications in Transmission Systems; *TSG Jan. 2021 589-598*
- Calero, F.**, Canizares, C.A., and Bhattacharya, K., Aggregated BESS Dynamic Models for Active Distribution Network Studies; *TSG May 2021 2077-2088*

- Canizares, C.**, Outstanding Associate Editors and Reviewers 2020; *TSG March 2021 920*
- Canizares, C.**, see Cordova, S., *TSG Nov. 2021 4668-4680*
- Canizares, C.A.**, see Calero, F., *TSG Jan. 2021 589-598*
- Canizares, C.A.**, see Mendieta, W., *TSG Jan. 2021 93-105*
- Canizares, C.A.**, see Alghamdi, B., *TSG March 2021 988-998*
- Canizares, C.A.**, see Calero, F., *TSG May 2021 2077-2088*
- Cao, B.**, see Gong, X., *TSG Jan. 2021 453-467*
- Cao, D.**, Zhao, J., Hu, W., Ding, F., Huang, Q., Chen, Z., and Blaabjerg, F., Data-Driven Multi-Agent Deep Reinforcement Learning for Distribution System Decentralized Voltage Control With High Penetration of PVs ; *TSG Sept. 2021 4137-4150*
- Cao, J.**, see Qin, Z., *TSG Sept. 2021 4079-4089*
- Cao, X.**, see Cheng, Z., *TSG Nov. 2021 5233-5243*
- Cao, X.**, see Xie, X., *TSG Nov. 2021 4765-4777*
- Cao, Y.**, see Liu, X., *TSG Jan. 2021 141-156*
- Cao, Z.**, see Qian, J., *TSG May 2021 2625-2637*
- Cao, Z.**, see Wan, C., *TSG Nov. 2021 5396-5408*
- Cardenas-Barrera, J.L.**, see Gong, X., *TSG Jan. 2021 453-467*
- Cardenas-Javier, R.**, see Mejia-Ruiz, G.E., *TSG May 2021 2425-2438*
- Carlson, O.**, see Antoniadou-Plytaria, K., *TSG March 2021 1794-1804*
- Castillo-Guerra, E.**, see Gong, X., *TSG Jan. 2021 453-467*
- Catalao, J.P.S.**, see Vahedipour-Dahraie, M., *TSG March 2021 1405-1415*
- Catalao, J.P.S.**, see Chen, Y., *TSG July 2021 3379-3389*
- Catalao, J.P.S.**, see Jang, Y., *TSG July 2021 3030-3042*
- Catalao, J.P.S.**, see Alavi, S.A., *TSG Sept. 2021 3718-3730*
- Catalao, J.P.S.**, see Nematkhah, F., *TSG Sept. 2021 4039-4048*
- Ceballos, S.**, see Yan, H.W., *TSG Sept. 2021 3755-3764*
- Centeno, V.A.**, see Ghasemkhani, A., *TSG March 2021 1519-1528*
- Cetinkaya, N.**, see Cimen, H., *TSG March 2021 977-987*
- Chabanloo, R.M.**, see Ghotbi-Maleki, M., *TSG March 2021 1185-1193*
- Chai, Q.**, see Chen, W., *TSG July 2021 2913-2928*
- Chai, Q.**, see Liu, H., *TSG Nov. 2021 5420-5433*
- Chakraborty, A.**, see Inoue, M., *TSG Jan. 2021 599-611*
- Chakraborty, A.**, see Mukherjee, S., *TSG May 2021 2389-2401*
- Chakraborty, P.**, see Duan, C., *TSG Sept. 2021 4573-4576*
- Chakraborty, S.**, see Patel, S., *TSG March 2021 1088-1103*
- Chakraborty, S.**, and Das, S., Correction to "Application of Smart Meters in High-Impedance Fault Detection on Distribution Systems" [May 19 3465-3473]; *TSG March 2021 1828*
- Chan, K.W.**, see Lu, X., *TSG March 2021 1507-1518*
- Chandorkar, M.C.**, see Vijay, A.S., *TSG July 2021 2991-3003*
- Chang, D.**, see Lee, Z.J., *TSG Sept. 2021 4339-4350*
- Chang, F.**, Cui, X., Wang, M., and Su, W., Region of Attraction Estimation for DC Microgrids With Constant Power Loads Using Potential Theory; *TSG Sept. 2021 3793-3808*
- Chang, J.**, Lee, G., Moon, S., and Hwang, P., A Novel Distributed Control Method for Interlinking Converters in an Islanded Hybrid AC/DC Microgrid; *TSG Sept. 2021 3765-3779*
- Chang, L.**, see Gong, X., *TSG Jan. 2021 453-467*
- Chapin, S.J.**, see Aravena, I., *TSG Sept. 2021 4068-4078*
- Charalampous, C.**, see Tziouvani, L., *TSG Sept. 2021 4195-4207*
- Charkhgard, H.**, see Dai, R., *TSG July 2021 3163-3174*
- Chatterjee, K.**, see Gupta, Y., *TSG Jan. 2021 169-181*
- Chatzivasileiadis, S.**, see Venzke, A., *TSG Jan. 2021 383-397*
- Chaudhuri, N.R.**, see Mahapatra, K., *TSG May 2021 2343-2354*
- Chauhan, S.V.S.**, and Gao, G.X., Synchronphasor Data Under GPS Spoofing: Attack Detection and Mitigation Using Residuals ; *TSG July 2021 3415-3424*
- Chauhan, S.V.S.**, and Gao, G.X., Spoofing Resilient State Estimation for the Power Grid Using an Extended Kalman Filter; *TSG July 2021 3404-3414*
- Chavarro-Barrera, L.**, Perez-Londono, S., and Mora-Florez, J., An Adaptive Approach for Dynamic Load Modeling in Microgrids; *TSG July 2021 2834-2843*
- Chavez, J.d.J.**, see Bakhshi-Jafarabadi, R., *TSG March 2021 1063-1072*
- Che, L.**, see Zhou, Q., *TSG Sept. 2021 3705-3717*
- Chen, B.**, Wang, J., Lu, X., Chen, C., and Zhao, S., Networked Microgrids for Grid Resilience, Robustness, and Efficiency: A Review; *TSG Jan. 2021 18-32*
- Chen, B.**, see Zhang, Y., *TSG Jan. 2021 623-634*
- Chen, B.**, see Ding, T., *TSG May 2021 2153-2164*
- Chen, B.**, see Duan, C., *TSG Sept. 2021 4573-4576*
- Chen, C.**, see Chen, B., *TSG Jan. 2021 18-32*
- Chen, C.**, Chen, Y., Zhang, K., Ni, M., Wang, S., and Liang, R., System Redundancy Enhancement of Secondary Frequency Control Under Latency Attacks; *TSG Jan. 2021 647-658*
- Chen, C.**, see Peng, N., *TSG Jan. 2021 574-588*
- Chen, C.**, see Liu, X., *TSG Jan. 2021 141-156*
- Chen, C.**, see Luo, Y., *TSG March 2021 1651-1662*
- Chen, C.**, see Ding, T., *TSG May 2021 2153-2164*
- Chen, C.**, see Li, X., *TSG July 2021 2788-2799*
- Chen, C.**, see Nazemi, M., *TSG July 2021 3200-3214*
- Chen, C.**, see Lin, F., *TSG Sept. 2021 3731-3741*
- Chen, D.**, see Ganesh, P., *TSG July 2021 3581-3593*
- Chen, G.**, see Zhang, Y., *TSG Jan. 2021 524-537*
- Chen, G.**, see Zhang, F., *TSG May 2021 2365-2377*
- Chen, G.**, see Li, C., *TSG July 2021 3289-3304*
- Chen, G.**, Zhang, H., Hui, H., and Song, Y., Fast Wasserstein-Distance-Based Distributionally Robust Chance-Constrained Power Dispatch for Multi-Zone HVAC Systems; *TSG Sept. 2021 4016-4028*
- Chen, H.**, see Ma, Z., *TSG Jan. 2021 227-238*
- Chen, H.**, see Xia, F., *TSG July 2021 3326-3338*
- Chen, H.**, Fu, L., Bai, L., Jiang, T., Xue, Y., Zhang, R., Chowdhury, B., Stekli, J., and Li, X., Distribution Market-Clearing and Pricing Considering Coordination of DSOs and ISO: An EPEC Approach ; *TSG July 2021 3150-3162*
- Chen, H.**, see Xie, P., *TSG Sept. 2021 3780-3792*
- Chen, J.**, see Wang, J., *TSG March 2021 1541-1551*
- Chen, J.**, see Jia, K., *TSG March 2021 1022-1032*
- Chen, K.**, Vantuch, T., Zhang, Y., Hu, J., and He, J., Fault Detection for Covered Conductors With High-Frequency Voltage Signals: From Local Patterns to Global Features; *TSG March 2021 1602-1614*
- Chen, K.**, see Zheng, Y., *TSG July 2021 3613-3623*
- Chen, L.**, Farajollahi, M., Ghamkhari, M., Zhao, W., Huang, S., and Mohsenian-Rad, H., Switch Status Identification in Distribution Networks Using Harmonic Synchronphasor Measurements; *TSG May 2021 2413-2424*
- Chen, L.**, see Xia, F., *TSG July 2021 3326-3338*
- Chen, L.**, Liu, N., Liu, L., Yu, X., and Xue, Y., Data-Driven Stochastic Game With Social Attributes for Peer-to-Peer Energy Sharing; *TSG Nov. 2021 5158-5171*
- Chen, M.**, Gao, C., Li, Z., Shahidehpour, M., Zhou, Q., Chen, S., and Yang, J., Aggregated Model of Data Network for the Provision of Demand Response in Generation and Transmission Expansion Planning; *TSG Jan. 2021 512-523*
- Chen, M.**, Gao, C., Shahidehpour, M., Li, Z., Chen, S., and Li, D., Internet Data Center Load Modeling for Demand Response Considering the Coupling of Multiple Regulation Methods; *TSG May 2021 2060-2076*
- Chen, M.**, Gao, C., Shahidehpour, M., and Li, Z., Incentive-Compatible Demand Response for Spatially Coupled Internet Data Centers in Electricity Markets; *TSG July 2021 3056-3069*
- Chen, M.**, see Faiya, B.A., *TSG Sept. 2021 4102-4112*
- Chen, M.**, Zhou, D., Wu, C., and Blaabjerg, F., Characteristics of Parallel Inverters Applying Virtual Synchronous Generator Control; *TSG Nov. 2021 4690-4701*
- Chen, M.**, see Li, Q., *TSG Nov. 2021 4627-4640*
- Chen, P.**, see Lin, F., *TSG Sept. 2021 3731-3741*
- Chen, Q.**, see Zheng, K., *TSG Jan. 2021 726-736*
- Chen, Q.**, see Li, Y., *TSG May 2021 1989-1999*
- Chen, S.**, see Chen, M., *TSG Jan. 2021 512-523*
- Chen, S.**, see Guo, Z., *TSG Jan. 2021 798-809*
- Chen, S.**, see Chen, M., *TSG May 2021 2060-2076*
- Chen, S.**, see Guo, Z., *TSG Sept. 2021 4151-4163*
- Chen, S.**, see Liu, W., *TSG Sept. 2021 4003-4015*
- Chen, T.**, see Liu, C., *TSG March 2021 1626-1639*
- Chen, T.**, see Jin, H., *TSG March 2021 1821-1824*

- Chen, T.**, see Xu, Y., *TSG May 2021 2696-2707*
- Chen, W.**, see Nazari, M.H., *TSG July 2021 2812-2821*
- Chen, W.**, Qiu, J., Zhao, J., Chai, Q., and Dong, Z.Y., Bargaining Game-Based Profit Allocation of Virtual Power Plant in Frequency Regulation Market Considering Battery Cycle Life; *TSG July 2021 2913-2928*
- Chen, X.**, see Zhou, J., *TSG Jan. 2021 205-214*
- Chen, X.**, see Liu, X., *TSG Jan. 2021 141-156*
- Chen, X.**, see Shi, M., *TSG March 2021 1011-1021*
- Chen, X.**, see Lu, T., *TSG May 2021 2176-2187*
- Chen, X.**, see Xu, Y., *TSG May 2021 2696-2707*
- Chen, X.**, see Shi, M., *TSG May 2021 1953-1963*
- Chen, X.**, see Zhang, W., *TSG Sept. 2021 4435-4446*
- Chen, X.**, and Li, N., Leveraging Two-Stage Adaptive Robust Optimization for Power Flexibility Aggregation; *TSG Sept. 2021 3954-3965*
- Chen, X.**, see Yan, L., *TSG Nov. 2021 5124-5134*
- Chen, X.**, Li, Y., Shimada, J., and Li, N., Online Learning and Distributed Control for Residential Demand Response; *TSG Nov. 2021 4843-4853*
- Chen, X.**, see Zhang, S., *TSG Nov. 2021 4788-4798*
- Chen, Y.**, see Fang, Z., *TSG Jan. 2021 239-250*
- Chen, Y.**, see Chen, C., *TSG Jan. 2021 647-658*
- Chen, Y.**, Yao, Y., and Zhang, Y., A Robust State Estimation Method Based on SOCP for Integrated Electricity-Heat System; *TSG Jan. 2021 810-820*
- Chen, Y.**, see Zhou, J., *TSG Jan. 2021 205-214*
- Chen, Y.**, see Liu, Y., *TSG Jan. 2021 715-725*
- Chen, Y.**, see Shi, M., *TSG March 2021 1011-1021*
- Chen, Y.**, Zhao, C., Low, S.H., and Mei, S., Approaching Prosumer Social Optimum via Energy Sharing With Proof of Convergence; *TSG May 2021 2484-2495*
- Chen, Y.**, Qi, D., Dong, H., Li, C., Li, Z., and Zhang, J., A FDI Attack-Resilient Distributed Secondary Control Strategy for Islanded Microgrids; *TSG May 2021 1929-1938*
- Chen, Y.**, see Li, B., *TSG July 2021 3314-3325*
- Chen, Y.**, Wei, W., Wang, H., Zhou, Q., and Catalao, J.P.S., An Energy Sharing Mechanism Achieving the Same Flexibility as Centralized Dispatch; *TSG July 2021 3379-3389*
- Chen, Y.**, see Ganesh, P., *TSG July 2021 3581-3593*
- Chen, Y.**, see Yan, L., *TSG Nov. 2021 5124-5134*
- Chen, Y.**, see Li, T., *TSG Nov. 2021 4897-4913*
- Chen, Y.C.**, see Bahrami, S., *TSG March 2021 1496-1506*
- Chen, Z.**, see Zheng, C., *TSG May 2021 2611-2624*
- Chen, Z.**, see Yan, Y., *TSG July 2021 3493-3502*
- Chen, Z.**, see Cao, D., *TSG Sept. 2021 4137-4150*
- Cheng, H.**, Huang, W., Shen, C., Peng, Y., Shuai, Z., and Shen, Z.J., Transient Voltage Stability of Paralleled Synchronous and Virtual Synchronous Generators With Induction Motor Loads; *TSG Nov. 2021 4983-4999*
- Cheng, S.**, see Yang, X., *TSG May 2021 1836-1852*
- Cheng, S.**, see Yao, W., *TSG Sept. 2021 4238-4249*
- Cheng, Z.**, Ye, F., Cao, X., and Chow, M., A Homomorphic Encryption-Based Private Collaborative Distributed Energy Management System; *TSG Nov. 2021 5233-5243*
- Cherkaoui, R.**, see Yuan, Z., *TSG Sept. 2021 4164-4175*
- Chi, Y.**, see Liao, J., *TSG July 2021 2966-2979*
- Chiang, H.**, see Su, J., *TSG July 2021 3004-3015*
- Chin, J.**, see Avula, R.R., *TSG July 2021 3503-3513*
- Choi, J.S.**, Lee, S., and Chun, S.J., A Queuing Network Analysis of a Hierarchical Communication Architecture for Advanced Metering Infrastructure; *TSG Sept. 2021 4318-4326*
- Chong, K.T.**, see Long, B., *TSG March 2021 953-964*
- Chong, K.T.**, see Long, B., *TSG July 2021 3138-3149*
- Choo, K.R.**, see Ahmed, S., *TSG Nov. 2021 5290-5298*
- Chow, M.**, see Cheng, Z., *TSG Nov. 2021 5233-5243*
- Chowdhury, B.**, see Chen, H., *TSG July 2021 3150-3162*
- Chu, B.**, see Xu, Z., *TSG July 2021 3560-3569*
- Chu, R.**, see Dong, C., *TSG Jan. 2021 871-884*
- Chu, X.**, see He, L., *TSG May 2021 1939-1952*
- Chu, Z.**, Zhang, N., and Teng, F., Frequency-Constrained Resilient Scheduling of Microgrid: A Distributionally Robust Approach; *TSG Nov. 2021 4914-4925*
- Chun, S.J.**, see Choi, J.S., *TSG Sept. 2021 4318-4326*
- Chung, C.Y.**, see Ansari, O.A., *TSG Sept. 2021 3901-3913*
- Chung, C.Y.**, see Hu, B., *TSG Nov. 2021 5201-5211*
- Ci, S.**, see Yong, P., *TSG Sept. 2021 3966-3979*
- Cimen, H.**, Cetinkaya, N., Vasquez, J.C., and Guerrero, J.M., A Microgrid Energy Management System Based on Non-Intrusive Load Monitoring via Multitask Learning; *TSG March 2021 977-987*
- Claeys, S.**, Deconinck, G., and Geth, F., Voltage-Dependent Load Models in Unbalanced Optimal Power Flow Using Power Cones; *TSG July 2021 2890-2902*
- Contreras, J.**, see Munoz-Delgado, G., *TSG Sept. 2021 4113-4125*
- Contreras-Ocana, J.E.**, Singh, A., Besanger, Y., and Wurtz, F., Integrated Planning of a Solar/Storage Collective; *TSG Jan. 2021 215-226*
- Cordova, S.**, Canizares, C., Lorca, A., and Olivares, D.E., An Energy Management System With Short-Term Fluctuation Reserves and Battery Degradation for Isolated Microgrids; *TSG Nov. 2021 4668-4680*
- Cortez, J.**, see Anderson, T., *TSG Sept. 2021 4126-4136*
- Cortez, E.**, see Aligholian, A., *TSG July 2021 3624-3636*
- Crespo-Vazquez, J.L.**, AlSkaif, T., Gonzalez-Rueda, A.M., and Gibescu, M., A Community-Based Energy Market Design Using Decentralized Decision-Making Under Uncertainty; *TSG March 2021 1782-1793*
- Crisostomi, E.**, see Moschella, M., *TSG March 2021 1772-1781*
- Cuadrado Vega, A.A.**, see Garcia-Perez, D., *TSG May 2021 2722-2731*
- Cui, M.**, see Fan, S., *TSG Jan. 2021 251-267*
- Cui, S.**, Wang, Y., Shi, Y., and Xiao, J., Community Energy Cooperation With the Presence of Cheating Behaviors; *TSG Jan. 2021 561-573*
- Cui, X.**, see Chang, F., *TSG Sept. 2021 3793-3808*
- Cui, Y.**, see Bai, F., *TSG Jan. 2021 897-900*
- Cui, Y.**, see Su, Y., *TSG May 2021 2355-2364*
- Cui, Y.**, Hu, Z., and Duan, X., Optimal Pricing of Public Electric Vehicle Charging Stations Considering Operations of Coupled Transportation and Power Systems; *TSG July 2021 3278-3288*
- Cui, Y.**, Bai, F., Yan, R., Saha, T., Ko, R.K.L., and Liu, Y., Source Authentication of Distribution Synchronphasors for Cybersecurity of Microgrids; *TSG Sept. 2021 4577-4580*

D

- da Silva, S.A.O.**, see Manrique Machado, S.d.J.M., *TSG Jan. 2021 79-92*
- Dabbaghjamesh, M.**, Moeini, A., Hatzigiorgiou, N.D., and Zhang, J., Deep Learning-Based Real-Time Switching of Hybrid AC/DC Transmission Networks; *TSG May 2021 2331-2342*
- Dai, R.**, see Soofi, A.F., *TSG March 2021 1663-1673*
- Dai, R.**, Esmailbeigi, R., and Charkhgard, H., The Utilization of Shared Energy Storage in Energy Systems: A Comprehensive Review; *TSG July 2021 3163-3174*
- Dai, Y.**, see Tian, W., *TSG Sept. 2021 4259-4268*
- Dan, G.**, see Delcourt, M., *TSG Sept. 2021 4460-4470*
- Darvishi, A.**, see Mukherjee, S., *TSG May 2021 2389-2401*
- Das, S.**, see Chakraborty, S., *TSG March 2021 1828*
- Das, S.**, see Kumar, A., *TSG July 2021 2844-2859*
- Dashti, R.**, see Mirshekali, H., *TSG March 2021 1277-1288*
- David, R.P.**, see Pasetti, M., *TSG Nov. 2021 5310-5321*
- Davison, P.**, see Zografou-Barredo, N., *TSG May 2021 1867-1879*
- De Carne, G.**, see Giacomuzzi, S., *TSG July 2021 2941-2951*
- De Greve, Z.**, see Toubeau, J., *TSG May 2021 2663-2674*
- De Greve, Z.**, see Hupez, M., *TSG May 2021 2201-2211*
- de Leon, F.**, see Faiya, B.A., *TSG Sept. 2021 4102-4112*
- de Oliveira, A.A.**, see Manrique Machado, S.d.J.M., *TSG Jan. 2021 79-92*
- de Oliveira, R.A.**, Ravindran, V., Ronnberg, S.K., and Bollen, M.H.J., Deep Learning Method With Manual Post-Processing for Identification of Spectral Patterns of Waveform Distortion in PV Installations; *TSG Nov. 2021 5444-5456*
- de Sa, A.O.**, see Pasetti, M., *TSG Nov. 2021 5310-5321*

- Debbah, M.**, see Lakshminarayana, S., *TSG Jan. 2021* 635-646
- Deconinck, G.**, see Wei, B., *TSG March 2021* 1455-1466
- Deconinck, G.**, see Peirelinck, T., *TSG March 2021* 1370-1379
- Deconinck, G.**, see Claeys, S., *TSG July 2021* 2890-2902
- Dehghanian, P.**, see Nazemi, M., *TSG July 2021* 3200-3214
- Dehghanpour, K.**, see Xie, J., *TSG March 2021* 1674-1684
- Dehghanpour, K.**, see Zhang, Q., *TSG March 2021* 1048-1062
- Dehghanpour, K.**, see Yuan, Y., *TSG Sept. 2021* 4308-4317
- Dehghanpour, K.**, see Bu, F., *TSG Nov. 2021* 5084-5094
- Deka, D.**, see Bariya, M., *TSG July 2021* 3605-3612
- Delcourt, M.**, Shereen, E., Dan, G., Le Boudec, J., and Paolone, M., Time-Synchronization Attack Detection in Unbalanced Three-Phase Systems; *TSG Sept. 2021* 4460-4470
- Delkosh, H.**, see Jorjani, M., *TSG Nov. 2021* 5322-5334
- Demoulias, C.S.**, see Kontis, E.O., *TSG Nov. 2021* 4971-4982
- Deng, C.**, see Lian, Z., *TSG Sept. 2021* 4494-4505
- Deng, J.**, see He, R., *TSG July 2021* 3458-3467
- Deng, L.**, see Yang, T., *TSG May 2021* 2027-2036
- Diao, R.**, see Xie, J., *TSG March 2021* 1674-1684
- Diaz-Blanco, I.**, see Garcia-Perez, D., *TSG May 2021* 2722-2731
- Dinavahi, V.**, see Duan, T., *TSG May 2021* 2544-2553
- Dinavahi, V.**, see Hu, W., *TSG July 2021* 2879-2889
- Dinavahi, V.**, see Duan, T., *TSG July 2021* 3673-3675
- Ding, F.**, see Cao, D., *TSG Sept. 2021* 4137-4150
- Ding, L.**, Nie, S., Li, W., Hu, P., and Liu, F., Multiple Line Outage Detection in Power Systems by Sparse Recovery Using Transient Data; *TSG July 2021* 3448-3457
- Ding, T.**, see Zhang, H., *TSG March 2021* 1194-1205
- Ding, T.**, see Liang, Y., *TSG March 2021* 1380-1393
- Ding, T.**, Qu, M., Wang, Z., Chen, B., Chen, C., and Shahidehpour, M., Power System Resilience Enhancement in Typhoons Using a Three-Stage Day-Ahead Unit Commitment; *TSG May 2021* 2153-2164
- Ding, T.**, Qu, M., Amjady, N., Wang, F., Bo, R., and Shahidehpour, M., Tracking Equilibrium Point Under Real-Time Price-Based Residential Demand Response; *TSG May 2021* 2736-2740
- Ding, Y.**, Shao, C., Hu, B., Bao, M., Niu, T., Xie, K., and Singh, C., Operational Reliability Assessment of Integrated Heat and Electricity Systems Considering the Load Uncertainties; *TSG Sept. 2021* 3928-3939
- Ding, Z.**, see Liang, Y., *TSG March 2021* 1380-1393
- Ding, Z.**, see Xu, Y., *TSG Nov. 2021* 4595-4606
- Disfani, V.R.**, see Pecenek, Z.K., *TSG Jan. 2021* 33-42
- Dissanayake, A.M.**, and Ekneligoda, N.C., Decentralized Optimal Stabilization of Active Loads in Islanded Microgrids; *TSG March 2021* 932-942
- Divan, D.**, see Ashok, K., *TSG Nov. 2021* 5073-5083
- Dobson, I.**, see Ju, W., *TSG Jan. 2021* 859-870
- Dominguez-Gonzalez, M.**, see Garcia-Perez, D., *TSG May 2021* 2722-2731
- Dong, C.**, Chu, R., Morstyn, T., McCulloch, M.D., and Jia, H., Online Rolling Evolutionary Decoder-Dispatch Framework for the Secondary Frequency Regulation of Time-Varying Electrical-Grid-Electric-Vehicle System; *TSG Jan. 2021* 871-884
- Dong, H.**, see Chen, Y., *TSG May 2021* 1929-1938
- Dong, H.**, see Li, S., *TSG Nov. 2021* 5475-5478
- Dong, J.**, see Wang, X., *TSG Sept. 2021* 3990-4002
- Dong, S.**, see Tang, K., *TSG Jan. 2021* 821-833
- Dong, S.**, see Tang, K., *TSG Nov. 2021* 5457-5471
- Dong, X.**, see Qian, J., *TSG May 2021* 2625-2637
- Dong, Z.**, see Li, C., *TSG July 2021* 3289-3304
- Dong, Z.**, see Xu, Y., *TSG Nov. 2021* 4595-4606
- Dong, Z.Y.**, see Zhao, H., *TSG May 2021* 2508-2517
- Dong, Z.Y.**, see Jiang, Y., *TSG July 2021* 3016-3029
- Dong, Z.Y.**, see Kong, W., *TSG July 2021* 3086-3096
- Dong, Z.Y.**, see Chen, W., *TSG July 2021* 2913-2928
- Dong, Z.Y.**, see Saberi, H., *TSG Sept. 2021* 4090-4101
- Dong, Z.Y.**, see Liu, H., *TSG Nov. 2021* 5420-5433
- Doolla, S.**, see Gupta, Y., *TSG Jan. 2021* 169-181
- Doolla, S.**, see Vijay, A.S., *TSG July 2021* 2991-3003
- Dou, X.**, see Xie, X., *TSG Nov. 2021* 4765-4777
- Dragicovic, T.**, see Li, Y., *TSG May 2021* 1880-1892
- Du, M.**, see Tian, W., *TSG Sept. 2021* 4259-4268
- Du, M.**, Pierrou, G., Wang, X., and Kassouf, M., Targeted False Data Injection Attacks Against AC State Estimation Without Network Parameters; *TSG Nov. 2021* 5349-5361
- Du, Y.**, Liu, Y., Wang, X., Fang, J., Sheng, G., and Jiang, X., Predicting Weather-Related Failure Risk in Distribution Systems Using Bayesian Neural Network; *TSG Jan. 2021* 350-360
- Du, Y.**, Tu, H., Lu, X., and Lukic, S., Privacy-Preserving Distributed Average Observers in Distribution Systems With Grid-Forming Inverters; *TSG Nov. 2021* 5000-5010
- Duan, C.**, Bharati, G., Chakraborty, P., Chen, B., Nishikawa, T., and Motter, A.E., Practical Challenges in Real-Time Demand Response; *TSG Sept. 2021* 4573-4576
- Duan, T.**, Huang, Z., and Dinavahi, V., RTCE: Real-Time Co-Emulation Framework for EMT-Based Power System and Communication Network on FPGA-MPSoc Hardware Architecture; *TSG May 2021* 2544-2553
- Duan, T.**, and Dinavahi, V., Starlink Space Network-Enhanced Cyber-Physical Power System; *TSG July 2021* 3673-3675
- Duan, X.**, see Cui, Y., *TSG July 2021* 3278-3288
- Dubey, A.**, see Aguiar, N., *TSG Sept. 2021* 4049-4058
- Dufek, E.**, see Luo, Y., *TSG March 2021* 1651-1662
- Dujic, D.**, see Kim, S., *TSG July 2021* 2860-2868
- Duque, E.M.S.**, Vergara, P.P., Nguyen, P.H., van der Molen, A., and Slootweg, J.G., Conditional Multivariate Elliptical Copulas to Model Residential Load Profiles From Smart Meter Data; *TSG Sept. 2021* 4280-4294
- Dvorkin, Y.**, see Acharya, S., *TSG July 2021* 3548-3559

E

- Edib, S.N.**, Lin, Y., Vokkarane, V.M., Qiu, F., Yao, R., and Zhao, D., Optimal PMU Restoration for Power System Observability Recovery After Massive Attacks; *TSG March 2021* 1565-1576
- Ekneligoda, N.C.**, see Dissanayake, A.M., *TSG March 2021* 932-942
- El Khatib, S.**, see Mohandes, B., *TSG May 2021* 2212-2223
- El Moursi, M.S.**, see Mohandes, B., *TSG May 2021* 2212-2223
- El-Saadany, E.F.**, see Elghitani, F., *TSG Jan. 2021* 761-773
- El-Saadany, E.F.**, see Ameli, A., *TSG Jan. 2021* 845-858
- El-Saadany, E.F.**, see El-Sayed, W.T., *TSG May 2021* 1904-1917
- El-Sayed, W.T.**, Azzouz, M.A., Zeineldin, H.H., and El-Saadany, E.F., A Harmonic Time-Current-Voltage Directional Relay for Optimal Protection Coordination of Inverter-Based Islanded Microgrids; *TSG May 2021* 1904-1917
- Elghitani, F.**, and El-Saadany, E.F., Efficient Assignment of Electric Vehicles to Charging Stations; *TSG Jan. 2021* 761-773
- Ellman, D.**, and Xiao, Y., Incentives to Manipulate Demand Response Bases with Uncertain Event Schedules; *TSG March 2021* 1358-1369
- Eskandari, M.**, and Savkin, A.V., On the Impact of Fault Ride-Through on Transient Stability of Autonomous Microgrids: Nonlinear Analysis and Solution; *TSG March 2021* 999-1010
- Esmailbeigi, R.**, see Dai, R., *TSG July 2021* 3163-3174

F

- F, A.N.**, Gomez, J.S., Llanos, J., Rute, E., Saez, D., and Sumner, M., Distributed Predictive Control Strategy for Frequency Restoration of Microgrids Considering Optimal Dispatch; *TSG July 2021* 2748-2759
- Faiya, B.A.**, Athanasiadis, D., Chen, M., McArthur, S., Kockar, I., Lu, H., and de Leon, F., A Self-Organizing Multi-Agent System for Distributed Voltage Regulation; *TSG Sept. 2021* 4102-4112
- Fan, B.**, see Peng, J., *TSG Jan. 2021* 106-116
- Fan, B.**, and Wang, X., Distributed Privacy-Preserving Active Power Sharing and Frequency Regulation in Microgrids; *TSG July 2021* 3665-3668
- Fan, B.**, see Fan, Z., *TSG Nov. 2021* 4607-4615
- Fan, S.**, He, G., Zhou, X., and Cui, M., Online Optimization for Networked Distributed Energy Resources With Time-Coupling Constraints; *TSG Jan. 2021* 251-267

- Fan, Z.**, Fan, B., and Liu, W., Distributed Control of DC Microgrids for Optimal Coordination of Conventional and Renewable Generators; *TSG Nov. 2021 4607-4615*
- Fang, J.**, see Du, Y., *TSG Jan. 2021 350-360*
- Fang, J.**, see Zheng, C., *TSG May 2021 2611-2624*
- Fang, J.**, see Yao, W., *TSG Sept. 2021 4238-4249*
- Fang, Z.**, Lin, Y., Song, S., Li, C., Lin, X., and Chen, Y., State Estimation for Situational Awareness of Active Distribution System With Photovoltaic Power Plants; *TSG Jan. 2021 239-250*
- Farajollahi, M.**, see Kamal, M., *TSG March 2021 1577-1588*
- Farajollahi, M.**, see Chen, L., *TSG May 2021 2413-2424*
- Farajzadeh-Zanjani, M.**, Hallaji, E., Razavi-Far, R., Saif, M., and Parvania, M., Adversarial Semi-Supervised Learning for Diagnosing Faults and Attacks in Power Grids; *TSG July 2021 3468-3478*
- Fardanesh, B.**, see Mukherjee, S., *TSG May 2021 2389-2401*
- Faris, A.**, see Ju, W., *TSG Jan. 2021 859-870*
- Farivar, G.G.**, see Yan, H.W., *TSG Sept. 2021 3755-3764*
- Fasiolo, M.**, see Browell, J., *TSG Nov. 2021 5011-5019*
- Fattaheian-Dehkordi, S.**, Tavakkoli, M., Abbaspour, A., Fotuhi-Firuzabad, M., and Lehtonen, M., An Incentive-Based Mechanism to Alleviate Active Power Congestion in a Multi-Agent Distribution System; *TSG May 2021 1978-1988*
- Faustine, A.**, Pereira, L., and Klemenjak, C., Adaptive Weighted Recurrence Graphs for Appliance Recognition in Non-Intrusive Load Monitoring; *TSG Jan. 2021 398-406*
- Fazeli, M.**, see Nasser, N., *TSG Jan. 2021 131-140*
- Feijoo, A.**, see Tao, S., *TSG Jan. 2021 834-844*
- Feng, T.**, see He, R., *TSG July 2021 3458-3467*
- Feng, Y.**, see He, L., *TSG May 2021 1939-1952*
- Ferrari, P.**, see Pasetti, M., *TSG Nov. 2021 5310-5321*
- Ferreira, D.M.**, Brandao, D.I., Bergna-Diaz, G., Tedeschi, E., and Silva, S.M., Distributed Control Strategy for Low-Voltage Three-Phase Four-Wire Microgrids: Consensus Power-Based Control; *TSG July 2021 3215-3231*
- Fotuhi Ghazvini, M.A.**, see Antoniadou-Plytaria, K., *TSG March 2021 1794-1804*
- Fotuhi-Firuzabad, M.**, see Fattaheian-Dehkordi, S., *TSG May 2021 1978-1988*
- Fotuhi-Firuzabad, M.**, see Jooshaki, M., *TSG Nov. 2021 4740-4751*
- Franco, J.F.**, see Arias, N.B., *TSG May 2021 2708-2721*
- Frankovic, D.**, see Vlahinic, S., *TSG March 2021 1736-1746*
- Frey, D.**, see Guo, K., *TSG Nov. 2021 4616-4626*
- Fu, L.**, see Chen, H., *TSG July 2021 3150-3162*
- Fusco, G.**, and Russo, M., A Decentralized Approach for Voltage Control by Multiple Distributed Energy Resources ; *TSG July 2021 3115-3127*
- ## G
- Gan, W.**, Shahidehpour, M., Guo, J., Yao, W., Paaso, A., Zhang, L., and Wen, J., Two-Stage Planning of Network-Constrained Hybrid Energy Supply Stations for Electric and Natural Gas Vehicles; *TSG May 2021 2013-2026*
- Gan, W.**, see Xia, F., *TSG July 2021 3326-3338*
- Ganesh, P.**, Lou, X., Chen, Y., Tan, R., Yau, D.K.Y., Chen, D., and Winslett, M., Learning-Based Simultaneous Detection and Characterization of Time Delay Attack in Cyber-Physical Systems ; *TSG July 2021 3581-3593*
- Ganji, B.**, see Seyedi, M., *TSG July 2021 2800-2811*
- Ganjian-Aboukheili, M.**, Shahabi, M., Shafiee, Q., and Guerrero, J.M., Linear Quadratic Regulator Based Smooth Transition Between Microgrid Operation Modes; *TSG Nov. 2021 4854-4864*
- Gao, C.**, see Chen, M., *TSG Jan. 2021 512-523*
- Gao, C.**, see Chen, M., *TSG May 2021 2060-2076*
- Gao, C.**, see Chen, M., *TSG July 2021 3056-3069*
- Gao, G.X.**, see Chauhan, S.V.S., *TSG July 2021 3415-3424*
- Gao, G.X.**, see Chauhan, S.V.S., *TSG July 2021 3404-3414*
- Gao, H.**, see Tang, Z., *TSG Jan. 2021 372-382*
- Gao, J.**, see Wei, X., *TSG March 2021 1699-1711*
- Gao, W.**, see Zhang, F., *TSG May 2021 2365-2377*
- Gao, Y.**, Wang, W., and Yu, N., Consensus Multi-Agent Reinforcement Learning for Volt-VAR Control in Power Distribution Networks; *TSG July 2021 3594-3604*
- Garcia, V.J.**, see Schmitz, M., *TSG Jan. 2021 324-337*
- Garcia-Perez, D.**, Perez-Lopez, D., Diaz-Blanco, I., Gonzalez-Muniz, A., Dominguez-Gonzalez, M., and Cuadrado Vega, A.A., Fully-Convolutional Denoising Auto-Encoders for NILM in Large Non-Residential Buildings ; *TSG May 2021 2722-2731*
- Garcia-Torres, F.**, Bordons, C., Tobajas, J., Marquez, J.J., Garrido-Zafra, J., and Moreno-Munoz, A., Optimal Schedule for Networked Microgrids Under Deregulated Power Market Environment Using Model Predictive Control; *TSG Jan. 2021 182-191*
- Garcia-Torres, F.**, Baez-Gonzalez, P., Tobajas, J., Vazquez, F., and Nieto, E., Cooperative Optimization of Networked Microgrids for Supporting Grid Flexibility Services Using Model Predictive Control; *TSG May 2021 1893-1903*
- Garrido-Zafra, J.**, see Garcia-Torres, F., *TSG Jan. 2021 182-191*
- Gebraeel, N.**, see Ashok, K., *TSG Nov. 2021 5073-5083*
- Geng, H.**, see Xu, Z., *TSG July 2021 3560-3569*
- Geth, F.**, see Claeyss, S., *TSG July 2021 2890-2902*
- Ghaffar, Z.**, see Ahmed, S., *TSG Nov. 2021 5290-5298*
- Ghafouri, M.**, see Kabir, M.E., *TSG Sept. 2021 4377-4388*
- Ghafouri, M.**, Karaagac, U., Ameli, A., Yan, J., and Assi, C., A Cyber Attack Mitigation Scheme for Series Compensated DFIG-Based Wind Parks; *TSG Nov. 2021 5221-5232*
- Ghaisari, J.**, see Mohammadrezaee, R., *TSG Sept. 2021 4535-4542*
- Ghamkhari, M.**, see Chen, L., *TSG May 2021 2413-2424*
- Ghasemkhani, A.**, Niaazari, I., Liu, Y., Livani, H., Centeno, V.A., and Yang, L., A Regularized Tensor Completion Approach for PMU Data Recovery; *TSG March 2021 1519-1528*
- Ghosh, R.**, see Montanari, G.C., *TSG March 2021 1206-1214*
- Ghotbi-Maleki, M.**, Chabanloo, R.M., Zeineldin, H.H., and Hosseini Miangafsheh, S.M., Design of Setting Group-Based Overcurrent Protection Scheme for Active Distribution Networks Using MILP; *TSG March 2021 1185-1193*
- Giacomuzzi, S.**, De Carne, G., Pugliese, S., Buja, G., Liserre, M., and Kazerooni, A., Synchronization of Low Voltage Grids Fed by Smart and Conventional Transformers; *TSG July 2021 2941-2951*
- Gibescu, M.**, see Crespo-Vazquez, J.L., *TSG March 2021 1782-1793*
- Gibescu, M.**, see Munoz-Delgado, G., *TSG Sept. 2021 4113-4125*
- Giraldo, J.S.**, see Tsaousoglou, G., *TSG May 2021 2249-2260*
- Golsorkhi, M.S.**, Hill, D.J., and Baharizadeh, M., A Secondary Control Method for Voltage Unbalance Compensation and Accurate Load Sharing in Networked Microgrids; *TSG July 2021 2822-2833*
- Golsorkhi, M.S.**, see Baharizadeh, M., *TSG July 2021 2776-2787*
- Gomez, J.S.**, see F., A.N., *TSG July 2021 2748-2759*
- Gomez-Exposito, A.**, see Milano, F., *TSG May 2021 2741-2744*
- Gong, X.**, Castillo-Guerra, E., Cardenas-Barrera, J.L., Cao, B., Saleh, S.A., and Chang, L., Robust Hierarchical Control Mechanism for Aggregated Thermodynamically Controlled Loads; *TSG Jan. 2021 453-467*
- Gong, Y.**, see Hu, B., *TSG Nov. 2021 5201-5211*
- Gonzales, F.M.**, see Saleem, B., *TSG May 2021 2589-2600*
- Gonzalez, J.**, Papadopoulos, P.N., Milanovic, J.V., Peskir, G., and Moriarty, J., Risk-Constrained Minimization of Combined Event Detection and Decision Time for Online Transient Stability Assessment; *TSG Sept. 2021 4564-4572*
- Gonzalez-Muniz, A.**, see Garcia-Perez, D., *TSG May 2021 2722-2731*
- Gonzalez-Rueda, A.M.**, see Crespo-Vazquez, J.L., *TSG March 2021 1782-1793*
- Gope, P.**, and Sikdar, B., A Privacy-Aware Reconfigurable Authenticated Key Exchange Scheme for Secure Communication in Smart Grids; *TSG Nov. 2021 5335-5348*
- Govindarasu, M.**, see Singh, V.K., *TSG July 2021 3514-3526*
- Graf, P.**, see Zhang, X., *TSG Jan. 2021 420-431*
- Gu, J.**, see Wen, H., *TSG July 2021 3648-3660*
- Gu, W.**, see Pan, G., *TSG Jan. 2021 338-349*
- Gu, W.**, see Qiu, H., *TSG March 2021 1135-1148*
- Gu, W.**, see Yang, L., *TSG March 2021 1722-1735*
- Gu, W.**, see Yi, Z., *TSG Sept. 2021 4208-4224*
- Gu, W.**, see Zhang, S., *TSG Nov. 2021 4788-4798*

- Guan, X.**, *see* Yu, L., *TSG Jan. 2021 407-419*
- Guerrero, J.**, *see* Seyedi, M., *TSG July 2021 2800-2811*
- Guerrero, J.M.**, *see* Long, B., *TSG March 2021 953-964*
- Guerrero, J.M.**, *see* Cimen, H., *TSG March 2021 977-987*
- Guerrero, J.M.**, *see* Long, B., *TSG July 2021 3138-3149*
- Guerrero, J.M.**, *see* Zhou, J., *TSG July 2021 2760-2775*
- Guerrero, J.M.**, *see* Ganjian-Aboukheili, M., *TSG Nov. 2021 4854-4864*
- Guerrero, J.M.**, *see* Nasiri, M., *TSG Nov. 2021 5020-5029*
- Guerrero, J.M.**, *see* Li, Q., *TSG Nov. 2021 4627-4640*
- Guillo-Sansano, E.**, *see* Syed, M.H., *TSG March 2021 1747-1760*
- Guo, F.**, *see* Wang, Z., *TSG July 2021 3185-3199*
- Guo, F.**, *see* Lian, Z., *TSG Sept. 2021 4494-4505*
- Guo, J.**, *see* Gan, W., *TSG May 2021 2013-2026*
- Guo, K.**, Qi, Y., Yu, J., Frey, D., and Tang, Y., A Converter-Based Power System Stabilizer for Stability Enhancement of Droop-Controlled Islanded Microgrids; *TSG Nov. 2021 4616-4626*
- Guo, Q.**, *see* Xu, L., *TSG July 2021 3425-3437*
- Guo, Q.**, *see* Liu, H., *TSG Nov. 2021 5420-5433*
- Guo, Y.**, *see* Ma, Z., *TSG Jan. 2021 227-238*
- Guo, Y.**, *see* Yang, T., *TSG May 2021 2027-2036*
- Guo, Y.**, *see* Zhang, Q., *TSG Sept. 2021 3889-3900*
- Guo, Z.**, Pinson, P., Chen, S., Yang, Q., and Yang, Z., Chance-Constrained Peer-to-Peer Joint Energy and Reserve Market Considering Renewable Generation Uncertainty; *TSG Jan. 2021 798-809*
- Guo, Z.**, Pinson, P., Chen, S., Yang, Q., and Yang, Z., Online Optimization for Real-Time Peer-to-Peer Electricity Market Mechanisms; *TSG Sept. 2021 4151-4163*
- Gupta, V.**, *see* Aguiar, N., *TSG Sept. 2021 4049-4058*
- Gupta, Y.**, Doolla, S., Chatterjee, K., and Pal, B.C., Optimal DG Allocation and Volt-Var Dispatch for a Droop-Based Microgrid; *TSG Jan. 2021 169-181*
- Gurung, N.**, *see* Yan, M., *TSG Nov. 2021 4702-4714*
- Gutierrez-Lagos, L.**, *see* Petrou, K., *TSG Sept. 2021 3877-3888*

H

- Hadjidemetriou, L.**, *see* Tziouvani, L., *TSG Sept. 2021 4195-4207*
- Hafez, O.**, and Bhattacharya, K., Correction to "Integrating EV Charging Stations as Smart Loads for Demand Response Provisions in Distribution Systems" [Mar 18 1096-1106]; *TSG March 2021 1829*
- Hafez, O.**, and Bhattacharya, K., Correction to "Queuing Analysis-Based PEV Load Modeling Considering Battery Charging Behavior and Their Impact on Distribution System Operation" [Jan 18 261-273]; *TSG March 2021 1830*
- Hagenmeyer, V.**, *see* Weber, M., *TSG Nov. 2021 5409-5419*
- Hagenmeyer, V.**, *see* Schwenk, K., *TSG Nov. 2021 5135-5145*
- Haggi, H.**, and Sun, W., Multi-Round Double Auction-Enabled Peer-to-Peer Energy Exchange in Active Distribution Networks; *TSG Sept. 2021 4403-4414*
- Haghi, H.V.**, *see* Pecenek, Z.K., *TSG Jan. 2021 33-42*
- Haghi, H.V.**, *see* Anderson, T., *TSG Sept. 2021 4126-4136*
- Haghighi, M.S.**, *see* Mohammadali, A., *TSG Nov. 2021 5212-5220*
- Hahn, A.**, *see* Sun, C., *TSG Jan. 2021 612-622*
- Haji, M.M.**, *see* Zishan, A.A., *TSG May 2021 2439-2449*
- Hallaji, E.**, *see* Farajzadeh-Zanjani, M., *TSG July 2021 3468-3478*
- Hamacher, T.**, *see* Vespermann, N., *TSG March 2021 1249-1263*
- Hamouda, M.R.**, Nassar, M.E., and Salama, M.M.A., A Novel Energy Trading Framework Using Adapted Blockchain Technology; *TSG May 2021 2165-2175*
- Han, F.**, *see* Abdella, J., *TSG July 2021 3364-3378*
- Han, J.**, *see* Yan, L., *TSG May 2021 2601-2610*
- Han, L.**, Morstyn, T., and McCulloch, M.D., Scaling Up Cooperative Game Theory-Based Energy Management Using Prosumer Clustering; *TSG Jan. 2021 289-300*
- Han, R.**, *see* Zhou, J., *TSG July 2021 2760-2775*
- Han, Z.**, *see* Tian, W., *TSG Sept. 2021 4259-4268*
- Harell, A.**, Jones, R., Makonin, S., and Bajic, I.V., TraceGAN: Synthesizing Appliance Power Signatures Using Generative Adversarial Networks; *TSG Sept. 2021 4553-4563*
- Harr, T.**, *see* Schwenk, K., *TSG Nov. 2021 5135-5145*
- Hashemi, S.**, *see* Arias, N.B., *TSG May 2021 2708-2721*
- Hatziargyriou, N.D.**, *see* Zhao, J., *TSG March 2021 1685-1698*
- Hatziargyriou, N.D.**, *see* Mohandes, B., *TSG May 2021 2212-2223*
- Hatziargyriou, N.D.**, *see* Dabbaghjamanesh, M., *TSG May 2021 2331-2342*
- Hatziargyriou, N.D.**, *see* Oshnoei, A., *TSG Sept. 2021 4351-4362*
- Hayel, Y.**, *see* Sohet, B., *TSG Nov. 2021 5146-5157*
- He, G.**, *see* Fan, S., *TSG Jan. 2021 251-267*
- He, H.**, *see* Zhou, J., *TSG Jan. 2021 205-214*
- He, H.**, *see* Shi, M., *TSG March 2021 1011-1021*
- He, H.**, *see* Shuai, H., *TSG March 2021 1073-1087*
- He, J.**, *see* Chen, K., *TSG March 2021 1602-1614*
- He, J.**, *see* Zhang, F., *TSG May 2021 2365-2377*
- He, J.**, *see* Li, J., *TSG Nov. 2021 4799-4812*
- He, L.**, and Zhang, J., A Community Sharing Market With PV and Energy Storage: An Adaptive Bidding-Based Double-Side Auction Mechanism; *TSG May 2021 2450-2461*
- He, L.**, Shuai, Z., Chu, X., Huang, W., Feng, Y., and Shen, Z.J., Waveform Difference Feature-Based Protection Scheme for Islanded Microgrids; *TSG May 2021 1939-1952*
- He, R.**, Yang, S., Deng, J., Feng, T., Lai, L.L., and Shahidehpour, M., Reliability Analyses of Wide-Area Protection System Considering Cyber-Physical System Constraints; *TSG July 2021 3458-3467*
- Hebner, R.**, *see* Montanari, G.C., *TSG March 2021 1206-1214*
- Hedman, K.W.**, *see* Kaviani, R., *TSG Jan. 2021 704-714*
- Heidari-Akhijahani, A.**, Safdarian, A., and Aminifar, F., Phase Identification of Single-Phase Customers and PV Panels via Smart Meter Data; *TSG Sept. 2021 4543-4552*
- Heleno, M.**, *see* Morozovska, K., *TSG Nov. 2021 5052-5059*
- Heo, S.**, *see* Le, T., *TSG July 2021 3252-3264*
- Hermans, C.**, *see* Peirelinck, T., *TSG March 2021 1370-1379*
- Hilber, P.**, *see* Morozovska, K., *TSG Nov. 2021 5052-5059*
- Hill, D.J.**, *see* Liang, L., *TSG Jan. 2021 491-501*
- Hill, D.J.**, *see* Huang, W., *TSG Jan. 2021 43-55*
- Hill, D.J.**, *see* Tang, Z., *TSG Jan. 2021 312-323*
- Hill, D.J.**, *see* Zheng, W., *TSG March 2021 1224-1237*
- Hill, D.J.**, *see* Golsorkhi, M.S., *TSG July 2021 2822-2833*
- Hill, D.J.**, *see* Huang, W., *TSG Nov. 2021 5385-5395*
- Hill, D.J.**, *see* Zhu, L., *TSG Nov. 2021 5472-5474*
- Ho, C.N.M.**, *see* Abdalaal, R.M., *TSG May 2021 2638-2651*
- Holjevac, N.**, *see* Baskarad, T., *TSG July 2021 3175-3184*
- Home-Ortiz, J.M.**, *see* Vargas, R., *TSG May 2021 2295-2306*
- Hossain, M.J.**, *see* Nizami, M.S.H., *TSG Jan. 2021 479-490*
- Hossain, M.J.**, *see* Yan, Y., *TSG July 2021 3493-3502*
- Hosseini Miangafsheh, S.M.**, *see* Ghotbi-Maleki, M., *TSG March 2021 1185-1193*
- Hou, Q.**, *see* Yong, P., *TSG Sept. 2021 3966-3979*
- Hou, T.**, *see* Peng, N., *TSG Jan. 2021 574-588*
- Hou, Y.**, *see* Liang, L., *TSG Jan. 2021 491-501*
- Hou, Y.**, *see* Zheng, W., *TSG March 2021 1224-1237*
- Hou, Y.**, *see* Zheng, W., *TSG May 2021 2685-2695*
- Hou, Y.**, *see* Liu, W., *TSG Sept. 2021 4003-4015*
- Hovsopian, R.**, *see* Syed, M.H., *TSG March 2021 1747-1760*
- Hredzak, B.**, *see* Zhang, R., *TSG Jan. 2021 192-204*
- Hu, B.**, *see* Ding, Y., *TSG Sept. 2021 3928-3939*
- Hu, B.**, Gong, Y., Chung, C.Y., Noble, B.F., and Poelzer, G., Price-Maker Bidding and Offering Strategies for Networked Microgrids in Day-Ahead Electricity Markets; *TSG Nov. 2021 5201-5211*
- Hu, G.**, *see* Yang, Y., *TSG Sept. 2021 4185-4194*
- Hu, J.**, *see* Yang, Z., *TSG Jan. 2021 4-17*
- Hu, J.**, Wu, J., Ai, X., and Liu, N., Coordinated Energy Management of Prosumers in a Distribution System Considering Network Congestion; *TSG Jan. 2021 468-478*
- Hu, J.**, *see* Chen, K., *TSG March 2021 1602-1614*
- Hu, L.**, *see* Li, K., *TSG Nov. 2021 4876-4885*
- Hu, P.**, *see* Ding, L., *TSG July 2021 3448-3457*
- Hu, Q.**, *see* Xie, X., *TSG Nov. 2021 4765-4777*

- Hu, W.**, Wu, Z., Lv, X., and Dinavahi, V., Robust Secondary Frequency Control for Virtual Synchronous Machine-Based Microgrid Cluster Using Equivalent Modeling; *TSG July 2021 2879-2889*
- Hu, W.**, see Cao, D., *TSG Sept. 2021 4137-4150*
- Hu, Z.**, see Cui, Y., *TSG July 2021 3278-3288*
- Hu, Z.**, see Bao, Z., *TSG Sept. 2021 4363-4376*
- Hua, H.**, see Qin, Z., *TSG Sept. 2021 4079-4089*
- Huang, B.**, and Wang, J., Deep-Reinforcement-Learning-Based Capacity Scheduling for PV-Battery Storage System; *TSG May 2021 2272-2283*
- Huang, C.**, see Su, H., *TSG Jan. 2021 912-915*
- Huang, C.**, see Aprillia, H., *TSG March 2021 1467-1480*
- Huang, C.**, Zhang, H., Song, Y., Wang, L., Ahmad, T., and Luo, X., Demand Response for Industrial Micro-Grid Considering Photovoltaic Power Uncertainty and Battery Operational Cost; *TSG July 2021 3043-3055*
- Huang, C.**, Wang, C., Zhang, M., Xie, N., and Wang, Y., A Transactive Retail Market Mechanism for Active Distribution Network Integrated With Large-Scale Distributed Energy Resources; *TSG Sept. 2021 4225-4237*
- Huang, J.**, see Yu, A., *TSG Nov. 2021 4822-4833*
- Huang, K.**, see Zhang, W., *TSG Sept. 2021 4435-4446*
- Huang, Q.**, see Cao, D., *TSG Sept. 2021 4137-4150*
- Huang, S.**, see Chen, L., *TSG May 2021 2413-2424*
- Huang, S.**, see Li, B., *TSG July 2021 3314-3325*
- Huang, W.**, Zheng, W., and Hill, D.J., Distributionally Robust Optimal Power Flow in Multi-Microgrids With Decomposition and Guaranteed Convergence ; *TSG Jan. 2021 43-55*
- Huang, W.**, see Zheng, W., *TSG March 2021 1224-1237*
- Huang, W.**, see He, L., *TSG May 2021 1939-1952*
- Huang, W.**, Zheng, W., and Hill, D.J., Distribution Network Reconfiguration for Short-Term Voltage Stability Enhancement: An Efficient Deep Learning Approach; *TSG Nov. 2021 5385-5395*
- Huang, W.**, see Cheng, H., *TSG Nov. 2021 4983-4999*
- Huang, Z.**, see Duan, T., *TSG May 2021 2544-2553*
- Hug, G.**, see Karagiannopoulos, S., *TSG Jan. 2021 268-278*
- Hug, G.**, see Jia, M., *TSG March 2021 1429-1444*
- Hug, G.**, see Avula, R.R., *TSG July 2021 3503-3513*
- Hui, H.**, see Chen, G., *TSG Sept. 2021 4016-4028*
- Hupez, M.**, Toubeau, J., De Greve, Z., and Vallee, F., A New Cooperative Framework for a Fair and Cost-Optimal Allocation of Resources Within a Low Voltage Electricity Community; *TSG May 2021 2201-2211*
- Hwang, E.**, see Song, J., *TSG July 2021 3242-3251*
- Hwang, P.**, see Chang, J., *TSG Sept. 2021 3765-3779*
- I**
- Inoue, M.**, Sadamoto, T., Arahata, M., and Chakraborty, A., Optimal Power Flow Design for Enhancing Dynamic Performance: Potentials of Reactive Power; *TSG Jan. 2021 599-611*
- Iov, F.**, see Shahid, K., *TSG Nov. 2021 5060-5072*
- Iria, J.**, see Attarha, A., *TSG May 2021 2284-2294*
- Ismail, M.**, see Takiddin, A., *TSG May 2021 2675-2684*
- Izadi, M.**, and Mohsenian-Rad, H., Synchronous Waveform Measurements to Locate Transient Events and Incipient Faults in Power Distribution Networks; *TSG Sept. 2021 4295-4307*
- J**
- Jafarigiv, D.**, Sheshyekani, K., Kassouf, M., Seyedi, Y., Karimi, H., and Mahseredjian, J., Countering FDI Attacks on DERs Coordinated Control System Using FMI-Compatible Cosimulation; *TSG March 2021 1640-1650*
- Jahromi, A.A.**, see Mohamed, A.S., *TSG Sept. 2021 4471-4483*
- Jalali, M.**, see Taheri, S., *TSG May 2021 2000-2012*
- James Ranjith Kumar, R.**, and Sikdar, B., Detection of Stealthy Cyber-Physical Line Disconnection Attacks in Smart Grid; *TSG Sept. 2021 4484-4493*
- Jang, Y.**, Kim, Y., and Catalao, J.P.S., Optimal HVAC System Operation Using Online Learning of Interconnected Neural Networks; *TSG July 2021 3030-3042*
- Jeandin, A.**, see Sohet, B., *TSG Nov. 2021 5146-5157*
- Jena, P.**, see Mishra, A., *TSG May 2021 1853-1866*
- Jhala, K.**, Pradhan, P., and Natarajan, B., Perturbation-Based Diagnosis of False Data Injection Attack Using Distributed Energy Resources; *TSG March 2021 1589-1601*
- Ji, X.**, see Tian, W., *TSG Sept. 2021 4259-4268*
- Jia, H.**, see Dong, C., *TSG Jan. 2021 871-884*
- Jia, K.**, Zhao, Q., Zhu, Z., and Bi, T., Modeling of DC Distribution System Based on High Frequency Transient Components; *TSG Jan. 2021 671-679*
- Jia, K.**, Chen, J., Zhao, G., Yang, B., and Bi, T., Second Harmonic Injection-Based Recovery Control of PV DC Boosting Integration System; *TSG March 2021 1022-1032*
- Jia, L.**, see Jiang, L., *TSG Nov. 2021 5362-5372*
- Jia, M.**, Wang, Y., Shen, C., and Hug, G., Privacy-Preserving Distributed Clustering for Electrical Load Profiling; *TSG March 2021 1429-1444*
- Jia, Q.**, see Long, T., *TSG Sept. 2021 4029-4038*
- Jia, Y.**, see Lyu, C., *TSG Jan. 2021 901-904*
- Jia, Y.**, see Kong, W., *TSG July 2021 3086-3096*
- Jia, Y.**, see Xie, P., *TSG Sept. 2021 3780-3792*
- Jiang, C.**, see Zhang, Y., *TSG Jan. 2021 524-537*
- Jiang, C.**, see Wang, L., *TSG March 2021 1104-1117*
- Jiang, L.**, Wang, X., Li, W., Wang, L., Yin, X., and Jia, L., Hybrid Multitask Multi-Information Fusion Deep Learning for Household Short-Term Load Forecasting; *TSG Nov. 2021 5362-5372*
- Jiang, T.**, see Yu, L., *TSG Jan. 2021 407-419*
- Jiang, T.**, Ju, P., Wang, C., Li, H., and Liu, J., Coordinated Control of Air-Conditioning Loads for System Frequency Regulation; *TSG Jan. 2021 548-560*
- Jiang, T.**, see Chen, H., *TSG July 2021 3150-3162*
- Jiang, X.**, see Du, Y., *TSG Jan. 2021 350-360*
- Jiang, Y.**, see Yu, P., *TSG May 2021 1964-1977*
- Jiang, Y.**, Wan, C., Botterud, A., Song, Y., and Dong, Z.Y., Efficient Robust Scheduling of Integrated Electricity and Heat Systems: A Direct Constraint Tightening Approach; *TSG July 2021 3016-3029*
- Jiang, Y.**, Data-Driven Probabilistic Fault Location of Electric Power Distribution Systems Incorporating Data Uncertainties; *TSG Sept. 2021 4522-4534*
- Jiao, R.**, Xun, G., Liu, X., and Yan, G., A New AC False Data Injection Attack Method Without Network Information ; *TSG Nov. 2021 5280-5289*
- Jibrán, M.**, Nasir, H.A., Qureshi, F.A., Ali, U., Jones, C., and Mahmood, I., A Demand Response-Based Solution to Overloading in Underdeveloped Distribution Networks; *TSG Sept. 2021 4059-4067*
- Jin, C.**, see Lee, Z.J., *TSG Sept. 2021 4339-4350*
- Jin, H.**, Lv, Z., Yuan, Z., Wei, Z., Wang, C., Wang, C., Tu, Y., Li, F., Chen, T., and Xiao, P., Micro-Cracks Identification and Characterization on the Sheds of Composite Insulators by Fractal Dimension; *TSG March 2021 1821-1824*
- Jin, J.**, and Xu, Y., Optimal Policy Characterization Enhanced Actor-Critic Approach for Electric Vehicle Charging Scheduling in a Power Distribution Network; *TSG March 2021 1416-1428*
- Jin, X.**, see Cai, S., *TSG Nov. 2021 4926-4937*
- Jin, Z.**, see Wen, H., *TSG July 2021 3648-3660*
- Johansson, D.**, see Lee, Z.J., *TSG Nov. 2021 5113-5123*
- Jonckheere, E.A.**, see Shalalfeh, L., *TSG May 2021 2578-2588*
- Jones, C.**, see Jibrán, M., *TSG Sept. 2021 4059-4067*
- Jones, R.**, see Harell, A., *TSG Sept. 2021 4553-4563*
- Jooshaki, M.**, Karimi-Arpanahi, S., Lehtonen, M., Millar, R.J., and Fotuhi-Firuzabad, M., An MILP Model for Optimal Placement of Sectionalizing Switches and Tie Lines in Distribution Networks With Complex Topologies; *TSG Nov. 2021 4740-4751*
- Jorjani, M.**, Seifi, H., Varjani, A.Y., and Delkhosh, H., An Optimization-Based Approach to Recover the Detected Attacked Grid Variables After False Data Injection Attack; *TSG Nov. 2021 5322-5334*
- Ju, P.**, see Jiang, T., *TSG Jan. 2021 548-560*
- Ju, P.**, see Wan, C., *TSG Nov. 2021 5396-5408*
- Ju, W.**, Dobson, I., Martin, K., Sun, K., Nayak, N., Singh, I., Silva-Saravia, H., Faris, A., Zhang, L., and Wang, Y., Real-Time Area Angle Monitoring Using Synchrophasors: A Practical Framework and Utility Deployment ; *TSG Jan. 2021 859-870*
- Jurisa, B.**, see Vlahinic, S., *TSG March 2021 1736-1746*

K

- Kabir, M.E.**, Ghafouri, M., Moussa, B., and Assi, C., A Two-Stage Protection Method for Detection and Mitigation of Coordinated EVSE Switching Attacks; *TSG Sept. 2021 4377-4388*
- Kadavil, R.**, see Luo, Y., *TSG March 2021 1651-1662*
- Kalathil, D.**, see Muthirayan, D., *TSG Jan. 2021 279-288*
- Kamal, M.**, Farajollahi, M., Nazari-pouya, H., and Mohsenian-Rad, H., Cyberattacks Against Event-Based Analysis in Micro-PMUs: Attack Models and Counter Measures; *TSG March 2021 1577-1588*
- Kamali, M.**, see Mohammadrezaee, R., *TSG Sept. 2021 4535-4542*
- Kammen, D.M.**, see Bao, Z., *TSG Sept. 2021 4363-4376*
- Kammoun, A.**, see Lakshminarayana, S., *TSG Jan. 2021 635-646*
- Kang, C.**, see Zheng, K., *TSG Jan. 2021 726-736*
- Kang, C.**, see Yong, P., *TSG Sept. 2021 3966-3979*
- Kang, Y.**, see Wan, Y., *TSG Jan. 2021 538-547*
- Karaagac, U.**, see Ghafouri, M., *TSG Nov. 2021 5221-5232*
- Karagiannopoulos, S.**, Mylonas, C., Aristidou, P., and Hug, G., Active Distribution Grids Providing Voltage Support: The Swiss Case; *TSG Jan. 2021 268-278*
- Karimi, H.**, see Jafarigiv, D., *TSG March 2021 1640-1650*
- Karimi, H.**, see Pourramezan, R., *TSG May 2021 2402-2412*
- Karimi, H.S.**, and Natarajan, B., Joint Topology Identification and State Estimation in Unobservable Distribution Grids; *TSG Nov. 2021 5299-5309*
- Karimi-Arpanahi, S.**, see Jooshaki, M., *TSG Nov. 2021 4740-4751*
- Karrar, A.A.**, see Ahmed, B., *TSG March 2021 1761-1771*
- Karri, R.**, see Acharya, S., *TSG July 2021 3548-3559*
- Kassouf, M.**, see Jafarigiv, D., *TSG March 2021 1640-1650*
- Kassouf, M.**, see Khaw, Y.M., *TSG May 2021 2554-2565*
- Kassouf, M.**, see Du, M., *TSG Nov. 2021 5349-5361*
- Kaviani, R.**, and Hedman, K.W., A Detection Mechanism Against Load-Redistribution Attacks in Smart Grids; *TSG Jan. 2021 704-714*
- Kazempour, J.**, see Vespermann, N., *TSG March 2021 1249-1263*
- Kazerouni, A.**, see Giacomuzzi, S., *TSG July 2021 2941-2951*
- Ke, D.**, see Xu, J., *TSG May 2021 2224-2238*
- Kekatos, V.**, see Taheri, S., *TSG May 2021 2000-2012*
- Kellermann, J.**, see Rotering, N., *TSG July 2021 3305-3313*
- Keshavarz, A.**, see Mirshekali, H., *TSG March 2021 1277-1288*
- Khaledian, E.**, Pandey, S., Kundu, P., and Srivastava, A.K., Real-Time Synchrophasor Data Anomaly Detection and Classification Using *Isolation Forest*, *KMeans*, and *LoOP*; *TSG May 2021 2378-2388*
- Khatibi, M.**, Bendtsen, J.D., Stoustrup, J., and Molbak, T., Exploiting Power-to-Heat Assets in District Heating Networks to Regulate Electric Power Network; *TSG May 2021 2048-2059*
- Khaw, Y.M.**, Abiri Jahromi, A., Arani, M.F.M., Sanner, S., Kundur, D., and Kassouf, M., A Deep Learning-Based Cyberattack Detection System for Transmission Protective Relays; *TSG May 2021 2554-2565*
- Khazaei, J.**, Stealthy Cyberattacks on Loads and Distributed Generation Aimed at Multi-Transmission Line Congestions in Smart Grids; *TSG May 2021 2518-2528*
- Khazaei, J.**, see Moazeni, F., *TSG Sept. 2021 3680-3691*
- Khazeynasab, S.R.**, and Qi, J., Generator Parameter Calibration by Adaptive Approximate Bayesian Computation With Sequential Monte Carlo Sampler; *TSG Sept. 2021 4327-4338*
- Kheradmandi, M.**, see Oshnoei, A., *TSG Sept. 2021 4351-4362*
- Khodayar, M.E.**, see Li, J., *TSG Nov. 2021 5172-5184*
- Khorasany, M.**, Paudel, A., Razzaghi, R., and Siano, P., A New Method for Peer Matching and Negotiation of Prosumers in Peer-to-Peer Energy Markets; *TSG May 2021 2472-2483*
- Kim, H.**, see Le, T., *TSG July 2021 3252-3264*
- Kim, J.**, see Baek, K., *TSG Sept. 2021 3980-3989*
- Kim, S.**, Kucka, J., Ulissi, G., and Dujic, D., Solid-State Technologies for Flexible and Efficient Marine DC Microgrids; *TSG July 2021 2860-2868*
- Kim, S.**, see Kim, S., *TSG July 2021 2860-2868*
- Kim, Y.**, see Park, J., *TSG Jan. 2021 905-908*
- Kim, Y.**, see Lee, J., *TSG May 2021 1918-1928*
- Kim, Y.**, see Jang, Y., *TSG July 2021 3030-3042*
- Kim, Y.**, see Park, J., *TSG Nov. 2021 4641-4654*
- Kleissl, J.**, see Pecenek, Z.K., *TSG Jan. 2021 33-42*
- Kleissl, J.**, see Anderson, T., *TSG Sept. 2021 4126-4136*
- Klemenjak, C.**, see Faustine, A., *TSG Jan. 2021 398-406*
- Ko, R.K.L.**, see Cui, Y., *TSG Sept. 2021 4577-4580*
- Kockar, I.**, see Faiya, B.A., *TSG Sept. 2021 4102-4112*
- Kong, W.**, Luo, F., Jia, Y., Dong, Z.Y., and Liu, J., Benefits of Home Energy Storage Utilization: An Australian Case Study of Demand Charge Practices in Residential Sector; *TSG July 2021 3086-3096*
- Kong, X.**, Zhang, X., Lu, N., Ma, Y., and Li, Y., Online Smart Meter Measurement Error Estimation Based on EKF and LMRLS Method; *TSG Sept. 2021 4269-4279*
- Kontis, E.O.**, Nozal, A.R.d., Mauricio, J.M., and Demoulias, C.S., Provision of Primary Frequency Response as Ancillary Service From Active Distribution Networks to the Transmission System; *TSG Nov. 2021 4971-4982*
- Korkali, M.**, see Xu, Y., *TSG May 2021 2696-2707*
- Krishna, S.**, see Sreeram, T.S., *TSG Nov. 2021 5258-5267*
- Kucka, J.**, see Kim, S., *TSG July 2021 2860-2868*
- Kuhnappel, U.**, see Weber, M., *TSG Nov. 2021 5409-5419*
- Kumar, A.**, Das, S., and Mallipeddi, R., An Inversion-Free Robust Power-Flow Algorithm for Microgrids; *TSG July 2021 2844-2859*
- Kumar, N.**, see Badar, H.M.S., *TSG Sept. 2021 4426-4434*
- Kumar, N.**, see Ahmed, S., *TSG Nov. 2021 5290-5298*
- Kumar, R.S.**, see Raghav, L.P., *TSG Nov. 2021 4834-4842*
- Kumar Jena, M.**, see Shaw, P., *TSG May 2021 2320-2330*
- Kundu, P.**, see Khaledian, E., *TSG May 2021 2378-2388*
- Kundur, D.**, see Khaw, Y.M., *TSG May 2021 2554-2565*
- Kundur, D.**, see Mohamed, A.S., *TSG Sept. 2021 4471-4483*
- Kuruganti, T.**, see Wang, X., *TSG Sept. 2021 3990-4002*
- Kuzle, I.**, see Baskarad, T., *TSG July 2021 3175-3184*
- Kwon, S.**, see Mansy, H., *TSG May 2021 2188-2200*
- Kyriakides, E.**, see Tziouani, L., *TSG Sept. 2021 4195-4207*

L

- Lai, L.L.**, see He, R., *TSG July 2021 3458-3467*
- Lai, S.**, see Tao, Y., *TSG March 2021 1149-1162*
- Laib, K.**, see Watson, J.D., *TSG Nov. 2021 4726-4739*
- Lakshminarayana, S.**, Kammoun, A., Debbah, M., and Poor, H.V., Data-Driven False Data Injection Attacks Against Power Grids: A Random Matrix Approach; *TSG Jan. 2021 635-646*
- Lakshminarayana, S.**, Adhikari, S., and Maple, C., Analysis of IoT-Based Load Altering Attacks Against Power Grids Using the Theory of Second-Order Dynamical Systems; *TSG Sept. 2021 4415-4425*
- Lakshminarayana, S.**, Belmega, E.V., and Poor, H.V., Moving-Target Defense Against Cyber-Physical Attacks in Power Grids via Game Theory; *TSG Nov. 2021 5244-5257*
- Langstaff, T.**, see Petrou, K., *TSG Sept. 2021 3877-3888*
- Lau, W.C.**, see Wu, T., *TSG Jan. 2021 680-691*
- Lazaroiu, G.C.**, see Ramirez, A., *TSG July 2021 3107-3114*
- Le, T.**, Heo, S., and Kim, H., Toward Load Identification Based on the Hilbert Transform and Sequence to Sequence Long Short-Term Memory ; *TSG July 2021 3252-3264*
- Le Boudec, J.**, see Delcourt, M., *TSG Sept. 2021 4460-4470*
- Ledwich, G.**, see Liu, A., *TSG May 2021 2239-2248*
- Lee, E.**, see Baek, K., *TSG Sept. 2021 3980-3989*
- Lee, G.**, see Lee, Z.J., *TSG Sept. 2021 4339-4350*
- Lee, G.**, see Chang, J., *TSG Sept. 2021 3765-3779*
- Lee, J.**, Lee, S., and Lee, K., Multistage Stochastic Optimization for Microgrid Operation Under Islanding Uncertainty; *TSG Jan. 2021 56-66*
- Lee, J.**, Kim, Y., and Moon, S., Current Injection Power Flow Analysis and Optimal Generation Dispatch for Bipolar DC Microgrids; *TSG May 2021 1918-1928*
- Lee, K.**, see Lee, J., *TSG Jan. 2021 56-66*
- Lee, R.**, see Lee, Z.J., *TSG Sept. 2021 4339-4350*
- Lee, S.**, see Lee, J., *TSG Jan. 2021 56-66*
- Lee, S.**, see Choi, J.S., *TSG Sept. 2021 4318-4326*

- Lee, T., *see* Lee, Z.J., *TSG Sept. 2021 4339-4350*
- Lee, W., *see* Liang, Y., *TSG March 2021 1380-1393*
- Lee, W., *see* Wan, C., *TSG Nov. 2021 5396-5408*
- Lee, Y., *see* Song, J., *TSG July 2021 3242-3251*
- Lee, Z.J., Lee, G., Lee, T., Jin, C., Lee, R., Low, Z., Chang, D., Ortega, C., and Low, S.H., Adaptive Charging Networks: A Framework for Smart Electric Vehicle Charging ; *TSG Sept. 2021 4339-4350*
- Lee, Z.J., Sharma, S., Johansson, D., and Low, S.H., ACN-Sim: An Open-Source Simulator for Data-Driven Electric Vehicle Charging Research; *TSG Nov. 2021 5113-5123*
- Lehtonen, M., *see* Fattaheian-Dehkordi, S., *TSG May 2021 1978-1988*
- Lehtonen, M., *see* Jooshaki, M., *TSG Nov. 2021 4740-4751*
- Lehtonen, M., *see* Mahmoud, K., *TSG Nov. 2021 4938-4949*
- Lens, H., *see* Mitrentsis, G., *TSG July 2021 2952-2965*
- Lestas, I., *see* Watson, J.D., *TSG Nov. 2021 4726-4739*
- Li, B., Chen, Y., Wei, W., Huang, S., and Mei, S., Resilient Restoration of Distribution Systems in Coordination With Electric Bus Scheduling ; *TSG July 2021 3314-3325*
- Li, C., *see* Pecenak, Z.K., *TSG Jan. 2021 33-42*
- Li, C., *see* Fang, Z., *TSG Jan. 2021 239-250*
- Li, C., *see* Zeng, L., *TSG Jan. 2021 301-311*
- Li, C., *see* Liu, X., *TSG Jan. 2021 141-156*
- Li, C., *see* Chen, Y., *TSG May 2021 1929-1938*
- Li, C., Dong, Z., Chen, G., Zhou, B., Zhang, J., and Yu, X., Data-Driven Planning of Electric Vehicle Charging Infrastructure: A Case Study of Sydney, Australia; *TSG July 2021 3289-3304*
- Li, D., *see* Chen, M., *TSG May 2021 2060-2076*
- Li, D., *see* Ashok, K., *TSG Nov. 2021 5073-5083*
- Li, F., *see* Wan, Y., *TSG Jan. 2021 538-547*
- Li, F., *see* Zhao, N., *TSG March 2021 1329-1345*
- Li, F., *see* Zhao, N., *TSG March 2021 1481-1495*
- Li, F., *see* Jin, H., *TSG March 2021 1821-1824*
- Li, F., *see* Zhang, Q., *TSG July 2021 3527-3537*
- Li, F., *see* Wang, X., *TSG Sept. 2021 3990-4002*
- Li, F., *see* Shuai, H., *TSG Nov. 2021 5479-5482*
- Li, H., *see* Jiang, T., *TSG Jan. 2021 548-560*
- Li, H., *see* Su, Y., *TSG May 2021 2355-2364*
- Li, H., *see* Rafiq, H., *TSG July 2021 3265-3277*
- Li, H., *see* Wu, X., *TSG Sept. 2021 3809-3818*
- Li, J., Xu, Y., Wang, Y., Li, M., He, J., Liu, C., and Schneider, K.P., Resilience-Motivated Distribution System Restoration Considering Electricity-Water-Gas Interdependency ; *TSG Nov. 2021 4799-4812*
- Li, J., Khodayar, M.E., Wang, J., and Zhou, B., Data-Driven Distributionally Robust Co-Optimization of P2P Energy Trading and Network Operation for Interconnected Microgrids; *TSG Nov. 2021 5172-5184*
- Li, K., Yan, J., Hu, L., Wang, F., and Zhang, N., Two-Stage Decoupled Estimation Approach of Aggregated Baseline Load Under High Penetration of Behind-the-Meter PV System; *TSG Nov. 2021 4876-4885*
- Li, M., *see* Liu, Y., *TSG Jan. 2021 715-725*
- Li, M., *see* Li, J., *TSG Nov. 2021 4799-4812*
- Li, N., *see* Chen, X., *TSG Sept. 2021 3954-3965*
- Li, N., *see* Chen, X., *TSG Nov. 2021 4843-4853*
- Li, P., *see* Xu, J., *TSG May 2021 2224-2238*
- Li, P., *see* Yuan, Z., *TSG Nov. 2021 4778-4787*
- Li, Q., Liao, Y., Wu, K., Zhang, L., Lin, J., Chen, M., Guerrero, J.M., and Abbott, D., Parallel and Distributed Optimization Method With Constraint Decomposition for Energy Management of Microgrids; *TSG Nov. 2021 4627-4640*
- Li, R., *see* Zhang, C., *TSG Jan. 2021 432-441*
- Li, S., *see* Muthirayan, D., *TSG Jan. 2021 279-288*
- Li, S., *see* Zhao, D., *TSG Sept. 2021 3819-3834*
- Li, S., Zhu, J., and Dong, H., A Novel Energy Sharing Mechanism for Smart Microgrid; *TSG Nov. 2021 5475-5478*
- Li, T., *see* Wang, J., *TSG Jan. 2021 787-797*
- Li, T., Sun, B., Chen, Y., Ye, Z., Low, S.H., and Wierman, A., Learning-Based Predictive Control via Real-Time Aggregate Flexibility; *TSG Nov. 2021 4897-4913*
- Li, W., *see* Ding, L., *TSG July 2021 3448-3457*
- Li, W., *see* Jiang, L., *TSG Nov. 2021 5362-5372*
- Li, X., Chen, C., Xu, Q., and Wen, C., Resilience for Communication Faults in Reactive Power Sharing of Microgrids; *TSG July 2021 2788-2799*
- Li, X., *see* Chen, H., *TSG July 2021 3150-3162*
- Li, Y., *see* Zhong, T., *TSG March 2021 1174-1184*
- Li, Y., Zhang, Z., Dragicevic, T., and Rodriguez, J., A Unified Distributed Cooperative Control of DC Microgrids Using Consensus Protocol; *TSG May 2021 1880-1892*
- Li, Y., Wang, Y., and Chen, Q., Optimal Dispatch With Transformer Dynamic Thermal Rating in ADNs Incorporating High PV Penetration; *TSG May 2021 1989-1999*
- Li, Y., *see* Zhao, D., *TSG Sept. 2021 3819-3834*
- Li, Y., *see* Kong, X., *TSG Sept. 2021 4269-4279*
- Li, Y., *see* Chen, X., *TSG Nov. 2021 4843-4853*
- Li, Z., *see* Chen, M., *TSG Jan. 2021 512-523*
- Li, Z., *see* Zeng, L., *TSG Jan. 2021 301-311*
- Li, Z., *see* Shen, C., *TSG March 2021 1118-1134*
- Li, Z., *see* Wang, H., *TSG March 2021 1394-1404*
- Li, Z., *see* Wang, L., *TSG March 2021 1104-1117*
- Li, Z., *see* Xiao, X., *TSG May 2021 2261-2271*
- Li, Z., *see* Zheng, W., *TSG May 2021 2685-2695*
- Li, Z., *see* Yan, L., *TSG May 2021 2601-2610*
- Li, Z., *see* Chen, Y., *TSG May 2021 1929-1938*
- Li, Z., *see* Chen, M., *TSG May 2021 2060-2076*
- Li, Z., *see* Chen, M., *TSG July 2021 3056-3069*
- Li, Z., Wu, L., and Xu, Y., Risk-Averse Coordinated Operation of a Multi-Energy Microgrid Considering Voltage/Var Control and Thermal Flow: An Adaptive Stochastic Approach; *TSG Sept. 2021 3914-3927*
- Li, Z., *see* Xu, Y., *TSG Nov. 2021 4595-4606*
- Lian, Z., Guo, F., Wen, C., Deng, C., and Lin, P., Distributed Resilient Optimal Current Sharing Control for an Islanded DC Microgrid Under DoS Attacks; *TSG Sept. 2021 4494-4505*
- Liang, G., *see* Zhao, H., *TSG May 2021 2508-2517*
- Liang, H., and Ma, J., Develop Load Shape Dictionary Through Efficient Clustering Based on Elastic Dissimilarity Measure; *TSG Jan. 2021 442-452*
- Liang, H., *see* Liu, C., *TSG March 2021 1626-1639*
- Liang, H., *see* Liu, Y., *TSG March 2021 1346-1357*
- Liang, H., *see* Zhuang, P., *TSG May 2021 2566-2577*
- Liang, J., and Tang, W., Scenario Reduction for Stochastic Day-Ahead Scheduling: A Mixed Autoencoder Based Time-Series Clustering Approach; *TSG May 2021 2652-2662*
- Liang, L., Yi, H., Hou, Y., and Hill, D.J., An Optimal Placement Model for Electric Springs in Distribution Networks; *TSG Jan. 2021 491-501*
- Liang, M., Meng, Y., Wang, J., Lubkeman, D.L., and Lu, N., FeederGAN: Synthetic Feeder Generation via Deep Graph Adversarial Nets; *TSG March 2021 1163-1173*
- Liang, R., *see* Chen, C., *TSG Jan. 2021 647-658*
- Liang, R., *see* Peng, N., *TSG Jan. 2021 574-588*
- Liang, Y., Ding, Z., Ding, T., and Lee, W., Mobility-Aware Charging Scheduling for Shared On-Demand Electric Vehicle Fleet Using Deep Reinforcement Learning; *TSG March 2021 1380-1393*
- Liao, J., Zhou, N., Wang, Q., and Chi, Y., Load-Switching Strategy for Voltage Balancing of Bipolar DC Distribution Networks Based on Optimal Automatic Commutation Algorithm; *TSG July 2021 2966-2979*
- Liao, S., *see* Xu, J., *TSG May 2021 2224-2238*
- Liao, Y., *see* Long, B., *TSG March 2021 953-964*
- Liao, Y., *see* Long, B., *TSG July 2021 3138-3149*
- Liao, Y., *see* Li, Q., *TSG Nov. 2021 4627-4640*
- Liauw, B., *see* Luo, Y., *TSG March 2021 1651-1662*
- Liebman, A., *see* Lulus, P., *TSG March 2021 1238-1248*
- Lin, F., Chen, C., Xiao, G., and Chen, P., Voltage Stabilization Control for Microgrid With Asymmetric Membership Function-Based Wavelet Petri Fuzzy Neural Network; *TSG Sept. 2021 3731-3741*
- Lin, J., *see* Li, Q., *TSG Nov. 2021 4627-4640*
- Lin, P., *see* Lian, Z., *TSG Sept. 2021 4494-4505*
- Lin, S., and Zhu, H., Enhancing the Spatio-Temporal Observability of Grid-Edge Resources in Distribution Grids; *TSG Nov. 2021 5434-5443*

- Lin, W.**, Wu, D., and Boulet, B., Spatial-Temporal Residential Short-Term Load Forecasting via Graph Neural Networks; *TSG Nov. 2021* 5373-5384
- Lin, X.**, see Fang, Z., *TSG Jan. 2021* 239-250
- Lin, Y.**, see Fang, Z., *TSG Jan. 2021* 239-250
- Lin, Y.**, see Zhang, H., *TSG March 2021* 1194-1205
- Lin, Y.**, see Edib, S.N., *TSG March 2021* 1565-1576
- Ling, Z.**, see Yang, F., *TSG March 2021* 1805-1820
- Liserre, M.**, see Giacomuzzi, S., *TSG July 2021* 2941-2951
- Liu, A.**, and Ledwich, G., A Grid-Friendly Sustainable Neighborhood Energy Trading Mechanism for MV-LV Network; *TSG May 2021* 2239-2248
- Liu, B.**, Akcakaya, M., and Mcdermott, T.E., Automated Control of Transactive HVACs in Energy Distribution Systems; *TSG May 2021* 2462-2471
- Liu, B.**, and Wu, H., Optimal Planning and Operation of Hidden Moving Target Defense for Maximal Detection Effectiveness; *TSG Sept. 2021* 4447-4459
- Liu, C.**, see Sun, C., *TSG Jan. 2021* 612-622
- Liu, C.**, Liang, H., and Chen, T., Network Parameter Coordinated False Data Injection Attacks Against Power System AC State Estimation; *TSG March 2021* 1626-1639
- Liu, C.**, see Wang, J., *TSG March 2021* 1541-1551
- Liu, C.**, see Li, J., *TSG Nov. 2021* 4799-4812
- Liu, D.**, see Qin, Z., *TSG Sept. 2021* 4079-4089
- Liu, F.**, see Ding, L., *TSG July 2021* 3448-3457
- Liu, G.**, see Soofi, A.F., *TSG March 2021* 1663-1673
- Liu, G.**, see Tian, W., *TSG Sept. 2021* 4259-4268
- Liu, H.**, and Wu, W., Two-Stage Deep Reinforcement Learning for Inverter-Based Volt-VAR Control in Active Distribution Networks; *TSG May 2021* 2037-2047
- Liu, H.**, see Xu, S., *TSG May 2021* 2307-2319
- Liu, H.**, and Wu, W., Online Multi-Agent Reinforcement Learning for Decentralized Inverter-Based Volt-VAR Control; *TSG July 2021* 2980-2990
- Liu, H.**, Zhang, C., Chai, Q., Meng, K., Guo, Q., and Dong, Z.Y., Robust Regional Coordination of Inverter-Based Volt/Var Control via Multi-Agent Deep Reinforcement Learning; *TSG Nov. 2021* 5420-5433
- Liu, J.**, see Jiang, T., *TSG Jan. 2021* 548-560
- Liu, J.**, see Tang, Z., *TSG Jan. 2021* 372-382
- Liu, J.**, Qin, C., and Yu, Y., A Comprehensive Resilience-Oriented FLISR Method for Distribution Systems; *TSG May 2021* 2136-2152
- Liu, J.**, see Babahajiani, P., *TSG July 2021* 3661-3664
- Liu, J.**, see Kong, W., *TSG July 2021* 3086-3096
- Liu, J.**, see Song, H., *TSG Nov. 2021* 4950-4961
- Liu, K.**, see Zhong, C., *TSG July 2021* 3128-3137
- Liu, L.**, see Zhong, T., *TSG March 2021* 1174-1184
- Liu, L.**, see Chen, L., *TSG Nov. 2021* 5158-5171
- Liu, M.Z.**, Ochoa, L.F., and Low, S.H., On the Implementation of OPF-Based Setpoints for Active Distribution Networks; *TSG July 2021* 2929-2940
- Liu, M.Z.**, see Petrou, K., *TSG Sept. 2021* 3877-3888
- Liu, N.**, see Hu, J., *TSG Jan. 2021* 468-478
- Liu, N.**, see Chen, L., *TSG Nov. 2021* 5158-5171
- Liu, P.**, see Qiu, H., *TSG March 2021* 1135-1148
- Liu, T.**, see Wang, S., *TSG Jan. 2021* 774-786
- Liu, T.**, see Tang, Z., *TSG Jan. 2021* 312-323
- Liu, W.**, see Peng, J., *TSG Jan. 2021* 106-116
- Liu, W.**, Chen, S., Hou, Y., and Yang, Z., Optimal Reserve Management of Electric Vehicle Aggregator: Discrete Bilevel Optimization Model and Exact Algorithm; *TSG Sept. 2021* 4003-4015
- Liu, W.**, see Fan, Z., *TSG Nov. 2021* 4607-4615
- Liu, X.**, Chen, X., Li, C., Shahidepour, M., Sun, K., Cao, Y., Chen, C., and Zhou, B., Multi-Stage Voltage Support Optimization for Microgrids With Multiple Distributed Generation Units; *TSG Jan. 2021* 141-156
- Liu, X.**, Soh, C.B., Zhao, T., and Wang, P., Stochastic Scheduling of Mobile Energy Storage in Coupled Distribution and Transportation Networks for Conversion Capacity Enhancement; *TSG Jan. 2021* 117-130
- Liu, X.**, see Shen, C., *TSG March 2021* 1118-1134
- Liu, X.**, see Wang, Y., *TSG July 2021* 3637-3647
- Liu, X.**, see Zhou, Q., *TSG Sept. 2021* 3705-3717
- Liu, X.**, Wen, C., Xu, Q., and Wang, Y., Resilient Control and Analysis for DC Microgrid System Under DoS and Impulsive FDI Attacks; *TSG Sept. 2021* 3742-3754
- Liu, X.**, see Jiao, R., *TSG Nov. 2021* 5280-5289
- Liu, Y.**, see Du, Y., *TSG Jan. 2021* 350-360
- Liu, Y.**, see Xiahou, K.S., *TSG Jan. 2021* 909-911
- Liu, Y.**, Chen, Y., and Li, M., Dynamic Event-Based Model Predictive Load Frequency Control for Power Systems Under Cyber Attacks; *TSG Jan. 2021* 715-725
- Liu, Y.**, see Qiu, W., *TSG Jan. 2021* 659-670
- Liu, Y.**, see Tang, Z., *TSG Jan. 2021* 372-382
- Liu, Y.**, see Wu, T., *TSG Jan. 2021* 680-691
- Liu, Y.**, and Liang, H., A Three-Layer Stochastic Energy Management Approach for Electric Bus Transit Centers With PV and Energy Storage Systems; *TSG March 2021* 1346-1357
- Liu, Y.**, see Ghasemkhani, A., *TSG March 2021* 1519-1528
- Liu, Y.**, see Su, Y., *TSG May 2021* 2355-2364
- Liu, Y.**, see Qiu, W., *TSG May 2021* 2732-2735
- Liu, Y.**, see Sagan, A., *TSG July 2021* 3097-3106
- Liu, Y.**, see Zheng, Y., *TSG July 2021* 3613-3623
- Liu, Y.**, see Cui, Y., *TSG Sept. 2021* 4577-4580
- Liu, Y.**, see Yong, P., *TSG Sept. 2021* 3966-3979
- Liu, Y.**, see Xu, Y., *TSG Nov. 2021* 4595-4606
- Liu, Y.**, see Song, H., *TSG Nov. 2021* 4950-4961
- Liu, Y.**, see Zhong, W., *TSG Nov. 2021* 5030-5042
- Liu, Z.**, see Wang, Q., *TSG March 2021* 1615-1625
- Liu, Z.**, and Wang, L., Leveraging Network Topology Optimization to Strengthen Power Grid Resilience Against Cyber-Physical Attacks ; *TSG March 2021* 1552-1564
- Liu, Z.**, and Wang, L., Defense Strategy Against Load Redistribution Attacks on Power Systems Considering Insider Threats; *TSG March 2021* 1529-1540
- Liu, Z.**, see Zheng, C., *TSG May 2021* 2611-2624
- Liu, Z.**, see Qian, J., *TSG May 2021* 2625-2637
- Livani, H.**, see Ghasemkhani, A., *TSG March 2021* 1519-1528
- Llanos, J.**, see F., A.N., *TSG July 2021* 2748-2759
- Long, B.**, Liao, Y., Chong, K.T., Rodriguez, J., and Guerrero, J.M., MPC-Controlled Virtual Synchronous Generator to Enhance Frequency and Voltage Dynamic Performance in Islanded Microgrids; *TSG March 2021* 953-964
- Long, B.**, Liao, Y., Chong, K.T., Rodriguez, J., and Guerrero, J.M., Enhancement of Frequency Regulation in AC Microgrid: A Fuzzy-MPC Controlled Virtual Synchronous Generator; *TSG July 2021* 3138-3149
- Long, Q.**, Yu, H., Xie, F., Xie, N., and Lubkeman, D., Diesel Generator Model Parameterization for Microgrid Simulation Using Hybrid Box-Constrained Levenberg-Marquardt Algorithm; *TSG March 2021* 943-952
- Long, T.**, see Xia, Y., *TSG March 2021* 965-976
- Long, T.**, Jia, Q., Wang, G., and Yang, Y., Efficient Real-Time EV Charging Scheduling via Ordinal Optimization; *TSG Sept. 2021* 4029-4038
- Lopez, J.C.**, see Arias, N.B., *TSG May 2021* 2708-2721
- Lorca, A.**, see Cordova, S., *TSG Nov. 2021* 4668-4680
- Lotfifard, S.**, see Azimi, S.M., *TSG May 2021* 2102-2112
- Lou, C.**, see Vega-Fuentes, E., *TSG March 2021* 1303-1313
- Lou, X.**, see Ganesh, P., *TSG July 2021* 3581-3593
- Low, S.H.**, see Chen, Y., *TSG May 2021* 2484-2495
- Low, S.H.**, see Liu, M.Z., *TSG July 2021* 2929-2940
- Low, S.H.**, see Zhou, F., *TSG July 2021* 3232-3241
- Low, S.H.**, see Lee, Z.J., *TSG Sept. 2021* 4339-4350
- Low, S.H.**, see Li, T., *TSG Nov. 2021* 4897-4913
- Low, S.H.**, see Lee, Z.J., *TSG Nov. 2021* 5113-5123
- Low, Z.**, see Lee, Z.J., *TSG Sept. 2021* 4339-4350
- Lu, C.**, see Wang, H., *TSG May 2021* 2529-2543
- Lu, H.**, see Faiya, B.A., *TSG Sept. 2021* 4102-4112
- Lu, N.**, see Meng, Y., *TSG March 2021* 1712-1721
- Lu, N.**, see Liang, M., *TSG March 2021* 1163-1173
- Lu, N.**, see Xie, F., *TSG May 2021* 2496-2507
- Lu, N.**, see Kong, X., *TSG Sept. 2021* 4269-4279
- Lu, R.**, Wang, J., and Wang, Z., Distributed Observer-Based Finite-Time Control of AC Microgrid Under Attack; *TSG Jan. 2021* 157-168

- Lu, R.**, see Zhong, T., *TSG March 2021 1174-1184*
- Lu, S.**, see Pan, G., *TSG Jan. 2021 338-349*
- Lu, S.**, see Mahapatra, K., *TSG May 2021 2343-2354*
- Lu, S.**, see Zhang, S., *TSG Nov. 2021 4788-4798*
- Lu, T.**, Chen, X., McElroy, M.B., Nielsen, C.P., Wu, Q., and Ai, Q., A Reinforcement Learning-Based Decision System for Electricity Pricing Plan Selection by Smart Grid End Users; *TSG May 2021 2176-2187*
- Lu, X.**, see Chen, B., *TSG Jan. 2021 18-32*
- Lu, X.**, see AlAshery, M.K., *TSG Jan. 2021 885-896*
- Lu, X.**, see Park, J., *TSG Jan. 2021 905-908*
- Lu, X.**, Chan, K.W., Xia, S., Shahidepour, M., and Ng, W.H., An Operation Model for Distribution Companies Using the Flexibility of Electric Vehicle Aggregators; *TSG March 2021 1507-1518*
- Lu, X.**, see Zhao, T., *TSG May 2021 2125-2135*
- Lu, X.**, see Nazemi, M., *TSG July 2021 3200-3214*
- Lu, X.**, see Park, J., *TSG Nov. 2021 4641-4654*
- Lu, X.**, see Du, Y., *TSG Nov. 2021 5000-5010*
- Lu, Y.**, see Pan, G., *TSG Jan. 2021 338-349*
- Lubkeman, D.**, see Sun, L., *TSG Jan. 2021 751-760*
- Lubkeman, D.**, see Long, Q., *TSG March 2021 943-952*
- Lubkeman, D.L.**, see Liang, M., *TSG March 2021 1163-1173*
- Lukic, S.**, see Du, Y., *TSG Nov. 2021 5000-5010*
- Lundstrom, B.**, Patel, S., and Salapaka, M.V., Distribution Feeder-Scale Fast Frequency Response via Optimal Coordination of Net-Load Resources—Part I: Solution Design; *TSG March 2021 1289-1302*
- Lundstrom, B.**, Patel, S., and Salapaka, M.V., Distribution Feeder-Scale Fast Frequency Response via Optimal Coordination of Net-Load Resources—Part II: Large-Scale Demonstration; *TSG March 2021 1445-1454*
- Lundstrom, B.**, see Patel, S., *TSG March 2021 1088-1103*
- Luo, F.**, see Kong, W., *TSG July 2021 3086-3096*
- Luo, X.**, see Huang, C., *TSG July 2021 3043-3055*
- Luo, X.**, Xue, K., Xu, J., Sun, Q., and Zhang, Y., Blockchain Based Secure Data Aggregation and Distributed Power Dispatching for Microgrids; *TSG Nov. 2021 5268-5279*
- Luo, Y.**, Chen, C., Kadavil, R., Liaw, B., Muljadi, E., Wu, X., Srivastava, S.K., Mosier, T., and Dufek, E., A Novel Framework for Optimizing Ramping Capability of Hybrid Energy Storage Systems; *TSG March 2021 1651-1662*
- Lusis, P.**, Andrew, L.L.H., Liebman, A., and Tack, G., The Added Value of Coordinating Inverter Control; *TSG March 2021 1238-1248*
- Lv, L.**, see Tang, K., *TSG Jan. 2021 821-833*
- Lv, X.**, see Hu, W., *TSG July 2021 2879-2889*
- Lv, Z.**, see Jin, H., *TSG March 2021 1821-1824*
- Lyhne, M.**, see Shahid, K., *TSG Nov. 2021 5060-5072*
- Lyu, C.**, Jia, Y., and Xu, Z., A Novel Communication-Less Approach to Economic Dispatch for Microgrids; *TSG Jan. 2021 901-904*

M

- Ma, J.**, see Liang, H., *TSG Jan. 2021 442-452*
- Ma, J.**, see Qiu, W., *TSG May 2021 2732-2735*
- Ma, J.**, see Wen, H., *TSG July 2021 3648-3660*
- Ma, S.**, see Zhang, H., *TSG March 2021 1194-1205*
- Ma, X.**, see Tang, K., *TSG Jan. 2021 821-833*
- Ma, X.**, see Xu, J., *TSG May 2021 2224-2238*
- Ma, Y.**, see Su, Y., *TSG May 2021 2355-2364*
- Ma, Y.**, see Kong, X., *TSG Sept. 2021 4269-4279*
- Ma, Z.**, Wang, Z., Guo, Y., Yuan, Y., and Chen, H., Nonlinear Multiple Models Adaptive Secondary Voltage Control of Microgrids; *TSG Jan. 2021 227-238*
- Ma, Z.**, see Xie, J., *TSG March 2021 1674-1684*
- Ma, Z.**, see Zhang, Q., *TSG Sept. 2021 3835-3846*
- Macedo, L.H.**, see Vargas, R., *TSG May 2021 2295-2306*
- Machado, R.C.S.**, see Pasetti, M., *TSG Nov. 2021 5310-5321*
- Maciejewski, A.A.**, see Algarni, A.S., *TSG March 2021 1825-1827*
- Mahapatra, K.**, Lu, S., Sengupta, A., and Chaudhuri, N.R., Power System Disturbance Classification With Online Event-Driven Neuromorphic Computing; *TSG May 2021 2343-2354*
- Mahmood, A.**, see Abdella, J., *TSG July 2021 3364-3378*
- Mahmood, I.**, see Jibrán, M., *TSG Sept. 2021 4059-4067*
- Mahmood, K.**, see Badar, H.M.S., *TSG Sept. 2021 4426-4434*
- Mahmood, K.**, see Ahmed, S., *TSG Nov. 2021 5290-5298*
- Mahmoud, K.**, and Lehtonen, M., Comprehensive Analytical Expressions for Assessing and Maximizing Technical Benefits of Photovoltaics to Distribution Systems; *TSG Nov. 2021 4938-4949*
- Mahmud, K.**, see Nizami, M.S.H., *TSG Jan. 2021 479-490*
- Mahseredjian, J.**, see Jafarigiv, D., *TSG March 2021 1640-1650*
- Mahseredjian, J.**, see Pourramezan, R., *TSG May 2021 2402-2412*
- Makonin, S.**, see Harell, A., *TSG Sept. 2021 4553-4563*
- Mallipeddi, R.**, see Kumar, A., *TSG July 2021 2844-2859*
- Manoharan, A.**, see Balachandran, T., *TSG Jan. 2021 692-703*
- Manrique Machado, S.d.J.M.**, da Silva, S.A.O., Monteiro, J.R.B.d.A., and de Oliveira, A.A., Network Modeling Influence on Small-Signal Reduced-Order Models of Inverter-Based AC Microgrids Considering Virtual Impedance; *TSG Jan. 2021 79-92*
- Manshadi, S.D.**, see Soofi, A.F., *TSG March 2021 1663-1673*
- Mansson, D.**, see Avula, R.R., *TSG July 2021 3503-3513*
- Mansy, H.**, and Kwon, S., Optimal HVAC Control for Demand Response via Chance-Constrained Two-Stage Stochastic Program; *TSG May 2021 2188-2200*
- Mantovani, J.R.S.**, see Vargas, R., *TSG May 2021 2295-2306*
- Maple, C.**, see Lakshminarayana, S., *TSG Sept. 2021 4415-4425*
- Marquez, J.J.**, see Garcia-Torres, F., *TSG Jan. 2021 182-191*
- Martin, K.**, see Ju, W., *TSG Jan. 2021 859-870*
- Martinez, S.**, see Anderson, T., *TSG Sept. 2021 4126-4136*
- Mather, B.**, see Xie, F., *TSG May 2021 2496-2507*
- Mauricio, J.M.**, see Kontis, E.O., *TSG Nov. 2021 4971-4982*
- McArthur, S.**, see Faiya, B.A., *TSG Sept. 2021 4102-4112*
- McCulloch, M.**, see Samende, C., *TSG Nov. 2021 4584-4594*
- McCulloch, M.**, see Samende, C., *TSG Nov. 2021 4715-4725*
- McCulloch, M.D.**, see Dong, C., *TSG Jan. 2021 871-884*
- McCulloch, M.D.**, see Han, L., *TSG Jan. 2021 289-300*
- Mcdermott, T.E.**, see Liu, B., *TSG May 2021 2462-2471*
- McElroy, M.B.**, see Lu, T., *TSG May 2021 2176-2187*
- McEntee, C.**, see Xie, F., *TSG May 2021 2496-2507*
- Meena, N.K.**, see Vega-Fuentes, E., *TSG March 2021 1303-1313*
- Mehran, K.**, see Alavi, S.A., *TSG Sept. 2021 3718-3730*
- Mei, S.**, see Chen, Y., *TSG May 2021 2484-2495*
- Mei, S.**, see Li, B., *TSG July 2021 3314-3325*
- Meisenbacher, S.**, see Schwenk, K., *TSG Nov. 2021 5135-5145*
- Mejia-Ruiz, G.E.**, Cardenas-Javier, R., Arrieta Paternina, M.R., Rodriguez-Rodriguez, J.R., Ramirez, J.M., and Zamora-Mendez, A., Coordinated Optimal Volt/Var Control for Distribution Networks via D-PMUs and EV Chargers by Exploiting the Eigensystem Realization; *TSG May 2021 2425-2438*
- Meliopoulos, A.P.S.**, see Zhong, C., *TSG July 2021 3128-3137*
- Mendieta, W.**, and Canizares, C.A., Primary Frequency Control in Isolated Microgrids Using Thermostatically Controllable Loads; *TSG Jan. 2021 93-105*
- Meng, K.**, see Liu, H., *TSG Nov. 2021 5420-5433*
- Meng, Y.**, Yu, Z., Lu, N., and Shi, D., Time Series Classification for Locating Forced Oscillation Sources; *TSG March 2021 1712-1721*
- Meng, Y.**, see Liang, M., *TSG March 2021 1163-1173*
- Meza, A.V.**, see Morozovska, K., *TSG Nov. 2021 5052-5059*
- Mi, T.**, see Yang, F., *TSG March 2021 1805-1820*
- Mikut, R.**, see Weber, M., *TSG Nov. 2021 5409-5419*
- Mikut, R.**, see Schwenk, K., *TSG Nov. 2021 5135-5145*
- Milano, F.**, see Moschella, M., *TSG March 2021 1772-1781*
- Milano, F.**, and Gomez-Exposito, A., Detection of Cyber-Attacks of Power Systems Through Benford's Law; *TSG May 2021 2741-2744*
- Milanovic, J.V.**, see Gonzalez, J., *TSG Sept. 2021 4564-4572*
- Mili, L.**, see Xu, Y., *TSG May 2021 2696-2707*
- Millar, R.J.**, see Jooshaki, M., *TSG Nov. 2021 4740-4751*
- Mirshakali, H.**, Dashti, R., Keshavarz, A., Torabi, A.J., and Shaker, H.R., A Novel Fault Location Methodology for Smart Distribution Networks; *TSG March 2021 1277-1288*
- Mishra, A.**, and Jena, P., A Scheduled Intentional Islanding Method Based on Ranking of Possible Islanding Zone; *TSG May 2021 1853-1866*

- Mitrentsis, G.**, and Lens, H., Data-Driven Dynamic Models of Active Distribution Networks Using Unsupervised Learning Techniques on Field Measurements; *TSG July 2021 2952-2965*
- Moazeni, F.**, Khazaei, J., and Asrari, A., Step Towards Energy-Water Smart Microgrids; Buildings Thermal Energy and Water Demand Management Embedded in Economic Dispatch; *TSG Sept. 2021 3680-3691*
- Moeini, A.**, see Dabbaghjamanesh, M., *TSG May 2021 2331-2342*
- Moeini-Aghtaie, M.**, see Azizi, A., *TSG March 2021 1215-1223*
- Moghaddam, M.P.**, see Zamani, R., *TSG Nov. 2021 4962-4970*
- Mohamed, A.S.**, Arani, M.F.M., Jahromi, A.A., and Kundur, D., False Data Injection Attacks Against Synchronization Systems in Microgrids; *TSG Sept. 2021 4471-4483*
- Mohammadali, A.**, and Haghghi, M.S., A Privacy-Preserving Homomorphic Scheme With Multiple Dimensions and Fault Tolerance for Metering Data Aggregation in Smart Grid; *TSG Nov. 2021 5212-5220*
- Mohammadrezaee, R.**, Ghaisari, J., Yousefi, G., and Kamali, M., Dynamic State Estimation of Smart Distribution Grids Using Compressed Measurements; *TSG Sept. 2021 4535-4542*
- Mohandes, B.**, El Moursi, M.S., Hatziaargyriou, N.D., and El Khatib, S., Incentive Based Demand Response Program for Power System Flexibility Enhancement; *TSG May 2021 2212-2223*
- Mohsenian-Rad, H.**, see Kamal, M., *TSG March 2021 1577-1588*
- Mohsenian-Rad, H.**, see Chen, L., *TSG May 2021 2413-2424*
- Mohsenian-Rad, H.**, see Aligholian, A., *TSG July 2021 3624-3636*
- Mohsenian-Rad, H.**, see Izadi, M., *TSG Sept. 2021 4295-4307*
- Molbak, T.**, see Khatibi, M., *TSG May 2021 2048-2059*
- Montanari, G.C.**, Hebner, R., Seri, P., and Ghosh, R., Self-Assessment of Health Conditions of Electrical Assets and Grid Components: A Contribution to Smart Grids; *TSG March 2021 1206-1214*
- Monteiro, J.R.B.d.A.**, see Manrique Machado, S.d.J.M., *TSG Jan. 2021 79-92*
- Monti, A.**, see Syed, M.H., *TSG March 2021 1747-1760*
- Moon, S.**, see Lee, J., *TSG May 2021 1918-1928*
- Moon, S.**, see Chang, J., *TSG Sept. 2021 3765-3779*
- Mora-Florez, J.**, see Chavarro-Barrera, L., *TSG July 2021 2834-2843*
- Moreno-Munoz, A.**, see Garcia-Torres, F., *TSG Jan. 2021 182-191*
- Morgante, G.**, see Shahid, K., *TSG Nov. 2021 5060-5072*
- Moriarty, J.**, see Gonzalez, J., *TSG Sept. 2021 4564-4572*
- Morozovska, K.**, Heleno, M., Meza, A.V., and Hilber, P., Including Dynamic Line Rating Into the Optimal Planning of Distributed Energy Resources; *TSG Nov. 2021 5052-5059*
- Morren, J.**, see Roos, M., *TSG Sept. 2021 3692-3704*
- Morren, J.**, see Roos, M.H., *TSG Nov. 2021 4655-4667*
- Morstyn, T.**, see Dong, C., *TSG Jan. 2021 871-884*
- Morstyn, T.**, see Han, L., *TSG Jan. 2021 289-300*
- Morstyn, T.**, see Toubeau, J., *TSG May 2021 2663-2674*
- Moschella, M.**, Murad, M.A.A., Crisostomi, E., and Milano, F., Decentralized Charging of Plug-In Electric Vehicles and Impact on Transmission System Dynamics ; *TSG March 2021 1772-1781*
- Moser, A.**, see Rotering, N., *TSG July 2021 3305-3313*
- Mosier, T.**, see Luo, Y., *TSG March 2021 1651-1662*
- Motter, A.E.**, see Duan, C., *TSG Sept. 2021 4573-4576*
- Moura, S.**, see Zeng, T., *TSG July 2021 3353-3363*
- Moussa, B.**, see Kabir, M.E., *TSG Sept. 2021 4377-4388*
- Mukherjee, S.**, Chakraborty, A., Bai, H., Darvishi, A., and Fardanesh, B., Scalable Designs for Reinforcement Learning-Based Wide-Area Damping Control; *TSG May 2021 2389-2401*
- Muljadi, E.**, see Luo, Y., *TSG March 2021 1651-1662*
- Munoz-Delgado, G.**, Contreras, J., Arroyo, J.M., Sanchez de la Nieta, A., and Gibescu, M., Integrated Transmission and Distribution System Expansion Planning Under Uncertainty; *TSG Sept. 2021 4113-4125*
- Murad, M.A.A.**, see Moschella, M., *TSG March 2021 1772-1781*
- Muralidharan, M.**, see Anderson, T., *TSG Sept. 2021 4126-4136*
- Muthirayan, D.**, Kalathil, D., Li, S., Poolla, K., and Varaiya, P., Selling Demand Response Using Options; *TSG Jan. 2021 279-288*
- Muyeen, S.M.**, see Oshnoei, A., *TSG Sept. 2021 4351-4362*
- Mylonas, C.**, see Karagiannopoulos, S., *TSG Jan. 2021 268-278*
- N**
- Nainar, K.**, see Shahid, K., *TSG Nov. 2021 5060-5072*
- Nan, J.**, see Yao, W., *TSG Sept. 2021 4238-4249*
- Narang, A.**, see Yan, H.W., *TSG Sept. 2021 3755-3764*
- Nasir, H.A.**, see Jibrán, M., *TSG Sept. 2021 4059-4067*
- Nasiri, M.**, Arzani, A., and Guerrero, J.M., LVRT Operation Enhancement of Single-Stage Photovoltaic Power Plants: An Analytical Approach; *TSG Nov. 2021 5020-5029*
- Nassar, M.E.**, see Hamouda, M.R., *TSG May 2021 2165-2175*
- Nasser, N.**, and Fazeli, M., Buffered-Microgrid Structure for Future Power Networks; a Seamless Microgrid Control; *TSG Jan. 2021 131-140*
- Natarajan, B.**, see Jhala, K., *TSG March 2021 1589-1601*
- Natarajan, B.**, see Karimi, H.S., *TSG Nov. 2021 5299-5309*
- Nayak, N.**, see Ju, W., *TSG Jan. 2021 859-870*
- Nazari, M.H.**, Xie, S., Yi Wang, L., Yin, G., and Chen, W., Impact of Communication Packet Delivery Ratio on Reliability of Optimal Load Tracking and Allocation in DC Microgrids; *TSG July 2021 2812-2821*
- Nazaripouya, H.**, see Kamal, M., *TSG March 2021 1577-1588*
- Nazemi, M.**, Dehghanian, P., Lu, X., and Chen, C., Uncertainty-Aware Deployment of Mobile Energy Storage Systems for Distribution Grid Resilience; *TSG July 2021 3200-3214*
- Nemathkhan, F.**, Bahrami, S., Aminifar, F., and Catalao, J.P.S., Exploiting the Potentials of HVAC Systems in Transactive Energy Markets; *TSG Sept. 2021 4039-4048*
- Ng, W.H.**, see Lu, X., *TSG March 2021 1507-1518*
- Ngo, V.**, and Wu, W., Interval Distribution Power Flow With Relative-Distance-Measure Arithmetic; *TSG Sept. 2021 3858-3867*
- Nguyen, P.**, see Roos, M., *TSG Sept. 2021 3692-3704*
- Nguyen, P.H.**, see Duque, E.M.S., *TSG Sept. 2021 4280-4294*
- Nguyen, P.H.**, see Roos, M.H., *TSG Nov. 2021 4655-4667*
- Ni, M.**, see Chen, C., *TSG Jan. 2021 647-658*
- Niazazari, I.**, see Ghasemkhani, A., *TSG March 2021 1519-1528*
- Nie, S.**, see Ding, L., *TSG July 2021 3448-3457*
- Nielsen, C.P.**, see Lu, T., *TSG May 2021 2176-2187*
- Nieto, E.**, see Garcia-Torres, F., *TSG May 2021 1893-1903*
- Nishikawa, T.**, see Duan, C., *TSG Sept. 2021 4573-4576*
- Niu, T.**, see Ding, Y., *TSG Sept. 2021 3928-3939*
- Nizami, M.S.H.**, Hossain, M.J., and Mahmud, K., A Nested Transactive Energy Market Model to Trade Demand-Side Flexibility of Residential Consumers; *TSG Jan. 2021 479-490*
- Noble, B.F.**, see Hu, B., *TSG Nov. 2021 5201-5211*
- Nordstrom, L.**, see Rabuzin, T., *TSG Sept. 2021 4250-4258*
- Nozal, A.R.d.**, see Kontis, E.O., *TSG Nov. 2021 4971-4982*
- O**
- O'Malley, M.**, see Anwar, M.B., *TSG July 2021 3070-3085*
- Ochani, M.K.**, see Rafiq, H., *TSG July 2021 3265-3277*
- Ochoa, L.F.**, see Liu, M.Z., *TSG July 2021 2929-2940*
- Ochoa, L.F.**, see Petrou, K., *TSG Sept. 2021 3877-3888*
- Oechtering, T.J.**, see Avula, R.R., *TSG July 2021 3503-3513*
- Ogunnubi, O.**, see Yan, M., *TSG Nov. 2021 4702-4714*
- Ojo, Y.**, see Watson, J.D., *TSG Nov. 2021 4726-4739*
- Olama, M.M.**, see Park, B., *TSG Jan. 2021 67-78*
- Olama, M.M.**, see Wang, X., *TSG Sept. 2021 3990-4002*
- Olivares, D.E.**, see Cordova, S., *TSG Nov. 2021 4668-4680*
- Olsen, R.L.**, see Shahid, K., *TSG Nov. 2021 5060-5072*
- Ortega, C.**, see Lee, Z.J., *TSG Sept. 2021 4339-4350*
- Oshnoei, A.**, Kheradmandi, M., Muyeen, S.M., and Hatziaargyriou, N.D., Disturbance Observer and Tube-Based Model Predictive Controlled Electric Vehicles for Frequency Regulation of an Isolated Power Grid; *TSG Sept. 2021 4351-4362*
- P**
- Paaso, A.**, see Yan, M., *TSG March 2021 1314-1328*
- Paaso, A.**, see Yan, M., *TSG March 2021 1033-1047*

- Paaso, A.**, see Gan, W., *TSG May 2021 2013-2026*
- Paaso, E.A.**, see Yan, M., *TSG Nov. 2021 4702-4714*
- Pal, B.C.**, see Gupta, Y., *TSG Jan. 2021 169-181*
- Palensky, P.**, see Syed, M.H., *TSG March 2021 1747-1760*
- Pan, G.**, Gu, W., Lu, Y., Qiu, H., Lu, S., and Yao, S., Accurate Modeling of a Profit-Driven Power to Hydrogen and Methane Plant Toward Strategic Bidding Within Multi-Type Markets; *TSG Jan. 2021 338-349*
- Pan, G.**, see Qiu, H., *TSG March 2021 1135-1148*
- Pan, Z.**, see Bai, F., *TSG Jan. 2021 897-900*
- Panahi, H.**, see Zamani, R., *TSG Nov. 2021 4962-4970*
- Pandey, S.**, see Khaledian, E., *TSG May 2021 2378-2388*
- Pandzic, H.**, see Sepetanc, K., *TSG July 2021 3339-3352*
- Pang, K.**, see Wang, C., *TSG Sept. 2021 3847-3857*
- Paniagua, J.**, Unamuno, E., and Barrena, J.A., Dual Inertia-Emulation Control for Interlinking Converters in Grid-Tying Applications; *TSG Sept. 2021 3868-3876*
- Paolone, M.**, see Pourramezan, R., *TSG May 2021 2402-2412*
- Paolone, M.**, see Delcourt, M., *TSG Sept. 2021 4460-4470*
- Paolone, M.**, see Yuan, Z., *TSG Sept. 2021 4164-4175*
- Papadopoulos, P.N.**, see Gonzalez, J., *TSG Sept. 2021 4564-4572*
- Parizi, R.M.**, see Ahmed, S., *TSG Nov. 2021 5290-5298*
- Park, B.**, and Olama, M.M., A Model-Free Voltage Control Approach to Mitigate Motor Stalling and FIDVR for Smart Grids; *TSG Jan. 2021 67-78*
- Park, B.**, see Wang, X., *TSG Sept. 2021 3990-4002*
- Park, J.**, Kim, Y., and Lu, X., New Analytical Model of Microgrid Frequency and Voltage Variations Due to Network Reconfiguration; *TSG Jan. 2021 905-908*
- Park, J.**, see Ullah, M.H., *TSG July 2021 3669-3672*
- Park, J.**, see Ullah, M.H., *TSG July 2021 3390-3403*
- Park, J.**, Ban, J., Kim, Y., and Lu, X., Supplementary Feedforward Control of DGs in a Reconfigurable Microgrid for Load Restoration; *TSG Nov. 2021 4641-4654*
- Parth, N.**, see Vijay, A.S., *TSG July 2021 2991-3003*
- Parvania, M.**, see Farajzadeh-Zanjani, M., *TSG July 2021 3468-3478*
- Pasetti, M.**, Ferrari, P., Bellagente, P., Sisinni, E., de Sa, A.O., Prado, C.B.d., David, R.P., and Machado, R.C.S., Artificial Neural Network-Based Stealth Attack on Battery Energy Storage Systems; *TSG Nov. 2021 5310-5321*
- Patel, A.**, Roy, S., and Baldi, S., Wide-Area Damping Control Resilience Towards Cyber-Attacks: A Dynamic Loop Approach; *TSG July 2021 3438-3447*
- Patel, S.**, see Lundstrom, B., *TSG March 2021 1289-1302*
- Patel, S.**, see Lundstrom, B., *TSG March 2021 1445-1454*
- Patel, S.**, Chakraborty, S., Lundstrom, B., Salapaka, S.M., and Salapaka, M.V., Isochronous Architecture-Based Voltage-Active Power Droop for Multi-Inverter Systems; *TSG March 2021 1088-1103*
- Paterakis, N.G.**, see Tsaousoglou, G., *TSG May 2021 2249-2260*
- Patsios, C.**, see Zografou-Barredo, N., *TSG May 2021 1867-1879*
- Paudel, A.**, see Khorasany, M., *TSG May 2021 2472-2483*
- Pecenak, Z.K.**, Haghi, H.V., Li, C., Reno, M.J., Disfani, V.R., and Kleissl, J., Aggregation of Voltage-Controlled Devices During Distribution Network Reduction; *TSG Jan. 2021 33-42*
- Peirelinck, T.**, Hermans, C., Spiessens, F., and Deconinck, G., Domain Randomization for Demand Response of an Electric Water Heater; *TSG March 2021 1370-1379*
- Peng, J.**, Fan, B., and Liu, W., Voltage-Based Distributed Optimal Control for Generation Cost Minimization and Bounded Bus Voltage Regulation in DC Microgrids; *TSG Jan. 2021 106-116*
- Peng, N.**, Liang, R., Wang, G., Sun, P., Chen, C., and Hou, T., Edge Computing-Based Fault Location in Distribution Networks by Using Asynchronous Transient Amplitudes at Limited Nodes; *TSG Jan. 2021 574-588*
- Peng, Y.**, see Shen, C., *TSG March 2021 1118-1134*
- Peng, Y.**, see Cheng, H., *TSG Nov. 2021 4983-4999*
- Pereira, L.**, see Faustine, A., *TSG Jan. 2021 398-406*
- Perez-Londono, S.**, see Chavarro-Barrera, L., *TSG July 2021 2834-2843*
- Perez-Lopez, D.**, see Garcia-Perez, D., *TSG May 2021 2722-2731*
- Peskir, G.**, see Gonzalez, J., *TSG Sept. 2021 4564-4572*
- Petrou, K.**, Procopiou, A.T., Gutierrez-Lagos, L., Liu, M.Z., Ochoa, L.F., Langstaff, T., and Theunissen, J.M., Ensuring Distribution Network Integrity Using Dynamic Operating Limits for Prosumers; *TSG Sept. 2021 3877-3888*
- Pfiftscher, L.L.**, see Schmitz, M., *TSG Jan. 2021 324-337*
- Pierrou, G.**, see Du, M., *TSG Nov. 2021 5349-5361*
- Pinson, P.**, see Guo, Z., *TSG Jan. 2021 798-809*
- Pinson, P.**, see Tsaousoglou, G., *TSG May 2021 2249-2260*
- Pinson, P.**, see Guo, Z., *TSG Sept. 2021 4151-4163*
- Poelzer, G.**, see Hu, B., *TSG Nov. 2021 5201-5211*
- Ponce, C.**, see Aravena, I., *TSG Sept. 2021 4068-4078*
- Poolla, K.**, see Muthirayan, D., *TSG Jan. 2021 279-288*
- Poor, H.V.**, see Lakshminarayana, S., *TSG Jan. 2021 635-646*
- Poor, H.V.**, see Lakshminarayana, S., *TSG Nov. 2021 5244-5257*
- Popov, M.**, see Bakhshi-Jafarabadi, R., *TSG March 2021 1063-1072*
- Pou, J.**, see Yan, H.W., *TSG Sept. 2021 3755-3764*
- Pourramezan, R.**, Karimi, H., Paolone, M., and Mahseredjian, J., Optimal Coordination of Phasor Data Concentrators in Hierarchical Synchrophasor Networks; *TSG May 2021 2402-2412*
- Pradhan, P.**, see Jhala, K., *TSG March 2021 1589-1601*
- Prado, C.B.d.**, see Pasetti, M., *TSG Nov. 2021 5310-5321*
- Procopiou, A.T.**, see Petrou, K., *TSG Sept. 2021 3877-3888*
- Pugliese, S.**, see Giacomuzzi, S., *TSG July 2021 2941-2951*
- Pulgar-Painemal, H.**, see Shuai, H., *TSG Nov. 2021 5479-5482*

Q

- Qadri, S.**, see Badar, H.M.S., *TSG Sept. 2021 4426-4434*
- Qi, D.**, see Chen, Y., *TSG May 2021 1929-1938*
- Qi, J.**, see Khazeynasab, S.R., *TSG Sept. 2021 4327-4338*
- Qi, L.**, see Wang, H., *TSG March 2021 1394-1404*
- Qi, Y.**, see Guo, K., *TSG Nov. 2021 4616-4626*
- Qian, J.**, Cao, Z., Dong, X., Shen, J., Liu, Z., and Ye, Y., Two Secure and Efficient Lightweight Data Aggregation Schemes for Smart Grid; *TSG May 2021 2625-2637*
- Qian, T.**, see Zhang, W., *TSG Sept. 2021 4435-4446*
- Qiao, W.**, see AlAshery, M.K., *TSG Jan. 2021 885-896*
- Qin, C.**, see Liu, J., *TSG May 2021 2136-2152*
- Qin, J.**, see Wan, Y., *TSG Jan. 2021 538-547*
- Qin, Z.**, Liu, D., Hua, H., and Cao, J., Privacy Preserving Load Control of Residential Microgrid via Deep Reinforcement Learning; *TSG Sept. 2021 4079-4089*
- Qiu, F.**, see Zhang, Q., *TSG March 2021 1048-1062*
- Qiu, F.**, see Edib, S.N., *TSG March 2021 1565-1576*
- Qiu, H.**, see Pan, G., *TSG Jan. 2021 338-349*
- Qiu, H.**, Gu, W., Xu, X., Pan, G., Liu, P., Wu, Z., and Wang, L., A Historical-Correlation-Driven Robust Optimization Approach for Microgrid Dispatch; *TSG March 2021 1135-1148*
- Qiu, J.**, see Tao, Y., *TSG March 2021 1149-1162*
- Qiu, J.**, see Zhao, H., *TSG May 2021 2508-2517*
- Qiu, J.**, see Chen, W., *TSG July 2021 2913-2928*
- Qiu, J.**, see Sun, X., *TSG July 2021 2903-2912*
- Qiu, J.**, see Sun, X., *TSG Nov. 2021 4752-4764*
- Qiu, R.C.**, see Yang, F., *TSG March 2021 1805-1820*
- Qiu, W.**, Tang, Q., Zhu, K., Wang, W., Liu, Y., and Yao, W., Detection of Synchrophasor False Data Injection Attack Using Feature Interactive Network; *TSG Jan. 2021 659-670*
- Qiu, W.**, Tang, Q., Zhu, K., Yao, W., Ma, J., and Liu, Y., Cyber Spoofing Detection for Grid Distributed Synchrophasor Using Dynamic Dual-Kernel SVM; *TSG May 2021 2732-2735*
- Qiu, Z.**, see Wei, B., *TSG March 2021 1455-1466*
- Qu, M.**, see Ding, T., *TSG May 2021 2153-2164*
- Qu, M.**, see Ding, T., *TSG May 2021 2736-2740*
- Quan, X.**, see Xie, X., *TSG Nov. 2021 4765-4777*
- Qureshi, F.A.**, see Jibrán, M., *TSG Sept. 2021 4059-4067*

R

- Rabuzin, T.**, and Nordstrom, L., Data-Driven Islanding Detection Using a Principal Subspace of Voltage Angle Differences; *TSG Sept. 2021* 4250-4258
- Rafiq, H.**, Shi, X., Zhang, H., Li, H., Ochani, M.K., and Shah, A.A., Generalizability Improvement of Deep Learning-Based Non-Intrusive Load Monitoring System Using Data Augmentation; *TSG July 2021* 3265-3277
- Raghav, L.P.**, Kumar, R.S., Raju, D.K., and Singh, A.R., Optimal Energy Management of Microgrids Using Quantum Teaching Learning Based Algorithm; *TSG Nov. 2021* 4834-4842
- Rahman, S.**, see Zhang, X., *TSG Jan. 2021* 420-431
- Rajabi, A.**, and Bobba, R.B., Resilience Against Data Manipulation in Distributed Synchrophasor-Based Mode Estimation; *TSG July 2021* 3538-3547
- Raju, D.K.**, see Raghav, L.P., *TSG Nov. 2021* 4834-4842
- Ramirez, A.**, and Lazaroiu, G.C., Fast Steady-State Computation of Electrical Networks Involving Nonlinear and Photovoltaic Components; *TSG July 2021* 3107-3114
- Ramirez, J.M.**, see Mejia-Ruiz, G.E., *TSG May 2021* 2425-2438
- Rashidzadeh-Kermani, H.**, see Vahedipour-Dahraie, M., *TSG March 2021* 1405-1415
- Ravindran, V.**, see de Oliveira, R.A., *TSG Nov. 2021* 5444-5456
- Razavi-Far, R.**, see Farajzadeh-Zanjani, M., *TSG July 2021* 3468-3478
- Razzaghi, R.**, see Khorasany, M., *TSG May 2021* 2472-2483
- Reno, M.J.**, see Pecenek, Z.K., *TSG Jan. 2021* 33-42
- Ridao, M.A.**, see Albea, C., *TSG Nov. 2021* 4865-4875
- Rider, M.J.**, see Arias, N.B., *TSG May 2021* 2708-2721
- Rodriguez, J.**, see Long, B., *TSG March 2021* 953-964
- Rodriguez, J.**, see Li, Y., *TSG May 2021* 1880-1892
- Rodriguez, J.**, see Long, B., *TSG July 2021* 3138-3149
- Rodriguez-Rodriguez, J.R.**, see Mejia-Ruiz, G.E., *TSG May 2021* 2425-2438
- Romero, R.**, see Vargas, R., *TSG May 2021* 2295-2306
- Ronnberg, S.K.**, see de Oliveira, R.A., *TSG Nov. 2021* 5444-5456
- Roos, M.**, Nguyen, P., Morren, J., and Slootweg, J.G., Direct-Quadrature Sequence Models for Energy-Function Based Transient Stability Analysis of Unbalanced Inverter-Based Microgrids; *TSG Sept. 2021* 3692-3704
- Roos, M.H.**, Nguyen, P.H., Morren, J., and Slootweg, J.G., Stability Analysis of Microgrid Islanding Transients Based on Interconnected Dissipative Subsystems; *TSG Nov. 2021* 4655-4667
- Rotering, N.**, Kellermann, J., and Moser, A., Algorithm for Simultaneous Medium Voltage Grid Planning and Electric Vehicle Scheduling; *TSG July 2021* 3305-3313
- Roy, S.**, see Patel, A., *TSG July 2021* 3438-3447
- Ruan, G.**, Zhong, H., Shan, B., and Tan, X., Constructing Demand-Side Bidding Curves Based on a Decoupled Full-Cycle Process; *TSG Jan. 2021* 502-511
- Russo, M.**, see Fusco, G., *TSG July 2021* 3115-3127
- Rute, E.**, see F., A.N., *TSG July 2021* 2748-2759

S

- Saberi, H.**, Zhang, C., and Dong, Z.Y., Data-Driven Distributionally Robust Hierarchical Coordination for Home Energy Management; *TSG Sept. 2021* 4090-4101
- Sadamoto, T.**, see Inoue, M., *TSG Jan. 2021* 599-611
- Sadeh, J.**, see Bakhshi-Jafarabadi, R., *TSG March 2021* 1063-1072
- Saez, D.**, see F., A.N., *TSG July 2021* 2748-2759
- Safari, A.**, see Shaker, A., *TSG Sept. 2021* 3940-3953
- Safdarian, A.**, see Heidari-Akhijahani, A., *TSG Sept. 2021* 4543-4552
- Sagan, A.**, Liu, Y., and Bernstein, A., Decentralized Low-Rank State Estimation for Power Distribution Systems; *TSG July 2021* 3097-3106
- Saha, T.**, see Cui, Y., *TSG Sept. 2021* 4577-4580
- Saha, T.K.**, see Bai, F., *TSG Jan. 2021* 897-900
- Saha, T.K.**, see Azim, M.I., *TSG Sept. 2021* 4389-4402
- Saied, N.A.**, see Ahmed, B., *TSG March 2021* 1761-1771
- Saif, M.**, see Farajzadeh-Zanjani, M., *TSG July 2021* 3468-3478
- Sajan, K.S.**, see Ahmed, A., *TSG July 2021* 3570-3580
- Salama, M.M.A.**, see Ameli, A., *TSG Jan. 2021* 845-858

- Salama, M.M.A.**, see Hamouda, M.R., *TSG May 2021* 2165-2175
- Salapaka, M.V.**, see Lundstrom, B., *TSG March 2021* 1289-1302
- Salapaka, M.V.**, see Lundstrom, B., *TSG March 2021* 1445-1454
- Salapaka, M.V.**, see Patel, S., *TSG March 2021* 1088-1103
- Salapaka, S.M.**, see Patel, S., *TSG March 2021* 1088-1103
- Saleem, B.**, Weng, Y., and Gonzales, F.M., Association Rule Mining for Localizing Solar Power in Different Distribution Grid Feeders; *TSG May 2021* 2589-2600
- Saleh, K.A.**, see Ameli, A., *TSG Jan. 2021* 845-858
- Saleh, S.A.**, see Gong, X., *TSG Jan. 2021* 453-467
- Samende, C.**, Bhagavathy, S.M., and McCulloch, M., Distributed State of Charge-Based Droop Control Algorithm for Reducing Power Losses in Multi-Port Converter-Enabled Solar DC Nano-Grids; *TSG Nov. 2021* 4584-4594
- Samende, C.**, Bhagavathy, S.M., and McCulloch, M., Power Loss Minimization of Off-Grid Solar DC Nano-Grids—Part I: Centralized Control Algorithm; *TSG Nov. 2021* 4715-4725
- Sanaye-Pasand, M.**, see Zamani, R., *TSG Nov. 2021* 4962-4970
- Sanchez de la Nieta, A.**, see Munoz-Delgado, G., *TSG Sept. 2021* 4113-4125
- Sanner, S.**, see Khaw, Y.M., *TSG May 2021* 2554-2565
- Sarantakos, I.**, see Zografou-Barredo, N., *TSG May 2021* 1867-1879
- Savaghebi, M.**, see Baharizadeh, M., *TSG July 2021* 2776-2787
- Savkin, A.V.**, see Eskandari, M., *TSG March 2021* 999-1010
- Schmitz, M.**, Bernardon, D.P., Garcia, V.J., Schmitz, W.I., Wolter, M., and Pfitscher, L.L., Price-Based Dynamic Optimal Power Flow With Emergency Repair; *TSG Jan. 2021* 324-337
- Schmitz, W.I.**, see Schmitz, M., *TSG Jan. 2021* 324-337
- Schneider, K.P.**, see Li, J., *TSG Nov. 2021* 4799-4812
- Schwenk, K.**, Meisenbacher, S., Briegel, B., Harr, T., Hagenmeyer, V., and Mikut, R., Integrating Battery Aging in the Optimization for Bidirectional Charging of Electric Vehicles; *TSG Nov. 2021* 5135-5145
- Scott, P.**, see Attarha, A., *TSG May 2021* 2284-2294
- Sebastian Cardenas, D.J.**, see Sun, C., *TSG Jan. 2021* 612-622
- Seifi, H.**, see Jorjani, M., *TSG Nov. 2021* 5322-5334
- Sengupta, A.**, see Mahapatra, K., *TSG May 2021* 2343-2354
- Sepehanc, K.**, and Pandzic, H., A Cluster-Based Model for Charging a Single-Depot Fleet of Electric Vehicles; *TSG July 2021* 3339-3352
- Seri, P.**, see Montanari, G.C., *TSG March 2021* 1206-1214
- Serpedin, E.**, see Takiddin, A., *TSG May 2021* 2675-2684
- Seyedi, M.**, Taher, S.A., Ganji, B., and Guerrero, J., A Hybrid Islanding Detection Method Based on the Rates of Changes in Voltage and Active Power for the Multi-Inverter Systems; *TSG July 2021* 2800-2811
- Seyedi, Y.**, see Jafarigiv, D., *TSG March 2021* 1640-1650
- Shafie-Khah, M.**, see Vahedipour-Dahraie, M., *TSG March 2021* 1405-1415
- Shafiee, Q.**, see Ganjian-Aboukheili, M., *TSG Nov. 2021* 4854-4864
- Shah, A.A.**, see Rafiq, H., *TSG July 2021* 3265-3277
- Shahabi, M.**, see Ganjian-Aboukheili, M., *TSG Nov. 2021* 4854-4864
- Shahid, K.**, Nainar, K., Olsen, R.L., Iov, F., Lyhne, M., and Morgante, G., On the Use of Common Information Model for Smart Grid Applications — A Conceptual Approach; *TSG Nov. 2021* 5060-5072
- Shahidehpour, M.**, see Chen, M., *TSG Jan. 2021* 512-523
- Shahidehpour, M.**, see Zeng, L., *TSG Jan. 2021* 301-311
- Shahidehpour, M.**, see Liu, X., *TSG Jan. 2021* 141-156
- Shahidehpour, M.**, see Zhang, H., *TSG March 2021* 1194-1205
- Shahidehpour, M.**, see Lu, X., *TSG March 2021* 1507-1518
- Shahidehpour, M.**, see Yan, M., *TSG March 2021* 1314-1328
- Shahidehpour, M.**, see Yan, M., *TSG March 2021* 1033-1047
- Shahidehpour, M.**, see Gan, W., *TSG May 2021* 2013-2026
- Shahidehpour, M.**, see Xiao, X., *TSG May 2021* 2261-2271
- Shahidehpour, M.**, see Ding, T., *TSG May 2021* 2153-2164
- Shahidehpour, M.**, see Ding, T., *TSG May 2021* 2736-2740
- Shahidehpour, M.**, see Shi, M., *TSG May 2021* 1953-1963
- Shahidehpour, M.**, see Chen, M., *TSG May 2021* 2060-2076
- Shahidehpour, M.**, see Xia, F., *TSG July 2021* 3326-3338
- Shahidehpour, M.**, see Chen, M., *TSG July 2021* 3056-3069
- Shahidehpour, M.**, see He, R., *TSG July 2021* 3458-3467
- Shahidehpour, M.**, see Zhou, Q., *TSG Sept. 2021* 3705-3717

- Shahidehpour, M.**, see Shaker, A., *TSG Sept. 2021 3940-3953*
- Shahidehpour, M.**, see Wang, C., *TSG Sept. 2021 3847-3857*
- Shahidehpour, M.**, see Yan, M., *TSG Nov. 2021 4702-4714*
- Shahparasti, M.**, see Baharizadeh, M., *TSG July 2021 2776-2787*
- Shahsavari, A.**, see Aligholian, A., *TSG July 2021 3624-3636*
- Shaker, A.**, Safari, A., and Shahidehpour, M., Reactive Power Management for Networked Microgrid Resilience in Extreme Conditions; *TSG Sept. 2021 3940-3953*
- Shaker, H.R.**, see Mirshekali, H., *TSG March 2021 1277-1288*
- Shalalfeh, L.**, Bogdan, P., and Jonckheere, E.A., Fractional Dynamics of PMU Data; *TSG May 2021 2578-2588*
- Shamshad, S.**, see Badar, H.M.S., *TSG Sept. 2021 4426-4434*
- Shamshad, S.**, see Ahmed, S., *TSG Nov. 2021 5290-5298*
- Shan, B.**, see Ruan, G., *TSG Jan. 2021 502-511*
- Shao, C.**, see Ding, Y., *TSG Sept. 2021 3928-3939*
- Sharma, S.**, see Lee, Z.J., *TSG Nov. 2021 5113-5123*
- Shaw, P.**, and Kumar Jena, M., A Novel Event Detection and Classification Scheme Using Wide-Area Frequency Measurements ; *TSG May 2021 2320-2330*
- Shen, C.**, see Yu, L., *TSG Jan. 2021 407-419*
- Shen, C.**, Shuai, Z., Shen, Y., Peng, Y., Liu, X., Li, Z., and Shen, Z.J., Transient Stability and Current Injection Design of Paralleled Current-Controlled VSCs and Virtual Synchronous Generators; *TSG March 2021 1118-1134*
- Shen, C.**, see Jia, M., *TSG March 2021 1429-1444*
- Shen, C.**, see Cheng, H., *TSG Nov. 2021 4983-4999*
- Shen, J.**, see Qian, J., *TSG May 2021 2625-2637*
- Shen, Y.**, see Shen, C., *TSG March 2021 1118-1134*
- Shen, Z.J.**, see Shen, C., *TSG March 2021 1118-1134*
- Shen, Z.J.**, see He, L., *TSG May 2021 1939-1952*
- Shen, Z.J.**, see Cheng, H., *TSG Nov. 2021 4983-4999*
- Sheng, G.**, see Du, Y., *TSG Jan. 2021 350-360*
- Shereen, E.**, see Delcourt, M., *TSG Sept. 2021 4460-4470*
- Sheshyekani, K.**, see Jafarigiv, D., *TSG March 2021 1640-1650*
- Shi, D.**, see AlAshery, M.K., *TSG Jan. 2021 885-896*
- Shi, D.**, see Xie, J., *TSG March 2021 1674-1684*
- Shi, D.**, see Wang, J., *TSG March 2021 1541-1551*
- Shi, D.**, see Meng, Y., *TSG March 2021 1712-1721*
- Shi, M.**, see Zhou, J., *TSG Jan. 2021 205-214*
- Shi, M.**, Chen, X., Zhou, J., Chen, Y., Wen, J., and He, H., Frequency Restoration and Oscillation Damping of Distributed VSGs in Microgrid With Low Bandwidth Communication; *TSG March 2021 1011-1021*
- Shi, M.**, Chen, X., Shahidehpour, M., Zhou, Q., and Wen, J., Observer-Based Resilient Integrated Distributed Control Against Cyberattacks on Sensors and Actuators in Islanded AC Microgrids; *TSG May 2021 1953-1963*
- Shi, Q.**, see Zhao, N., *TSG March 2021 1481-1495*
- Shi, Q.**, see Wang, X., *TSG Sept. 2021 3990-4002*
- Shi, X.**, see Rafiq, H., *TSG July 2021 3265-3277*
- Shi, Y.**, see Cui, S., *TSG Jan. 2021 561-573*
- Shimada, J.**, see Chen, X., *TSG Nov. 2021 4843-4853*
- Shuai, H.**, and He, H., Online Scheduling of a Residential Microgrid via Monte-Carlo Tree Search and a Learned Model ; *TSG March 2021 1073-1087*
- Shuai, H.**, Li, F., Pulgar-Painemal, H., and Xue, Y., Branching Dueling Q-Network-Based Online Scheduling of a Microgrid With Distributed Energy Storage Systems; *TSG Nov. 2021 5479-5482*
- Shuai, Z.**, see Shen, C., *TSG March 2021 1118-1134*
- Shuai, Z.**, see He, L., *TSG May 2021 1939-1952*
- Shuai, Z.**, see Cheng, H., *TSG Nov. 2021 4983-4999*
- Siano, P.**, see Khorasany, M., *TSG May 2021 2472-2483*
- Sidiropoulos, N.D.**, see Zhou, F., *TSG July 2021 3232-3241*
- Siegel, H.J.**, see Algarni, A.S., *TSG March 2021 1825-1827*
- Sikdar, B.**, see James Ranjith Kumar, R., *TSG Sept. 2021 4484-4493*
- Sikdar, B.**, see Gope, P., *TSG Nov. 2021 5335-5348*
- Silva, S.M.**, see Ferreira, D.M., *TSG July 2021 3215-3231*
- Silva-Saravia, H.**, see Ju, W., *TSG Jan. 2021 859-870*
- Singh, A.**, see Contreras-Ocana, J.E., *TSG Jan. 2021 215-226*
- Singh, A.R.**, see Raghav, L.P., *TSG Nov. 2021 4834-4842*
- Singh, C.**, see Balachandran, T., *TSG Jan. 2021 692-703*
- Singh, C.**, see Ding, Y., *TSG Sept. 2021 3928-3939*
- Singh, I.**, see Ju, W., *TSG Jan. 2021 859-870*
- Singh, V.K.**, and Govindarasu, M., A Cyber-Physical Anomaly Detection for Wide-Area Protection Using Machine Learning; *TSG July 2021 3514-3526*
- Sisinni, E.**, see Pasetti, M., *TSG Nov. 2021 5310-5321*
- Slootweg, J.G.**, see Duque, E.M.S., *TSG Sept. 2021 4280-4294*
- Slootweg, J.G.**, see Roos, M., *TSG Sept. 2021 3692-3704*
- Slootweg, J.G.**, see Roos, M.H., *TSG Nov. 2021 4655-4667*
- Soh, C.B.**, see Liu, X., *TSG Jan. 2021 117-130*
- Sohet, B.**, Hayel, Y., Beaudé, O., and Jeandin, A., Hierarchical Coupled Driving-and-Charging Model of Electric Vehicles, Stations and Grid Operators; *TSG Nov. 2021 5146-5157*
- Song, H.**, Liu, Y., Zhao, J., Liu, J., and Wu, G., Prioritized Replay Dueling DDQN Based Grid-Edge Control of Community Energy Storage System; *TSG Nov. 2021 4950-4961*
- Song, J.**, Lee, Y., and Hwang, E., Time-Frequency Mask Estimation Based on Deep Neural Network for Flexible Load Disaggregation in Buildings; *TSG July 2021 3242-3251*
- Song, S.**, see Fang, Z., *TSG Jan. 2021 239-250*
- Song, Y.**, see Tang, K., *TSG Jan. 2021 821-833*
- Song, Y.**, see Yu, P., *TSG May 2021 1964-1977*
- Song, Y.**, see Huang, C., *TSG July 2021 3043-3055*
- Song, Y.**, see Jiang, Y., *TSG July 2021 3016-3029*
- Song, Y.**, see Chen, G., *TSG Sept. 2021 4016-4028*
- Song, Y.**, see Tang, K., *TSG Nov. 2021 5457-5471*
- Song, Y.**, see Wan, C., *TSG Nov. 2021 5396-5408*
- Soofi, A.F.**, Manshadi, S.D., Liu, G., and Dai, R., A SOCP Relaxation for Cycle Constraints in the Optimal Power Flow Problem; *TSG March 2021 1663-1673*
- Spanos, C.J.**, see Yang, Y., *TSG Sept. 2021 4185-4194*
- Spiessens, F.**, see Peirelinck, T., *TSG March 2021 1370-1379*
- Sreeram, T.S.**, and Krishna, S., Protection Against False Data Injection Attacks Considering Degrees of Freedom in Attack Vectors; *TSG Nov. 2021 5258-5267*
- Srikantha, P.**, see Wang, J., *TSG July 2021 3479-3492*
- Srivastava, A.**, see Ahmed, A., *TSG July 2021 3570-3580*
- Srivastava, A.K.**, see Khaledian, E., *TSG May 2021 2378-2388*
- Srivastava, P.**, see Anderson, T., *TSG Sept. 2021 4126-4136*
- Srivastava, S.K.**, see Luo, Y., *TSG March 2021 1651-1662*
- Steen, D.**, see Antoniadou-Plytaria, K., *TSG March 2021 1794-1804*
- Stekli, J.**, see Chen, H., *TSG July 2021 3150-3162*
- Stewart, E.M.**, see Aligholian, A., *TSG July 2021 3624-3636*
- Stoustrup, J.**, see Khatibi, M., *TSG May 2021 2048-2059*
- Strbac, G.**, see Ye, Y., *TSG Nov. 2021 5185-5200*
- Su, H.**, and Huang, C., Enhanced Wind Generation Forecast Using Robust Ensemble Learning; *TSG Jan. 2021 912-915*
- Su, J.**, Chiang, H., Zeng, Y., and Zhou, N., Toward Complete Characterization of the Steady-State Security Region for the Electricity-Gas Integrated Energy System; *TSG July 2021 3004-3015*
- Su, W.**, see Chang, F., *TSG Sept. 2021 3793-3808*
- Su, Y.**, Li, H., Cui, Y., You, S., Ma, Y., Wang, J., and Liu, Y., An Adaptive PV Frequency Control Strategy Based on Real-Time Inertia Estimation; *TSG May 2021 2355-2364*
- Su, Y.**, see Bao, Z., *TSG Sept. 2021 4363-4376*
- Sumner, M.**, see F., A.N., *TSG July 2021 2748-2759*
- Sun, B.**, see Zhao, D., *TSG Sept. 2021 3819-3834*
- Sun, B.**, see Li, T., *TSG Nov. 2021 4897-4913*
- Sun, C.**, Sebastian Cardenas, D.J., Hahn, A., and Liu, C., Intrusion Detection for Cybersecurity of Smart Meters; *TSG Jan. 2021 612-622*
- Sun, H.**, see Yang, L., *TSG March 2021 1722-1735*
- Sun, H.**, see Yang, T., *TSG May 2021 2027-2036*
- Sun, H.**, see Zhou, J., *TSG July 2021 2760-2775*
- Sun, H.**, see Xu, L., *TSG July 2021 3425-3437*
- Sun, H.**, see Yi, Z., *TSG Sept. 2021 4208-4224*
- Sun, J.**, see Zheng, Y., *TSG July 2021 3613-3623*
- Sun, K.**, see Ju, W., *TSG Jan. 2021 859-870*
- Sun, K.**, see Liu, X., *TSG Jan. 2021 141-156*

Sun, L., and Lubkeman, D., Agent-Based Modeling of Feeder-Level Electric Vehicle Diffusion for Distribution Planning; *TSG Jan. 2021 751-760*

Sun, M., see Wang, Y., *TSG July 2021 3637-3647*

Sun, P., see Peng, N., *TSG Jan. 2021 574-588*

Sun, Q., see Luo, X., *TSG Nov. 2021 5268-5279*

Sun, W., see Haggi, H., *TSG Sept. 2021 4403-4414*

Sun, X., and Qiu, J., Two-Stage Volt/Var Control in Active Distribution Networks With Multi-Agent Deep Reinforcement Learning Method; *TSG July 2021 2903-2912*

Sun, X., and Qiu, J., Hierarchical Voltage Control Strategy in Distribution Networks Considering Customized Charging Navigation of Electric Vehicles; *TSG Nov. 2021 4752-4764*

Sun, Y., see Yu, L., *TSG Jan. 2021 407-419*

Sun, Y., see Xu, J., *TSG May 2021 2224-2238*

Sun, Y., see Zhao, D., *TSG Sept. 2021 3819-3834*

Suryanarayanan, S., see Algarni, A.S., *TSG March 2021 1825-1827*

Syed, M.H., Guillo-Sansano, E., Wang, Y., Vogel, S., Palensky, P., Burt, G.M., Xu, Y., Monti, A., and Hovsapian, R., Real-Time Coupling of Geographically Distributed Research Infrastructures: Taxonomy, Overview, and Real-World Smart Grid Applications; *TSG March 2021 1747-1760*

T

Tack, G., see Lusic, P., *TSG March 2021 1238-1248*

Tafti, H.D., see Yan, H.W., *TSG Sept. 2021 3755-3764*

Taher, S.A., see Seyedi, M., *TSG July 2021 2800-2811*

Taheri, S., Jalali, M., Kekatos, V., and Tong, L., Fast Probabilistic Hosting Capacity Analysis for Active Distribution Systems; *TSG May 2021 2000-2012*

Takiddin, A., Ismail, M., Zafar, U., and Serpedin, E., Robust Electricity Theft Detection Against Data Poisoning Attacks in Smart Grids; *TSG May 2021 2675-2684*

Tan, R., see Ganesh, P., *TSG July 2021 3581-3593*

Tan, X., see Wang, S., *TSG Jan. 2021 774-786*

Tan, X., see Ruan, G., *TSG Jan. 2021 502-511*

Tan, Z., see Zhong, H., *TSG May 2021 2089-2101*

Tang, K., Dong, S., Ma, X., Lv, L., and Song, Y., Chance-Constrained Optimal Power Flow of Integrated Transmission and Distribution Networks With Limited Information Interaction; *TSG Jan. 2021 821-833*

Tang, K., Dong, S., and Song, Y., An Asynchronous Forward-Backward-Splitting Power Flow Algorithm of Coupled Transmission and Active Distribution Systems; *TSG Nov. 2021 5457-5471*

Tang, Q., see Qiu, W., *TSG Jan. 2021 659-670*

Tang, Q., see Qiu, W., *TSG May 2021 2732-2735*

Tang, W., see Liang, J., *TSG May 2021 2652-2662*

Tang, W., see Zhang, W., *TSG Sept. 2021 4435-4446*

Tang, X., see Yu, A., *TSG Nov. 2021 4822-4833*

Tang, Y., see Wang, Q., *TSG March 2021 1615-1625*

Tang, Y., see Ye, Y., *TSG Nov. 2021 5185-5200*

Tang, Y., see Guo, K., *TSG Nov. 2021 4616-4626*

Tang, Z., Hill, D.J., and Liu, T., Distributed Coordinated Reactive Power Control for Voltage Regulation in Distribution Networks; *TSG Jan. 2021 312-323*

Tang, Z., Liu, Y., Wu, L., Liu, J., and Gao, H., Reserve Model of Energy Storage in Day-Ahead Joint Energy and Reserve Markets: A Stochastic UC Solution; *TSG Jan. 2021 372-382*

Tao, S., Xu, Q., Feijoo, A., and Zheng, G., Joint Optimization of Wind Turbine Micrositing and Cabling in an Offshore Wind Farm; *TSG Jan. 2021 834-844*

Tao, Y., Qiu, J., Lai, S., and Zhao, J., Integrated Electricity and Hydrogen Energy Sharing in Coupled Energy Systems; *TSG March 2021 1149-1162*

Tari, Z., see Abdella, J., *TSG July 2021 3364-3378*

Tavakkoli, M., see Fattaheian-Dehkordi, S., *TSG May 2021 1978-1988*

Taylor, P.C., see Zografou-Barredo, N., *TSG May 2021 1867-1879*

Tedeschi, E., see Ferreira, D.M., *TSG July 2021 3215-3231*

Teng, F., see Yong, P., *TSG Sept. 2021 3966-3979*

Teng, F., see Chu, Z., *TSG Nov. 2021 4914-4925*

Theunissen, J.M., see Petrou, K., *TSG Sept. 2021 3877-3888*

Thiebaut, S., see Attarha, A., *TSG May 2021 2284-2294*

Tian, W., Du, M., Ji, X., Liu, G., Dai, Y., and Han, Z., Contract-Based Incentive Mechanisms for HoneyPot Defense in Advanced Metering Infrastructure; *TSG Sept. 2021 4259-4268*

Timotheou, S., see Tziouvani, L., *TSG Sept. 2021 4195-4207*

Tobajas, J., see Garcia-Torres, F., *TSG Jan. 2021 182-191*

Tobajas, J., see Garcia-Torres, F., *TSG May 2021 1893-1903*

Tong, L., see Taheri, S., *TSG May 2021 2000-2012*

Torabi, A.J., see Mirshekali, H., *TSG March 2021 1277-1288*

Toubeau, J., Morstyn, T., Bottieau, J., Zheng, K., Apostolopoulou, D., De Greve, Z., Wang, Y., and Vallee, F., Capturing Spatio-Temporal Dependencies in the Probabilistic Forecasting of Distribution Locational Marginal Prices; *TSG May 2021 2663-2674*

Toubeau, J., see Hupez, M., *TSG May 2021 2201-2211*

Town, G.E., see Yan, Y., *TSG July 2021 3493-3502*

Travacca, B., see Zeng, T., *TSG July 2021 3353-3363*

Tsang, D.H.K., see Wang, S., *TSG Jan. 2021 774-786*

Tsaousoglou, G., Giraldo, J.S., Pinson, P., and Paterakis, N.G., Mechanism Design for Fair and Efficient DSO Flexibility Markets; *TSG May 2021 2249-2260*

Tu, H., see Du, Y., *TSG Nov. 2021 5000-5010*

Tu, Y., see Jin, H., *TSG March 2021 1821-1824*

Tuan, L.A., see Antoniadou-Plytaria, K., *TSG March 2021 1794-1804*

Turowski, M., see Weber, M., *TSG Nov. 2021 5409-5419*

Tushar, W., see Azim, M.I., *TSG Sept. 2021 4389-4402*

Tziakouri, M., see Tziouvani, L., *TSG Sept. 2021 4195-4207*

Tziouvani, L., Hadjidemetriou, L., Charalampous, C., Tziakouri, M., Timotheou, S., and Kyriakides, E., Energy Management and Control of a Flywheel Storage System for Peak Shaving Applications; *TSG Sept. 2021 4195-4207*

U

Ulissi, G., see Kim, S., *TSG July 2021 2860-2868*

Ullah, M.H., and Park, J., Distributed Energy Trading in Smart Grid Over Directed Communication Network; *TSG July 2021 3669-3672*

Ullah, M.H., and Park, J., Peer-to-Peer Energy Trading in Transactive Markets Considering Physical Network Constraints; *TSG July 2021 3390-3403*

Unamuno, E., see Paniagua, J., *TSG Sept. 2021 3868-3876*

V

Vahedipour-Dahraie, M., Rashidizadeh-Kermani, H., Shafie-Khah, M., and Catalao, J.P.S., Risk-Averse Optimal Energy and Reserve Scheduling for Virtual Power Plants Incorporating Demand Response Programs; *TSG March 2021 1405-1415*

Vahidinasab, V., see Alavi, S.A., *TSG Sept. 2021 3718-3730*

Valinejad, J., see Xu, Y., *TSG May 2021 2696-2707*

Vallee, F., see Toubeau, J., *TSG May 2021 2663-2674*

Vallee, F., see Hupez, M., *TSG May 2021 2201-2211*

van der Molen, A., see Duque, E.M.S., *TSG Sept. 2021 4280-4294*

van der Schaar, M., see Xiao, Y., *TSG Nov. 2021 4813-4821*

Vantuch, T., see Chen, K., *TSG March 2021 1602-1614*

Varadharajan, V., see Yan, Y., *TSG July 2021 3493-3502*

Varaiya, P., see Muthirayan, D., *TSG Jan. 2021 279-288*

Vargas, R., Macedo, L.H., Home-Ortiz, J.M., Mantovani, J.R.S., and Romero, R., Optimal Restoration of Active Distribution Systems With Voltage Control and Closed-Loop Operation; *TSG May 2021 2295-2306*

Varjani, A.Y., see Jorjani, M., *TSG Nov. 2021 5322-5334*

Vasquez, J.C., see Cimen, H., *TSG March 2021 977-987*

Vazquez, F., see Garcia-Torres, F., *TSG May 2021 1893-1903*

Vega-Fuentes, E., Yang, J., Lou, C., and Meena, N.K., Transaction-Oriented Dynamic Power Flow Tracing for Distribution Networks—Definition and Implementation in GIS Environment; *TSG March 2021 1303-1313*

Venkatesh, B., see Zheng, X., *TSG July 2021 2869-2878*

Venzke, A., and Chatzivasileiadis, S., Verification of Neural Network Behaviour: Formal Guarantees for Power System Applications; *TSG Jan. 2021 383-397*

Verbic, G., see Wang, B., *TSG Nov. 2021 4681-4689*

Vergara, P.P., see Duque, E.M.S., *TSG Sept. 2021 4280-4294*
Vespermann, N., Hamacher, T., and Kazempour, J., Risk Trading in Energy Communities; *TSG March 2021 1249-1263*
Vijay, A.S., Parth, N., Doolla, S., and Chandorkar, M.C., An Adaptive Virtual Impedance Control for Improving Power Sharing Among Inverters in Islanded AC Microgrids; *TSG July 2021 2991-3003*
Vlahinic, S., Frankovic, D., Jurisa, B., and Zbunjak, Z., Back Up Protection Scheme for High Impedance Faults Detection in Transmission Systems Based on Synchronphasor Measurements; *TSG March 2021 1736-1746*
Vogel, S., see Syed, M.H., *TSG March 2021 1747-1760*
Vokkarane, V.M., see Edib, S.N., *TSG March 2021 1565-1576*
von Meier, A., see Bariya, M., *TSG July 2021 3605-3612*
Vukojevic, A., see Yan, M., *TSG Nov. 2021 4702-4714*

W

Walker, S.L., see Zografou-Barredo, N., *TSG May 2021 1867-1879*
Wan, C., see Yu, P., *TSG May 2021 1964-1977*
Wan, C., see Jiang, Y., *TSG July 2021 3016-3029*
Wan, C., Cao, Z., Lee, W., Song, Y., and Ju, P., An Adaptive Ensemble Data Driven Approach for Nonparametric Probabilistic Forecasting of Electricity Load; *TSG Nov. 2021 5396-5408*
Wan, Y., Qin, J., Li, F., Yu, X., and Kang, Y., Game Theoretic-Based Distributed Charging Strategy for PEVs in a Smart Charging Station; *TSG Jan. 2021 538-547*
Wang, B., see Zhao, N., *TSG March 2021 1329-1345*
Wang, B., see Zhao, N., *TSG March 2021 1481-1495*
Wang, B., see Wei, X., *TSG March 2021 1699-1711*
Wang, B., and Verbic, G., Stability Analysis of Low-Voltage Distribution Feeders Operated as Islanded Microgrids ; *TSG Nov. 2021 4681-4689*
Wang, C., see Jiang, T., *TSG Jan. 2021 548-560*
Wang, C., see Jin, H., *TSG March 2021 1821-1824*
Wang, C., see Jin, H., *TSG March 2021 1821-1824*
Wang, C., see Huang, C., *TSG Sept. 2021 4225-4237*
Wang, C., Pang, K., Shahidehpour, M., and Wen, F., MILP-Based Fault Diagnosis Model in Active Power Distribution Networks; *TSG Sept. 2021 3847-3857*
Wang, C., see Yun, Z., *TSG Nov. 2021 5095-5112*
Wang, D., see Wang, Z., *TSG July 2021 3185-3199*
Wang, F., see Zhang, L., *TSG March 2021 921-931*
Wang, F., see Xiao, X., *TSG May 2021 2261-2271*
Wang, F., see Ding, T., *TSG May 2021 2736-2740*
Wang, F., see Li, K., *TSG Nov. 2021 4876-4885*
Wang, G., see Peng, N., *TSG Jan. 2021 574-588*
Wang, G., see Long, T., *TSG Sept. 2021 4029-4038*
Wang, H., see Zhao, J., *TSG March 2021 1685-1698*
Wang, H., Qi, L., Yan, L., and Li, Z., Load Photo: A Novel Analysis Method for Load Data ; *TSG March 2021 1394-1404*
Wang, H., Zhang, J., Lu, C., and Wu, C., Privacy Preserving in Non-Intrusive Load Monitoring: A Differential Privacy Perspective; *TSG May 2021 2529-2543*
Wang, H., see Chen, Y., *TSG July 2021 3379-3389*
Wang, H., see Ye, Y., *TSG Nov. 2021 5185-5200*
Wang, J., see Chen, B., *TSG Jan. 2021 18-32*
Wang, J., see Zhang, Y., *TSG Jan. 2021 623-634*
Wang, J., see Lu, R., *TSG Jan. 2021 157-168*
Wang, J., and Li, T., Distributed Multi-Area State Estimation for Power Systems With Switching Communication Graphs; *TSG Jan. 2021 787-797*
Wang, J., see Zhang, Y., *TSG Jan. 2021 361-371*
Wang, J., Shi, D., Chen, J., and Liu, C., Privacy-Preserving Hierarchical State Estimation in Untrustworthy Cloud Environments; *TSG March 2021 1541-1551*
Wang, J., see Liang, M., *TSG March 2021 1163-1173*
Wang, J., see Huang, B., *TSG May 2021 2272-2283*
Wang, J., see Su, Y., *TSG May 2021 2355-2364*
Wang, J., see Zhao, T., *TSG May 2021 2125-2135*
Wang, J., and Srikantha, P., Stealthy Black-Box Attacks on Deep Learning Non-Intrusive Load Monitoring Models; *TSG July 2021 3479-3492*
Wang, J., see Li, J., *TSG Nov. 2021 5172-5184*
Wang, K., see Wu, J., *TSG Jan. 2021 737-750*
Wang, L., see Qiu, H., *TSG March 2021 1135-1148*
Wang, L., see Liu, Z., *TSG March 2021 1552-1564*
Wang, L., see Liu, Z., *TSG March 2021 1529-1540*
Wang, L., Zhu, Z., Jiang, C., and Li, Z., Bi-Level Robust Optimization for Distribution System With Multiple Microgrids Considering Uncertainty Distribution Locational Marginal Price; *TSG March 2021 1104-1117*
Wang, L., see Huang, C., *TSG July 2021 3043-3055*
Wang, L., see Zhou, J., *TSG July 2021 2760-2775*
Wang, L., see Babahajiani, P., *TSG July 2021 3661-3664*
Wang, L., see Jiang, L., *TSG Nov. 2021 5362-5372*
Wang, M., see Chang, F., *TSG Sept. 2021 3793-3808*
Wang, P., see Liu, X., *TSG Jan. 2021 117-130*
Wang, Q., Liu, Z., and Tang, Y., SCCO: A State-Caching-Based Coagulation Platform for Cybor-Physical Power System Evaluation; *TSG March 2021 1615-1625*
Wang, Q., see Liao, J., *TSG July 2021 2966-2979*
Wang, S., Tan, X., Liu, T., and Tsang, D.H.K., Aggregation of Demand-Side Flexibility in Electricity Markets: Negative Impact Analysis and Mitigation Method; *TSG Jan. 2021 774-786*
Wang, S., see Chen, C., *TSG Jan. 2021 647-658*
Wang, S., see Zheng, C., *TSG May 2021 2611-2624*
Wang, S., and Wu, W., Aggregate Flexibility of Virtual Power Plants With Temporal Coupling Constraints; *TSG Nov. 2021 5043-5051*
Wang, W., see Qiu, W., *TSG Jan. 2021 659-670*
Wang, W., see Gao, Y., *TSG July 2021 3594-3604*
Wang, W., see Wang, Z., *TSG July 2021 3185-3199*
Wang, X., see Du, Y., *TSG Jan. 2021 350-360*
Wang, X., see Zhang, Y., *TSG Jan. 2021 361-371*
Wang, X., see Wei, X., *TSG March 2021 1699-1711*
Wang, X., see Zhang, F., *TSG May 2021 2365-2377*
Wang, X., see Fan, B., *TSG July 2021 3665-3668*
Wang, X., see Wu, X., *TSG Sept. 2021 3809-3818*
Wang, X., Li, F., Dong, J., Olama, M.M., Zhang, Q., Shi, Q., Park, B., and Kuruganti, T., Tri-Level Scheduling Model Considering Residential Demand Flexibility of Aggregated HVACs and EVs Under Distribution LMP ; *TSG Sept. 2021 3990-4002*
Wang, X., see Jiang, L., *TSG Nov. 2021 5362-5372*
Wang, X., see Du, M., *TSG Nov. 2021 5349-5361*
Wang, Y., see Cui, S., *TSG Jan. 2021 561-573*
Wang, Y., see Zhang, Y., *TSG Jan. 2021 524-537*
Wang, Y., see Ju, W., *TSG Jan. 2021 859-870*
Wang, Y., see Zheng, K., *TSG Jan. 2021 726-736*
Wang, Y., see Xie, J., *TSG March 2021 1674-1684*
Wang, Y., see Jia, M., *TSG March 2021 1429-1444*
Wang, Y., see Syed, M.H., *TSG March 2021 1747-1760*
Wang, Y., see Li, Y., *TSG May 2021 1989-1999*
Wang, Y., see Toubeau, J., *TSG May 2021 2663-2674*
Wang, Y., Bennani, I.L., Liu, X., Sun, M., and Zhou, Y., Electricity Consumer Characteristics Identification: A Federated Learning Approach; *TSG July 2021 3637-3647*
Wang, Y., see Huang, C., *TSG Sept. 2021 4225-4237*
Wang, Y., see Liu, X., *TSG Sept. 2021 3742-3754*
Wang, Y., see Li, J., *TSG Nov. 2021 4799-4812*
Wang, Z., see Lu, R., *TSG Jan. 2021 157-168*
Wang, Z., see Ma, Z., *TSG Jan. 2021 227-238*
Wang, Z., see Wu, J., *TSG Jan. 2021 737-750*
Wang, Z., see AlAshery, M.K., *TSG Jan. 2021 885-896*
Wang, Z., see Xie, J., *TSG March 2021 1674-1684*
Wang, Z., see Zhang, Q., *TSG March 2021 1048-1062*
Wang, Z., see Ding, T., *TSG May 2021 2153-2164*
Wang, Z., see Xu, L., *TSG July 2021 3425-3437*
Wang, Z., Wang, D., Wen, C., Guo, F., and Wang, W., Push-Based Distributed Economic Dispatch in Smart Grids Over Time-Varying Unbalanced Directed Graphs; *TSG July 2021 3185-3199*
Wang, Z., see Yuan, Y., *TSG Sept. 2021 4308-4317*

- Wang, Z.**, see Zhang, Q., *TSG Sept. 2021 3889-3900*
- Wang, Z.**, see Zhang, Q., *TSG Sept. 2021 3835-3846*
- Wang, Z.**, see Bu, F., *TSG Nov. 2021 5084-5094*
- Washom, B.**, see Anderson, T., *TSG Sept. 2021 4126-4136*
- Watson, J.D.**, Ojo, Y., Laib, K., and Lestas, I., A Scalable Control Design for Grid-Forming Inverters in Microgrids; *TSG Nov. 2021 4726-4739*
- Weber, M.**, Turowski, M., Cakmak, H.K., Mikut, R., Kuhnapfel, U., and Hagemeyer, V., Data-Driven Copy-Paste Imputation for Energy Time Series; *TSG Nov. 2021 5409-5419*
- Wei, B.**, Qiu, Z., and Deconinck, G., A Mean-Field Voltage Control Approach for Active Distribution Networks With Uncertainties; *TSG March 2021 1455-1466*
- Wei, J.**, see Wei, X., *TSG March 2021 1699-1711*
- Wei, M.**, see Yang, F., *TSG March 2021 1805-1820*
- Wei, W.**, see Li, B., *TSG July 2021 3314-3325*
- Wei, W.**, see Chen, Y., *TSG July 2021 3379-3389*
- Wei, X.**, Yang, D., Wang, X., Wang, B., Gao, J., and Wei, J., Faulty Feeder Detection Based on Fundamental Component Shift and Multiple-Transient-Feature Fusion in Distribution Networks; *TSG March 2021 1699-1711*
- Wei, Z.**, see Jin, H., *TSG March 2021 1821-1824*
- Wen, C.**, see Li, X., *TSG July 2021 2788-2799*
- Wen, C.**, see Wang, Z., *TSG July 2021 3185-3199*
- Wen, C.**, see Lian, Z., *TSG Sept. 2021 4494-4505*
- Wen, C.**, see Liu, X., *TSG Sept. 2021 3742-3754*
- Wen, F.**, see Zhao, H., *TSG May 2021 2508-2517*
- Wen, F.**, see Wang, C., *TSG Sept. 2021 3847-3857*
- Wen, H.**, Gu, J., Ma, J., Yuan, L., and Jin, Z., Probabilistic Load Forecasting via Neural Basis Expansion Model Based Prediction Intervals; *TSG July 2021 3648-3660*
- Wen, J.**, see Zhou, J., *TSG Jan. 2021 205-214*
- Wen, J.**, see Shi, M., *TSG March 2021 1011-1021*
- Wen, J.**, see Gan, W., *TSG May 2021 2013-2026*
- Wen, J.**, see Yang, X., *TSG May 2021 1836-1852*
- Wen, J.**, see Shi, M., *TSG May 2021 1953-1963*
- Wen, J.**, see Yao, W., *TSG Sept. 2021 4238-4249*
- Wen, J.**, see Yan, L., *TSG Nov. 2021 5124-5134*
- Wen, T.**, see Yun, Z., *TSG Nov. 2021 5095-5112*
- Weng, Y.**, see Saleem, B., *TSG May 2021 2589-2600*
- Wierman, A.**, see Li, T., *TSG Nov. 2021 4897-4913*
- Winslett, M.**, see Ganesh, P., *TSG July 2021 3581-3593*
- Wolter, M.**, see Schmitz, M., *TSG Jan. 2021 324-337*
- Wong, V.W.S.**, see Bahrami, S., *TSG March 2021 1496-1506*
- Wu, C.**, see Wu, J., *TSG Jan. 2021 737-750*
- Wu, C.**, see Wang, H., *TSG May 2021 2529-2543*
- Wu, C.**, see Chen, M., *TSG Nov. 2021 4690-4701*
- Wu, D.**, see Lin, W., *TSG Nov. 2021 5373-5384*
- Wu, G.**, see Song, H., *TSG Nov. 2021 4950-4961*
- Wu, H.**, see Yang, X., *TSG May 2021 1836-1852*
- Wu, H.**, see Liu, B., *TSG Sept. 2021 4447-4459*
- Wu, J.**, see Yang, Z., *TSG Jan. 2021 4-17*
- Wu, J.**, Wang, Z., Wu, C., Wang, K., and Yu, Y., A Data-Driven Storage Control Framework for Dynamic Pricing; *TSG Jan. 2021 737-750*
- Wu, J.**, see Hu, J., *TSG Jan. 2021 468-478*
- Wu, J.**, see Xie, P., *TSG Sept. 2021 3780-3792*
- Wu, K.**, see Li, Q., *TSG Nov. 2021 4627-4640*
- Wu, L.**, see Tang, Z., *TSG Jan. 2021 372-382*
- Wu, L.**, see Li, Z., *TSG Sept. 2021 3914-3927*
- Wu, Q.**, see Zhao, J., *TSG March 2021 1685-1698*
- Wu, Q.**, see Lu, T., *TSG May 2021 2176-2187*
- Wu, Q.**, see Zhang, W., *TSG Sept. 2021 4435-4446*
- Wu, Q.**, see Cai, S., *TSG Nov. 2021 4926-4937*
- Wu, Q.H.**, see Xiahou, K.S., *TSG Jan. 2021 909-911*
- Wu, T.**, Zhang, Y.A., Liu, Y., Lau, W.C., and Xu, H., Missing Data Recovery in Large Power Systems Using Network Embedding; *TSG Jan. 2021 680-691*
- Wu, T.**, Zhao, C., and Zhang, Y.A., Privacy-Preserving Distributed Optimal Power Flow With Partially Homomorphic Encryption; *TSG Sept. 2021 4506-4521*
- Wu, W.**, see Yang, T., *TSG May 2021 2027-2036*
- Wu, W.**, see Liu, H., *TSG May 2021 2037-2047*
- Wu, W.**, see Liu, H., *TSG July 2021 2980-2990*
- Wu, W.**, see Ngo, V., *TSG Sept. 2021 3858-3867*
- Wu, W.**, see Wang, S., *TSG Nov. 2021 5043-5051*
- Wu, X.**, see Luo, Y., *TSG March 2021 1651-1662*
- Wu, X.**, Zhao, W., Wang, X., and Li, H., An MILP-Based Planning Model of a Photovoltaic/Diesel/Battery Stand-Alone Microgrid Considering the Reliability; *TSG Sept. 2021 3809-3818*
- Wu, Y.**, see Ahmed, A., *TSG July 2021 3570-3580*
- Wu, Z.**, see Qiu, H., *TSG March 2021 1135-1148*
- Wu, Z.**, see Hu, W., *TSG July 2021 2879-2889*
- Wu, Z.**, see Xie, X., *TSG Nov. 2021 4765-4777*
- Wurtz, F.**, see Contreras-Ocana, J.E., *TSG Jan. 2021 215-226*

X

- Xia, F.**, Chen, H., Shahidehpour, M., Gan, W., Yan, M., and Chen, L., Distributed Expansion Planning of Electric Vehicle Dynamic Wireless Charging System in Coupled Power-Traffic Networks; *TSG July 2021 3326-3338*
- Xia, J.**, see Yuan, Z., *TSG Nov. 2021 4778-4787*
- Xia, S.**, see Lu, X., *TSG March 2021 1507-1518*
- Xia, Y.**, and Long, T., Chopperless Fault Ride-Through Control for DC Microgrids; *TSG March 2021 965-976*
- Xiahou, K.S.**, Liu, Y., and Wu, Q.H., Robust Load Frequency Control of Power Systems Against Random Time-Delay Attacks; *TSG Jan. 2021 909-911*
- Xiang, Z.**, see Cai, S., *TSG Nov. 2021 4926-4937*
- Xiao, G.**, see Lin, F., *TSG Sept. 2021 3731-3741*
- Xiao, J.**, see Cui, S., *TSG Jan. 2021 561-573*
- Xiao, P.**, see Jin, H., *TSG March 2021 1821-1824*
- Xiao, X.**, Wang, F., Shahidehpour, M., Li, Z., and Yan, M., Coordination of Distribution Network Reinforcement and DER Planning in Competitive Market; *TSG May 2021 2261-2271*
- Xiao, Y.**, see Ellman, D., *TSG March 2021 1358-1369*
- Xiao, Y.**, and van der Schaar, M., Dynamic Stochastic Demand Response With Energy Storage; *TSG Nov. 2021 4813-4821*
- Xie, B.**, see Xu, J., *TSG May 2021 2224-2238*
- Xie, B.**, see Zhong, C., *TSG July 2021 3128-3137*
- Xie, F.**, see Long, Q., *TSG March 2021 943-952*
- Xie, F.**, McEntee, C., Zhang, M., Mather, B., and Lu, N., Development of an Encoding Method on a Co-Simulation Platform for Mitigating the Impact of Unreliable Communication; *TSG May 2021 2496-2507*
- Xie, J.**, Ma, Z., Dehghanpour, K., Wang, Z., Wang, Y., Diao, R., and Shi, D., Imitation and Transfer Q-Learning-Based Parameter Identification for Composite Load Modeling; *TSG March 2021 1674-1684*
- Xie, J.**, see Zhong, C., *TSG July 2021 3128-3137*
- Xie, K.**, see Zhong, W., *TSG March 2021 1264-1276*
- Xie, K.**, see Ding, Y., *TSG Sept. 2021 3928-3939*
- Xie, K.**, see Zhong, W., *TSG Nov. 2021 5030-5042*
- Xie, L.**, see Zheng, K., *TSG Jan. 2021 726-736*
- Xie, L.**, see Zhong, W., *TSG March 2021 1264-1276*
- Xie, L.**, see Zhong, W., *TSG Nov. 2021 5030-5042*
- Xie, N.**, see Long, Q., *TSG March 2021 943-952*
- Xie, N.**, see Huang, C., *TSG Sept. 2021 4225-4237*
- Xie, P.**, Jia, Y., Chen, H., Wu, J., and Cai, Z., Mixed-Stage Energy Management for Decentralized Microgrid Cluster Based on Enhanced Tube Model Predictive Control; *TSG Sept. 2021 3780-3792*
- Xie, S.**, see Zhong, W., *TSG March 2021 1264-1276*
- Xie, S.**, see Nazari, M.H., *TSG July 2021 2812-2821*
- Xie, S.**, see Zhong, W., *TSG Nov. 2021 5030-5042*
- Xie, X.**, Quan, X., Wu, Z., Cao, X., Dou, X., and Hu, Q., Adaptive Master-Slave Control Strategy for Medium Voltage DC Distribution Systems Based on a Novel Nonlinear Droop Controller; *TSG Nov. 2021 4765-4777*
- Xie, Y.**, see Cai, S., *TSG Nov. 2021 4926-4937*
- Xu, C.**, see AlAshery, M.K., *TSG Jan. 2021 885-896*
- Xu, H.**, see Wu, T., *TSG Jan. 2021 680-691*

- Xu, J.**, Xie, B., Liao, S., Sun, Y., Ke, D., Yang, J., Li, P., Yu, L., Xu, Q., and Ma, X., Online Assessment of Conservation Voltage Reduction Effects With Micro-perturbation; *TSG May 2021 2224-2238*
- Xu, J.**, see Luo, X., *TSG Nov. 2021 5268-5279*
- Xu, L.**, Guo, Q., Wang, Z., and Sun, H., Modeling of Time-Delayed Distributed Cyber-Physical Power Systems for Small-Signal Stability Analysis; *TSG July 2021 3425-3437*
- Xu, Q.**, see Tao, S., *TSG Jan. 2021 834-844*
- Xu, Q.**, see Xu, J., *TSG May 2021 2224-2238*
- Xu, Q.**, see Li, X., *TSG July 2021 2788-2799*
- Xu, Q.**, see Liu, X., *TSG Sept. 2021 3742-3754*
- Xu, R.**, see Yan, L., *TSG May 2021 2601-2610*
- Xu, S.**, Liu, H., and Bi, T., A General Design Method for Phasor Estimation in Different Applications; *TSG May 2021 2307-2319*
- Xu, X.**, see Qiu, H., *TSG March 2021 1135-1148*
- Xu, Y.**, see Zhang, L., *TSG March 2021 921-931*
- Xu, Y.**, see Jin, J., *TSG March 2021 1416-1428*
- Xu, Y.**, see Yang, L., *TSG March 2021 1722-1735*
- Xu, Y.**, see Syed, M.H., *TSG March 2021 1747-1760*
- Xu, Y.**, Korkali, M., Mili, L., Valinejad, J., Chen, T., and Chen, X., An Iterative Response-Surface-Based Approach for Chance-Constrained AC Optimal Power Flow Considering Dependent Uncertainty; *TSG May 2021 2696-2707*
- Xu, Y.**, see Zhou, J., *TSG July 2021 2760-2775*
- Xu, Y.**, see Zheng, Y., *TSG July 2021 3613-3623*
- Xu, Y.**, see Yi, Z., *TSG Sept. 2021 4208-4224*
- Xu, Y.**, see Li, Z., *TSG Sept. 2021 3914-3927*
- Xu, Y.**, Dong, Z., Li, Z., Liu, Y., and Ding, Z., Distributed Optimization for Integrated Frequency Regulation and Economic Dispatch in Microgrids; *TSG Nov. 2021 4595-4606*
- Xu, Y.**, see Li, J., *TSG Nov. 2021 4799-4812*
- Xu, Z.**, see Yu, L., *TSG Jan. 2021 407-419*
- Xu, Z.**, see Lyu, C., *TSG Jan. 2021 901-904*
- Xu, Z.**, Geng, H., and Chu, B., A Hierarchical Data-Driven Wind Farm Power Optimization Approach Using Stochastic Projected Simplex Method; *TSG July 2021 3560-3569*
- Xue, K.**, see Luo, X., *TSG Nov. 2021 5268-5279*
- Xue, Y.**, see Zhao, H., *TSG May 2021 2508-2517*
- Xue, Y.**, see Chen, H., *TSG July 2021 3150-3162*
- Xue, Y.**, see Chen, L., *TSG Nov. 2021 5158-5171*
- Xue, Y.**, see Shuai, H., *TSG Nov. 2021 5479-5482*
- Xun, G.**, see Jiao, R., *TSG Nov. 2021 5280-5289*
- Y**
- Yan, G.**, see Jiao, R., *TSG Nov. 2021 5280-5289*
- Yan, H.W.**, Narang, A., Tafti, H.D., Farivar, G.G., Ceballos, S., and Pou, J., Minimizing Energy Storage Utilization in a Stand-Alone DC Microgrid Using Photovoltaic Flexible Power Control; *TSG Sept. 2021 3755-3764*
- Yan, J.**, see Ghafouri, M., *TSG Nov. 2021 5221-5232*
- Yan, J.**, see Li, K., *TSG Nov. 2021 4876-4885*
- Yan, L.**, see Wang, H., *TSG March 2021 1394-1404*
- Yan, L.**, Han, J., Xu, R., and Li, Z., Model-Free Lossless Data Compression for Real-Time Low-Latency Transmission in Smart Grids; *TSG May 2021 2601-2610*
- Yan, L.**, Chen, X., Zhou, J., Chen, Y., and Wen, J., Deep Reinforcement Learning for Continuous Electric Vehicles Charging Control With Dynamic User Behaviors; *TSG Nov. 2021 5124-5134*
- Yan, M.**, Shahidehpour, M., Paaso, A., Zhang, L., Alabdulwahab, A., and Abusorrah, A., Distribution System Resilience in Ice Storms by Optimal Routing of Mobile Devices on Congested Roads; *TSG March 2021 1314-1328*
- Yan, M.**, Shahidehpour, M., Paaso, A., Zhang, L., Alabdulwahab, A., and Abusorrah, A., Distribution Network-Constrained Optimization of Peer-to-Peer Transactive Energy Trading Among Multi-Microgrids; *TSG March 2021 1033-1047*
- Yan, M.**, see Xiao, X., *TSG May 2021 2261-2271*
- Yan, M.**, see Xia, F., *TSG July 2021 3326-3338*
- Yan, M.**, Shahidehpour, M., Alabdulwahab, A., Abusorrah, A., Gurung, N., Zheng, H., Ogunnubi, O., Vukojevic, A., and Paaso, E.A., Blockchain for Transacting Energy and Carbon Allowance in Networked Microgrids; *TSG Nov. 2021 4702-4714*
- Yan, R.**, see Bai, F., *TSG Jan. 2021 897-900*
- Yan, R.**, see Cui, Y., *TSG Sept. 2021 4577-4580*
- Yan, X.**, see Zhong, H., *TSG May 2021 2089-2101*
- Yan, Y.**, see Zhang, F., *TSG May 2021 2365-2377*
- Yan, Y.**, Chen, Z., Varadharajan, V., Hossain, M.J., and Town, G.E., Distributed Consensus-Based Economic Dispatch in Power Grids Using the Paillier Cryptosystem; *TSG July 2021 3493-3502*
- Yan, Z.**, see Zheng, Y., *TSG July 2021 3613-3623*
- Yang, B.**, see Jia, K., *TSG March 2021 1022-1032*
- Yang, D.**, see Wei, X., *TSG March 2021 1699-1711*
- Yang, F.**, Wei, M., Ling, Z., Mi, T., Yang, H., and Qiu, R.C., Brown Measure Based Spectral Distribution Analysis for Spatial-Temporal Localization of Cascading Events in Power Grids; *TSG March 2021 1805-1820*
- Yang, G.**, see Yang, Z., *TSG Jan. 2021 4-17*
- Yang, H.**, see Yang, F., *TSG March 2021 1805-1820*
- Yang, H.**, see Aprillia, H., *TSG March 2021 1467-1480*
- Yang, J.**, see Chen, M., *TSG Jan. 2021 512-523*
- Yang, J.**, see Vega-Fuentes, E., *TSG March 2021 1303-1313*
- Yang, J.**, see Xu, J., *TSG May 2021 2224-2238*
- Yang, L.**, see Ghasemkhani, A., *TSG March 2021 1519-1528*
- Yang, L.**, Xu, Y., Gu, W., and Sun, H., Distributionally Robust Chance-Constrained Optimal Power-Gas Flow Under Bidirectional Interactions Considering Uncertain Wind Power; *TSG March 2021 1722-1735*
- Yang, L.**, see Yi, Z., *TSG Sept. 2021 4208-4224*
- Yang, Q.**, see Guo, Z., *TSG Jan. 2021 798-809*
- Yang, Q.**, see Zhong, W., *TSG March 2021 1264-1276*
- Yang, Q.**, see Guo, Z., *TSG Sept. 2021 4151-4163*
- Yang, R.**, see Cai, M., *TSG Nov. 2021 4886-4896*
- Yang, S.**, see He, R., *TSG July 2021 3458-3467*
- Yang, T.**, Guo, Y., Deng, L., Sun, H., and Wu, W., A Linear Branch Flow Model for Radial Distribution Networks and Its Application to Reactive Power Optimization and Network Reconfiguration; *TSG May 2021 2027-2036*
- Yang, X.**, Zhang, Y., Wu, H., Wen, J., and Cheng, S., Enabling Online Scheduling for Multi-Microgrid Systems: An Event-Triggered Approach; *TSG May 2021 1836-1852*
- Yang, Y.**, see Long, T., *TSG Sept. 2021 4029-4038*
- Yang, Y.**, Hu, G., and Spanos, C.J., Optimal Sharing and Fair Cost Allocation of Community Energy Storage; *TSG Sept. 2021 4185-4194*
- Yang, Z.**, Hu, J., Ai, X., Wu, J., and Yang, G., Transactive Energy Supported Economic Operation for Multi-Energy Complementary Microgrids; *TSG Jan. 2021 4-17*
- Yang, Z.**, see Guo, Z., *TSG Jan. 2021 798-809*
- Yang, Z.**, see Guo, Z., *TSG Sept. 2021 4151-4163*
- Yang, Z.**, see Liu, W., *TSG Sept. 2021 4003-4015*
- Yao, R.**, see Edib, S.N., *TSG March 2021 1565-1576*
- Yao, S.**, see Pan, G., *TSG Jan. 2021 338-349*
- Yao, S.**, see Zhang, S., *TSG Nov. 2021 4788-4798*
- Yao, W.**, see Qiu, W., *TSG Jan. 2021 659-670*
- Yao, W.**, see Gan, W., *TSG May 2021 2013-2026*
- Yao, W.**, see Qiu, W., *TSG May 2021 2732-2735*
- Yao, W.**, Nan, J., Zhao, Y., Fang, J., Ai, X., Zuo, W., Wen, J., and Cheng, S., Resilient Wide-Area Damping Control for Inter-Area Oscillations to Tolerate Deception Attacks; *TSG Sept. 2021 4238-4249*
- Yao, Y.**, see Chen, Y., *TSG Jan. 2021 810-820*
- Yau, D.K.Y.**, see Ganesh, P., *TSG July 2021 3581-3593*
- Ye, F.**, see Cheng, Z., *TSG Nov. 2021 5233-5243*
- Ye, Y.**, see Qian, J., *TSG May 2021 2625-2637*
- Ye, Y.**, Tang, Y., Wang, H., Zhang, X., and Strbac, G., A Scalable Privacy-Preserving Multi-Agent Deep Reinforcement Learning Approach for Large-Scale Peer-to-Peer Transactive Energy Trading; *TSG Nov. 2021 5185-5200*
- Ye, Z.**, see Li, T., *TSG Nov. 2021 4897-4913*
- Yeh, C.**, see Zhang, L., *TSG March 2021 921-931*
- Yi, H.**, see Liang, L., *TSG Jan. 2021 491-501*

- Yi, Z.**, see AlAshery, M.K., *TSG Jan. 2021 885-896*
- Yi, Z.**, see Zhou, J., *TSG July 2021 2760-2775*
- Yi, Z.**, Xu, Y., Gu, W., Yang, L., and Sun, H., Aggregate Operation Model for Numerous Small-Capacity Distributed Energy Resources Considering Uncertainty; *TSG Sept. 2021 4208-4224*
- Yi Wang, L.**, see Nazari, M.H., *TSG July 2021 2812-2821*
- Yin, G.**, see Nazari, M.H., *TSG July 2021 2812-2821*
- Yin, X.**, see Jiang, L., *TSG Nov. 2021 5362-5372*
- Yong, P.**, Zhang, N., Hou, Q., Liu, Y., Teng, F., Ci, S., and Kang, C., Evaluating the Dispatchable Capacity of Base Station Backup Batteries in Distribution Networks; *TSG Sept. 2021 3966-3979*
- You, S.**, see Su, Y., *TSG May 2021 2355-2364*
- Yousefi, G.**, see Mohammadrezaee, R., *TSG Sept. 2021 4535-4542*
- Yu, A.**, Tang, X., Zhang, Y.J., and Huang, J., Continuous Group-Wise Double Auction for Prosumers in Distribution-Level Markets; *TSG Nov. 2021 4822-4833*
- Yu, H.**, see Long, Q., *TSG March 2021 943-952*
- Yu, J.**, see Guo, K., *TSG Nov. 2021 4616-4626*
- Yu, L.**, Sun, Y., Xu, Z., Shen, C., Yue, D., Jiang, T., and Guan, X., Multi-Agent Deep Reinforcement Learning for HVAC Control in Commercial Buildings; *TSG Jan. 2021 407-419*
- Yu, L.**, see Xu, J., *TSG May 2021 2224-2238*
- Yu, N.**, see Gao, Y., *TSG July 2021 3594-3604*
- Yu, P.**, Wan, C., Song, Y., and Jiang, Y., Distributed Control of Multi-Energy Storage Systems for Voltage Regulation in Distribution Networks: A Back-and-Forth Communication Framework; *TSG May 2021 1964-1977*
- Yu, X.**, see Wan, Y., *TSG Jan. 2021 538-547*
- Yu, X.**, see Li, C., *TSG July 2021 3289-3304*
- Yu, X.**, see Chen, L., *TSG Nov. 2021 5158-5171*
- Yu, Y.**, see Wu, J., *TSG Jan. 2021 737-750*
- Yu, Y.**, see Liu, J., *TSG May 2021 2136-2152*
- Yu, Z.**, see Meng, Y., *TSG March 2021 1712-1721*
- Yuan, L.**, see Wen, H., *TSG July 2021 3648-3660*
- Yuan, Y.**, see Ma, Z., *TSG Jan. 2021 227-238*
- Yuan, Y.**, Dehghanpour, K., and Wang, Z., Mitigating Smart Meter Asynchrony Error Via Multi-Objective Low Rank Matrix Recovery; *TSG Sept. 2021 4308-4317*
- Yuan, Z.**, see Jin, H., *TSG March 2021 1821-1824*
- Yuan, Z.**, Zecchino, A., Cherkaoui, R., and Paolone, M., Real-Time Control of Battery Energy Storage Systems to Provide Ancillary Services Considering Voltage-Dependent Capability of DC-AC Converters; *TSG Sept. 2021 4164-4175*
- Yuan, Z.**, Xia, J., and Li, P., Two-Time-Scale Energy Management for Microgrids With Data-Based Day-Ahead Distributionally Robust Chance-Constrained Scheduling; *TSG Nov. 2021 4778-4787*
- Yue, D.**, see Yu, L., *TSG Jan. 2021 407-419*
- Yun, Z.**, Wen, T., and Wang, C., Fault Location Method for Three-Terminal Lines in Distribution Network Based on Line Voltage Measured by μ MPMU; *TSG Nov. 2021 5095-5112*
- Z**
- Zafar, U.**, see Takiddin, A., *TSG May 2021 2675-2684*
- Zamani, R.**, Moghaddam, M.P., Panahi, H., and Sanaye-Pasand, M., Fast Islanding Detection of Nested Grids Including Multiple Resources Based on Phase Criteria; *TSG Nov. 2021 4962-4970*
- Zamora-Mendez, A.**, see Mejia-Ruiz, G.E., *TSG May 2021 2425-2438*
- Zamzam, A.S.**, see Zhou, F., *TSG July 2021 3232-3241*
- Zbunjak, Z.**, see Vlahinic, S., *TSG March 2021 1736-1746*
- Zecchino, A.**, see Yuan, Z., *TSG Sept. 2021 4164-4175*
- Zeineldin, H.H.**, see Ameli, A., *TSG Jan. 2021 845-858*
- Zeineldin, H.H.**, see Ghotbi-Maleki, M., *TSG March 2021 1185-1193*
- Zeineldin, H.H.**, see El-Sayed, W.T., *TSG May 2021 1904-1917*
- Zeng, L.**, Li, C., Li, Z., Shahidehpour, M., Zhou, B., and Zhou, Q., Hierarchical Bipartite Graph Matching Method for Transactive V2V Power Exchange in Distribution Power System; *TSG Jan. 2021 301-311*
- Zeng, T.**, Bae, S., Travacca, B., and Moura, S., Inducing Human Behavior to Maximize Operation Performance at PEV Charging Station; *TSG July 2021 3353-3363*
- Zeng, Y.**, see Su, J., *TSG July 2021 3004-3015*
- Zeng, Y.**, see Zheng, X., *TSG July 2021 2869-2878*
- Zhang, C.**, and Li, R., A Novel Closed-Loop Clustering Algorithm for Hierarchical Load Forecasting; *TSG Jan. 2021 432-441*
- Zhang, C.**, see Saberi, H., *TSG Sept. 2021 4090-4101*
- Zhang, C.**, see Zhao, D., *TSG Sept. 2021 3819-3834*
- Zhang, C.**, see Liu, H., *TSG Nov. 2021 5420-5433*
- Zhang, F.**, Wang, X., Yan, Y., He, J., Gao, W., and Chen, G., A Synchronophor Data Compression Technique With Iteration-Enhanced Phasor Principal Component Analysis ; *TSG May 2021 2365-2377*
- Zhang, H.**, Ma, S., Ding, T., Lin, Y., and Shahidehpour, M., Multi-Stage Multi-Zone Defender-Attacker-Defender Model for Optimal Resilience Strategy With Distribution Line Hardening and Energy Storage System Deployment; *TSG March 2021 1194-1205*
- Zhang, H.**, see Zhong, T., *TSG March 2021 1174-1184*
- Zhang, H.**, see Huang, C., *TSG July 2021 3043-3055*
- Zhang, H.**, see Rafiq, H., *TSG July 2021 3265-3277*
- Zhang, H.**, see Chen, G., *TSG Sept. 2021 4016-4028*
- Zhang, J.**, see He, L., *TSG May 2021 2450-2461*
- Zhang, J.**, see Wang, H., *TSG May 2021 2529-2543*
- Zhang, J.**, see Dabbaghjamanesh, M., *TSG May 2021 2331-2342*
- Zhang, J.**, see Chen, Y., *TSG May 2021 1929-1938*
- Zhang, J.**, see Li, C., *TSG July 2021 3289-3304*
- Zhang, K.**, see Chen, C., *TSG Jan. 2021 647-658*
- Zhang, L.**, see Ju, W., *TSG Jan. 2021 859-870*
- Zhang, L.**, Wang, F., Xu, Y., Yeh, C., and Zhou, P., Evaluating and Selecting Renewable Energy Sources for a Microgrid: A Bi-Capacity-Based Multi-Criteria Decision Making Approach ; *TSG March 2021 921-931*
- Zhang, L.**, see Yan, M., *TSG March 2021 1314-1328*
- Zhang, L.**, see Yan, M., *TSG March 2021 1033-1047*
- Zhang, L.**, see Gan, W., *TSG May 2021 2013-2026*
- Zhang, L.**, see Li, Q., *TSG Nov. 2021 4627-4640*
- Zhang, M.**, see Xie, F., *TSG May 2021 2496-2507*
- Zhang, M.**, see Huang, C., *TSG Sept. 2021 4225-4237*
- Zhang, M.**, see Cai, S., *TSG Nov. 2021 4926-4937*
- Zhang, N.**, see Yong, P., *TSG Sept. 2021 3966-3979*
- Zhang, N.**, see Chu, Z., *TSG Nov. 2021 4914-4925*
- Zhang, N.**, see Li, K., *TSG Nov. 2021 4876-4885*
- Zhang, P.**, see Babahajiani, P., *TSG July 2021 3661-3664*
- Zhang, Q.**, Dehghanpour, K., Wang, Z., Qiu, F., and Zhao, D., Multi-Agent Safe Policy Learning for Power Management of Networked Microgrids; *TSG March 2021 1048-1062*
- Zhang, Q.**, and Li, F., Cyber-Vulnerability Analysis for Real-Time Power Market Operation; *TSG July 2021 3527-3537*
- Zhang, Q.**, Guo, Y., Wang, Z., and Bu, F., Distributed Optimal Conservation Voltage Reduction in Integrated Primary-Secondary Distribution Systems; *TSG Sept. 2021 3889-3900*
- Zhang, Q.**, see Wang, X., *TSG Sept. 2021 3990-4002*
- Zhang, Q.**, Ma, Z., Zhu, Y., and Wang, Z., A Two-Level Simulation-Assisted Sequential Distribution System Restoration Model With Frequency Dynamics Constraints; *TSG Sept. 2021 3835-3846*
- Zhang, R.**, see Zhang, Y., *TSG Jan. 2021 524-537*
- Zhang, R.**, and Hredzak, B., Distributed Dynamic Clustering Algorithm for Formation of Heterogeneous Virtual Power Plants Based on Power Requirements ; *TSG Jan. 2021 192-204*
- Zhang, R.**, see Chen, H., *TSG July 2021 3150-3162*
- Zhang, S.**, Gu, W., Lu, S., Yao, S., Zhou, S., and Chen, X., Dynamic Security Control in Heat and Electricity Integrated Energy System With an Equivalent Heating Network Model; *TSG Nov. 2021 4788-4798*
- Zhang, W.**, see Zhao, J., *TSG March 2021 1685-1698*
- Zhang, W.**, Qian, T., Chen, X., Huang, K., Tang, W., and Wu, Q., Resilient Economic Control for Distributed Microgrids Under False Data Injection Attacks; *TSG Sept. 2021 4435-4446*

- Zhang, X.**, Biagioni, D., Cai, M., Graf, P., and Rahman, S., An Edge-Cloud Integrated Solution for Buildings Demand Response Using Reinforcement Learning; *TSG Jan. 2021* 420-431
- Zhang, X.**, see Kong, X., *TSG Sept. 2021* 4269-4279
- Zhang, X.**, see Ye, Y., *TSG Nov. 2021* 5185-5200
- Zhang, Y.**, Wang, J., and Chen, B., Detecting False Data Injection Attacks in Smart Grids: A Semi-Supervised Deep Learning Approach; *TSG Jan. 2021* 623-634
- Zhang, Y.**, see Chen, Y., *TSG Jan. 2021* 810-820
- Zhang, Y.**, Zhou, Y., Jiang, C., Wang, Y., Zhang, R., and Chen, G., Plug-in Electric Vehicle Charging With Multiple Charging Options: A Systematic Analysis of Service Providers' Pricing Strategies; *TSG Jan. 2021* 524-537
- Zhang, Y.**, Wang, X., and Wang, J., Deep Reinforcement Learning Based Volt-VAR Optimization in Smart Distribution Systems; *TSG Jan. 2021* 361-371
- Zhang, Y.**, see Zhang, Y., *TSG Jan. 2021* 361-371
- Zhang, Y.**, see Chen, K., *TSG March 2021* 1602-1614
- Zhang, Y.**, see Yang, X., *TSG May 2021* 1836-1852
- Zhang, Y.**, see Luo, X., *TSG Nov. 2021* 5268-5279
- Zhang, Y.**, see Cai, M., *TSG Nov. 2021* 4886-4896
- Zhang, Y.A.**, see Wu, T., *TSG Jan. 2021* 680-691
- Zhang, Y.A.**, see Wu, T., *TSG Sept. 2021* 4506-4521
- Zhang, Y.J.**, see Yu, A., *TSG Nov. 2021* 4822-4833
- Zhang, Z.**, see Li, Y., *TSG May 2021* 1880-1892
- Zhao, C.**, see Chen, Y., *TSG May 2021* 2484-2495
- Zhao, C.**, see Wu, T., *TSG Sept. 2021* 4506-4521
- Zhao, D.**, see Zhang, Q., *TSG March 2021* 1048-1062
- Zhao, D.**, see Edib, S.N., *TSG March 2021* 1565-1576
- Zhao, D.**, Zhang, C., Sun, Y., Li, S., Sun, B., and Li, Y., Distributed Robust Frequency Restoration and Active Power Sharing for Autonomous Microgrids With Event-Triggered Strategy; *TSG Sept. 2021* 3819-3834
- Zhao, G.**, see Jia, K., *TSG March 2021* 1022-1032
- Zhao, H.**, Zhao, J., Qiu, J., Liang, G., Wen, F., Xue, Y., and Dong, Z.Y., Data-Driven Risk Preference Analysis in Day-Ahead Electricity Market; *TSG May 2021* 2508-2517
- Zhao, J.**, Wang, H., Wu, Q., Hatziaargyriou, N.D., and Zhang, W., Spatio-Temporal Decomposition and Coordination for Distributed Load Restoration in AC/DC Hybrid System; *TSG March 2021* 1685-1698
- Zhao, J.**, see Tao, Y., *TSG March 2021* 1149-1162
- Zhao, J.**, see Zhao, H., *TSG May 2021* 2508-2517
- Zhao, J.**, see Chen, W., *TSG July 2021* 2913-2928
- Zhao, J.**, see Cao, D., *TSG Sept. 2021* 4137-4150
- Zhao, J.**, see Song, H., *TSG Nov. 2021* 4950-4961
- Zhao, M.**, see Zheng, X., *TSG July 2021* 2869-2878
- Zhao, N.**, Wang, B., Bai, L., and Li, F., Quantitative Model of the Electricity-Shifting Curve in an Energy Hub Based on Aggregated Utility Curve of Multi-Energy Demands; *TSG March 2021* 1329-1345
- Zhao, N.**, Wang, B., Li, F., and Shi, Q., Optimal Energy-Hub Planning Based on Dimension Reduction and Variable-Sized Unimodal Searching; *TSG March 2021* 1481-1495
- Zhao, Q.**, see Jia, K., *TSG Jan. 2021* 671-679
- Zhao, S.**, see Chen, B., *TSG Jan. 2021* 18-32
- Zhao, T.**, see Liu, X., *TSG Jan. 2021* 117-130
- Zhao, T.**, Wang, J., and Lu, X., An MPC-Aided Resilient Operation of Multi-Microgrids With Dynamic Boundaries; *TSG May 2021* 2125-2135
- Zhao, W.**, see Chen, L., *TSG May 2021* 2413-2424
- Zhao, W.**, see Wu, X., *TSG Sept. 2021* 3809-3818
- Zhao, Y.**, see Yao, W., *TSG Sept. 2021* 4238-4249
- Zheng, C.**, Fang, J., Wang, S., Ai, X., Liu, Z., and Chen, Z., Energy Flow Optimization of Integrated Gas and Power Systems in Continuous Time and Space; *TSG May 2021* 2611-2624
- Zheng, G.**, see Tao, S., *TSG Jan. 2021* 834-844
- Zheng, H.**, see Yan, M., *TSG Nov. 2021* 4702-4714
- Zheng, K.**, Chen, Q., Wang, Y., Kang, C., and Xie, L., Unsupervised Congestion Status Identification Using LMP Data; *TSG Jan. 2021* 726-736
- Zheng, K.**, see Toubeau, J., *TSG May 2021* 2663-2674
- Zheng, W.**, see Huang, W., *TSG Jan. 2021* 43-55
- Zheng, W.**, Huang, W., Hill, D.J., and Hou, Y., An Adaptive Distributionally Robust Model for Three-Phase Distribution Network Reconfiguration; *TSG March 2021* 1224-1237
- Zheng, W.**, Hou, Y., and Li, Z., A Dynamic Equivalent Model for District Heating Networks: Formulation, Existence and Application in Distributed Electricity-Heat Operation; *TSG May 2021* 2685-2695
- Zheng, W.**, see Huang, W., *TSG Nov. 2021* 5385-5395
- Zheng, X.**, Zeng, Y., Zhao, M., and Venkatesh, B., Early Identification and Location of Short-Circuit Fault in Grid-Connected AC Microgrid; *TSG July 2021* 2869-2878
- Zheng, Y.**, Yan, Z., Chen, K., Sun, J., Xu, Y., and Liu, Y., Vulnerability Assessment of Deep Reinforcement Learning Models for Power System Topology Optimization; *TSG July 2021* 3613-3623
- Zhong, C.**, Meliopoulos, A.P.S., Xie, B., Xie, J., and Liu, K., Multi-Stage Quadratic Flexible Optimal Power Flow With a Rolling Horizon; *TSG July 2021* 3128-3137
- Zhong, H.**, see Ruan, G., *TSG Jan. 2021* 502-511
- Zhong, H.**, Yan, X., and Tan, Z., Real-Time Distributed Economic Dispatch Adapted to General Convex Cost Functions: A Secant Approximation-Based Method; *TSG May 2021* 2089-2101
- Zhong, T.**, Zhang, H., Li, Y., Liu, L., and Lu, R., Bayesian Learning-Based Multi-Objective Distribution Power Network Reconfiguration; *TSG March 2021* 1174-1184
- Zhong, W.**, Xie, S., Xie, K., Yang, Q., and Xie, L., Cooperative P2P Energy Trading in Active Distribution Networks: An MILP-Based Nash Bargaining Solution; *TSG March 2021* 1264-1276
- Zhong, W.**, Xie, K., Liu, Y., Xie, S., and Xie, L., Chance Constrained Scheduling and Pricing for Multi-Service Battery Energy Storage; *TSG Nov. 2021* 5030-5042
- Zhou, B.**, see Zeng, L., *TSG Jan. 2021* 301-311
- Zhou, B.**, see Liu, X., *TSG Jan. 2021* 141-156
- Zhou, B.**, see Li, C., *TSG July 2021* 3289-3304
- Zhou, B.**, see Li, J., *TSG Nov. 2021* 5172-5184
- Zhou, D.**, see Chen, M., *TSG Nov. 2021* 4690-4701
- Zhou, F.**, Zamzam, A.S., Low, S.H., and Sidiropoulos, N.D., Exactness of OPF Relaxation on Three-Phase Radial Networks With Delta Connections; *TSG July 2021* 3232-3241
- Zhou, J.**, Shi, M., Chen, X., Chen, Y., Wen, J., and He, H., A Cascaded Distributed Control Framework in DC Microgrids; *TSG Jan. 2021* 205-214
- Zhou, J.**, see Shi, M., *TSG March 2021* 1011-1021
- Zhou, J.**, Sun, H., Xu, Y., Han, R., Yi, Z., Wang, L., and Guerrero, J.M., Distributed Power Sharing Control for Islanded Single-/Three-Phase Microgrids With Admissible Voltage and Energy Storage Constraints; *TSG July 2021* 2760-2775
- Zhou, J.**, see Yan, L., *TSG Nov. 2021* 5124-5134
- Zhou, N.**, see Liao, J., *TSG July 2021* 2966-2979
- Zhou, N.**, see Su, J., *TSG July 2021* 3004-3015
- Zhou, P.**, see Zhang, L., *TSG March 2021* 921-931
- Zhou, Q.**, see Chen, M., *TSG Jan. 2021* 512-523
- Zhou, Q.**, see Zeng, L., *TSG Jan. 2021* 301-311
- Zhou, Q.**, see Shi, M., *TSG May 2021* 1953-1963
- Zhou, Q.**, see Chen, Y., *TSG July 2021* 3379-3389
- Zhou, Q.**, Shahidehpour, M., Alabdulwahab, A., Abusorrah, A., Che, L., and Liu, X., Cross-Layer Distributed Control Strategy for Cyber Resilient Microgrids; *TSG Sept. 2021* 3705-3717
- Zhou, S.**, see Zhang, S., *TSG Nov. 2021* 4788-4798
- Zhou, X.**, see Fan, S., *TSG Jan. 2021* 251-267
- Zhou, Y.**, see Zhang, Y., *TSG Jan. 2021* 524-537
- Zhou, Y.**, see Wang, Y., *TSG July 2021* 3637-3647
- Zhu, H.**, see Lin, S., *TSG Nov. 2021* 5434-5443
- Zhu, J.**, see Li, S., *TSG Nov. 2021* 5475-5478
- Zhu, K.**, see Qiu, W., *TSG Jan. 2021* 659-670
- Zhu, K.**, see Qiu, W., *TSG May 2021* 2732-2735
- Zhu, L.**, and Hill, D.J., Spatial-Temporal Data Analysis-Based Event Detection in Weakly Damped Power Systems; *TSG Nov. 2021* 5472-5474
- Zhu, Y.**, see Zhang, Q., *TSG Sept. 2021* 3835-3846
- Zhu, Z.**, see Jia, K., *TSG Jan. 2021* 671-679

- Zhu, Z.**, see Wang, L., *TSG March 2021 1104-1117*
- Zhuang, P.**, and Liang, H., False Data Injection Attacks Against State-of-Charge Estimation of Battery Energy Storage Systems in Smart Distribution Networks; *TSG May 2021 2566-2577*
- Zio, E.**, see Ansari, O.A., *TSG Sept. 2021 3901-3913*
- Zishan, A.A.**, Haji, M.M., and Ardakanian, O., Adaptive Congestion Control for Electric Vehicle Charging in the Smart Grid; *TSG May 2021 2439-2449*
- Zografou-Barredo, N.**, Patsios, C., Sarantakos, I., Davison, P., Walker, S.L., and Taylor, P.C., MicroGrid Resilience-Oriented Scheduling: A Robust MISOCP Model; *TSG May 2021 1867-1879*
- Zuo, W.**, see Yao, W., *TSG Sept. 2021 4238-4249*

SUBJECT INDEX

Numeric

5G mobile communication

- Evaluating the Dispatchable Capacity of Base Station Backup Batteries in Distribution Networks. *Yong, P.*, +, *TSG Sept. 2021 3966-3979*

A

AC-AC power converters

- Dual Inertia-Emulation Control for Interlinking Converters in Grid-Tying Applications. *Paniagua, J.*, +, *TSG Sept. 2021 3868-3876*

AC-DC power converters

- Dual Inertia-Emulation Control for Interlinking Converters in Grid-Tying Applications. *Paniagua, J.*, +, *TSG Sept. 2021 3868-3876*
- Spatio-Temporal Decomposition and Coordination for Distributed Load Restoration in AC/DC Hybrid System. *Zhao, J.*, +, *TSG March 2021 1685-1698*

Actuators

- Observer-Based Resilient Integrated Distributed Control Against Cyberattacks on Sensors and Actuators in Islanded AC Microgrids. *Shi, M.*, +, *TSG May 2021 1953-1963*

Adaptive control

- A Unified Distributed Cooperative Control of DC Microgrids Using Consensus Protocol. *Li, Y.*, +, *TSG May 2021 1880-1892*
- Adaptive Congestion Control for Electric Vehicle Charging in the Smart Grid. *Zishan, A.A.*, +, *TSG May 2021 2439-2449*
- Decentralized Optimal Stabilization of Active Loads in Islanded Microgrids. *Dissanayake, A.M.*, +, *TSG March 2021 932-942*
- Nonlinear Multiple Models Adaptive Secondary Voltage Control of Microgrids. *Ma, Z.*, +, *TSG Jan. 2021 227-238*
- Practical Challenges in Real-Time Demand Response. *Duan, C.*, +, *TSG Sept. 2021 4573-4576*
- Resilient Control and Analysis for DC Microgrid System Under DoS and Impulsive FDI Attacks. *Liu, X.*, +, *TSG Sept. 2021 3742-3754*
- Scalable Designs for Reinforcement Learning-Based Wide-Area Damping Control. *Mukherjee, S.*, +, *TSG May 2021 2389-2401*

Aerodynamics

- A Hierarchical Data-Driven Wind Farm Power Optimization Approach Using Stochastic Projected Simplex Method. *Xu, Z.*, +, *TSG July 2021 3560-3569*

Air conditioning

- Coordinated Control of Air-Conditioning Loads for System Frequency Regulation. *Jiang, T.*, +, *TSG Jan. 2021 548-560*
- Extraction of Dynamic Frequency Response Characteristics and Modelling of Modern Air Conditioners. *Bai, F.*, +, *TSG Jan. 2021 897-900*
- Multi-Agent Deep Reinforcement Learning for HVAC Control in Commercial Buildings. *Yu, L.*, +, *TSG Jan. 2021 407-419*
- Online Optimization for Networked Distributed Energy Resources With Time-Coupling Constraints. *Fan, S.*, +, *TSG Jan. 2021 251-267*
- Primary Frequency Control in Isolated Microgrids Using Thermostatically Controllable Loads. *Mendieta, W.*, +, *TSG Jan. 2021 93-105*
- Robust Hierarchical Control Mechanism for Aggregated Thermostatically Controlled Loads. *Gong, X.*, +, *TSG Jan. 2021 453-467*

Air pollution control

- Combined Impact of Demand Response Aggregators and Carbon Taxation on Emissions Reduction in Electric Power Systems. *Algarni, A.S.*, +, *TSG March 2021 1825-1827*

- Resident Behavior Detection Model for Environment Responsive Demand Response. *Baek, K.*, +, *TSG Sept. 2021 3980-3989*

Aircraft power systems

- Region of Attraction Estimation for DC Microgrids With Constant Power Loads Using Potential Theory. *Chang, F.*, +, *TSG Sept. 2021 3793-3808*

Alarm systems

- MILP-Based Fault Diagnosis Model in Active Power Distribution Networks. *Wang, C.*, +, *TSG Sept. 2021 3847-3857*

Ant colony optimization

- Algorithm for Simultaneous Medium Voltage Grid Planning and Electric Vehicle Scheduling. *Roterling, N.*, +, *TSG July 2021 3305-3313*

Approximation theory

- A Historical-Correlation-Driven Robust Optimization Approach for Microgrid Dispatch. *Qiu, H.*, +, *TSG March 2021 1135-1148*
- A Reinforcement Learning-Based Decision System for Electricity Pricing Plan Selection by Smart Grid End Users. *Lu, T.*, +, *TSG May 2021 2176-2187*
- An Inversion-Free Robust Power-Flow Algorithm for Microgrids. *Kumar, A.*, +, *TSG July 2021 2844-2859*
- An Operation Model for Distribution Companies Using the Flexibility of Electric Vehicle Aggregators. *Lu, X.*, +, *TSG March 2021 1507-1518*
- Enhanced Wind Generation Forecast Using Robust Ensemble Learning. *Su, H.*, +, *TSG Jan. 2021 912-915*
- Fast Probabilistic Hosting Capacity Analysis for Active Distribution Systems. *Taheri, S.*, +, *TSG May 2021 2000-2012*
- Photovoltaic System Power Reserve Determination Using Parabolic Approximation of Frequency Response. *Baskarad, T.*, +, *TSG July 2021 3175-3184*
- Real-Time Distributed Economic Dispatch Adapted to General Convex Cost Functions: A Secant Approximation-Based Method. *Zhong, H.*, +, *TSG May 2021 2089-2101*

Arcs (electric)

- Faulty Feeder Detection Based on Fundamental Component Shift and Multiple-Transient-Feature Fusion in Distribution Networks. *Wei, X.*, +, *TSG March 2021 1699-1711*

Artificial neural networks

- Branching Dueling Q-Network-Based Online Scheduling of a Microgrid With Distributed Energy Storage Systems. *Shuai, H.*, +, *TSG Nov. 2021 5479-5482*
- Correction to "Integrating EV Charging Stations as Smart Loads for Demand Response Provisions in Distribution Systems" [Mar 18 1096-1106]. *Hafez, O.*, +, *TSG March 2021 1829*
- Integrating Battery Aging in the Optimization for Bidirectional Charging of Electric Vehicles. *Schwenk, K.*, +, *TSG Nov. 2021 5135-5145*

Asynchronous generators

- A Cyber Attack Mitigation Scheme for Series Compensated DFIG-Based Wind Parks. *Ghafouri, M.*, +, *TSG Nov. 2021 5221-5232*

Automobiles

- Resilient Restoration of Distribution Systems in Coordination With Electric Bus Scheduling. *Li, B.*, +, *TSG July 2021 3314-3325*

Autonomous aerial vehicles

- Micro-Cracks Identification and Characterization on the Sheds of Composite Insulators by Fractal Dimension. *Jin, H.*, +, *TSG March 2021 1821-1824*

Autoregressive moving average processes

- Fractional Dynamics of PMU Data. *Shalalfeh, L.*, +, *TSG May 2021 2578-2588*

B

Backpropagation

- A Two-Stage Protection Method for Detection and Mitigation of Coordinated EVSE Switching Attacks. *Kabir, M.E.*, +, *TSG Sept. 2021 4377-4388*

Band-pass filters

- A General Design Method for Phasor Estimation in Different Applications. *Xu, S.*, +, *TSG May 2021 2307-2319*

Batteries

Aggregate Flexibility of Virtual Power Plants With Temporal Coupling Constraints. *Wang, S.*, +, *TSG Nov. 2021 5043-5051*

Chance Constrained Scheduling and Pricing for Multi-Service Battery Energy Storage. *Zhong, W.*, +, *TSG Nov. 2021 5030-5042*

Integrating Battery Aging in the Optimization for Bidirectional Charging of Electric Vehicles. *Schwenk, K.*, +, *TSG Nov. 2021 5135-5145*

Battery chargers

Decentralized Charging of Plug-In Electric Vehicles and Impact on Transmission System Dynamics. *Moschella, M.*, +, *TSG March 2021 1772-1781*

Battery management systems

A Cluster-Based Model for Charging a Single-Depot Fleet of Electric Vehicles. *Sepehri, K.*, +, *TSG July 2021 3339-3352*

Battery powered vehicles

A Cluster-Based Model for Charging a Single-Depot Fleet of Electric Vehicles. *Sepehri, K.*, +, *TSG July 2021 3339-3352*

A Two-Stage Protection Method for Detection and Mitigation of Coordinated EVSE Switching Attacks. *Kabir, M.E.*, +, *TSG Sept. 2021 4377-4388*

Adaptive Charging Networks: A Framework for Smart Electric Vehicle Charging. *Lee, Z.J.*, +, *TSG Sept. 2021 4339-4350*

Coordinated Energy Management of Prosumers in a Distribution System Considering Network Congestion. *Hu, J.*, +, *TSG Jan. 2021 468-478*

Correction to "Queueing Analysis-Based PEV Load Modeling Considering Battery Charging Behavior and Their Impact on Distribution System Operation" [Jan 18 261-273]. *Hafez, O.*, +, *TSG March 2021 1830*

Decentralized Charging of Plug-In Electric Vehicles and Impact on Transmission System Dynamics. *Moschella, M.*, +, *TSG March 2021 1772-1781*

Distributed Expansion Planning of Electric Vehicle Dynamic Wireless Charging System in Coupled Power-Traffic Networks. *Xia, F.*, +, *TSG July 2021 3326-3338*

Efficient Assignment of Electric Vehicles to Charging Stations. *Elghitani, F.*, +, *TSG Jan. 2021 761-773*

Efficient Real-Time EV Charging Scheduling via Ordinal Optimization. *Long, T.*, +, *TSG Sept. 2021 4029-4038*

Frequency Regulation With Heterogeneous Energy Resources: A Realization Using Distributed Control. *Anderson, T.*, +, *TSG Sept. 2021 4126-4136*

Hierarchical Bipartite Graph Matching Method for Transactive V2V Power Exchange in Distribution Power System. *Zeng, L.*, +, *TSG Jan. 2021 301-311*

Inducing Human Behavior to Maximize Operation Performance at PEV Charging Station. *Zeng, T.*, +, *TSG July 2021 3353-3363*

Integrated Electricity and Hydrogen Energy Sharing in Coupled Energy Systems. *Tao, Y.*, +, *TSG March 2021 1149-1162*

Mobility-Aware Charging Scheduling for Shared On-Demand Electric Vehicle Fleet Using Deep Reinforcement Learning. *Liang, Y.*, +, *TSG March 2021 1380-1393*

Optimal Policy Characterization Enhanced Actor-Critic Approach for Electric Vehicle Charging Scheduling in a Power Distribution Network. *Jin, J.*, +, *TSG March 2021 1416-1428*

Optimal Pricing of Public Electric Vehicle Charging Stations Considering Operations of Coupled Transportation and Power Systems. *Cui, Y.*, +, *TSG July 2021 3278-3288*

Plug-in Electric Vehicle Charging With Multiple Charging Options: A Systematic Analysis of Service Providers' Pricing Strategies. *Zhang, Y.*, +, *TSG Jan. 2021 524-537*

Two-Stage Planning of Network-Constrained Hybrid Energy Supply Stations for Electric and Natural Gas Vehicles. *Gan, W.*, +, *TSG May 2021 2013-2026*

Battery storage plants

A Grid-Friendly Sustainable Neighborhood Energy Trading Mechanism for MV-LV Network. *Liu, A.*, +, *TSG May 2021 2239-2248*

A Novel Framework for Optimizing Ramping Capability of Hybrid Energy Storage Systems. *Luo, Y.*, +, *TSG March 2021 1651-1662*

Aggregated BESS Dynamic Models for Active Distribution Network Studies. *Calero, F.*, +, *TSG May 2021 2077-2088*

Artificial Neural Network-Based Stealth Attack on Battery Energy Storage Systems. *Pasetti, M.*, +, *TSG Nov. 2021 5310-5321*

Bargaining Game-Based Profit Allocation of Virtual Power Plant in Frequency Regulation Market Considering Battery Cycle Life. *Chen, W.*, +, *TSG July 2021 2913-2928*

Benefits of Home Energy Storage Utilization: An Australian Case Study of Demand Charge Practices in Residential Sector. *Kong, W.*, +, *TSG July 2021 3086-3096*

Deep-Reinforcement-Learning-Based Capacity Scheduling for PV-Battery Storage System. *Huang, B.*, +, *TSG May 2021 2272-2283*

Dynamic Modeling of Battery Energy Storage and Applications in Transmission Systems. *Calero, F.*, +, *TSG Jan. 2021 589-598*

False Data Injection Attacks Against State-of-Charge Estimation of Battery Energy Storage Systems in Smart Distribution Networks. *Zhuang, P.*, +, *TSG May 2021 2566-2577*

Frequency Regulation With Heterogeneous Energy Resources: A Realization Using Distributed Control. *Anderson, T.*, +, *TSG Sept. 2021 4126-4136*

Market-Based Energy Management Model of a Building Microgrid Considering Battery Degradation. *Antoniadou-Plytaria, K.*, +, *TSG March 2021 1794-1804*

Minimizing Energy Storage Utilization in a Stand-Alone DC Microgrid Using Photovoltaic Flexible Power Control. *Yan, H.W.*, +, *TSG Sept. 2021 3755-3764*

Multi-Objective Sizing of Battery Energy Storage Systems for Stackable Grid Applications. *Arias, N.B.*, +, *TSG May 2021 2708-2721*

Real-Time Control of Battery Energy Storage Systems to Provide Ancillary Services Considering Voltage-Dependent Capability of DC-AC Converters. *Yuan, Z.*, +, *TSG Sept. 2021 4164-4175*

Bayes methods

Bayesian Learning-Based Multi-Objective Distribution Power Network Reconfiguration. *Zhong, T.*, +, *TSG March 2021 1174-1184*

Generator Parameter Calibration by Adaptive Approximate Bayesian Computation With Sequential Monte Carlo Sampler. *Khazeinyasab, S.R.*, +, *TSG Sept. 2021 4327-4338*

Predicting Weather-Related Failure Risk in Distribution Systems Using Bayesian Neural Network. *Du, Y.*, +, *TSG Jan. 2021 350-360*

Belief networks

Predicting Weather-Related Failure Risk in Distribution Systems Using Bayesian Neural Network. *Du, Y.*, +, *TSG Jan. 2021 350-360*

Belief propagation

Data-Driven Approach for Analyzing Spatiotemporal Price Elasticities of EV Public Charging Demands Based on Conditional Random Fields. *Bao, Z.*, +, *TSG Sept. 2021 4363-4376*

Big Data

Develop Load Shape Dictionary Through Efficient Clustering Based on Elastic Dissimilarity Measure. *Liang, H.*, +, *TSG Jan. 2021 442-452*

Blockchains

A Blockchain-Enabled Multi-Settlement Quasi-Ideal Peer-to-Peer Trading Framework. *AlAshery, M.K.*, +, *TSG Jan. 2021 885-896*

A Novel Energy Trading Framework Using Adapted Blockchain Technology. *Hamouda, M.R.*, +, *TSG May 2021 2165-2175*

An Architecture and Performance Evaluation of Blockchain-Based Peer-to-Peer Energy Trading. *Abdella, J.*, +, *TSG July 2021 3364-3378*

Blockchain Based Secure Data Aggregation and Distributed Power Dispatching for Microgrids. *Luo, X.*, +, *TSG Nov. 2021 5268-5279*

Blockchain for Transacting Energy and Carbon Allowance in Networked Microgrids. *Yan, M.*, +, *TSG Nov. 2021 4702-4714*

Boilers

Exploiting Power-to-Heat Assets in District Heating Networks to Regulate Electric Power Network. *Khatibi, M.*, +, *TSG May 2021 2048-2059*

Building integrated photovoltaics

A Grid-Friendly Sustainable Neighborhood Energy Trading Mechanism for MV-LV Network. *Liu, A.*, +, *TSG May 2021 2239-2248*

Distributed State of Charge-Based Droop Control Algorithm for Reducing Power Losses in Multi-Port Converter-Enabled Solar DC Nano-Grids. *Samende, C.*, +, *TSG Nov. 2021 4584-4594*

Distribution Feeder-Scale Fast Frequency Response via Optimal Coordination of Net-Load Resources—Part I: Solution Design. *Lundstrom, B.*, +, *TSG March 2021 1289-1302*

Market-Based Energy Management Model of a Building Microgrid Considering Battery Degradation. *Antoniadou-Plytaria, K.*, +, *TSG March 2021 1794-1804*

Phase Identification of Single-Phase Customers and PV Panels via Smart Meter Data. *Heidari-Akhijahani, A.*, +, *TSG Sept. 2021 4543-4552*

Building management systems

An Edge-Cloud Integrated Solution for Buildings Demand Response Using Reinforcement Learning. *Zhang, X.*, +, *TSG Jan. 2021 420-431*

An Energy Sharing Mechanism Achieving the Same Flexibility as Centralized Dispatch. *Chen, Y.*, +, *TSG July 2021 3379-3389*

Automated Control of Transactive HVACs in Energy Distribution Systems. *Liu, B.*, +, *TSG May 2021 2462-2471*

Benefits of Home Energy Storage Utilization: An Australian Case Study of Demand Charge Practices in Residential Sector. *Kong, W.*, +, *TSG July 2021 3086-3096*

Data-Driven Distributionally Robust Hierarchical Coordination for Home Energy Management. *Saberi, H.*, +, *TSG Sept. 2021 4090-4101*

Data-Driven Stochastic Game With Social Attributes for Peer-to-Peer Energy Sharing. *Chen, L.*, +, *TSG Nov. 2021 5158-5171*

Distribution Feeder-Scale Fast Frequency Response via Optimal Coordination of Net-Load Resources—Part I: Solution Design. *Lundstrom, B.*, +, *TSG March 2021 1289-1302*

Fully-Convolutional Denoising Auto-Encoders for NILM in Large Non-Residential Buildings. *Garcia-Perez, D.*, +, *TSG May 2021 2722-2731*

Market-Based Energy Management Model of a Building Microgrid Considering Battery Degradation. *Antoniadou-Plytaria, K.*, +, *TSG March 2021 1794-1804*

Multi-Agent Deep Reinforcement Learning for HVAC Control in Commercial Buildings. *Yu, L.*, +, *TSG Jan. 2021 407-419*

Online Learning and Distributed Control for Residential Demand Response. *Chen, X.*, +, *TSG Nov. 2021 4843-4853*

Optimal HVAC Control for Demand Response via Chance-Constrained Two-Stage Stochastic Program. *Mansy, H.*, +, *TSG May 2021 2188-2200*

Primary Frequency Control in Isolated Microgrids Using Thermostatically Controllable Loads. *Mendieta, W.*, +, *TSG Jan. 2021 93-105*

Resident Behavior Detection Model for Environment Responsive Demand Response. *Baek, K.*, +, *TSG Sept. 2021 3980-3989*

Step Towards Energy-Water Smart Microgrids; Buildings Thermal Energy and Water Demand Management Embedded in Economic Dispatch. *Moa-zeni, F.*, +, *TSG Sept. 2021 3680-3691*

Strategic Participation of Residential Thermal Demand Response in Energy and Capacity Markets. *Anwar, M.B.*, +, *TSG July 2021 3070-3085*

Time-Frequency Mask Estimation Based on Deep Neural Network for Flexible Load Disaggregation in Buildings. *Song, J.*, +, *TSG July 2021 3242-3251*

Tri-Level Scheduling Model Considering Residential Demand Flexibility of Aggregated HVACs and EVs Under Distribution LMP. *Wang, X.*, +, *TSG Sept. 2021 3990-4002*

Buildings (structures)

Automated Control of Transactive HVACs in Energy Distribution Systems. *Liu, B.*, +, *TSG May 2021 2462-2471*

Fully-Convolutional Denoising Auto-Encoders for NILM in Large Non-Residential Buildings. *Garcia-Perez, D.*, +, *TSG May 2021 2722-2731*

C

Cache storage

SCCO: A State-Caching-Based Coagulation Platform for Cyber-Physical Power System Evaluation. *Wang, Q.*, +, *TSG March 2021 1615-1625*

Calibration

Generator Parameter Calibration by Adaptive Approximate Bayesian Computation With Sequential Monte Carlo Sampler. *Khazeynasab, S.R.*, +, *TSG Sept. 2021 4327-4338*

Carbon compounds

Combined Impact of Demand Response Aggregators and Carbon Taxation on Emissions Reduction in Electric Power Systems. *Algarni, A.S.*, +, *TSG March 2021 1825-1827*

Cascade control

A Cascaded Distributed Control Framework in DC Microgrids. *Zhou, J.*, +, *TSG Jan. 2021 205-214*

Linear Quadratic Regulator Based Smooth Transition Between Microgrid Operation Modes. *Ganjan-Aboukheili, M.*, +, *TSG Nov. 2021 4854-4864*

Cellular radio

Evaluating the Dispatchable Capacity of Base Station Backup Batteries in Distribution Networks. *Yong, P.*, +, *TSG Sept. 2021 3966-3979*

Charging stations

ACN-Sim: An Open-Source Simulator for Data-Driven Electric Vehicle Charging Research. *Lee, Z.J.*, +, *TSG Nov. 2021 5113-5123*

Correction to “Integrating EV Charging Stations as Smart Loads for Demand Response Provisions in Distribution Systems” [Mar 18 1096-1106]. *Hafez, O.*, +, *TSG March 2021 1829*

Hierarchical Coupled Driving-and-Charging Model of Electric Vehicles, Stations and Grid Operators. *Sohet, B.*, +, *TSG Nov. 2021 5146-5157*

Chemical analysis

Impact of Communication Packet Delivery Ratio on Reliability of Optimal Load Tracking and Allocation in DC Microgrids. *Nazari, M.H.*, +, *TSG July 2021 2812-2821*

Choppers (circuits)

Chopperless Fault Ride-Through Control for DC Microgrids. *Xia, Y.*, +, *TSG March 2021 965-976*

Circuit breakers

An MPC-Aided Resilient Operation of Multi-Microgrids With Dynamic Boundaries. *Zhao, T.*, +, *TSG May 2021 2125-2135*

Design of Setting Group-Based Overcurrent Protection Scheme for Active Distribution Networks Using MILP. *Ghotbi-Maleki, M.*, +, *TSG March 2021 1185-1193*

Detection of Stealthy Cyber-Physical Line Disconnection Attacks in Smart Grid. *James Ranjith Kumar, R.*, +, *TSG Sept. 2021 4484-4493*

Closed loop systems

Decentralized Optimal Stabilization of Active Loads in Islanded Microgrids. *Dissanayake, A.M.*, +, *TSG March 2021 932-942*

Distributed Control of DC Microgrids for Optimal Coordination of Conventional and Renewable Generators. *Fan, Z.*, +, *TSG Nov. 2021 4607-4615*

Distributed Optimization for Integrated Frequency Regulation and Economic Dispatch in Microgrids. *Xu, Y.*, +, *TSG Nov. 2021 4595-4606*

Learning-Based Predictive Control via Real-Time Aggregate Flexibility. *Li, T.*, +, *TSG Nov. 2021 4897-4913*

Nonlinear Multiple Models Adaptive Secondary Voltage Control of Microgrids. *Ma, Z.*, +, *TSG Jan. 2021 227-238*

Optimal Restoration of Active Distribution Systems With Voltage Control and Closed-Loop Operation. *Vargas, R.*, +, *TSG May 2021 2295-2306*

Practical Challenges in Real-Time Demand Response. *Duan, C.*, +, *TSG Sept. 2021 4573-4576*

Scalable Designs for Reinforcement Learning-Based Wide-Area Damping Control. *Mukherjee, S.*, +, *TSG May 2021 2389-2401*

Cloud computing

A Novel Energy Sharing Mechanism for Smart Microgrid. *Li, S.*, +, *TSG Nov. 2021 5475-5478*

An Edge-Cloud Integrated Solution for Buildings Demand Response Using Reinforcement Learning. *Zhang, X.*, +, *TSG Jan. 2021 420-431*

Privacy-Preserving Hierarchical State Estimation in Untrustworthy Cloud Environments. *Wang, J.*, +, *TSG March 2021 1541-1551*

Coal-fired power stations

A Novel Framework for the Operational Reliability Evaluation of Integrated Electric Power-Gas Networks. *Ansari, O.A.*, +, *TSG Sept. 2021 3901-3913*

Cogeneration

A Dynamic Equivalent Model for District Heating Networks: Formulation, Existence and Application in Distributed Electricity-Heat Operation. *Zheng, W.*, +, *TSG May 2021 2685-2695*

A Robust State Estimation Method Based on SOCP for Integrated Electricity-Heat System. *Chen, Y.*, +, *TSG Jan. 2021 810-820*

Energy Flow Optimization of Integrated Gas and Power Systems in Continuous Time and Space. *Zheng, C.*, +, *TSG May 2021 2611-2624*

Exploiting Power-to-Heat Assets in District Heating Networks to Regulate Electric Power Network. *Khatibi, M.*, +, *TSG May 2021 2048-2059*

Operational Reliability Assessment of Integrated Heat and Electricity Systems Considering the Load Uncertainties. *Ding, Y.*, +, *TSG Sept. 2021* 3928-3939

Quantitative Model of the Electricity-Shifting Curve in an Energy Hub Based on Aggregated Utility Curve of Multi-Energy Demands. *Zhao, N.*, +, *TSG March 2021* 1329-1345

Commutation

Load-Switching Strategy for Voltage Balancing of Bipolar DC Distribution Networks Based on Optimal Automatic Commutation Algorithm. *Liao, J.*, +, *TSG July 2021* 2966-2979

Compensation

Distributed Control Strategy for Low-Voltage Three-Phase Four-Wire Microgrids: Consensus Power-Based Control. *Ferreira, D.M.*, +, *TSG July 2021* 3215-3231

Enhancement of Frequency Regulation in AC Microgrid: A Fuzzy-MPC Controlled Virtual Synchronous Generator. *Long, B.*, +, *TSG July 2021* 3138-3149

Resilient Wide-Area Damping Control for Inter-Area Oscillations to Tolerate Deception Attacks. *Yao, W.*, +, *TSG Sept. 2021* 4238-4249

Composite insulators

Micro-Cracks Identification and Characterization on the Sheds of Composite Insulators by Fractal Dimension. *Jin, H.*, +, *TSG March 2021* 1821-1824

Compressed sensing

Privacy Preserving in Non-Intrusive Load Monitoring: A Differential Privacy Perspective. *Wang, H.*, +, *TSG May 2021* 2529-2543

Compressors

Resilience-Motivated Distribution System Restoration Considering Electricity-Water-Gas Interdependency. *Li, J.*, +, *TSG Nov. 2021* 4799-4812

Computational complexity

Component-Level Reliability Evaluation Model for Cyber Power Devices. *Balachandran, T.*, +, *TSG Jan. 2021* 692-703

Constructing Demand-Side Bidding Curves Based on a Decoupled Full-Cycle Process. *Ruan, G.*, +, *TSG Jan. 2021* 502-511

Distributed Optimal Conservation Voltage Reduction in Integrated Primary-Secondary Distribution Systems. *Zhang, Q.*, +, *TSG Sept. 2021* 3889-3900

Integrated Electricity and Hydrogen Energy Sharing in Coupled Energy Systems. *Tao, Y.*, +, *TSG March 2021* 1149-1162

Online Optimization for Real-Time Peer-to-Peer Electricity Market Mechanisms. *Guo, Z.*, +, *TSG Sept. 2021* 4151-4163

Computer centers

Aggregated Model of Data Network for the Provision of Demand Response in Generation and Transmission Expansion Planning. *Chen, M.*, +, *TSG Jan. 2021* 512-523

Internet Data Center Load Modeling for Demand Response Considering the Coupling of Multiple Regulation Methods. *Chen, M.*, +, *TSG May 2021* 2060-2076

Computer crime

A Deep Learning-Based Cyberattack Detection System for Transmission Protective Relays. *Khaw, Y.M.*, +, *TSG May 2021* 2554-2565

A New AC False Data Injection Attack Method Without Network Information. *Jiao, R.*, +, *TSG Nov. 2021* 5280-5289

Causative Cyberattacks on Online Learning-Based Automated Demand Response Systems. *Acharya, S.*, +, *TSG July 2021* 3548-3559

Detection of Cyber-Attacks of Power Systems Through Benford's Law. *Milano, F.*, +, *TSG May 2021* 2741-2744

Intrusion Detection for Cybersecurity of Smart Meters. *Sun, C.*, +, *TSG Jan. 2021* 612-622

Learning-Based Simultaneous Detection and Characterization of Time Delay Attack in Cyber-Physical Systems. *Ganesh, P.*, +, *TSG July 2021* 3581-3593

Resilient Control and Analysis for DC Microgrid System Under DoS and Impulsive FDI Attacks. *Liu, X.*, +, *TSG Sept. 2021* 3742-3754

Vulnerability Assessment of Deep Reinforcement Learning Models for Power System Topology Optimization. *Zheng, Y.*, +, *TSG July 2021* 3613-3623

Wide-Area Damping Control Resilience Towards Cyber-Attacks: A Dynamic Loop Approach. *Patel, A.*, +, *TSG July 2021* 3438-3447

Computer network management

An Identity Based Authentication Protocol for Smart Grid Environment Using Physical Uncloneable Function. *Badar, H.M.S.*, +, *TSG Sept. 2021* 4426-4434

Computer network security

A Privacy-Preserving Homomorphic Scheme With Multiple Dimensions and Fault Tolerance for Metering Data Aggregation in Smart Grid. *Mohammadali, A.*, +, *TSG Nov. 2021* 5212-5220

An Identity Based Authentication Protocol for Smart Grid Environment Using Physical Uncloneable Function. *Badar, H.M.S.*, +, *TSG Sept. 2021* 4426-4434

Artificial Neural Network-Based Stealth Attack on Battery Energy Storage Systems. *Pasetti, M.*, +, *TSG Nov. 2021* 5310-5321

Cross-Layer Distributed Control Strategy for Cyber Resilient Microgrids. *Zhou, Q.*, +, *TSG Sept. 2021* 3705-3717

Cyber Spoofing Detection for Grid Distributed Synchrophasor Using Dynamic Dual-Kernel SVM. *Qiu, W.*, +, *TSG May 2021* 2732-2735

Distributed Consensus-Based Economic Dispatch in Power Grids Using the Paillier Cryptosystem. *Yan, Y.*, +, *TSG July 2021* 3493-3502

Distributed Resilient Optimal Current Sharing Control for an Islanded DC Microgrid Under DoS Attacks. *Lian, Z.*, +, *TSG Sept. 2021* 4494-4505

Intrusion Detection for Cybersecurity of Smart Meters. *Sun, C.*, +, *TSG Jan. 2021* 612-622

Network Parameter Coordinated False Data Injection Attacks Against Power System AC State Estimation. *Liu, C.*, +, *TSG March 2021* 1626-1639

Starlink Space Network-Enhanced Cyber-Physical Power System. *Duan, T.*, +, *TSG July 2021* 3673-3675

System Redundancy Enhancement of Secondary Frequency Control Under Latency Attacks. *Chen, C.*, +, *TSG Jan. 2021* 647-658

Two Secure and Efficient Lightweight Data Aggregation Schemes for Smart Grid. *Qian, J.*, +, *TSG May 2021* 2625-2637

Computer simulation

Real-Time Synchrophasor Data Anomaly Detection and Classification Using *Isolation Forest*, *KMeans*, and *LoOP*. *Khaledian, E.*, +, *TSG May 2021* 2378-2388

Computerized instrumentation

Intrusion Detection for Cybersecurity of Smart Meters. *Sun, C.*, +, *TSG Jan. 2021* 612-622

Robust Electricity Theft Detection Against Data Poisoning Attacks in Smart Grids. *Takiddin, A.*, +, *TSG May 2021* 2675-2684

Computerized monitoring

Enabling Online Scheduling for Multi-Microgrid Systems: An Event-Triggered Approach. *Yang, X.*, +, *TSG May 2021* 1836-1852

Concave programming

A SOCP Relaxation for Cycle Constraints in the Optimal Power Flow Problem. *Soofi, A.F.*, +, *TSG March 2021* 1663-1673

Real-Time Control of Battery Energy Storage Systems to Provide Ancillary Services Considering Voltage-Dependent Capability of DC-AC Converters. *Yuan, Z.*, +, *TSG Sept. 2021* 4164-4175

Condition monitoring

Micro-Cracks Identification and Characterization on the Sheds of Composite Insulators by Fractal Dimension. *Jin, H.*, +, *TSG March 2021* 1821-1824

Self-Assessment of Health Conditions of Electrical Assets and Grid Components: A Contribution to Smart Grids. *Montanari, G.C.*, +, *TSG March 2021* 1206-1214

Conductors (electric)

An Inversion-Free Robust Power-Flow Algorithm for Microgrids. *Kumar, A.*, +, *TSG July 2021* 2844-2859

Continuous systems

A Novel Distributed Control Method for Interlinking Converters in an Islanded Hybrid AC/DC Microgrid. *Chang, J.*, +, *TSG Sept. 2021* 3765-3779

Continuous time systems

Robust Hybrid Control for Demand Side Management in Islanded Microgrids. *Albea, C.*, +, *TSG Nov. 2021* 4865-4875

Contracts

Contract-Based Incentive Mechanisms for Honeypot Defense in Advanced Metering Infrastructure. *Tian, W.*, +, *TSG Sept. 2021* 4259-4268

Plug-in Electric Vehicle Charging With Multiple Charging Options: A Systematic Analysis of Service Providers' Pricing Strategies. *Zhang, Y., +, TSG Jan. 2021 524-537*

Selling Demand Response Using Options. *Muthirayan, D., +, TSG Jan. 2021 279-288*

Control design

A Scalable Control Design for Grid-Forming Inverters in Microgrids. *Watson, J.D., +, TSG Nov. 2021 4726-4739*

Control engineering computing

Adaptive Congestion Control for Electric Vehicle Charging in the Smart Grid. *Zishan, A.A., +, TSG May 2021 2439-2449*

An Edge-Cloud Integrated Solution for Buildings Demand Response Using Reinforcement Learning. *Zhang, X., +, TSG Jan. 2021 420-431*

Automated Control of Transactive HVACs in Energy Distribution Systems. *Liu, B., +, TSG May 2021 2462-2471*

Cyber Spoofing Detection for Grid Distributed Synchrophasor Using Dynamic Dual-Kernel SVM. *Qiu, W., +, TSG May 2021 2732-2735*

Development of an Encoding Method on a Co-Simulation Platform for Mitigating the Impact of Unreliable Communication. *Xie, F., +, TSG May 2021 2496-2507*

Fully-Convolutional Denoising Auto-Encoders for NILM in Large Non-Residential Buildings. *Garcia-Perez, D., +, TSG May 2021 2722-2731*

Optimal HVAC System Operation Using Online Learning of Interconnected Neural Networks. *Jang, Y., +, TSG July 2021 3030-3042*

Resilient Control and Analysis for DC Microgrid System Under DoS and Impulsive FDI Attacks. *Liu, X., +, TSG Sept. 2021 3742-3754*

Scalable Designs for Reinforcement Learning-Based Wide-Area Damping Control. *Mukherjee, S., +, TSG May 2021 2389-2401*

Voltage Stabilization Control for Microgrid With Asymmetric Membership Function-Based Wavelet Petri Fuzzy Neural Network. *Lin, F., +, TSG Sept. 2021 3731-3741*

Wide-Area Damping Control Resilience Towards Cyber-Attacks: A Dynamic Loop Approach. *Patel, A., +, TSG July 2021 3438-3447*

Control system security

Dynamic Event-Based Model Predictive Load Frequency Control for Power Systems Under Cyber Attacks. *Liu, Y., +, TSG Jan. 2021 715-725*

Control system synthesis

A Cyber Attack Mitigation Scheme for Series Compensated DFIG-Based Wind Parks. *Ghafouri, M., +, TSG Nov. 2021 5221-5232*

A Decentralized Approach for Voltage Control by Multiple Distributed Energy Resources. *Fusco, G., +, TSG July 2021 3115-3127*

Automated Control of Transactive HVACs in Energy Distribution Systems. *Liu, B., +, TSG May 2021 2462-2471*

Decentralized Optimal Stabilization of Active Loads in Islanded Microgrids. *Dissanayake, A.M., +, TSG March 2021 932-942*

Distributed Control of DC Microgrids for Optimal Coordination of Conventional and Renewable Generators. *Fan, Z., +, TSG Nov. 2021 4607-4615*

Distributed Observer-Based Finite-Time Control of AC Microgrid Under Attack. *Lu, R., +, TSG Jan. 2021 157-168*

Distributed Robust Frequency Restoration and Active Power Sharing for Autonomous Microgrids With Event-Triggered Strategy. *Zhao, D., +, TSG Sept. 2021 3819-3834*

Disturbance Observer and Tube-Based Model Predictive Controlled Electric Vehicles for Frequency Regulation of an Isolated Power Grid. *Oshnoei, A., +, TSG Sept. 2021 4351-4362*

Dynamic Event-Based Model Predictive Load Frequency Control for Power Systems Under Cyber Attacks. *Liu, Y., +, TSG Jan. 2021 715-725*

Practical Challenges in Real-Time Demand Response. *Duan, C., +, TSG Sept. 2021 4573-4576*

Resilient Control and Analysis for DC Microgrid System Under DoS and Impulsive FDI Attacks. *Liu, X., +, TSG Sept. 2021 3742-3754*

Robust Secondary Frequency Control for Virtual Synchronous Machine-Based Microgrid Cluster Using Equivalent Modeling. *Hu, W., +, TSG July 2021 2879-2889*

Scalable Designs for Reinforcement Learning-Based Wide-Area Damping Control. *Mukherjee, S., +, TSG May 2021 2389-2401*

Supplementary Controller for Seamless Transitions Between Microgrids Operation Modes. *Azimi, S.M., +, TSG May 2021 2102-2112*

Supplementary Feedforward Control of DGs in a Reconfigurable Microgrid for Load Restoration. *Park, J., +, TSG Nov. 2021 4641-4654*

Transient Stability and Current Injection Design of Paralleled Current-Controlled VSCs and Virtual Synchronous Generators. *Shen, C., +, TSG March 2021 1118-1134*

Voltage-Based Distributed Optimal Control for Generation Cost Minimization and Bounded Bus Voltage Regulation in DC Microgrids. *Peng, J., +, TSG Jan. 2021 106-116*

Controllability

Extraction of Dynamic Frequency Response Characteristics and Modelling of Modern Air Conditioners. *Bai, F., +, TSG Jan. 2021 897-900*

Controllers

A FDI Attack-Resilient Distributed Secondary Control Strategy for Islanded Microgrids. *Chen, Y., +, TSG May 2021 1929-1938*

Countering FDI Attacks on DERs Coordinated Control System Using FMI-Compatible Cosimulation. *Jafarigiv, D., +, TSG March 2021 1640-1650*

Isochronous Architecture-Based Voltage-Active Power Droop for Multi-Inverter Systems. *Patel, S., +, TSG March 2021 1088-1103*

Convergence

Decentralized Optimal Stabilization of Active Loads in Islanded Microgrids. *Dissanayake, A.M., +, TSG March 2021 932-942*

Distributed Multi-Area State Estimation for Power Systems With Switching Communication Graphs. *Wang, J., +, TSG Jan. 2021 787-797*

Prioritized Replay Dueling DDQN Based Grid-Edge Control of Community Energy Storage System. *Song, H., +, TSG Nov. 2021 4950-4961*

Convex programming

A Robust State Estimation Method Based on SOCP for Integrated Electricity-Heat System. *Chen, Y., +, TSG Jan. 2021 810-820*

A SOCP Relaxation for Cycle Constraints in the Optimal Power Flow Problem. *Soofi, A.F., +, TSG March 2021 1663-1673*

Aggregate Operation Model for Numerous Small-Capacity Distributed Energy Resources Considering Uncertainty. *Yi, Z., +, TSG Sept. 2021 4208-4224*

Decentralized Low-Rank State Estimation for Power Distribution Systems. *Sagan, A., +, TSG July 2021 3097-3106*

Deep Reinforcement Learning for Demand Response in Distribution Networks. *Bahrami, S., +, TSG March 2021 1496-1506*

Distribution Market-Clearing and Pricing Considering Coordination of DSOs and ISO: An EPEC Approach. *Chen, H., +, TSG July 2021 3150-3162*

Distributionally Robust Chance-Constrained Optimal Power-Gas Flow Under Bidirectional Interactions Considering Uncertain Wind Power. *Yang, L., +, TSG March 2021 1722-1735*

Inducing Human Behavior to Maximize Operation Performance at PEV Charging Station. *Zeng, T., +, TSG July 2021 3353-3363*

Online Optimization for Networked Distributed Energy Resources With Time-Coupling Constraints. *Fan, S., +, TSG Jan. 2021 251-267*

Optimal Energy-Hub Planning Based on Dimension Reduction and Variable-Sized Unimodal Searching. *Zhao, N., +, TSG March 2021 1481-1495*

Parallel and Distributed Optimization Method With Constraint Decomposition for Energy Management of Microgrids. *Li, Q., +, TSG Nov. 2021 4627-4640*

Power Loss Minimization of Off-Grid Solar DC Nano-Grids—Part I: Centralized Control Algorithm. *Samende, C., +, TSG Nov. 2021 4715-4725*

Real-Time Control of Battery Energy Storage Systems to Provide Ancillary Services Considering Voltage-Dependent Capability of DC-AC Converters. *Yuan, Z., +, TSG Sept. 2021 4164-4175*

Resilience-Motivated Distribution System Restoration Considering Electricity-Water-Gas Interdependency. *Li, J., +, TSG Nov. 2021 4799-4812*

Toward Complete Characterization of the Steady-State Security Region for the Electricity-Gas Integrated Energy System. *Su, J., +, TSG July 2021 3004-3015*

Tracking Equilibrium Point Under Real-Time Price-Based Residential Demand Response. *Ding, T., +, TSG May 2021 2736-2740*

Two-Time-Scale Energy Management for Microgrids With Data-Based Day-Ahead Distributionally Robust Chance-Constrained Scheduling. *Yuan, Z., +, TSG Nov. 2021 4778-4787*

Voltage-Dependent Load Models in Unbalanced Optimal Power Flow Using Power Cones. *Claeys, S.*, +, *TSG July 2021 2890-2902*

Convolutional neural nets

Detection of Synchrophasor False Data Injection Attack Using Feature Interactive Network. *Qiu, W.*, +, *TSG Jan. 2021 659-670*

Distribution Network Reconfiguration for Short-Term Voltage Stability Enhancement: An Efficient Deep Learning Approach. *Huang, W.*, +, *TSG Nov. 2021 5385-5395*

FeederGAN: Synthetic Feeder Generation via Deep Graph Adversarial Nets. *Liang, M.*, +, *TSG March 2021 1163-1173*

Fully-Convolutional Denoising Auto-Encoders for NILM in Large Non-Residential Buildings. *Garcia-Perez, D.*, +, *TSG May 2021 2722-2731*

Generalizability Improvement of Deep Learning-Based Non-Intrusive Load Monitoring System Using Data Augmentation. *Rafiq, H.*, +, *TSG July 2021 3265-3277*

Hybrid Multitask Multi-Information Fusion Deep Learning for Household Short-Term Load Forecasting. *Jiang, L.*, +, *TSG Nov. 2021 5362-5372*

Correlation methods

Missing Data Recovery in Large Power Systems Using Network Embedding. *Wu, T.*, +, *TSG Jan. 2021 680-691*

Cost reduction

An Operation Model for Distribution Companies Using the Flexibility of Electric Vehicle Aggregators. *Lu, X.*, +, *TSG March 2021 1507-1518*

Automated Control of Transactive HVACs in Energy Distribution Systems. *Liu, B.*, +, *TSG May 2021 2462-2471*

Benefits of Home Energy Storage Utilization: An Australian Case Study of Demand Charge Practices in Residential Sector. *Kong, W.*, +, *TSG July 2021 3086-3096*

Community Energy Cooperation With the Presence of Cheating Behaviors. *Cui, S.*, +, *TSG Jan. 2021 561-573*

Distribution Feeder-Scale Fast Frequency Response via Optimal Coordination of Net-Load Resources—Part I: Solution Design. *Lundstrom, B.*, +, *TSG March 2021 1289-1302*

Dynamic Stochastic Demand Response With Energy Storage. *Xiao, Y.*, +, *TSG Nov. 2021 4813-4821*

Market-Based Energy Management Model of a Building Microgrid Considering Battery Degradation. *Antoniadou-Plytaria, K.*, +, *TSG March 2021 1794-1804*

Optimal HVAC Control for Demand Response via Chance-Constrained Two-Stage Stochastic Program. *Mansy, H.*, +, *TSG May 2021 2188-2200*

Strategic Participation of Residential Thermal Demand Response in Energy and Capacity Markets. *Anwar, M.B.*, +, *TSG July 2021 3070-3085*

Costing

A Reinforcement Learning-Based Decision System for Electricity Pricing Plan Selection by Smart Grid End Users. *Lu, T.*, +, *TSG May 2021 2176-2187*

Iteration-Based Linearized Distribution-Level Locational Marginal Price for Three-Phase Unbalanced Distribution Systems. *Cai, M.*, +, *TSG Nov. 2021 4886-4896*

Real-Time Distributed Economic Dispatch Adapted to General Convex Cost Functions: A Secant Approximation-Based Method. *Zhong, H.*, +, *TSG May 2021 2089-2101*

Covariance matrices

Data-Driven Islanding Detection Using a Principal Subspace of Voltage Angle Differences. *Rabuzin, T.*, +, *TSG Sept. 2021 4250-4258*

Cracks

Micro-Cracks Identification and Characterization on the Sheds of Composite Insulators by Fractal Dimension. *Jin, H.*, +, *TSG March 2021 1821-1824*

Critical infrastructures

Resilience-Motivated Distribution System Restoration Considering Electricity-Water-Gas Interdependency. *Li, J.*, +, *TSG Nov. 2021 4799-4812*

Cryptographic protocols

A Privacy-Aware Reconfigurable Authenticated Key Exchange Scheme for Secure Communication in Smart Grids. *Gope, P.*, +, *TSG Nov. 2021 5335-5348*

A Privacy-Preserving Homomorphic Scheme With Multiple Dimensions and Fault Tolerance for Metering Data Aggregation in Smart Grid. *Mohammadali, A.*, +, *TSG Nov. 2021 5212-5220*

An Identity Based Authentication Protocol for Smart Grid Environment Using Physical Unclonable Function. *Badar, H.M.S.*, +, *TSG Sept. 2021 4426-4434*

Signcryption Based Authenticated and Key Exchange Protocol for EI-Based V2G Environment. *Ahmed, S.*, +, *TSG Nov. 2021 5290-5298*

Cryptography

A Homomorphic Encryption-Based Private Collaborative Distributed Energy Management System. *Cheng, Z.*, +, *TSG Nov. 2021 5233-5243*

Blockchain Based Secure Data Aggregation and Distributed Power Dispatching for Microgrids. *Luo, X.*, +, *TSG Nov. 2021 5268-5279*

Distributed Consensus-Based Economic Dispatch in Power Grids Using the Paillier Cryptosystem. *Yan, Y.*, +, *TSG July 2021 3493-3502*

Privacy-Preserving Distributed Optimal Power Flow With Partially Homomorphic Encryption. *Wu, T.*, +, *TSG Sept. 2021 4506-4521*

Privacy-Preserving Hierarchical State Estimation in Untrustworthy Cloud Environments. *Wang, J.*, +, *TSG March 2021 1541-1551*

Resilient Wide-Area Damping Control for Inter-Area Oscillations to Tolerate Deception Attacks. *Yao, W.*, +, *TSG Sept. 2021 4238-4249*

Two Secure and Efficient Lightweight Data Aggregation Schemes for Smart Grid. *Qian, J.*, +, *TSG May 2021 2625-2637*

Current limiters

On the Impact of Fault Ride-Through on Transient Stability of Autonomous Microgrids: Nonlinear Analysis and Solution. *Eskandari, M.*, +, *TSG March 2021 999-1010*

Current transformers

Wide-Band Current Transformers for Traveling-Waves-Based Protection Applications. *Ameli, A.*, +, *TSG Jan. 2021 845-858*

Customer satisfaction

A Microgrid Energy Management System Based on Non-Intrusive Load Monitoring via Multitask Learning. *Cimen, H.*, +, *TSG March 2021 977-987*

Customer services

Resilience-Motivated Distribution System Restoration Considering Electricity-Water-Gas Interdependency. *Li, J.*, +, *TSG Nov. 2021 4799-4812*

Cyber-physical systems

ACN-Sim: An Open-Source Simulator for Data-Driven Electric Vehicle Charging Research. *Lee, Z.J.*, +, *TSG Nov. 2021 5113-5123*

False Data Injection Attacks Against State-of-Charge Estimation of Battery Energy Storage Systems in Smart Distribution Networks. *Zhuang, P.*, +, *TSG May 2021 2566-2577*

Learning-Based Simultaneous Detection and Characterization of Time Delay Attack in Cyber-Physical Systems. *Ganesh, P.*, +, *TSG July 2021 3581-3593*

Leveraging Network Topology Optimization to Strengthen Power Grid Resilience Against Cyber-Physical Attacks. *Liu, Z.*, +, *TSG March 2021 1552-1564*

Optimal PMU Restoration for Power System Observability Recovery After Massive Attacks. *Edib, S.N.*, +, *TSG March 2021 1565-1576*

D

Damping

A Cyber Attack Mitigation Scheme for Series Compensated DFIG-Based Wind Parks. *Ghafouri, M.*, +, *TSG Nov. 2021 5221-5232*

Characteristics of Parallel Inverters Applying Virtual Synchronous Generator Control. *Chen, M.*, +, *TSG Nov. 2021 4690-4701*

Enhancement of Frequency Regulation in AC Microgrid: A Fuzzy-MPC Controlled Virtual Synchronous Generator. *Long, B.*, +, *TSG July 2021 3138-3149*

Network Modeling Influence on Small-Signal Reduced-Order Models of Inverter-Based AC Microgrids Considering Virtual Impedance. *Manrique Machado, S.d.J.M.*, +, *TSG Jan. 2021 79-92*

Optimal Power Flow Design for Enhancing Dynamic Performance: Potentials of Reactive Power. *Inoue, M.*, +, *TSG Jan. 2021 599-611*

Resilient Wide-Area Damping Control for Inter-Area Oscillations to Tolerate Deception Attacks. *Yao, W.*, +, *TSG Sept. 2021 4238-4249*

Scalable Designs for Reinforcement Learning-Based Wide-Area Damping Control. *Mukherjee, S.*, +, *TSG May 2021 2389-2401*

- Spatial–Temporal Data Analysis-Based Event Detection in Weakly Damped Power Systems. *Zhu, L., +, TSG Nov. 2021 5472-5474*
- Wide-Area Damping Control Resilience Towards Cyber-Attacks: A Dynamic Loop Approach. *Patel, A., +, TSG July 2021 3438-3447*
- Data acquisition**
- Model-Free Lossless Data Compression for Real-Time Low-Latency Transmission in Smart Grids. *Yan, L., +, TSG May 2021 2601-2610*
- Data aggregation**
- Blockchain Based Secure Data Aggregation and Distributed Power Dispatching for Microgrids. *Luo, X., +, TSG Nov. 2021 5268-5279*
- Two Secure and Efficient Lightweight Data Aggregation Schemes for Smart Grid. *Qian, J., +, TSG May 2021 2625-2637*
- Data analysis**
- Deep Learning Method With Manual Post-Processing for Identification of Spectral Patterns of Waveform Distortion in PV Installations. *de Oliveira, R.A., +, TSG Nov. 2021 5444-5456*
- Fractional Dynamics of PMU Data. *Shalalfeh, L., +, TSG May 2021 2578-2588*
- Resident Behavior Detection Model for Environment Responsive Demand Response. *Baek, K., +, TSG Sept. 2021 3980-3989*
- Spatial–Temporal Data Analysis-Based Event Detection in Weakly Damped Power Systems. *Zhu, L., +, TSG Nov. 2021 5472-5474*
- Data communication**
- Model-Free Lossless Data Compression for Real-Time Low-Latency Transmission in Smart Grids. *Yan, L., +, TSG May 2021 2601-2610*
- Data compression**
- A Synchronphasor Data Compression Technique With Iteration-Enhanced Phasor Principal Component Analysis. *Zhang, F., +, TSG May 2021 2365-2377*
- Model-Free Lossless Data Compression for Real-Time Low-Latency Transmission in Smart Grids. *Yan, L., +, TSG May 2021 2601-2610*
- Data handling**
- Anomaly Detection, Localization and Classification Using Drifting Synchronphasor Data Streams. *Ahmed, A., +, TSG July 2021 3570-3580*
- Data-Driven Copy-Paste Imputation for Energy Time Series. *Weber, M., +, TSG Nov. 2021 5409-5419*
- Generalizability Improvement of Deep Learning-Based Non-Intrusive Load Monitoring System Using Data Augmentation. *Raftiq, H., +, TSG July 2021 3265-3277*
- Data integration**
- On the Use of Common Information Model for Smart Grid Applications — A Conceptual Approach. *Shahid, K., +, TSG Nov. 2021 5060-5072*
- Data integrity**
- Causative Cyberattacks on Online Learning-Based Automated Demand Response Systems. *Acharya, S., +, TSG July 2021 3548-3559*
- Two Secure and Efficient Lightweight Data Aggregation Schemes for Smart Grid. *Qian, J., +, TSG May 2021 2625-2637*
- Data loggers**
- A Novel Fault Location Methodology for Smart Distribution Networks. *Mirshakali, H., +, TSG March 2021 1277-1288*
- Data mining**
- An Adaptive Ensemble Data Driven Approach for Nonparametric Probabilistic Forecasting of Electricity Load. *Wan, C., +, TSG Nov. 2021 5396-5408*
- Association Rule Mining for Localizing Solar Power in Different Distribution Grid Feeders. *Saleem, B., +, TSG May 2021 2589-2600*
- Data-Driven Copy-Paste Imputation for Energy Time Series. *Weber, M., +, TSG Nov. 2021 5409-5419*
- Develop Load Shape Dictionary Through Efficient Clustering Based on Elastic Dissimilarity Measure. *Liang, H., +, TSG Jan. 2021 442-452*
- Load Photo: A Novel Analysis Method for Load Data. *Wang, H., +, TSG March 2021 1394-1404*
- Data models**
- Aggregate Flexibility of Virtual Power Plants With Temporal Coupling Constraints. *Wang, S., +, TSG Nov. 2021 5043-5051*
- Data privacy**
- A Homomorphic Encryption-Based Private Collaborative Distributed Energy Management System. *Cheng, Z., +, TSG Nov. 2021 5233-5243*
- A Privacy-Aware Reconfigurable Authenticated Key Exchange Scheme for Secure Communication in Smart Grids. *Gope, P., +, TSG Nov. 2021 5335-5348*
- A Privacy-Preserving Homomorphic Scheme With Multiple Dimensions and Fault Tolerance for Metering Data Aggregation in Smart Grid. *Mohammadali, A., +, TSG Nov. 2021 5212-5220*
- A Scalable Privacy-Preserving Multi-Agent Deep Reinforcement Learning Approach for Large-Scale Peer-to-Peer Transactive Energy Trading. *Ye, Y., +, TSG Nov. 2021 5185-5200*
- An Architecture and Performance Evaluation of Blockchain-Based Peer-to-Peer Energy Trading. *Abdella, J., +, TSG July 2021 3364-3378*
- An Energy Sharing Mechanism Achieving the Same Flexibility as Centralized Dispatch. *Chen, Y., +, TSG July 2021 3379-3389*
- Community Energy Cooperation With the Presence of Cheating Behaviors. *Cui, S., +, TSG Jan. 2021 561-573*
- Design Framework for Privacy-Aware Demand-Side Management With Realistic Energy Storage Model. *Avula, R.R., +, TSG July 2021 3503-3513*
- Distributed Consensus-Based Economic Dispatch in Power Grids Using the Paillier Cryptosystem. *Yan, Y., +, TSG July 2021 3493-3502*
- Distributed Privacy-Preserving Active Power Sharing and Frequency Regulation in Microgrids. *Fan, B., +, TSG July 2021 3665-3668*
- Electricity Consumer Characteristics Identification: A Federated Learning Approach. *Wang, Y., +, TSG July 2021 3637-3647*
- Mixed-Stage Energy Management for Decentralized Microgrid Cluster Based on Enhanced Tube Model Predictive Control. *Xie, P., +, TSG Sept. 2021 3780-3792*
- Privacy Preserving in Non-Intrusive Load Monitoring: A Differential Privacy Perspective. *Wang, H., +, TSG May 2021 2529-2543*
- Privacy Preserving Load Control of Residential Microgrid via Deep Reinforcement Learning. *Qin, Z., +, TSG Sept. 2021 4079-4089*
- Privacy-Preserving Distributed Average Observers in Distribution Systems With Grid-Forming Inverters. *Du, Y., +, TSG Nov. 2021 5000-5010*
- Privacy-Preserving Distributed Clustering for Electrical Load Profiling. *Jia, M., +, TSG March 2021 1429-1444*
- Privacy-Preserving Distributed Optimal Power Flow With Partially Homomorphic Encryption. *Wu, T., +, TSG Sept. 2021 4506-4521*
- Privacy-Preserving Hierarchical State Estimation in Untrustworthy Cloud Environments. *Wang, J., +, TSG March 2021 1541-1551*
- Two Secure and Efficient Lightweight Data Aggregation Schemes for Smart Grid. *Qian, J., +, TSG May 2021 2625-2637*
- Data structures**
- Hybrid Multitask Multi-Information Fusion Deep Learning for Household Short-Term Load Forecasting. *Jiang, L., +, TSG Nov. 2021 5362-5372*
- DC distribution systems**
- Current Injection Power Flow Analysis and Optimal Generation Dispatch for Bipolar DC Microgrids. *Lee, J., +, TSG May 2021 1918-1928*
- DC power transmission**
- Load-Switching Strategy for Voltage Balancing of Bipolar DC Distribution Networks Based on Optimal Automatic Commutation Algorithm. *Liao, J., +, TSG July 2021 2966-2979*
- DC transmission networks**
- Deep Learning-Based Real-Time Switching of Hybrid AC/DC Transmission Networks. *Dabbaghjamesh, M., +, TSG May 2021 2331-2342*
- DC-AC power converters**
- Real-Time Control of Battery Energy Storage Systems to Provide Ancillary Services Considering Voltage-Dependent Capability of DC-AC Converters. *Yuan, Z., +, TSG Sept. 2021 4164-4175*
- DC-DC power converters**
- Chopperless Fault Ride-Through Control for DC Microgrids. *Xia, Y., +, TSG March 2021 965-976*
- Dynamic Modeling of Battery Energy Storage and Applications in Transmission Systems. *Calero, F., +, TSG Jan. 2021 589-598*
- Minimizing Energy Storage Utilization in a Stand-Alone DC Microgrid Using Photovoltaic Flexible Power Control. *Yan, H.W., +, TSG Sept. 2021 3755-3764*
- Second Harmonic Injection-Based Recovery Control of PV DC Boosting Integration System. *Jia, K., +, TSG March 2021 1022-1032*

Self-Assessment of Health Conditions of Electrical Assets and Grid Components: A Contribution to Smart Grids. *Montanari, G.C.*, +, *TSG March 2021 1206-1214*

Decentralized control

A Decentralized Approach for Voltage Control by Multiple Distributed Energy Resources. *Fusco, G.*, +, *TSG July 2021 3115-3127*

A Scalable Control Design for Grid-Forming Inverters in Microgrids. *Watson, J.D.*, +, *TSG Nov. 2021 4726-4739*

Buffered-Microgrid Structure for Future Power Networks; a Seamless Microgrid Control. *Nasser, N.*, +, *TSG Jan. 2021 131-140*

Data-Driven Multi-Agent Deep Reinforcement Learning for Distribution System Decentralized Voltage Control With High Penetration of PVs. *Cao, D.*, +, *TSG Sept. 2021 4137-4150*

Decentralized Charging of Plug-In Electric Vehicles and Impact on Transmission System Dynamics. *Moschella, M.*, +, *TSG March 2021 1772-1781*

Mixed-Stage Energy Management for Decentralized Microgrid Cluster Based on Enhanced Tube Model Predictive Control. *Xie, P.*, +, *TSG Sept. 2021 3780-3792*

Online Multi-Agent Reinforcement Learning for Decentralized Inverter-Based Volt-VAR Control. *Liu, H.*, +, *TSG July 2021 2980-2990*

Decision making

A Community-Based Energy Market Design Using Decentralized Decision-Making Under Uncertainty. *Crespo-Vazquez, J.L.*, +, *TSG March 2021 1782-1793*

A Transactive Retail Market Mechanism for Active Distribution Network Integrated With Large-Scale Distributed Energy Resources. *Huang, C.*, +, *TSG Sept. 2021 4225-4237*

Agent-Based Modeling of Feeder-Level Electric Vehicle Diffusion for Distribution Planning. *Sun, L.*, +, *TSG Jan. 2021 751-760*

An Adaptive Ensemble Data Driven Approach for Nonparametric Probabilistic Forecasting of Electricity Load. *Wan, C.*, +, *TSG Nov. 2021 5396-5408*

An Edge-Cloud Integrated Solution for Buildings Demand Response Using Reinforcement Learning. *Zhang, X.*, +, *TSG Jan. 2021 420-431*

Approaching Prosumer Social Optimum via Energy Sharing With Proof of Convergence. *Chen, Y.*, +, *TSG May 2021 2484-2495*

Automated Control of Transactive HVACs in Energy Distribution Systems. *Liu, B.*, +, *TSG May 2021 2462-2471*

Data-Driven Probabilistic Fault Location of Electric Power Distribution Systems Incorporating Data Uncertainties. *Jiang, Y.*, *TSG Sept. 2021 4522-4534*

Dynamic Stochastic Demand Response With Energy Storage. *Xiao, Y.*, +, *TSG Nov. 2021 4813-4821*

Evaluating and Selecting Renewable Energy Sources for a Microgrid: A Bi-Capacity-Based Multi-Criteria Decision Making Approach. *Zhang, L.*, +, *TSG March 2021 921-931*

Mobility-Aware Charging Scheduling for Shared On-Demand Electric Vehicle Fleet Using Deep Reinforcement Learning. *Liang, Y.*, +, *TSG March 2021 1380-1393*

Reactive Power Management for Networked Microgrid Resilience in Extreme Conditions. *Shaker, A.*, +, *TSG Sept. 2021 3940-3953*

Risk Trading in Energy Communities. *Vespermann, N.*, +, *TSG March 2021 1249-1263*

Stealthy Black-Box Attacks on Deep Learning Non-Intrusive Load Monitoring Models. *Wang, J.*, +, *TSG July 2021 3479-3492*

Tri-Level Scheduling Model Considering Residential Demand Flexibility of Aggregated HVACs and EVs Under Distribution LMP. *Wang, X.*, +, *TSG Sept. 2021 3990-4002*

Decision theory

A Reinforcement Learning-Based Decision System for Electricity Pricing Plan Selection by Smart Grid End Users. *Lu, T.*, +, *TSG May 2021 2176-2187*

Automated Control of Transactive HVACs in Energy Distribution Systems. *Liu, B.*, +, *TSG May 2021 2462-2471*

Decision trees

A Cyber-Physical Anomaly Detection for Wide-Area Protection Using Machine Learning. *Singh, V.K.*, +, *TSG July 2021 3514-3526*

An Adaptive Approach for Dynamic Load Modeling in Microgrids. *Chavarro-Barrera, L.*, +, *TSG July 2021 2834-2843*

Deep learning (artificial intelligence)

A Deep Learning-Based Cyberattack Detection System for Transmission Protective Relays. *Khaw, Y.M.*, +, *TSG May 2021 2554-2565*

Adaptive Congestion Control for Electric Vehicle Charging in the Smart Grid. *Zishan, A.A.*, +, *TSG May 2021 2439-2449*

Adaptive Weighted Recurrence Graphs for Appliance Recognition in Non-Intrusive Load Monitoring. *Faustine, A.*, +, *TSG Jan. 2021 398-406*

Anomaly Detection, Localization and Classification Using Drifting Synchronophasor Data Streams. *Ahmed, A.*, +, *TSG July 2021 3570-3580*

Automated Control of Transactive HVACs in Energy Distribution Systems. *Liu, B.*, +, *TSG May 2021 2462-2471*

Consensus Multi-Agent Reinforcement Learning for Volt-VAR Control in Power Distribution Networks. *Gao, Y.*, +, *TSG July 2021 3594-3604*

Deep Learning-Based Real-Time Switching of Hybrid AC/DC Transmission Networks. *Dabbaghjamesh, M.*, +, *TSG May 2021 2331-2342*

Deep Reinforcement Learning for Continuous Electric Vehicles Charging Control With Dynamic User Behaviors. *Yan, L.*, +, *TSG Nov. 2021 5124-5134*

Detecting False Data Injection Attacks in Smart Grids: A Semi-Supervised Deep Learning Approach. *Zhang, Y.*, +, *TSG Jan. 2021 623-634*

Distribution Network Reconfiguration for Short-Term Voltage Stability Enhancement: An Efficient Deep Learning Approach. *Huang, W.*, +, *TSG Nov. 2021 5385-5395*

FeederGAN: Synthetic Feeder Generation via Deep Graph Adversarial Nets. *Liang, M.*, +, *TSG March 2021 1163-1173*

Forecast-Based Consensus Control for DC Microgrids Using Distributed Long Short-Term Memory Deep Learning Models. *Alavi, S.A.*, +, *TSG Sept. 2021 3718-3730*

Generalizability Improvement of Deep Learning-Based Non-Intrusive Load Monitoring System Using Data Augmentation. *Rafiq, H.*, +, *TSG July 2021 3265-3277*

Hybrid Multitask Multi-Information Fusion Deep Learning for Household Short-Term Load Forecasting. *Jiang, L.*, +, *TSG Nov. 2021 5362-5372*

Learning-Based Simultaneous Detection and Characterization of Time Delay Attack in Cyber-Physical Systems. *Ganesh, P.*, +, *TSG July 2021 3581-3593*

Load Photo: A Novel Analysis Method for Load Data. *Wang, H.*, +, *TSG March 2021 1394-1404*

Mobility-Aware Charging Scheduling for Shared On-Demand Electric Vehicle Fleet Using Deep Reinforcement Learning. *Liang, Y.*, +, *TSG March 2021 1380-1393*

Probabilistic Load Forecasting via Neural Basis Expansion Model Based Prediction Intervals. *Wen, H.*, +, *TSG July 2021 3648-3660*

Robust Electricity Theft Detection Against Data Poisoning Attacks in Smart Grids. *Takiddin, A.*, +, *TSG May 2021 2675-2684*

Stealthy Black-Box Attacks on Deep Learning Non-Intrusive Load Monitoring Models. *Wang, J.*, +, *TSG July 2021 3479-3492*

Time-Frequency Mask Estimation Based on Deep Neural Network for Flexible Load Disaggregation in Buildings. *Song, J.*, +, *TSG July 2021 3242-3251*

Vulnerability Assessment of Deep Reinforcement Learning Models for Power System Topology Optimization. *Zheng, Y.*, +, *TSG July 2021 3613-3623*

Delays

An Asynchronous Forward-Backward-Splitting Power Flow Algorithm of Coupled Transmission and Active Distribution Systems. *Tang, K.*, +, *TSG Nov. 2021 5457-5471*

Modeling of Time-Delayed Distributed Cyber-Physical Power Systems for Small-Signal Stability Analysis. *Xu, L.*, +, *TSG July 2021 3425-3437*

Resilient Wide-Area Damping Control for Inter-Area Oscillations to Tolerate Deception Attacks. *Yao, W.*, +, *TSG Sept. 2021 4238-4249*

Robust Load Frequency Control of Power Systems Against Random Time-Delay Attacks. *Xiahou, K.S.*, +, *TSG Jan. 2021 909-911*

Demand response

Correction to "Integrating EV Charging Stations as Smart Loads for Demand Response Provisions in Distribution Systems" [Mar 18 1096-1106]. *Hafez, O., +, TSG March 2021 1829*

Demand side management

A Blockchain-Enabled Multi-Settlement Quasi-Ideal Peer-to-Peer Trading Framework. *AlAshery, M.K., +, TSG Jan. 2021 885-896*

A Demand Response-Based Solution to Overloading in Underdeveloped Distribution Networks. *Jibran, M., +, TSG Sept. 2021 4059-4067*

Aggregated Model of Data Network for the Provision of Demand Response in Generation and Transmission Expansion Planning. *Chen, M., +, TSG Jan. 2021 512-523*

Aggregation of Demand-Side Flexibility in Electricity Markets: Negative Impact Analysis and Mitigation Method. *Wang, S., +, TSG Jan. 2021 774-786*

Algorithm for Simultaneous Medium Voltage Grid Planning and Electric Vehicle Scheduling. *Rotering, N., +, TSG July 2021 3305-3313*

An Edge-Cloud Integrated Solution for Buildings Demand Response Using Reinforcement Learning. *Zhang, X., +, TSG Jan. 2021 420-431*

An Identity Based Authentication Protocol for Smart Grid Environment Using Physical Uncloneable Function. *Badar, H.M.S., +, TSG Sept. 2021 4426-4434*

Blockchain for Transacting Energy and Carbon Allowance in Networked Microgrids. *Yan, M., +, TSG Nov. 2021 4702-4714*

Causative Cyberattacks on Online Learning-Based Automated Demand Response Systems. *Acharya, S., +, TSG July 2021 3548-3559*

Combined Impact of Demand Response Aggregators and Carbon Taxation on Emissions Reduction in Electric Power Systems. *Algarni, A.S., +, TSG March 2021 1825-1827*

Constructing Demand-Side Bidding Curves Based on a Decoupled Full-Cycle Process. *Ruan, G., +, TSG Jan. 2021 502-511*

Deep Reinforcement Learning for Continuous Electric Vehicles Charging Control With Dynamic User Behaviors. *Yan, L., +, TSG Nov. 2021 5124-5134*

Deep Reinforcement Learning for Demand Response in Distribution Networks. *Bahrami, S., +, TSG March 2021 1496-1506*

Demand Response for Industrial Micro-Grid Considering Photovoltaic Power Uncertainty and Battery Operational Cost. *Huang, C., +, TSG July 2021 3043-3055*

Design Framework for Privacy-Aware Demand-Side Management With Realistic Energy Storage Model. *Avula, R.R., +, TSG July 2021 3503-3513*

Develop Load Shape Dictionary Through Efficient Clustering Based on Elastic Dissimilarity Measure. *Liang, H., +, TSG Jan. 2021 442-452*

Domain Randomization for Demand Response of an Electric Water Heater. *Peirelinck, T., +, TSG March 2021 1370-1379*

Dynamic Stochastic Demand Response With Energy Storage. *Xiao, Y., +, TSG Nov. 2021 4813-4821*

Enabling Online Scheduling for Multi-Microgrid Systems: An Event-Triggered Approach. *Yang, X., +, TSG May 2021 1836-1852*

Incentive Based Demand Response Program for Power System Flexibility Enhancement. *Mohandes, B., +, TSG May 2021 2212-2223*

Incentive-Compatible Demand Response for Spatially Coupled Internet Data Centers in Electricity Markets. *Chen, M., +, TSG July 2021 3056-3069*

Incentives to Manipulate Demand Response Baselines With Uncertain Event Schedules. *Ellman, D., +, TSG March 2021 1358-1369*

Network-Constrained Stackelberg Game for Pricing Demand Flexibility in Power Distribution Systems. *Aguiar, N., +, TSG Sept. 2021 4049-4058*

Online Learning and Distributed Control for Residential Demand Response. *Chen, X., +, TSG Nov. 2021 4843-4853*

Online Optimization for Networked Distributed Energy Resources With Time-Coupling Constraints. *Fan, S., +, TSG Jan. 2021 251-267*

Online Optimization for Real-Time Peer-to-Peer Electricity Market Mechanisms. *Guo, Z., +, TSG Sept. 2021 4151-4163*

Optimal HVAC Control for Demand Response via Chance-Constrained Two-Stage Stochastic Program. *Mansy, H., +, TSG May 2021 2188-2200*

Parallel and Distributed Optimization Method With Constraint Decomposition for Energy Management of Microgrids. *Li, Q., +, TSG Nov. 2021 4627-4640*

Practical Challenges in Real-Time Demand Response. *Duan, C., +, TSG Sept. 2021 4573-4576*

Primary Frequency Control in Isolated Microgrids Using Thermostatically Controllable Loads. *Mendieta, W., +, TSG Jan. 2021 93-105*

Privacy Preserving Load Control of Residential Microgrid via Deep Reinforcement Learning. *Qin, Z., +, TSG Sept. 2021 4079-4089*

Quantitative Model of the Electricity-Shifting Curve in an Energy Hub Based on Aggregated Utility Curve of Multi-Energy Demands. *Zhao, N., +, TSG March 2021 1329-1345*

Resident Behavior Detection Model for Environment Responsive Demand Response. *Baek, K., +, TSG Sept. 2021 3980-3989*

Risk-Averse Optimal Energy and Reserve Scheduling for Virtual Power Plants Incorporating Demand Response Programs. *Vahedipour-Dahraie, M., +, TSG March 2021 1405-1415*

Robust Hierarchical Control Mechanism for Aggregated Thermostatically Controlled Loads. *Gong, X., +, TSG Jan. 2021 453-467*

Stealthy Black-Box Attacks on Deep Learning Non-Intrusive Load Monitoring Models. *Wang, J., +, TSG July 2021 3479-3492*

Strategic Participation of Residential Thermal Demand Response in Energy and Capacity Markets. *Anwar, M.B., +, TSG July 2021 3070-3085*

Tracking Equilibrium Point Under Real-Time Price-Based Residential Demand Response. *Ding, T., +, TSG May 2021 2736-2740*

Tri-Level Scheduling Model Considering Residential Demand Flexibility of Aggregated HVACs and EVs Under Distribution LMP. *Wang, X., +, TSG Sept. 2021 3990-4002*

Two-Stage Decoupled Estimation Approach of Aggregated Baseline Load Under High Penetration of Behind-the-Meter PV System. *Li, K., +, TSG Nov. 2021 4876-4885*

Diesel-electric generators

Diesel Generator Model Parameterization for Microgrid Simulation Using Hybrid Box-Constrained Levenberg-Marquardt Algorithm. *Long, Q., +, TSG March 2021 943-952*

Digital signatures

Cyber Spoofing Detection for Grid Distributed Synchrophasor Using Dynamic Dual-Kernel SVM. *Qiu, W., +, TSG May 2021 2732-2735*

Signcryption Based Authenticated and Key Exchange Protocol for EI-Based V2G Environment. *Ahmed, S., +, TSG Nov. 2021 5290-5298*

Directed graphs

Distributed Multi-Area State Estimation for Power Systems With Switching Communication Graphs. *Wang, J., +, TSG Jan. 2021 787-797*

FeederGAN: Synthetic Feeder Generation via Deep Graph Adversarial Nets. *Liang, M., +, TSG March 2021 1163-1173*

Push-Based Distributed Economic Dispatch in Smart Grids Over Time-Varying Unbalanced Directed Graphs. *Wang, Z., +, TSG July 2021 3185-3199*

Disasters

Multi-Stage Multi-Zone Defender-Attacker-Defender Model for Optimal Resilience Strategy With Distribution Line Hardening and Energy Storage System Deployment. *Zhang, H., +, TSG March 2021 1194-1205*

Resilient Restoration of Distribution Systems in Coordination With Electric Bus Scheduling. *Li, B., +, TSG July 2021 3314-3325*

Discrete event simulation

RTCE: Real-Time Co-Emulation Framework for EMT-Based Power System and Communication Network on FPGA-MPSoC Hardware Architecture. *Duan, T., +, TSG May 2021 2544-2553*

Discrete systems

A Novel Distributed Control Method for Interlinking Converters in an Islanded Hybrid AC/DC Microgrid. *Chang, J., +, TSG Sept. 2021 3765-3779*

Discrete time systems

A Cyber Attack Mitigation Scheme for Series Compensated DFIG-Based Wind Parks. *Ghafouri, M., +, TSG Nov. 2021 5221-5232*

Distributed Control of DC Microgrids for Optimal Coordination of Conventional and Renewable Generators. *Fan, Z., +, TSG Nov. 2021 4607-4615*

Resilient Control and Analysis for DC Microgrid System Under DoS and Impulsive FDI Attacks. *Liu, X., +, TSG Sept. 2021 3742-3754*

Discrete wavelet transforms

Islanding Detection Method With Load Power Factor Improvement and High Frequency Transient Suppressing. *Azzaoui, M.E., TSG Sept. 2021 4176-4184*

Distributed algorithms

Distributed Multi-Area State Estimation for Power Systems With Switching Communication Graphs. *Wang, J., +, TSG Jan. 2021 787-797*

Distribution Network-Constrained Optimization of Peer-to-Peer Transactive Energy Trading Among Multi-Microgrids. *Yan, M., +, TSG March 2021 1033-1047*

Privacy-Preserving Distributed Optimal Power Flow With Partially Homomorphic Encryption. *Wu, T., +, TSG Sept. 2021 4506-4521*

Push-Based Distributed Economic Dispatch in Smart Grids Over Time-Varying Unbalanced Directed Graphs. *Wang, Z., +, TSG July 2021 3185-3199*

Distributed control

A Cascaded Distributed Control Framework in DC Microgrids. *Zhou, J., +, TSG Jan. 2021 205-214*

A FDI Attack-Resilient Distributed Secondary Control Strategy for Islanded Microgrids. *Chen, Y., +, TSG May 2021 1929-1938*

A Mean-Field Voltage Control Approach for Active Distribution Networks With Uncertainties. *Wei, B., +, TSG March 2021 1455-1466*

A Novel Distributed Control Method for Interlinking Converters in an Islanded Hybrid AC/DC Microgrid. *Chang, J., +, TSG Sept. 2021 3765-3779*

A Self-Organizing Multi-Agent System for Distributed Voltage Regulation. *Faiya, B.A., +, TSG Sept. 2021 4102-4112*

A Unified Distributed Cooperative Control of DC Microgrids Using Consensus Protocol. *Li, Y., +, TSG May 2021 1880-1892*

Cross-Layer Distributed Control Strategy for Cyber Resilient Microgrids. *Zhou, Q., +, TSG Sept. 2021 3705-3717*

Data-Driven Distributionally Robust Hierarchical Coordination for Home Energy Management. *Saberi, H., +, TSG Sept. 2021 4090-4101*

Distributed Control of DC Microgrids for Optimal Coordination of Conventional and Renewable Generators. *Fan, Z., +, TSG Nov. 2021 4607-4615*

Distributed Control of Multi-Energy Storage Systems for Voltage Regulation in Distribution Networks: A Back-and-Forth Communication Framework. *Yu, P., +, TSG May 2021 1964-1977*

Distributed Control Strategy for Low-Voltage Three-Phase Four-Wire Microgrids: Consensus Power-Based Control. *Ferreira, D.M., +, TSG July 2021 3215-3231*

Distributed Multi-Area State Estimation for Power Systems With Switching Communication Graphs. *Wang, J., +, TSG Jan. 2021 787-797*

Distributed Observer-Based Finite-Time Control of AC Microgrid Under Attack. *Lu, R., +, TSG Jan. 2021 157-168*

Distributed Power Sharing Control for Islanded Single-/Three-Phase Microgrids With Admissible Voltage and Energy Storage Constraints. *Zhou, J., +, TSG July 2021 2760-2775*

Distributed Predictive Control Strategy for Frequency Restoration of Microgrids Considering Optimal Dispatch. *F., A.N., +, TSG July 2021 2748-2759*

Distributed Resilient Optimal Current Sharing Control for an Islanded DC Microgrid Under DoS Attacks. *Lian, Z., +, TSG Sept. 2021 4494-4505*

Distributed Robust Frequency Restoration and Active Power Sharing for Autonomous Microgrids With Event-Triggered Strategy. *Zhao, D., +, TSG Sept. 2021 3819-3834*

Frequency Regulation With Heterogeneous Energy Resources: A Realization Using Distributed Control. *Anderson, T., +, TSG Sept. 2021 4126-4136*

Modeling of Time-Delayed Distributed Cyber-Physical Power Systems for Small-Signal Stability Analysis. *Xu, L., +, TSG July 2021 3425-3437*

Observer-Based Resilient Integrated Distributed Control Against Cyberattacks on Sensors and Actuators in Islanded AC Microgrids. *Shi, M., +, TSG May 2021 1953-1963*

Online Learning and Distributed Control for Residential Demand Response. *Chen, X., +, TSG Nov. 2021 4843-4853*

Power Loss Minimization of Off-Grid Solar DC Nano-Grids—Part I: Centralized Control Algorithm. *Samende, C., +, TSG Nov. 2021 4715-4725*

Privacy-Preserving Distributed Average Observers in Distribution Systems With Grid-Forming Inverters. *Du, Y., +, TSG Nov. 2021 5000-5010*

Voltage-Based Distributed Optimal Control for Generation Cost Minimization and Bounded Bus Voltage Regulation in DC Microgrids. *Peng, J., +, TSG Jan. 2021 106-116*

Distributed power generation

A Blockchain-Enabled Multi-Settlement Quasi-Ideal Peer-to-Peer Trading Framework. *AlAshery, M.K., +, TSG Jan. 2021 885-896*

A Cascaded Distributed Control Framework in DC Microgrids. *Zhou, J., +, TSG Jan. 2021 205-214*

A Comprehensive Resilience-Oriented FLISR Method for Distribution Systems. *Liu, J., +, TSG May 2021 2136-2152*

A Decentralized Approach for Voltage Control by Multiple Distributed Energy Resources. *Fusco, G., +, TSG July 2021 3115-3127*

A FDI Attack-Resilient Distributed Secondary Control Strategy for Islanded Microgrids. *Chen, Y., +, TSG May 2021 1929-1938*

A Grid-Friendly Sustainable Neighborhood Energy Trading Mechanism for MV-LV Network. *Liu, A., +, TSG May 2021 2239-2248*

A Harmonic Time-Current-Voltage Directional Relay for Optimal Protection Coordination of Inverter-Based Islanded Microgrids. *El-Sayed, W.T., +, TSG May 2021 1904-1917*

A Historical-Correlation-Driven Robust Optimization Approach for Microgrid Dispatch. *Qiu, H., +, TSG March 2021 1135-1148*

A Homomorphic Encryption-Based Private Collaborative Distributed Energy Management System. *Cheng, Z., +, TSG Nov. 2021 5233-5243*

A Hybrid Islanding Detection Method Based on the Rates of Changes in Voltage and Active Power for the Multi-Inverter Systems. *Seyedi, M., +, TSG July 2021 2800-2811*

A Mean-Field Voltage Control Approach for Active Distribution Networks With Uncertainties. *Wei, B., +, TSG March 2021 1455-1466*

A Microgrid Energy Management System Based on Non-Intrusive Load Monitoring via Multitask Learning. *Cimen, H., +, TSG March 2021 977-987*

A Model-Free Voltage Control Approach to Mitigate Motor Stalling and FIDVR for Smart Grids. *Park, B., +, TSG Jan. 2021 67-78*

A Nested Transactive Energy Market Model to Trade Demand-Side Flexibility of Residential Consumers. *Nizami, M.S.H., +, TSG Jan. 2021 479-490*

A Novel Communication-Less Approach to Economic Dispatch for Microgrids. *Lyu, C., +, TSG Jan. 2021 901-904*

A Novel Distributed Control Method for Interlinking Converters in an Islanded Hybrid AC/DC Microgrid. *Chang, J., +, TSG Sept. 2021 3765-3779*

A Novel Energy Sharing Mechanism for Smart Microgrid. *Li, S., +, TSG Nov. 2021 5475-5478*

A Novel Energy Trading Framework Using Adapted Blockchain Technology. *Hamouda, M.R., +, TSG May 2021 2165-2175*

A Novel Fault Location Methodology for Smart Distribution Networks. *Mirshakali, H., +, TSG March 2021 1277-1288*

A Scalable Privacy-Preserving Multi-Agent Deep Reinforcement Learning Approach for Large-Scale Peer-to-Peer Transactive Energy Trading. *Ye, Y., +, TSG Nov. 2021 5185-5200*

A Scheduled Intentional Islanding Method Based on Ranking of Possible Islanding Zone. *Mishra, A., +, TSG May 2021 1853-1866*

A Secondary Control Method for Voltage Unbalance Compensation and Accurate Load Sharing in Networked Microgrids. *Golsorkhi, M.S., +, TSG July 2021 2822-2833*

A Self-Organizing Multi-Agent System for Distributed Voltage Regulation. *Faiya, B.A., +, TSG Sept. 2021 4102-4112*

A Transactive Retail Market Mechanism for Active Distribution Network Integrated With Large-Scale Distributed Energy Resources. *Huang, C., +, TSG Sept. 2021 4225-4237*

A Two-Layer Control Scheme Based on $P - V$ Droop Characteristic for Accurate Power Sharing and Voltage Regulation in DC Microgrids. *Baharizadeh, M., +, TSG July 2021 2776-2787*

A Two-Level Simulation-Assisted Sequential Distribution System Restoration Model With Frequency Dynamics Constraints. *Zhang, Q., +, TSG Sept. 2021 3835-3846*

A Unified Distributed Cooperative Control of DC Microgrids Using Consensus Protocol. *Li, Y., +, TSG May 2021 1880-1892*

- Active Distribution Grids Providing Voltage Support: The Swiss Case. *Karagiannopoulos, S.*, +, *TSG Jan. 2021 268-278*
- Adaptive Charging Networks: A Framework for Smart Electric Vehicle Charging. *Lee, Z.J.*, +, *TSG Sept. 2021 4339-4350*
- Agent-Based Modeling of Feeder-Level Electric Vehicle Diffusion for Distribution Planning. *Sun, L.*, +, *TSG Jan. 2021 751-760*
- Aggregate Flexibility of Virtual Power Plants With Temporal Coupling Constraints. *Wang, S.*, +, *TSG Nov. 2021 5043-5051*
- Aggregate Operation Model for Numerous Small-Capacity Distributed Energy Resources Considering Uncertainty. *Yi, Z.*, +, *TSG Sept. 2021 4208-4224*
- Algorithm for Simultaneous Medium Voltage Grid Planning and Electric Vehicle Scheduling. *Rotering, N.*, +, *TSG July 2021 3305-3313*
- An Adaptive Approach for Dynamic Load Modeling in Microgrids. *Chavarrro-Barrera, L.*, +, *TSG July 2021 2834-2843*
- An Adaptive Distributionally Robust Model for Three-Phase Distribution Network Reconfiguration. *Zheng, W.*, +, *TSG March 2021 1224-1237*
- An Adaptive Virtual Impedance Control for Improving Power Sharing Among Inverters in Islanded AC Microgrids. *Vijay, A.S.*, +, *TSG July 2021 2991-3003*
- An Asynchronous Forward-Backward-Splitting Power Flow Algorithm of Coupled Transmission and Active Distribution Systems. *Tang, K.*, +, *TSG Nov. 2021 5457-5471*
- An Energy Management System With Short-Term Fluctuation Reserves and Battery Degradation for Isolated Microgrids. *Cordova, S.*, +, *TSG Nov. 2021 4668-4680*
- An Energy Sharing Mechanism Achieving the Same Flexibility as Centralized Dispatch. *Chen, Y.*, +, *TSG July 2021 3379-3389*
- An Incentive-Based Mechanism to Alleviate Active Power Congestion in a Multi-Agent Distribution System. *Fattaheian-Dehkordi, S.*, +, *TSG May 2021 1978-1988*
- An Inversion-Free Robust Power-Flow Algorithm for Microgrids. *Kumar, A.*, +, *TSG July 2021 2844-2859*
- An MILP-Based Planning Model of a Photovoltaic/Diesel/Battery Stand-Alone Microgrid Considering the Reliability. *Wu, X.*, +, *TSG Sept. 2021 3809-3818*
- An MPC-Aided Resilient Operation of Multi-Microgrids With Dynamic Boundaries. *Zhao, T.*, +, *TSG May 2021 2125-2135*
- An Optimal Placement Model for Electric Springs in Distribution Networks. *Liang, L.*, +, *TSG Jan. 2021 491-501*
- Analysis and Validations of Modularized Distributed TL-UPQC Systems With Supervisory Remote Management System. *Abdalaal, R.M.*, +, *TSG May 2021 2638-2651*
- Anomaly Detection, Localization and Classification Using Drifting Synchronophasor Data Streams. *Ahmed, A.*, +, *TSG July 2021 3570-3580*
- Association Rule Mining for Localizing Solar Power in Different Distribution Grid Feeders. *Saleem, B.*, +, *TSG May 2021 2589-2600*
- Bargaining Game-Based Profit Allocation of Virtual Power Plant in Frequency Regulation Market Considering Battery Cycle Life. *Chen, W.*, +, *TSG July 2021 2913-2928*
- Bayesian Learning-Based Multi-Objective Distribution Power Network Reconfiguration. *Zhong, T.*, +, *TSG March 2021 1174-1184*
- Bi-Level Robust Optimization for Distribution System With Multiple Microgrids Considering Uncertainty Distribution Locational Marginal Price. *Wang, L.*, +, *TSG March 2021 1104-1117*
- Blockchain Based Secure Data Aggregation and Distributed Power Dispatching for Microgrids. *Luo, X.*, +, *TSG Nov. 2021 5268-5279*
- Blockchain for Transacting Energy and Carbon Allowance in Networked Microgrids. *Yan, M.*, +, *TSG Nov. 2021 4702-4714*
- Buffered-Microgrid Structure for Future Power Networks; a Seamless Microgrid Control. *Nasser, N.*, +, *TSG Jan. 2021 131-140*
- Chance-Constrained Peer-to-Peer Joint Energy and Reserve Market Considering Renewable Generation Uncertainty. *Guo, Z.*, +, *TSG Jan. 2021 798-809*
- Characteristics of Parallel Inverters Applying Virtual Synchronous Generator Control. *Chen, M.*, +, *TSG Nov. 2021 4690-4701*
- Chopperless Fault Ride-Through Control for DC Microgrids. *Xia, Y.*, +, *TSG March 2021 965-976*
- Cooperative Optimization of Networked Microgrids for Supporting Grid Flexibility Services Using Model Predictive Control. *Garcia-Torres, F.*, +, *TSG May 2021 1893-1903*
- Coordinated Control of Air-Conditioning Loads for System Frequency Regulation. *Jiang, T.*, +, *TSG Jan. 2021 548-560*
- Coordinated Energy Management of Prosumers in a Distribution System Considering Network Congestion. *Hu, J.*, +, *TSG Jan. 2021 468-478*
- Coordination of Distribution Network Reinforcement and DER Planning in Competitive Market. *Xiao, X.*, +, *TSG May 2021 2261-2271*
- Countering FDI Attacks on DERs Coordinated Control System Using FMI-Compatible Cosimulation. *Jafarigiv, D.*, +, *TSG March 2021 1640-1650*
- Cross-Layer Distributed Control Strategy for Cyber Resilient Microgrids. *Zhou, Q.*, +, *TSG Sept. 2021 3705-3717*
- Current Injection Power Flow Analysis and Optimal Generation Dispatch for Bipolar DC Microgrids. *Lee, J.*, +, *TSG May 2021 1918-1928*
- Cyber Spoofing Detection for Grid Distributed Synchronophasor Using Dynamic Dual-Kernel SVM. *Qiu, W.*, +, *TSG May 2021 2732-2735*
- Cyberattacks Against Event-Based Analysis in Micro-PMUs: Attack Models and Counter Measures. *Kamal, M.*, +, *TSG March 2021 1577-1588*
- Data-Driven Distributionally Robust Co-Optimization of P2P Energy Trading and Network Operation for Interconnected Microgrids. *Li, J.*, +, *TSG Nov. 2021 5172-5184*
- Data-Driven Dynamic Models of Active Distribution Networks Using Unsupervised Learning Techniques on Field Measurements. *Mitrentsis, G.*, +, *TSG July 2021 2952-2965*
- Data-Driven Islanding Detection Using a Principal Subspace of Voltage Angle Differences. *Rabuzin, T.*, +, *TSG Sept. 2021 4250-4258*
- Data-Driven Multi-Agent Deep Reinforcement Learning for Distribution System Decentralized Voltage Control With High Penetration of PVs. *Cao, D.*, +, *TSG Sept. 2021 4137-4150*
- Decentralized Optimal Stabilization of Active Loads in Islanded Microgrids. *Dissanayake, A.M.*, +, *TSG March 2021 932-942*
- Deep Reinforcement Learning Based Volt-VAR Optimization in Smart Distribution Systems. *Zhang, Y.*, +, *TSG Jan. 2021 361-371*
- Deep Reinforcement Learning for Demand Response in Distribution Networks. *Bahrami, S.*, +, *TSG March 2021 1496-1506*
- Demand Response for Industrial Micro-Grid Considering Photovoltaic Power Uncertainty and Battery Operational Cost. *Huang, C.*, +, *TSG July 2021 3043-3055*
- Design of Setting Group-Based Overcurrent Protection Scheme for Active Distribution Networks Using MILP. *Ghotbi-Maleki, M.*, +, *TSG March 2021 1185-1193*
- Development of an Encoding Method on a Co-Simulation Platform for Mitigating the Impact of Unreliable Communication. *Xie, F.*, +, *TSG May 2021 2496-2507*
- Diesel Generator Model Parameterization for Microgrid Simulation Using Hybrid Box-Constrained Levenberg-Marquardt Algorithm. *Long, Q.*, +, *TSG March 2021 943-952*
- Direct-Quadrature Sequence Models for Energy-Function Based Transient Stability Analysis of Unbalanced Inverter-Based Microgrids. *Roos, M.*, +, *TSG Sept. 2021 3692-3704*
- Distributed Consensus-Based Economic Dispatch in Power Grids Using the Paillier Cryptosystem. *Yan, Y.*, +, *TSG July 2021 3493-3502*
- Distributed Control of DC Microgrids for Optimal Coordination of Conventional and Renewable Generators. *Fan, Z.*, +, *TSG Nov. 2021 4607-4615*
- Distributed Control of Multi-Energy Storage Systems for Voltage Regulation in Distribution Networks: A Back-and-Forth Communication Framework. *Yu, P.*, +, *TSG May 2021 1964-1977*
- Distributed Control Strategy for Low-Voltage Three-Phase Four-Wire Microgrids: Consensus Power-Based Control. *Ferreira, D.M.*, +, *TSG July 2021 3215-3231*
- Distributed Coordinated Reactive Power Control for Voltage Regulation in Distribution Networks. *Tang, Z.*, +, *TSG Jan. 2021 312-323*

- Distributed Dynamic Clustering Algorithm for Formation of Heterogeneous Virtual Power Plants Based on Power Requirements. *Zhang, R.*, +, *TSG Jan. 2021 192-204*
- Distributed Observer-Based Finite-Time Control of AC Microgrid Under Attack. *Lu, R.*, +, *TSG Jan. 2021 157-168*
- Distributed Optimal Conservation Voltage Reduction in Integrated Primary-Secondary Distribution Systems. *Zhang, Q.*, +, *TSG Sept. 2021 3889-3900*
- Distributed Optimization for Integrated Frequency Regulation and Economic Dispatch in Microgrids. *Xu, Y.*, +, *TSG Nov. 2021 4595-4606*
- Distributed Power Sharing Control for Islanded Single-/Three-Phase Microgrids With Admissible Voltage and Energy Storage Constraints. *Zhou, J.*, +, *TSG July 2021 2760-2775*
- Distributed Predictive Control Strategy for Frequency Restoration of Microgrids Considering Optimal Dispatch. *F, A.N.*, +, *TSG July 2021 2748-2759*
- Distributed Privacy-Preserving Active Power Sharing and Frequency Regulation in Microgrids. *Fan, B.*, +, *TSG July 2021 3665-3668*
- Distributed Resilient Optimal Current Sharing Control for an Islanded DC Microgrid Under DoS Attacks. *Lian, Z.*, +, *TSG Sept. 2021 4494-4505*
- Distributed Robust Frequency Restoration and Active Power Sharing for Autonomous Microgrids With Event-Triggered Strategy. *Zhao, D.*, +, *TSG Sept. 2021 3819-3834*
- Distributed State of Charge-Based Droop Control Algorithm for Reducing Power Losses in Multi-Port Converter-Enabled Solar DC Nano-Grids. *Samende, C.*, +, *TSG Nov. 2021 4584-4594*
- Distribution Feeder-Scale Fast Frequency Response via Optimal Coordination of Net-Load Resources—Part I: Solution Design. *Lundstrom, B.*, +, *TSG March 2021 1289-1302*
- Distribution Feeder-Scale Fast Frequency Response via Optimal Coordination of Net-Load Resources—Part II: Large-Scale Demonstration. *Lundstrom, B.*, +, *TSG March 2021 1445-1454*
- Distribution Market-Clearing and Pricing Considering Coordination of DSOs and ISO: An EPEC Approach. *Chen, H.*, +, *TSG July 2021 3150-3162*
- Distribution Network-Constrained Optimization of Peer-to-Peer Transactive Energy Trading Among Multi-Microgrids. *Yan, M.*, +, *TSG March 2021 1033-1047*
- Distribution System Resilience in Ice Storms by Optimal Routing of Mobile Devices on Congested Roads. *Yan, M.*, +, *TSG March 2021 1314-1328*
- Distributionally Robust Microgrid Formation Approach for Service Restoration Under Random Contingency. *Cai, S.*, +, *TSG Nov. 2021 4926-4937*
- Distributionally Robust Optimal Power Flow in Multi-Microgrids With Decomposition and Guaranteed Convergence. *Huang, W.*, +, *TSG Jan. 2021 43-55*
- Dynamic State Estimation of Smart Distribution Grids Using Compressed Measurements. *Mohammadrezaee, R.*, +, *TSG Sept. 2021 4535-4542*
- Early Identification and Location of Short-Circuit Fault in Grid-Connected AC Microgrid. *Zheng, X.*, +, *TSG July 2021 2869-2878*
- Enabling Online Scheduling for Multi-Microgrid Systems: An Event-Triggered Approach. *Yang, X.*, +, *TSG May 2021 1836-1852*
- Energy Management and Control of a Flywheel Storage System for Peak Shaving Applications. *Tziovani, L.*, +, *TSG Sept. 2021 4195-4207*
- Enhancement of Frequency Regulation in AC Microgrid: A Fuzzy-MPC Controlled Virtual Synchronous Generator. *Long, B.*, +, *TSG July 2021 3138-3149*
- Enhancing the Spatio-Temporal Observability of Grid-Edge Resources in Distribution Grids. *Lin, S.*, +, *TSG Nov. 2021 5434-5443*
- Evaluating and Selecting Renewable Energy Sources for a Microgrid: A Bi-Capacity-Based Multi-Criteria Decision Making Approach. *Zhang, L.*, +, *TSG March 2021 921-931*
- Exploiting the Potentials of HVAC Systems in Transactive Energy Markets. *Nematkhan, F.*, +, *TSG Sept. 2021 4039-4048*
- False Data Injection Attacks Against Synchronization Systems in Microgrids. *Mohamed, A.S.*, +, *TSG Sept. 2021 4471-4483*
- Fast Islanding Detection of Nested Grids Including Multiple Resources Based on Phase Criteria. *Zamani, R.*, +, *TSG Nov. 2021 4962-4970*
- Fast Probabilistic Hosting Capacity Analysis for Active Distribution Systems. *Taheri, S.*, +, *TSG May 2021 2000-2012*
- Forecast-Based Consensus Control for DC Microgrids Using Distributed Long Short-Term Memory Deep Learning Models. *Alavi, S.A.*, +, *TSG Sept. 2021 3718-3730*
- Frequency Regulation in Isolated Microgrids Through Optimal Droop Gain and Voltage Control. *Alghamdi, B.*, +, *TSG March 2021 988-998*
- Frequency Regulation With Heterogeneous Energy Resources: A Realization Using Distributed Control. *Anderson, T.*, +, *TSG Sept. 2021 4126-4136*
- Frequency Restoration and Oscillation Damping of Distributed VSGs in Microgrid With Low Bandwidth Communication. *Shi, M.*, +, *TSG March 2021 1011-1021*
- Frequency-Constrained Resilient Scheduling of Microgrid: A Distributionally Robust Approach. *Chu, Z.*, +, *TSG Nov. 2021 4914-4925*
- Hierarchical Bipartite Graph Matching Method for Transactive V2V Power Exchange in Distribution Power System. *Zeng, L.*, +, *TSG Jan. 2021 301-311*
- Impact of Communication Packet Delivery Ratio on Reliability of Optimal Load Tracking and Allocation in DC Microgrids. *Nazari, M.H.*, +, *TSG July 2021 2812-2821*
- Including Dynamic Line Rating Into the Optimal Planning of Distributed Energy Resources. *Morozovska, K.*, +, *TSG Nov. 2021 5052-5059*
- Integrated Electricity and Hydrogen Energy Sharing in Coupled Energy Systems. *Tao, Y.*, +, *TSG March 2021 1149-1162*
- Integrated Transmission and Distribution System Expansion Planning Under Uncertainty. *Munoz-Delgado, G.*, +, *TSG Sept. 2021 4113-4125*
- Interval Distribution Power Flow With Relative-Distance-Measure Arithmetic. *Ngo, V.*, +, *TSG Sept. 2021 3858-3867*
- Islanding Detection Method With Load Power Factor Improvement and High Frequency Transient Suppressing. *Azzaoui, M.E.*, *TSG Sept. 2021 4176-4184*
- Isochronous Architecture-Based Voltage-Active Power Droop for Multi-Inverter Systems. *Patel, S.*, +, *TSG March 2021 1088-1103*
- Iteration-Based Linearized Distribution-Level Locational Marginal Price for Three-Phase Unbalanced Distribution Systems. *Cai, M.*, +, *TSG Nov. 2021 4886-4896*
- Leveraging Two-Stage Adaptive Robust Optimization for Power Flexibility Aggregation. *Chen, X.*, +, *TSG Sept. 2021 3954-3965*
- Linear Quadratic Regulator Based Smooth Transition Between Microgrid Operation Modes. *Ganjian-Aboukheili, M.*, +, *TSG Nov. 2021 4854-4864*
- Market-Based Energy Management Model of a Building Microgrid Considering Battery Degradation. *Antoniadou-Plytaria, K.*, +, *TSG March 2021 1794-1804*
- MicroGrid Resilience-Oriented Scheduling: A Robust MISOCP Model. *Zografou-Barredo, N.*, +, *TSG May 2021 1867-1879*
- MILP-Based Fault Diagnosis Model in Active Power Distribution Networks. *Wang, C.*, +, *TSG Sept. 2021 3847-3857*
- Minimizing Energy Storage Utilization in a Stand-Alone DC Microgrid Using Photovoltaic Flexible Power Control. *Yan, H.W.*, +, *TSG Sept. 2021 3755-3764*
- Mixed-Stage Energy Management for Decentralized Microgrid Cluster Based on Enhanced Tube Model Predictive Control. *Xie, P.*, +, *TSG Sept. 2021 3780-3792*
- Modeling of Time-Delayed Distributed Cyber-Physical Power Systems for Small-Signal Stability Analysis. *Xu, L.*, +, *TSG July 2021 3425-3437*
- MPC-Controlled Virtual Synchronous Generator to Enhance Frequency and Voltage Dynamic Performance in Islanded Microgrids. *Long, B.*, +, *TSG March 2021 953-964*
- Multi-Agent Safe Policy Learning for Power Management of Networked Microgrids. *Zhang, Q.*, +, *TSG March 2021 1048-1062*
- Multi-Round Double Auction-Enabled Peer-to-Peer Energy Exchange in Active Distribution Networks. *Haggi, H.*, +, *TSG Sept. 2021 4403-4414*
- Multi-Stage Quadratic Flexible Optimal Power Flow With a Rolling Horizon. *Zhong, C.*, +, *TSG July 2021 3128-3137*
- Multi-Stage Voltage Support Optimization for Microgrids With Multiple Distributed Generation Units. *Liu, X.*, +, *TSG Jan. 2021 141-156*
- Multistage Stochastic Optimization for Microgrid Operation Under Islanding Uncertainty. *Lee, J.*, +, *TSG Jan. 2021 56-66*

- Network Modeling Influence on Small-Signal Reduced-Order Models of Inverter-Based AC Microgrids Considering Virtual Impedance. *Manrique Machado, S.d.J.M., +, TSG Jan. 2021 79-92*
- Network-Constrained Stackelberg Game for Pricing Demand Flexibility in Power Distribution Systems. *Aguiar, N., +, TSG Sept. 2021 4049-4058*
- Networked Microgrids for Grid Resilience, Robustness, and Efficiency: A Review. *Chen, B., +, TSG Jan. 2021 18-32*
- New Analytical Model of Microgrid Frequency and Voltage Variations Due to Network Reconfiguration. *Park, J., +, TSG Jan. 2021 905-908*
- Observer-Based Resilient Integrated Distributed Control Against Cyberattacks on Sensors and Actuators in Islanded AC Microgrids. *Shi, M., +, TSG May 2021 1953-1963*
- On the Impact of Fault Ride-Through on Transient Stability of Autonomous Microgrids: Nonlinear Analysis and Solution. *Eskandari, M., +, TSG March 2021 999-1010*
- Online Optimization for Networked Distributed Energy Resources With Time-Coupling Constraints. *Fan, S., +, TSG Jan. 2021 251-267*
- Online Optimization for Real-Time Peer-to-Peer Electricity Market Mechanisms. *Guo, Z., +, TSG Sept. 2021 4151-4163*
- Online Scheduling of a Residential Microgrid via Monte-Carlo Tree Search and a Learned Model. *Shuai, H., +, TSG March 2021 1073-1087*
- Optimal DG Allocation and Volt-Var Dispatch for a Droop-Based Microgrid. *Gupta, Y., +, TSG Jan. 2021 169-181*
- Optimal Dispatch With Transformer Dynamic Thermal Rating in ADNs Incorporating High PV Penetration. *Li, Y., +, TSG May 2021 1989-1999*
- Optimal Energy Management of Microgrids Using Quantum Teaching Learning Based Algorithm. *Raghav, L.P., +, TSG Nov. 2021 4834-4842*
- Optimal Restoration of Active Distribution Systems With Voltage Control and Closed-Loop Operation. *Vargas, R., +, TSG May 2021 2295-2306*
- Optimal Schedule for Networked Microgrids Under Deregulated Power Market Environment Using Model Predictive Control. *Garcia-Torres, F., +, TSG Jan. 2021 182-191*
- Parallel and Distributed Optimization Method With Constraint Decomposition for Energy Management of Microgrids. *Li, Q., +, TSG Nov. 2021 4627-4640*
- Peer-to-Peer Energy Trading in Transactive Markets Considering Physical Network Constraints. *Ullah, M.H., +, TSG July 2021 3390-3403*
- Perturbation-Based Diagnosis of False Data Injection Attack Using Distributed Energy Resources. *Jhala, K., +, TSG March 2021 1589-1601*
- Power Loss Minimization of Off-Grid Solar DC Nano-Grids—Part I: Centralized Control Algorithm. *Samende, C., +, TSG Nov. 2021 4715-4725*
- Price-Based Dynamic Optimal Power Flow With Emergency Repair. *Schmitz, M., +, TSG Jan. 2021 324-337*
- Price-Maker Bidding and Offering Strategies for Networked Microgrids in Day-Ahead Electricity Markets. *Hu, B., +, TSG Nov. 2021 5201-5211*
- Primary Frequency Control in Isolated Microgrids Using Thermostatically Controllable Loads. *Mendieta, W., +, TSG Jan. 2021 93-105*
- Privacy Preserving Load Control of Residential Microgrid via Deep Reinforcement Learning. *Qin, Z., +, TSG Sept. 2021 4079-4089*
- Privacy-Preserving Distributed Average Observers in Distribution Systems With Grid-Forming Inverters. *Du, Y., +, TSG Nov. 2021 5000-5010*
- Provision of Primary Frequency Response as Ancillary Service From Active Distribution Networks to the Transmission System. *Kontis, E.O., +, TSG Nov. 2021 4971-4982*
- Push-Based Distributed Economic Dispatch in Smart Grids Over Time-Varying Unbalanced Directed Graphs. *Wang, Z., +, TSG July 2021 3185-3199*
- Push-Sum-Enabled Resilient Microgrid Control. *Babahajiani, P., +, TSG July 2021 3661-3664*
- Reactive Power Management for Networked Microgrid Resilience in Extreme Conditions. *Shaker, A., +, TSG Sept. 2021 3940-3953*
- Real-Time Coupling of Geographically Distributed Research Infrastructures: Taxonomy, Overview, and Real-World Smart Grid Applications. *Syed, M.H., +, TSG March 2021 1747-1760*
- Real-Time Distributed Economic Dispatch Adapted to General Convex Cost Functions: A Secant Approximation-Based Method. *Zhong, H., +, TSG May 2021 2089-2101*
- Region of Attraction Estimation for DC Microgrids With Constant Power Loads Using Potential Theory. *Chang, F., +, TSG Sept. 2021 3793-3808*
- Resident Behavior Detection Model for Environment Responsive Demand Response. *Baek, K., +, TSG Sept. 2021 3980-3989*
- Resilience Against Data Manipulation in Distributed Synchronphasor-Based Mode Estimation. *Rajabi, A., +, TSG July 2021 3538-3547*
- Resilience for Communication Faults in Reactive Power Sharing of Microgrids. *Li, X., +, TSG July 2021 2788-2799*
- Resilient Control and Analysis for DC Microgrid System Under DoS and Impulsive FDI Attacks. *Liu, X., +, TSG Sept. 2021 3742-3754*
- Resilient Economic Control for Distributed Microgrids Under False Data Injection Attacks. *Zhang, W., +, TSG Sept. 2021 4435-4446*
- Risk-Averse Coordinated Operation of a Multi-Energy Microgrid Considering Voltage/Var Control and Thermal Flow: An Adaptive Stochastic Approach. *Li, Z., +, TSG Sept. 2021 3914-3927*
- Robust Hybrid Control for Demand Side Management in Islanded Microgrids. *Albea, C., +, TSG Nov. 2021 4865-4875*
- Robust Regional Coordination of Inverter-Based Volt/Var Control via Multi-Agent Deep Reinforcement Learning. *Liu, H., +, TSG Nov. 2021 5420-5433*
- Robust Secondary Frequency Control for Virtual Synchronous Machine-Based Microgrid Cluster Using Equivalent Modeling. *Hu, W., +, TSG July 2021 2879-2889*
- Solid-State Technologies for Flexible and Efficient Marine DC Microgrids. *Kim, S., +, TSG July 2021 2860-2868*
- Source Authentication of Distribution Synchronphasors for Cybersecurity of Microgrids. *Cui, Y., +, TSG Sept. 2021 4577-4580*
- Stability Analysis of Low-Voltage Distribution Feeders Operated as Islanded Microgrids. *Wang, B., +, TSG Nov. 2021 4681-4689*
- Stability Analysis of Microgrid Islanding Transients Based on Interconnected Dissipative Subsystems. *Roos, M.H., +, TSG Nov. 2021 4655-4667*
- Stealthy Cyberattacks on Loads and Distributed Generation Aimed at Multi-Transmission Line Congestions in Smart Grids. *Khazaei, J., TSG May 2021 2518-2528*
- Step Towards Energy-Water Smart Microgrids; Buildings Thermal Energy and Water Demand Management Embedded in Economic Dispatch. *Moaazeni, F., +, TSG Sept. 2021 3680-3691*
- Stochastic Scheduling of Mobile Energy Storage in Coupled Distribution and Transportation Networks for Conversion Capacity Enhancement. *Liu, X., +, TSG Jan. 2021 117-130*
- Supplementary Controller for Seamless Transitions Between Microgrids Operation Modes. *Azimi, S.M., +, TSG May 2021 2102-2112*
- Supplementary Feedforward Control of DGs in a Reconfigurable Microgrid for Load Restoration. *Park, J., +, TSG Nov. 2021 4641-4654*
- Switch Status Identification in Distribution Networks Using Harmonic Synchronphasor Measurements. *Chen, L., +, TSG May 2021 2413-2424*
- Transaction-Oriented Dynamic Power Flow Tracing for Distribution Networks—Definition and Implementation in GIS Environment. *Vega-Fuentes, E., +, TSG March 2021 1303-1313*
- Transactive Energy Supported Economic Operation for Multi-Energy Complementary Microgrids. *Yang, Z., +, TSG Jan. 2021 4-17*
- Transient Stability and Current Injection Design of Paralleled Current-Controlled VSCs and Virtual Synchronous Generators. *Shen, C., +, TSG March 2021 1118-1134*
- Tri-Level Scheduling Model Considering Residential Demand Flexibility of Aggregated HVACs and EVs Under Distribution LMP. *Wang, X., +, TSG Sept. 2021 3990-4002*
- Two-Level Islanding Detection Method for Grid-Connected Photovoltaic System-Based Microgrid With Small Non-Detection Zone. *Bakhshi-Jafarabadi, R., +, TSG March 2021 1063-1072*
- Two-Time-Scale Energy Management for Microgrids With Data-Based Day-Ahead Distributionally Robust Chance-Constrained Scheduling. *Yuan, Z., +, TSG Nov. 2021 4778-4787*
- Uncertainty-Aware Deployment of Mobile Energy Storage Systems for Distribution Grid Resilience. *Nazemi, M., +, TSG July 2021 3200-3214*

Voltage Stabilization Control for Microgrid With Asymmetric Membership Function-Based Wavelet Petri Fuzzy Neural Network. *Lin, F.*, +, *TSG Sept. 2021 3731-3741*

Voltage-Based Distributed Optimal Control for Generation Cost Minimization and Bounded Bus Voltage Regulation in DC Microgrids. *Peng, J.*, +, *TSG Jan. 2021 106-116*

Waveform Difference Feature-Based Protection Scheme for Islanded Microgrids. *He, L.*, +, *TSG May 2021 1939-1952*

Distribution networks

A Decentralized Approach for Voltage Control by Multiple Distributed Energy Resources. *Fusco, G.*, +, *TSG July 2021 3115-3127*

A Linear Branch Flow Model for Radial Distribution Networks and Its Application to Reactive Power Optimization and Network Reconfiguration. *Yang, T.*, +, *TSG May 2021 2027-2036*

A Mean-Field Voltage Control Approach for Active Distribution Networks With Uncertainties. *Wei, B.*, +, *TSG March 2021 1455-1466*

A Self-Organizing Multi-Agent System for Distributed Voltage Regulation. *Faiya, B.A.*, +, *TSG Sept. 2021 4102-4112*

A Transactive Retail Market Mechanism for Active Distribution Network Integrated With Large-Scale Distributed Energy Resources. *Huang, C.*, +, *TSG Sept. 2021 4225-4237*

Active Distribution Grids Providing Voltage Support: The Swiss Case. *Karagiannopoulos, S.*, +, *TSG Jan. 2021 268-278*

Agent-Based Modeling of Feeder-Level Electric Vehicle Diffusion for Distribution Planning. *Sun, L.*, +, *TSG Jan. 2021 751-760*

Aggregation of Voltage-Controlled Devices During Distribution Network Reduction. *Pecenak, Z.K.*, +, *TSG Jan. 2021 33-42*

An Adaptive Distributionally Robust Model for Three-Phase Distribution Network Reconfiguration. *Zheng, W.*, +, *TSG March 2021 1224-1237*

An Asynchronous Forward-Backward-Splitting Power Flow Algorithm of Coupled Transmission and Active Distribution Systems. *Tang, K.*, +, *TSG Nov. 2021 5457-5471*

An MPC-Aided Resilient Operation of Multi-Microgrids With Dynamic Boundaries. *Zhao, T.*, +, *TSG May 2021 2125-2135*

An Optimal Placement Model for Electric Springs in Distribution Networks. *Liang, L.*, +, *TSG Jan. 2021 491-501*

Analysis and Validations of Modularized Distributed TL-UPQC Systems With Supervisory Remote Management System. *Abdalaal, R.M.*, +, *TSG May 2021 2638-2651*

Association Rule Mining for Localizing Solar Power in Different Distribution Grid Feeders. *Saleem, B.*, +, *TSG May 2021 2589-2600*

Bayesian Learning-Based Multi-Objective Distribution Power Network Reconfiguration. *Zhong, T.*, +, *TSG March 2021 1174-1184*

Cooperative P2P Energy Trading in Active Distribution Networks: An MILP-Based Nash Bargaining Solution. *Zhong, W.*, +, *TSG March 2021 1264-1276*

Coordinated Energy Management of Prosumers in a Distribution System Considering Network Congestion. *Hu, J.*, +, *TSG Jan. 2021 468-478*

Cyberattacks Against Event-Based Analysis in Micro-PMUs: Attack Models and Counter Measures. *Kamal, M.*, +, *TSG March 2021 1577-1588*

Data-Driven Dynamic Models of Active Distribution Networks Using Unsupervised Learning Techniques on Field Measurements. *Mitrentsis, G.*, +, *TSG July 2021 2952-2965*

Data-Driven Multi-Agent Deep Reinforcement Learning for Distribution System Decentralized Voltage Control With High Penetration of PVs. *Cao, D.*, +, *TSG Sept. 2021 4137-4150*

Decentralized Low-Rank State Estimation for Power Distribution Systems. *Sagan, A.*, +, *TSG July 2021 3097-3106*

Deep Reinforcement Learning Based Volt-VAR Optimization in Smart Distribution Systems. *Zhang, Y.*, +, *TSG Jan. 2021 361-371*

Deep Reinforcement Learning for Demand Response in Distribution Networks. *Bahrami, S.*, +, *TSG March 2021 1496-1506*

Distributed Coordinated Reactive Power Control for Voltage Regulation in Distribution Networks. *Tang, Z.*, +, *TSG Jan. 2021 312-323*

Distributed Energy Trading in Smart Grid Over Directed Communication Network. *Ullah, M.H.*, +, *TSG July 2021 3669-3672*

Distribution Feeder-Scale Fast Frequency Response via Optimal Coordination of Net-Load Resources—Part I: Solution Design. *Lundstrom, B.*, +, *TSG March 2021 1289-1302*

Distribution Network-Constrained Optimization of Peer-to-Peer Transactive Energy Trading Among Multi-Microgrids. *Yan, M.*, +, *TSG March 2021 1033-1047*

Distribution System Resilience in Ice Storms by Optimal Routing of Mobile Devices on Congested Roads. *Yan, M.*, +, *TSG March 2021 1314-1328*

Dynamic State Estimation of Smart Distribution Grids Using Compressed Measurements. *Mohammadrezaee, R.*, +, *TSG Sept. 2021 4535-4542*

Enhancing the Spatio-Temporal Observability of Grid-Edge Resources in Distribution Grids. *Lin, S.*, +, *TSG Nov. 2021 5434-5443*

Enriching Load Data Using Micro-PMUs and Smart Meters. *Bu, F.*, +, *TSG Nov. 2021 5084-5094*

Evaluating the Dispatchable Capacity of Base Station Backup Batteries in Distribution Networks. *Yong, P.*, +, *TSG Sept. 2021 3966-3979*

Exactness of OPF Relaxation on Three-Phase Radial Networks With Delta Connections. *Zhou, F.*, +, *TSG July 2021 3232-3241*

False Data Injection Attacks Against State-of-Charge Estimation of Battery Energy Storage Systems in Smart Distribution Networks. *Zhuang, P.*, +, *TSG May 2021 2566-2577*

Fault Location Method for Three-Terminal Lines in Distribution Network Based on Line Voltage Measured by μ MPPMU. *Yun, Z.*, +, *TSG Nov. 2021 5095-5112*

FeederGAN: Synthetic Feeder Generation via Deep Graph Adversarial Nets. *Liang, M.*, +, *TSG March 2021 1163-1173*

Guaranteed Phase & Topology Identification in Three Phase Distribution Grids. *Bariya, M.*, +, *TSG July 2021 3605-3612*

Hierarchical Voltage Control Strategy in Distribution Networks Considering Customized Charging Navigation of Electric Vehicles. *Sun, X.*, +, *TSG Nov. 2021 4752-4764*

Interval Distribution Power Flow With Relative-Distance-Measure Arithmetic. *Ngo, V.*, +, *TSG Sept. 2021 3858-3867*

Isochronous Architecture-Based Voltage-Active Power Droop for Multi-Inverter Systems. *Patel, S.*, +, *TSG March 2021 1088-1103*

Leveraging Two-Stage Adaptive Robust Optimization for Power Flexibility Aggregation. *Chen, X.*, +, *TSG Sept. 2021 3954-3965*

Mechanism Design for Fair and Efficient DSO Flexibility Markets. *Tsaou-soglou, G.*, +, *TSG May 2021 2249-2260*

Mitigating Smart Meter Asynchrony Error Via Multi-Objective Low Rank Matrix Recovery. *Yuan, Y.*, +, *TSG Sept. 2021 4308-4317*

Network-Secure and Price-Elastic Aggregator Bidding in Energy and Reserve Markets. *Attarha, A.*, +, *TSG May 2021 2284-2294*

Online Optimization for Networked Distributed Energy Resources With Time-Coupling Constraints. *Fan, S.*, +, *TSG Jan. 2021 251-267*

Optimal Dispatch With Transformer Dynamic Thermal Rating in ADNs Incorporating High PV Penetration. *Li, Y.*, +, *TSG May 2021 1989-1999*

Optimal Pricing of Public Electric Vehicle Charging Stations Considering Operations of Coupled Transportation and Power Systems. *Cui, Y.*, +, *TSG July 2021 3278-3288*

Perturbation-Based Diagnosis of False Data Injection Attack Using Distributed Energy Resources. *Jhala, K.*, +, *TSG March 2021 1589-1601*

Resilient Restoration of Distribution Systems in Coordination With Electric Bus Scheduling. *Li, B.*, +, *TSG July 2021 3314-3325*

Stability Analysis of Low-Voltage Distribution Feeders Operated as Islanded Microgrids. *Wang, B.*, +, *TSG Nov. 2021 4681-4689*

Switch Status Identification in Distribution Networks Using Harmonic Synchronophasor Measurements. *Chen, L.*, +, *TSG May 2021 2413-2424*

Transaction-Oriented Dynamic Power Flow Tracing for Distribution Networks—Definition and Implementation in GIS Environment. *Vega-Fuentes, E.*, +, *TSG March 2021 1303-1313*

Uncertainty-Aware Deployment of Mobile Energy Storage Systems for Distribution Grid Resilience. *Nazemi, M.*, +, *TSG July 2021 3200-3214*

Unsupervised Event Detection, Clustering, and Use Case Exposition in Micro-PMU Measurements. *Aligholian, A.*, +, *TSG July 2021 3624-3636*

District heating

- A Dynamic Equivalent Model for District Heating Networks: Formulation, Existence and Application in Distributed Electricity-Heat Operation. *Zheng, W.*, +, *TSG May 2021 2685-2695*
- Dynamic Security Control in Heat and Electricity Integrated Energy System With an Equivalent Heating Network Model. *Zhang, S.*, +, *TSG Nov. 2021 4788-4798*
- Exploiting Power-to-Heat Assets in District Heating Networks to Regulate Electric Power Network. *Khatibi, M.*, +, *TSG May 2021 2048-2059*

Domestic appliances

- Adaptive Weighted Recurrence Graphs for Appliance Recognition in Non-Intrusive Load Monitoring. *Faustine, A.*, +, *TSG Jan. 2021 398-406*
- Distributed State of Charge-Based Droop Control Algorithm for Reducing Power Losses in Multi-Port Converter-Enabled Solar DC Nano-Grids. *Samende, C.*, +, *TSG Nov. 2021 4584-4594*
- Distribution Feeder-Scale Fast Frequency Response via Optimal Coordination of Net-Load Resources—Part II: Large-Scale Demonstration. *Lundstrom, B.*, +, *TSG March 2021 1445-1454*
- Enhancing the Spatio-Temporal Observability of Grid-Edge Resources in Distribution Grids. *Lin, S.*, +, *TSG Nov. 2021 5434-5443*
- Exploiting the Potentials of HVAC Systems in Transactive Energy Markets. *Nematkah, F.*, +, *TSG Sept. 2021 4039-4048*
- Extraction of Dynamic Frequency Response Characteristics and Modelling of Modern Air Conditioners. *Bai, F.*, +, *TSG Jan. 2021 897-900*
- Generalizability Improvement of Deep Learning-Based Non-Intrusive Load Monitoring System Using Data Augmentation. *Rafiq, H.*, +, *TSG July 2021 3265-3277*
- Privacy Preserving Load Control of Residential Microgrid via Deep Reinforcement Learning. *Qin, Z.*, +, *TSG Sept. 2021 4079-4089*
- Resident Behavior Detection Model for Environment Responsive Demand Response. *Baek, K.*, +, *TSG Sept. 2021 3980-3989*
- Time-Frequency Mask Estimation Based on Deep Neural Network for Flexible Load Disaggregation in Buildings. *Song, J.*, +, *TSG July 2021 3242-3251*
- TraceGAN: Synthesizing Appliance Power Signatures Using Generative Adversarial Networks. *Harell, A.*, +, *TSG Sept. 2021 4553-4563*

Dynamic programming

- A Three-Layer Stochastic Energy Management Approach for Electric Bus Transit Centers With PV and Energy Storage Systems. *Liu, Y.*, +, *TSG March 2021 1346-1357*
- Algorithm for Simultaneous Medium Voltage Grid Planning and Electric Vehicle Scheduling. *Rotering, N.*, +, *TSG July 2021 3305-3313*
- Benefits of Home Energy Storage Utilization: An Australian Case Study of Demand Charge Practices in Residential Sector. *Kong, W.*, +, *TSG July 2021 3086-3096*
- Decentralized Optimal Stabilization of Active Loads in Islanded Microgrids. *Dissanayake, A.M.*, +, *TSG March 2021 932-942*
- Incentives to Manipulate Demand Response Baselines With Uncertain Event Schedules. *Ellman, D.*, +, *TSG March 2021 1358-1369*
- Optimal Policy Characterization Enhanced Actor-Critic Approach for Electric Vehicle Charging Scheduling in a Power Distribution Network. *Jin, J.*, +, *TSG March 2021 1416-1428*

Dynamic response

- A Secondary Control Method for Voltage Unbalance Compensation and Accurate Load Sharing in Networked Microgrids. *Golsorkhi, M.S.*, +, *TSG July 2021 2822-2833*
- Adaptive Master-Slave Control Strategy for Medium Voltage DC Distribution Systems Based on a Novel Nonlinear Droop Controller. *Xie, X.*, +, *TSG Nov. 2021 4765-4777*
- Dual Inertia-Emulation Control for Interlinking Converters in Grid-Tying Applications. *Paniagua, J.*, +, *TSG Sept. 2021 3868-3876*

E**Earthing**

- An Inversion-Free Robust Power-Flow Algorithm for Microgrids. *Kumar, A.*, +, *TSG July 2021 2844-2859*

- Faulty Feeder Detection Based on Fundamental Component Shift and Multiple-Transient-Feature Fusion in Distribution Networks. *Wei, X.*, +, *TSG March 2021 1699-1711*

Economic indicators

- Data-Driven Planning of Electric Vehicle Charging Infrastructure: A Case Study of Sydney, Australia. *Li, C.*, +, *TSG July 2021 3289-3304*

Eigenvalues and eigenfunctions

- A Cyber Attack Mitigation Scheme for Series Compensated DFIG-Based Wind Parks. *Ghafouri, M.*, +, *TSG Nov. 2021 5221-5232*
- A Scheduled Intentional Islanding Method Based on Ranking of Possible Islanding Zone. *Mishra, A.*, +, *TSG May 2021 1853-1866*
- A Synchrophasor Data Compression Technique With Iteration-Enhanced Phasor Principal Component Analysis. *Zhang, F.*, +, *TSG May 2021 2365-2377*
- A Two-Layer Control Scheme Based on $P - V$ Droop Characteristic for Accurate Power Sharing and Voltage Regulation in DC Microgrids. *Baharizadeh, M.*, +, *TSG July 2021 2776-2787*
- An Adaptive Virtual Impedance Control for Improving Power Sharing Among Inverters in Islanded AC Microgrids. *Vijay, A.S.*, +, *TSG July 2021 2991-3003*
- Isochronous Architecture-Based Voltage-Active Power Droop for Multi-Inverter Systems. *Patel, S.*, +, *TSG March 2021 1088-1103*
- Modeling of Time-Delayed Distributed Cyber-Physical Power Systems for Small-Signal Stability Analysis. *Xu, L.*, +, *TSG July 2021 3425-3437*
- Network Modeling Influence on Small-Signal Reduced-Order Models of Inverter-Based AC Microgrids Considering Virtual Impedance. *Manrique Machado, S.d.J.M.*, +, *TSG Jan. 2021 79-92*
- Stability Analysis of Low-Voltage Distribution Feeders Operated as Islanded Microgrids. *Wang, B.*, +, *TSG Nov. 2021 4681-4689*

Elasticity

- Network-Secure and Price-Elastic Aggregator Bidding in Energy and Reserve Markets. *Attarha, A.*, +, *TSG May 2021 2284-2294*

Electric admittance

- Back Up Protection Scheme for High Impedance Faults Detection in Transmission Systems Based on Synchrophasor Measurements. *Vlahinic, S.*, +, *TSG March 2021 1736-1746*

Electric current control

- Buffered-Microgrid Structure for Future Power Networks; a Seamless Microgrid Control. *Nasser, N.*, +, *TSG Jan. 2021 131-140*
- Distributed Control Strategy for Low-Voltage Three-Phase Four-Wire Microgrids: Consensus Power-Based Control. *Ferreira, D.M.*, +, *TSG July 2021 3215-3231*
- Distributed Resilient Optimal Current Sharing Control for an Islanded DC Microgrid Under DoS Attacks. *Lian, Z.*, +, *TSG Sept. 2021 4494-4505*
- Dynamic Modeling of Battery Energy Storage and Applications in Transmission Systems. *Calero, F.*, +, *TSG Jan. 2021 589-598*
- Resilient Control and Analysis for DC Microgrid System Under DoS and Impulsive FDI Attacks. *Liu, X.*, +, *TSG Sept. 2021 3742-3754*
- Second Harmonic Injection-Based Recovery Control of PV DC Boosting Integration System. *Jia, K.*, +, *TSG March 2021 1022-1032*
- Transient Stability and Current Injection Design of Paralleled Current-Controlled VSCs and Virtual Synchronous Generators. *Shen, C.*, +, *TSG March 2021 1118-1134*

Electric current measurement

- A Deep Learning-Based Cyberattack Detection System for Transmission Protective Relays. *Khaw, Y.M.*, +, *TSG May 2021 2554-2565*
- Synchronous Waveform Measurements to Locate Transient Events and Incipient Faults in Power Distribution Networks. *Izadi, M.*, +, *TSG Sept. 2021 4295-4307*

Electric field measurement

- Diesel Generator Model Parameterization for Microgrid Simulation Using Hybrid Box-Constrained Levenberg-Marquardt Algorithm. *Long, Q.*, +, *TSG March 2021 943-952*

Electric generators

- Resilience Against Data Manipulation in Distributed Synchrophasor-Based Mode Estimation. *Rajabi, A.*, +, *TSG July 2021 3538-3547*

Electric heating

Domain Randomization for Demand Response of an Electric Water Heater. *Peirelinck, T.*, +, *TSG March 2021 1370-1379*

Primary Frequency Control in Isolated Microgrids Using Thermostatically Controllable Loads. *Mendieta, W.*, +, *TSG Jan. 2021 93-105*

Electric impedance

A Hybrid Islanding Detection Method Based on the Rates of Changes in Voltage and Active Power for the Multi-Inverter Systems. *Seyedi, M.*, +, *TSG July 2021 2800-2811*

Back Up Protection Scheme for High Impedance Faults Detection in Transmission Systems Based on Synchrophasor Measurements. *Vlahinic, S.*, +, *TSG March 2021 1736-1746*

Deep Learning-Based Real-Time Switching of Hybrid AC/DC Transmission Networks. *Dabbaghjamesh, M.*, +, *TSG May 2021 2331-2342*

Network Modeling Influence on Small-Signal Reduced-Order Models of Inverter-Based AC Microgrids Considering Virtual Impedance. *Manrique Machado, S.d.J.M.*, +, *TSG Jan. 2021 79-92*

On the Impact of Fault Ride-Through on Transient Stability of Autonomous Microgrids: Nonlinear Analysis and Solution. *Eskandari, M.*, +, *TSG March 2021 999-1010*

The Added Value of Coordinating Inverter Control. *Lusis, P.*, +, *TSG March 2021 1238-1248*

Electric sensing devices

Data-Driven Probabilistic Fault Location of Electric Power Distribution Systems Incorporating Data Uncertainties. *Jiang, Y.*, *TSG Sept. 2021 4522-4534*

Robust Electricity Theft Detection Against Data Poisoning Attacks in Smart Grids. *Takiddin, A.*, +, *TSG May 2021 2675-2684*

Electric vehicle charging

A Cluster-Based Model for Charging a Single-Depot Fleet of Electric Vehicles. *Sepehri, K.*, +, *TSG July 2021 3339-3352*

A Three-Layer Stochastic Energy Management Approach for Electric Bus Transit Centers With PV and Energy Storage Systems. *Liu, Y.*, +, *TSG March 2021 1346-1357*

A Two-Stage Protection Method for Detection and Mitigation of Coordinated EVSE Switching Attacks. *Kabir, M.E.*, +, *TSG Sept. 2021 4377-4388*

ACN-Sim: An Open-Source Simulator for Data-Driven Electric Vehicle Charging Research. *Lee, Z.J.*, +, *TSG Nov. 2021 5113-5123*

Adaptive Charging Networks: A Framework for Smart Electric Vehicle Charging. *Lee, Z.J.*, +, *TSG Sept. 2021 4339-4350*

Adaptive Congestion Control for Electric Vehicle Charging in the Smart Grid. *Zishan, A.A.*, +, *TSG May 2021 2439-2449*

An Operation Model for Distribution Companies Using the Flexibility of Electric Vehicle Aggregators. *Lu, X.*, +, *TSG March 2021 1507-1518*

Correction to "Integrating EV Charging Stations as Smart Loads for Demand Response Provisions in Distribution Systems" [Mar 18 1096-1106]. *Hafez, O.*, +, *TSG March 2021 1829*

Data-Driven Approach for Analyzing Spatiotemporal Price Elasticities of EV Public Charging Demands Based on Conditional Random Fields. *Bao, Z.*, +, *TSG Sept. 2021 4363-4376*

Decentralized Failure-Tolerant Optimization of Electric Vehicle Charging. *Aravena, I.*, +, *TSG Sept. 2021 4068-4078*

Deep Reinforcement Learning for Continuous Electric Vehicles Charging Control With Dynamic User Behaviors. *Yan, L.*, +, *TSG Nov. 2021 5124-5134*

Deep-Reinforcement-Learning-Based Capacity Scheduling for PV-Battery Storage System. *Huang, B.*, +, *TSG May 2021 2272-2283*

Distributed Expansion Planning of Electric Vehicle Dynamic Wireless Charging System in Coupled Power-Traffic Networks. *Xia, F.*, +, *TSG July 2021 3326-3338*

Efficient Assignment of Electric Vehicles to Charging Stations. *Elghitani, F.*, +, *TSG Jan. 2021 761-773*

Efficient Real-Time EV Charging Scheduling via Ordinal Optimization. *Long, T.*, +, *TSG Sept. 2021 4029-4038*

Enhancing the Spatio-Temporal Observability of Grid-Edge Resources in Distribution Grids. *Lin, S.*, +, *TSG Nov. 2021 5434-5444*

Frequency Regulation With Heterogeneous Energy Resources: A Realization Using Distributed Control. *Anderson, T.*, +, *TSG Sept. 2021 4126-4136*

Hierarchical Voltage Control Strategy in Distribution Networks Considering Customized Charging Navigation of Electric Vehicles. *Sun, X.*, +, *TSG Nov. 2021 4752-4764*

Inducing Human Behavior to Maximize Operation Performance at PEV Charging Station. *Zeng, T.*, +, *TSG July 2021 3353-3363*

Integrating Battery Aging in the Optimization for Bidirectional Charging of Electric Vehicles. *Schwenk, K.*, +, *TSG Nov. 2021 5135-5145*

Mobility-Aware Charging Scheduling for Shared On-Demand Electric Vehicle Fleet Using Deep Reinforcement Learning. *Liang, Y.*, +, *TSG March 2021 1380-1393*

Optimal Policy Characterization Enhanced Actor-Critic Approach for Electric Vehicle Charging Scheduling in a Power Distribution Network. *Jin, J.*, +, *TSG March 2021 1416-1428*

Optimal Pricing of Public Electric Vehicle Charging Stations Considering Operations of Coupled Transportation and Power Systems. *Cui, Y.*, +, *TSG July 2021 3278-3288*

Two-Stage Planning of Network-Constrained Hybrid Energy Supply Stations for Electric and Natural Gas Vehicles. *Gan, W.*, +, *TSG May 2021 2013-2026*

Electric vehicles

A Three-Layer Stochastic Energy Management Approach for Electric Bus Transit Centers With PV and Energy Storage Systems. *Liu, Y.*, +, *TSG March 2021 1346-1357*

ACN-Sim: An Open-Source Simulator for Data-Driven Electric Vehicle Charging Research. *Lee, Z.J.*, +, *TSG Nov. 2021 5113-5123*

Agent-Based Modeling of Feeder-Level Electric Vehicle Diffusion for Distribution Planning. *Sun, L.*, +, *TSG Jan. 2021 751-760*

Algorithm for Simultaneous Medium Voltage Grid Planning and Electric Vehicle Scheduling. *Rotering, N.*, +, *TSG July 2021 3305-3313*

An Operation Model for Distribution Companies Using the Flexibility of Electric Vehicle Aggregators. *Lu, X.*, +, *TSG March 2021 1507-1518*

Coordinated Optimal Volt/Var Control for Distribution Networks via D-PMUs and EV Chargers by Exploiting the Eigensystem Realization. *Mejia-Ruiz, G.E.*, +, *TSG May 2021 2425-2438*

Correction to "Integrating EV Charging Stations as Smart Loads for Demand Response Provisions in Distribution Systems" [Mar 18 1096-1106]. *Hafez, O.*, +, *TSG March 2021 1829*

Data-Driven Approach for Analyzing Spatiotemporal Price Elasticities of EV Public Charging Demands Based on Conditional Random Fields. *Bao, Z.*, +, *TSG Sept. 2021 4363-4376*

Data-Driven Planning of Electric Vehicle Charging Infrastructure: A Case Study of Sydney, Australia. *Li, C.*, +, *TSG July 2021 3289-3304*

Deep Reinforcement Learning for Continuous Electric Vehicles Charging Control With Dynamic User Behaviors. *Yan, L.*, +, *TSG Nov. 2021 5124-5134*

Disturbance Observer and Tube-Based Model Predictive Controlled Electric Vehicles for Frequency Regulation of an Isolated Power Grid. *Oshnoei, A.*, +, *TSG Sept. 2021 4351-4362*

Enhancing the Spatio-Temporal Observability of Grid-Edge Resources in Distribution Grids. *Lin, S.*, +, *TSG Nov. 2021 5434-5444*

Game Theoretic-Based Distributed Charging Strategy for PEVs in a Smart Charging Station. *Wan, Y.*, +, *TSG Jan. 2021 538-547*

Hierarchical Bipartite Graph Matching Method for Transactive V2V Power Exchange in Distribution Power System. *Zeng, L.*, +, *TSG Jan. 2021 301-311*

Hierarchical Coupled Driving-and-Charging Model of Electric Vehicles, Stations and Grid Operators. *Sohet, B.*, +, *TSG Nov. 2021 5146-5157*

Integrating Battery Aging in the Optimization for Bidirectional Charging of Electric Vehicles. *Schwenk, K.*, +, *TSG Nov. 2021 5135-5145*

Learning-Based Predictive Control via Real-Time Aggregate Flexibility. *Li, T.*, +, *TSG Nov. 2021 4897-4913*

Online Rolling Evolutionary Decoder-Dispatch Framework for the Secondary Frequency Regulation of Time-Varying Electrical-Grid-Electric-Vehicle System. *Dong, C.*, +, *TSG Jan. 2021 871-884*

Optimal Reserve Management of Electric Vehicle Aggregator: Discrete Bilevel Optimization Model and Exact Algorithm. *Liu, W., +, TSG Sept. 2021 4003-4015*

Plug-in Electric Vehicle Charging With Multiple Charging Options: A Systematic Analysis of Service Providers' Pricing Strategies. *Zhang, Y., +, TSG Jan. 2021 524-537*

Privacy Preserving Load Control of Residential Microgrid via Deep Reinforcement Learning. *Qin, Z., +, TSG Sept. 2021 4079-4089*

Tri-Level Scheduling Model Considering Residential Demand Flexibility of Aggregated HVACs and EVs Under Distribution LMP. *Wang, X., +, TSG Sept. 2021 3990-4002*

Electrical contracting

Incentive Based Demand Response Program for Power System Flexibility Enhancement. *Mohandes, B., +, TSG May 2021 2212-2223*

Electricity supply industry

An Operation Model for Distribution Companies Using the Flexibility of Electric Vehicle Aggregators. *Lu, X., +, TSG March 2021 1507-1518*

Electricity Consumer Characteristics Identification: A Federated Learning Approach. *Wang, Y., +, TSG July 2021 3637-3647*

Stealthy Black-Box Attacks on Deep Learning Non-Intrusive Load Monitoring Models. *Wang, J., +, TSG July 2021 3479-3492*

Electronic commerce

A Blockchain-Enabled Multi-Settlement Quasi-Ideal Peer-to-Peer Trading Framework. *AlAshery, M.K., +, TSG Jan. 2021 885-896*

A Community Sharing Market With PV and Energy Storage: An Adaptive Bidding-Based Double-Side Auction Mechanism. *He, L., +, TSG May 2021 2450-2461*

A New Method for Peer Matching and Negotiation of Prosumers in Peer-to-Peer Energy Markets. *Khorasany, M., +, TSG May 2021 2472-2483*

Multi-Round Double Auction-Enabled Peer-to-Peer Energy Exchange in Active Distribution Networks. *Haggi, H., +, TSG Sept. 2021 4403-4414*

Electronic data interchange

Design of Setting Group-Based Overcurrent Protection Scheme for Active Distribution Networks Using MILP. *Ghotbi-Maleki, M., +, TSG March 2021 1185-1193*

SCCO: A State-Caching-Based Coagulation Platform for Cybor-Physical Power System Evaluation. *Wang, Q., +, TSG March 2021 1615-1625*

Electronic money

An Architecture and Performance Evaluation of Blockchain-Based Peer-to-Peer Energy Trading. *Abdella, J., +, TSG July 2021 3364-3378*

Embedded systems

Distribution Feeder-Scale Fast Frequency Response via Optimal Coordination of Net-Load Resources—Part II: Large-Scale Demonstration. *Lundstrom, B., +, TSG March 2021 1445-1454*

Missing Data Recovery in Large Power Systems Using Network Embedding. *Wu, T., +, TSG Jan. 2021 680-691*

EMTP

Countering FDI Attacks on DERs Coordinated Control System Using FMI-Compatible Cosimulation. *Jafarigiv, D., +, TSG March 2021 1640-1650*

Fast Steady-State Computation of Electrical Networks Involving Nonlinear and Photovoltaic Components. *Ramirez, A., +, TSG July 2021 3107-3114*

RTCE: Real-Time Co-Emulation Framework for EMT-Based Power System and Communication Network on FPGA-MPSoC Hardware Architecture. *Duan, T., +, TSG May 2021 2544-2553*

Energy conservation

Community Energy Cooperation With the Presence of Cheating Behaviors. *Cui, S., +, TSG Jan. 2021 561-573*

Distributed Control of DC Microgrids for Optimal Coordination of Conventional and Renewable Generators. *Fan, Z., +, TSG Nov. 2021 4607-4615*

Fast Wasserstein-Distance-Based Distributionally Robust Chance-Constrained Power Dispatch for Multi-Zone HVAC Systems. *Chen, G., +, TSG Sept. 2021 4016-4028*

Fully-Convolutional Denoising Auto-Encoders for NILM in Large Non-Residential Buildings. *Garcia-Perez, D., +, TSG May 2021 2722-2731*

Optimal HVAC Control for Demand Response via Chance-Constrained Two-Stage Stochastic Program. *Mansy, H., +, TSG May 2021 2188-2200*

Step Towards Energy-Water Smart Microgrids; Buildings Thermal Energy and Water Demand Management Embedded in Economic Dispatch. *Moa-zeni, F., +, TSG Sept. 2021 3680-3691*

Energy consumption

Automated Control of Transactive HVACs in Energy Distribution Systems. *Liu, B., +, TSG May 2021 2462-2471*

Benefits of Home Energy Storage Utilization: An Australian Case Study of Demand Charge Practices in Residential Sector. *Kong, W., +, TSG July 2021 3086-3096*

Enriching Load Data Using Micro-PMUs and Smart Meters. *Bu, F., +, TSG Nov. 2021 5084-5094*

Fast Wasserstein-Distance-Based Distributionally Robust Chance-Constrained Power Dispatch for Multi-Zone HVAC Systems. *Chen, G., +, TSG Sept. 2021 4016-4028*

Incentive Design for Flexibility Provisions From Residential Energy Hubs in Smart Grid. *Alharbi, W., +, TSG May 2021 2113-2124*

Load Photo: A Novel Analysis Method for Load Data. *Wang, H., +, TSG March 2021 1394-1404*

Power System Disturbance Classification With Online Event-Driven Neuro-morphic Computing. *Mahapatra, K., +, TSG May 2021 2343-2354*

Energy management systems

A Homomorphic Encryption-Based Private Collaborative Distributed Energy Management System. *Cheng, Z., +, TSG Nov. 2021 5233-5243*

A Microgrid Energy Management System Based on Non-Intrusive Load Monitoring via Multitask Learning. *Cimen, H., +, TSG March 2021 977-987*

A Three-Layer Stochastic Energy Management Approach for Electric Bus Transit Centers With PV and Energy Storage Systems. *Liu, Y., +, TSG March 2021 1346-1357*

An Energy Management System With Short-Term Fluctuation Reserves and Battery Degradation for Isolated Microgrids. *Cordova, S., +, TSG Nov. 2021 4668-4680*

An Energy Sharing Mechanism Achieving the Same Flexibility as Centralized Dispatch. *Chen, Y., +, TSG July 2021 3379-3389*

Cooperative Optimization of Networked Microgrids for Supporting Grid Flexibility Services Using Model Predictive Control. *Garcia-Torres, F., +, TSG May 2021 1893-1903*

Data-Driven Distributionally Robust Co-Optimization of P2P Energy Trading and Network Operation for Interconnected Microgrids. *Li, J., +, TSG Nov. 2021 5172-5184*

Data-Driven Distributionally Robust Hierarchical Coordination for Home Energy Management. *Saberi, H., +, TSG Sept. 2021 4090-4101*

Data-Driven Stochastic Game With Social Attributes for Peer-to-Peer Energy Sharing. *Chen, L., +, TSG Nov. 2021 5158-5171*

Demand Response for Industrial Micro-Grid Considering Photovoltaic Power Uncertainty and Battery Operational Cost. *Huang, C., +, TSG July 2021 3043-3055*

Design Framework for Privacy-Aware Demand-Side Management With Realistic Energy Storage Model. *Avula, R.R., +, TSG July 2021 3503-3513*

Frequency Regulation in Isolated Microgrids Through Optimal Droop Gain and Voltage Control. *Alghamdi, B., +, TSG March 2021 988-998*

Fully-Convolutional Denoising Auto-Encoders for NILM in Large Non-Residential Buildings. *Garcia-Perez, D., +, TSG May 2021 2722-2731*

Market-Based Energy Management Model of a Building Microgrid Considering Battery Degradation. *Antoniadou-Plytaria, K., +, TSG March 2021 1794-1804*

Mixed-Stage Energy Management for Decentralized Microgrid Cluster Based on Enhanced Tube Model Predictive Control. *Xie, P., +, TSG Sept. 2021 3780-3792*

Optimal Energy Management of Microgrids Using Quantum Teaching Learning Based Algorithm. *Raghav, L.P., +, TSG Nov. 2021 4834-4842*

Optimal Schedule for Networked Microgrids Under Deregulated Power Market Environment Using Model Predictive Control. *Garcia-Torres, F., +, TSG Jan. 2021 182-191*

Scaling Up Cooperative Game Theory-Based Energy Management Using Prosumer Clustering. *Han, L., +, TSG Jan. 2021 289-300*

Step Towards Energy-Water Smart Microgrids; Buildings Thermal Energy and Water Demand Management Embedded in Economic Dispatch. *Moazzeni, F.*, +, *TSG Sept. 2021 3680-3691*

Two-Time-Scale Energy Management for Microgrids With Data-Based Day-Ahead Distributionally Robust Chance-Constrained Scheduling. *Yuan, Z.*, +, *TSG Nov. 2021 4778-4787*

Energy resources

Including Dynamic Line Rating Into the Optimal Planning of Distributed Energy Resources. *Morozovska, K.*, +, *TSG Nov. 2021 5052-5059*

Market-Based Energy Management Model of a Building Microgrid Considering Battery Degradation. *Antoniadou-Plytaria, K.*, +, *TSG March 2021 1794-1804*

Two-Stage Deep Reinforcement Learning for Inverter-Based Volt-VAR Control in Active Distribution Networks. *Liu, H.*, +, *TSG May 2021 2037-2047*

Energy storage

A Community Sharing Market With PV and Energy Storage: An Adaptive Bidding-Based Double-Side Auction Mechanism. *He, L.*, +, *TSG May 2021 2450-2461*

A Community-Based Energy Market Design Using Decentralized Decision-Making Under Uncertainty. *Crespo-Vazquez, J.L.*, +, *TSG March 2021 1782-1793*

A New Cooperative Framework for a Fair and Cost-Optimal Allocation of Resources Within a Low Voltage Electricity Community. *Hupetz, M.*, +, *TSG May 2021 2201-2211*

A Novel Energy Sharing Mechanism for Smart Microgrid. *Li, S.*, +, *TSG Nov. 2021 5475-5478*

A Three-Layer Stochastic Energy Management Approach for Electric Bus Transit Centers With PV and Energy Storage Systems. *Liu, Y.*, +, *TSG March 2021 1346-1357*

Artificial Neural Network-Based Stealth Attack on Battery Energy Storage Systems. *Pasetti, M.*, +, *TSG Nov. 2021 5310-5321*

Bargaining Game-Based Profit Allocation of Virtual Power Plant in Frequency Regulation Market Considering Battery Cycle Life. *Chen, W.*, +, *TSG July 2021 2913-2928*

Benefits of Home Energy Storage Utilization: An Australian Case Study of Demand Charge Practices in Residential Sector. *Kong, W.*, +, *TSG July 2021 3086-3096*

Branching Dueling Q-Network-Based Online Scheduling of a Microgrid With Distributed Energy Storage Systems. *Shuai, H.*, +, *TSG Nov. 2021 5479-5482*

Buffered-Microgrid Structure for Future Power Networks; a Seamless Microgrid Control. *Nasser, N.*, +, *TSG Jan. 2021 131-140*

Chance Constrained Scheduling and Pricing for Multi-Service Battery Energy Storage. *Zhong, W.*, +, *TSG Nov. 2021 5030-5042*

Community Energy Cooperation With the Presence of Cheating Behaviors. *Cui, S.*, +, *TSG Jan. 2021 561-573*

Cooperative Optimization of Networked Microgrids for Supporting Grid Flexibility Services Using Model Predictive Control. *Garcia-Torres, F.*, +, *TSG May 2021 1893-1903*

Countering FDI Attacks on DERs Coordinated Control System Using FMI-Compatible Cosimulation. *Jafarigiv, D.*, +, *TSG March 2021 1640-1650*

Demand Response for Industrial Micro-Grid Considering Photovoltaic Power Uncertainty and Battery Operational Cost. *Huang, C.*, +, *TSG July 2021 3043-3055*

Design Framework for Privacy-Aware Demand-Side Management With Realistic Energy Storage Model. *Avula, R.R.*, +, *TSG July 2021 3503-3513*

Distributed Dynamic Clustering Algorithm for Formation of Heterogeneous Virtual Power Plants Based on Power Requirements. *Zhang, R.*, +, *TSG Jan. 2021 192-204*

Distributed Power Sharing Control for Islanded Single-/Three-Phase Microgrids With Admissible Voltage and Energy Storage Constraints. *Zhou, J.*, +, *TSG July 2021 2760-2775*

Dynamic Modeling of Battery Energy Storage and Applications in Transmission Systems. *Calero, F.*, +, *TSG Jan. 2021 589-598*

Dynamic Stochastic Demand Response With Energy Storage. *Xiao, Y.*, +, *TSG Nov. 2021 4813-4821*

Energy Management and Control of a Flywheel Storage System for Peak Shaving Applications. *Tziouvani, L.*, +, *TSG Sept. 2021 4195-4207*

Enhancement of Frequency Regulation in AC Microgrid: A Fuzzy-MPC Controlled Virtual Synchronous Generator. *Long, B.*, +, *TSG July 2021 3138-3149*

False Data Injection Attacks Against State-of-Charge Estimation of Battery Energy Storage Systems in Smart Distribution Networks. *Zhuang, P.*, +, *TSG May 2021 2566-2577*

Integrated Electricity and Hydrogen Energy Sharing in Coupled Energy Systems. *Tao, Y.*, +, *TSG March 2021 1149-1162*

Integrated Planning of a Solar/Storage Collective. *Contreras-Ocana, J.E.*, +, *TSG Jan. 2021 215-226*

Market-Based Energy Management Model of a Building Microgrid Considering Battery Degradation. *Antoniadou-Plytaria, K.*, +, *TSG March 2021 1794-1804*

Minimizing Energy Storage Utilization in a Stand-Alone DC Microgrid Using Photovoltaic Flexible Power Control. *Yan, H.W.*, +, *TSG Sept. 2021 3755-3764*

MPC-Controlled Virtual Synchronous Generator to Enhance Frequency and Voltage Dynamic Performance in Islanded Microgrids. *Long, B.*, +, *TSG March 2021 953-964*

Multi-Stage Multi-Zone Defender-Attacker-Defender Model for Optimal Resilience Strategy With Distribution Line Hardening and Energy Storage System Deployment. *Zhang, H.*, +, *TSG March 2021 1194-1205*

Optimal Schedule for Networked Microgrids Under Deregulated Power Market Environment Using Model Predictive Control. *Garcia-Torres, F.*, +, *TSG Jan. 2021 182-191*

Primary Frequency Control in Isolated Microgrids Using Thermostatically Controllable Loads. *Mendieta, W.*, +, *TSG Jan. 2021 93-105*

Prioritized Replay Dueling DDQN Based Grid-Edge Control of Community Energy Storage System. *Song, H.*, +, *TSG Nov. 2021 4950-4961*

Real-Time Control of Battery Energy Storage Systems to Provide Ancillary Services Considering Voltage-Dependent Capability of DC-AC Converters. *Yuan, Z.*, +, *TSG Sept. 2021 4164-4175*

Reserve Model of Energy Storage in Day-Ahead Joint Energy and Reserve Markets: A Stochastic UC Solution. *Tang, Z.*, +, *TSG Jan. 2021 372-382*

Risk-Averse Optimal Energy and Reserve Scheduling for Virtual Power Plants Incorporating Demand Response Programs. *Vahedipour-Dahraie, M.*, +, *TSG March 2021 1405-1415*

Solid-State Technologies for Flexible and Efficient Marine DC Microgrids. *Kim, S.*, +, *TSG July 2021 2860-2868*

Stochastic Scheduling of Mobile Energy Storage in Coupled Distribution and Transportation Networks for Conversion Capacity Enhancement. *Liu, X.*, +, *TSG Jan. 2021 117-130*

The Utilization of Shared Energy Storage in Energy Systems: A Comprehensive Review. *Dai, R.*, +, *TSG July 2021 3163-3174*

Entropy

An Adaptive Ensemble Data Driven Approach for Nonparametric Probabilistic Forecasting of Electricity Load. *Wan, C.*, +, *TSG Nov. 2021 5396-5408*

Learning-Based Predictive Control via Real-Time Aggregate Flexibility. *Li, T.*, +, *TSG Nov. 2021 4897-4913*

Environmental factors

Evaluating and Selecting Renewable Energy Sources for a Microgrid: A Bi-Capacity-Based Multi-Criteria Decision Making Approach. *Zhang, L.*, +, *TSG March 2021 921-931*

Evolutionary computation

An MILP-Based Planning Model of a Photovoltaic/Diesel/Battery Stand-Alone Microgrid Considering the Reliability. *Wu, X.*, +, *TSG Sept. 2021 3809-3818*

Bayesian Learning-Based Multi-Objective Distribution Power Network Reconfiguration. *Zhong, T.*, +, *TSG March 2021 1174-1184*

Online Rolling Evolutionary Decoder-Dispatch Framework for the Secondary Frequency Regulation of Time-Varying Electrical-Grid-Electric-Vehicle System. *Dong, C.*, +, *TSG Jan. 2021 871-884*

Optimal Energy Management of Microgrids Using Quantum Teaching Learning Based Algorithm. *Raghav, L.P.*, +, *TSG Nov. 2021 4834-4842*

F

Failure analysis

- Component-Level Reliability Evaluation Model for Cyber Power Devices. *Balachandran, T.*, +, *TSG Jan. 2021 692-703*
- Countering FDI Attacks on DERs Coordinated Control System Using FMI-Compatible Cosimulation. *Jafarigiv, D.*, +, *TSG March 2021 1640-1650*
- Decentralized Failure-Tolerant Optimization of Electric Vehicle Charging. *Aravena, I.*, +, *TSG Sept. 2021 4068-4078*
- Multiple Line Outage Detection in Power Systems by Sparse Recovery Using Transient Data. *Ding, L.*, +, *TSG July 2021 3448-3457*
- Predicting Weather-Related Failure Risk in Distribution Systems Using Bayesian Neural Network. *Du, Y.*, +, *TSG Jan. 2021 350-360*

Fast Fourier transforms

- Fast Steady-State Computation of Electrical Networks Involving Nonlinear and Photovoltaic Components. *Ramirez, A.*, +, *TSG July 2021 3107-3114*

Fault current limiters

- LVRT Operation Enhancement of Single-Stage Photovoltaic Power Plants: An Analytical Approach. *Nasiri, M.*, +, *TSG Nov. 2021 5020-5029*

Fault currents

- A Harmonic Time-Current-Voltage Directional Relay for Optimal Protection Coordination of Inverter-Based Islanded Microgrids. *El-Sayed, W.T.*, +, *TSG May 2021 1904-1917*
- Early Identification and Location of Short-Circuit Fault in Grid-Connected AC Microgrid. *Zheng, X.*, +, *TSG July 2021 2869-2878*
- MILP-Based Fault Diagnosis Model in Active Power Distribution Networks. *Wang, C.*, +, *TSG Sept. 2021 3847-3857*
- Waveform Difference Feature-Based Protection Scheme for Islanded Microgrids. *He, L.*, +, *TSG May 2021 1939-1952*

Fault diagnosis

- A Comprehensive Resilience-Oriented FLISR Method for Distribution Systems. *Liu, J.*, +, *TSG May 2021 2136-2152*
- A Deep Learning-Based Cyberattack Detection System for Transmission Protective Relays. *Khaw, Y.M.*, +, *TSG May 2021 2554-2565*
- A Novel Fault Location Methodology for Smart Distribution Networks. *Mirshakali, H.*, +, *TSG March 2021 1277-1288*
- Back Up Protection Scheme for High Impedance Faults Detection in Transmission Systems Based on Synchronophasor Measurements. *Vlahinic, S.*, +, *TSG March 2021 1736-1746*
- Detection of Synchronophasor False Data Injection Attack Using Feature Interactive Network. *Qiu, W.*, +, *TSG Jan. 2021 659-670*
- Edge Computing-Based Fault Location in Distribution Networks by Using Asynchronous Transient Amplitudes at Limited Nodes. *Peng, N.*, +, *TSG Jan. 2021 574-588*
- Faulty Feeder Detection Based on Fundamental Component Shift and Multiple-Transient-Feature Fusion in Distribution Networks. *Wei, X.*, +, *TSG March 2021 1699-1711*
- MILP-Based Fault Diagnosis Model in Active Power Distribution Networks. *Wang, C.*, +, *TSG Sept. 2021 3847-3857*
- Modeling of DC Distribution System Based on High Frequency Transient Components. *Jia, K.*, +, *TSG Jan. 2021 671-679*
- Online Detection of Inter-Turn Winding Faults in Single-Phase Distribution Transformers Using Smart Meter Data. *Ashok, K.*, +, *TSG Nov. 2021 5073-5083*
- Wide-Band Current Transformers for Traveling-Waves-Based Protection Applications. *Ameli, A.*, +, *TSG Jan. 2021 845-858*

Fault location

- A Comprehensive Resilience-Oriented FLISR Method for Distribution Systems. *Liu, J.*, +, *TSG May 2021 2136-2152*
- A Novel Fault Location Methodology for Smart Distribution Networks. *Mirshakali, H.*, +, *TSG March 2021 1277-1288*
- Data-Driven Probabilistic Fault Location of Electric Power Distribution Systems Incorporating Data Uncertainties. *Jiang, Y.*, *TSG Sept. 2021 4522-4534*
- Edge Computing-Based Fault Location in Distribution Networks by Using Asynchronous Transient Amplitudes at Limited Nodes. *Peng, N.*, +, *TSG Jan. 2021 574-588*

Fault Detection for Covered Conductors With High-Frequency Voltage Signals: From Local Patterns to Global Features. *Chen, K.*, +, *TSG March 2021 1602-1614*

Fault Location Method for Three-Terminal Lines in Distribution Network Based on Line Voltage Measured by μ MPMU. *Yun, Z.*, +, *TSG Nov. 2021 5095-5112*

Synchronous Waveform Measurements to Locate Transient Events and Incipient Faults in Power Distribution Networks. *Izadi, M.*, +, *TSG Sept. 2021 4295-4307*

Waveform Difference Feature-Based Protection Scheme for Islanded Microgrids. *He, L.*, +, *TSG May 2021 1939-1952*

Wide-Band Current Transformers for Traveling-Waves-Based Protection Applications. *Ameli, A.*, +, *TSG Jan. 2021 845-858*

Fault tolerance

Blockchain Based Secure Data Aggregation and Distributed Power Dispatching for Microgrids. *Luo, X.*, +, *TSG Nov. 2021 5268-5279*

Decentralized Failure-Tolerant Optimization of Electric Vehicle Charging. *Aravena, I.*, +, *TSG Sept. 2021 4068-4078*

Resilience Against Data Manipulation in Distributed Synchronophasor-Based Mode Estimation. *Rajabi, A.*, +, *TSG July 2021 3538-3547*

Fault tolerant computing

An Architecture and Performance Evaluation of Blockchain-Based Peer-to-Peer Energy Trading. *Abdella, J.*, +, *TSG July 2021 3364-3378*

Feature extraction

A Reinforcement Learning-Based Decision System for Electricity Pricing Plan Selection by Smart Grid End Users. *Lu, T.*, +, *TSG May 2021 2176-2187*

Adaptive Weighted Recurrence Graphs for Appliance Recognition in Non-Intrusive Load Monitoring. *Faustine, A.*, +, *TSG Jan. 2021 398-406*

Branching Dueling Q-Network-Based Online Scheduling of a Microgrid With Distributed Energy Storage Systems. *Shuai, H.*, +, *TSG Nov. 2021 5479-5482*

Deep Learning Method With Manual Post-Processing for Identification of Spectral Patterns of Waveform Distortion in PV Installations. *de Oliveira, R.A.*, +, *TSG Nov. 2021 5444-5456*

Detecting False Data Injection Attacks in Smart Grids: A Semi-Supervised Deep Learning Approach. *Zhang, Y.*, +, *TSG Jan. 2021 623-634*

Detection of Synchronophasor False Data Injection Attack Using Feature Interactive Network. *Qiu, W.*, +, *TSG Jan. 2021 659-670*

Develop Load Shape Dictionary Through Efficient Clustering Based on Elastic Dissimilarity Measure. *Liang, H.*, +, *TSG Jan. 2021 442-452*

Electricity Consumer Characteristics Identification: A Federated Learning Approach. *Wang, Y.*, +, *TSG July 2021 3637-3647*

Fault Detection for Covered Conductors With High-Frequency Voltage Signals: From Local Patterns to Global Features. *Chen, K.*, +, *TSG March 2021 1602-1614*

Load Photo: A Novel Analysis Method for Load Data. *Wang, H.*, +, *TSG March 2021 1394-1404*

Missing Data Recovery in Large Power Systems Using Network Embedding. *Wu, T.*, +, *TSG Jan. 2021 680-691*

Time Series Classification for Locating Forced Oscillation Sources. *Meng, Y.*, +, *TSG March 2021 1712-1721*

Toward Load Identification Based on the Hilbert Transform and Sequence to Sequence Long Short-Term Memory. *Le, T.*, +, *TSG July 2021 3252-3264*

Waveform Difference Feature-Based Protection Scheme for Islanded Microgrids. *He, L.*, +, *TSG May 2021 1939-1952*

Feedback

A Cyber Attack Mitigation Scheme for Series Compensated DFIG-Based Wind Parks. *Ghafouri, M.*, +, *TSG Nov. 2021 5221-5232*

A Decentralized Approach for Voltage Control by Multiple Distributed Energy Resources. *Fusco, G.*, +, *TSG July 2021 3115-3127*

Decentralized Optimal Stabilization of Active Loads in Islanded Microgrids. *Dissanayake, A.M.*, +, *TSG March 2021 932-942*

Distributed Optimal Conservation Voltage Reduction in Integrated Primary-Secondary Distribution Systems. *Zhang, Q.*, +, *TSG Sept. 2021 3889-3900*

Distributed Optimization for Integrated Frequency Regulation and Economic Dispatch in Microgrids. *Xu, Y.*, +, *TSG Nov. 2021 4595-4606*

- Learning-Based Predictive Control via Real-Time Aggregate Flexibility. *Li, T.*, +, *TSG Nov. 2021 4897-4913*
- Multi-Stage Quadratic Flexible Optimal Power Flow With a Rolling Horizon. *Zhong, C.*, +, *TSG July 2021 3128-3137*
- Observer-Based Resilient Integrated Distributed Control Against Cyberattacks on Sensors and Actuators in Islanded AC Microgrids. *Shi, M.*, +, *TSG May 2021 1953-1963*
- Scalable Designs for Reinforcement Learning-Based Wide-Area Damping Control. *Mukherjee, S.*, +, *TSG May 2021 2389-2401*
- Feedforward**
- A Queuing Network Analysis of a Hierarchical Communication Architecture for Advanced Metering Infrastructure. *Choi, J.S.*, +, *TSG Sept. 2021 4318-4326*
- Practical Challenges in Real-Time Demand Response. *Duan, C.*, +, *TSG Sept. 2021 4573-4576*
- Supplementary Feedforward Control of DGs in a Reconfigurable Microgrid for Load Restoration. *Park, J.*, +, *TSG Nov. 2021 4641-4654*
- Feedforward neural networks**
- Robust Electricity Theft Detection Against Data Poisoning Attacks in Smart Grids. *Takiddin, A.*, +, *TSG May 2021 2675-2684*
- Verification of Neural Network Behaviour: Formal Guarantees for Power System Applications. *Venzke, A.*, +, *TSG Jan. 2021 383-397*
- Field programmable gate arrays**
- RTCE: Real-Time Co-Emulation Framework for EMT-Based Power System and Communication Network on FPGA-MPSoC Hardware Architecture. *Duan, T.*, +, *TSG May 2021 2544-2553*
- FIR filters**
- A General Design Method for Phasor Estimation in Different Applications. *Xu, S.*, +, *TSG May 2021 2307-2319*
- Flexible AC transmission systems**
- Moving-Target Defense Against Cyber-Physical Attacks in Power Grids via Game Theory. *Lakshminarayana, S.*, +, *TSG Nov. 2021 5244-5257*
- Optimal Planning and Operation of Hidden Moving Target Defense for Maximal Detection Effectiveness. *Liu, B.*, +, *TSG Sept. 2021 4447-4459*
- Flywheels**
- Energy Management and Control of a Flywheel Storage System for Peak Shaving Applications. *Tziouvani, L.*, +, *TSG Sept. 2021 4195-4207*
- Fokker-Planck equation**
- A Mean-Field Voltage Control Approach for Active Distribution Networks With Uncertainties. *Wei, B.*, +, *TSG March 2021 1455-1466*
- Fossil fuels**
- Combined Impact of Demand Response Aggregators and Carbon Taxation on Emissions Reduction in Electric Power Systems. *Algarni, A.S.*, +, *TSG March 2021 1825-1827*
- Fractals**
- Micro-Cracks Identification and Characterization on the Sheds of Composite Insulators by Fractal Dimension. *Jin, H.*, +, *TSG March 2021 1821-1824*
- Fraud**
- Detection of Cyber-Attacks of Power Systems Through Benford's Law. *Milano, F.*, +, *TSG May 2021 2741-2744*
- Frequency control**
- Aggregated BESS Dynamic Models for Active Distribution Network Studies. *Calero, F.*, +, *TSG May 2021 2077-2088*
- An Adaptive PV Frequency Control Strategy Based on Real-Time Inertia Estimation. *Su, Y.*, +, *TSG May 2021 2355-2364*
- An Energy Management System With Short-Term Fluctuation Reserves and Battery Degradation for Isolated Microgrids. *Cordova, S.*, +, *TSG Nov. 2021 4668-4680*
- Analysis of IoT-Based Load Altering Attacks Against Power Grids Using the Theory of Second-Order Dynamical Systems. *Lakshminarayana, S.*, +, *TSG Sept. 2021 4415-4425*
- Bargaining Game-Based Profit Allocation of Virtual Power Plant in Frequency Regulation Market Considering Battery Cycle Life. *Chen, W.*, +, *TSG July 2021 2913-2928*
- Buffered-Microgrid Structure for Future Power Networks; a Seamless Microgrid Control. *Nasser, N.*, +, *TSG Jan. 2021 131-140*
- Chance Constrained Scheduling and Pricing for Multi-Service Battery Energy Storage. *Zhong, W.*, +, *TSG Nov. 2021 5030-5042*
- Coordinated Control of Air-Conditioning Loads for System Frequency Regulation. *Jiang, T.*, +, *TSG Jan. 2021 548-560*
- Deep-Reinforcement-Learning-Based Capacity Scheduling for PV-Battery Storage System. *Huang, B.*, +, *TSG May 2021 2272-2283*
- Distributed Control Strategy for Low-Voltage Three-Phase Four-Wire Microgrids: Consensus Power-Based Control. *Ferreira, D.M.*, +, *TSG July 2021 3215-3231*
- Distributed Optimization for Integrated Frequency Regulation and Economic Dispatch in Microgrids. *Xu, Y.*, +, *TSG Nov. 2021 4595-4606*
- Distributed Robust Frequency Restoration and Active Power Sharing for Autonomous Microgrids With Event-Triggered Strategy. *Zhao, D.*, +, *TSG Sept. 2021 3819-3834*
- Distribution Feeder-Scale Fast Frequency Response via Optimal Coordination of Net-Load Resources—Part II: Large-Scale Demonstration. *Lundstrom, B.*, +, *TSG March 2021 1445-1454*
- Disturbance Observer and Tube-Based Model Predictive Controlled Electric Vehicles for Frequency Regulation of an Isolated Power Grid. *Oshnoei, A.*, +, *TSG Sept. 2021 4351-4362*
- Dynamic Event-Based Model Predictive Load Frequency Control for Power Systems Under Cyber Attacks. *Liu, Y.*, +, *TSG Jan. 2021 715-725*
- Dynamic Modeling of Battery Energy Storage and Applications in Transmission Systems. *Calero, F.*, +, *TSG Jan. 2021 589-598*
- Enhancement of Frequency Regulation in AC Microgrid: A Fuzzy-MPC Controlled Virtual Synchronous Generator. *Long, B.*, +, *TSG July 2021 3138-3149*
- Frequency Regulation in Isolated Microgrids Through Optimal Droop Gain and Voltage Control. *Alghamdi, B.*, +, *TSG March 2021 988-998*
- Frequency Regulation With Heterogeneous Energy Resources: A Realization Using Distributed Control. *Anderson, T.*, +, *TSG Sept. 2021 4126-4136*
- Frequency Restoration and Oscillation Damping of Distributed VSGs in Microgrid With Low Bandwidth Communication. *Shi, M.*, +, *TSG March 2021 1011-1021*
- Isochronous Architecture-Based Voltage-Active Power Droop for Multi-Inverter Systems. *Patel, S.*, +, *TSG March 2021 1088-1103*
- Modeling of Time-Delayed Distributed Cyber-Physical Power Systems for Small-Signal Stability Analysis. *Xu, L.*, +, *TSG July 2021 3425-3437*
- MPC-Controlled Virtual Synchronous Generator to Enhance Frequency and Voltage Dynamic Performance in Islanded Microgrids. *Long, B.*, +, *TSG March 2021 953-964*
- Online Rolling Evolutionary Decoder-Dispatch Framework for the Secondary Frequency Regulation of Time-Varying Electrical-Grid-Electric-Vehicle System. *Dong, C.*, +, *TSG Jan. 2021 871-884*
- Photovoltaic System Power Reserve Determination Using Parabolic Approximation of Frequency Response. *Baskarad, T.*, +, *TSG July 2021 3175-3184*
- Primary Frequency Control in Isolated Microgrids Using Thermostatically Controllable Loads. *Mendieta, W.*, +, *TSG Jan. 2021 93-105*
- Provision of Primary Frequency Response as Ancillary Service From Active Distribution Networks to the Transmission System. *Kontis, E.O.*, +, *TSG Nov. 2021 4971-4982*
- Push-Sum-Enabled Resilient Microgrid Control. *Babahajiani, P.*, +, *TSG July 2021 3661-3664*
- Robust Load Frequency Control of Power Systems Against Random Time-Delay Attacks. *Xiahou, K.S.*, +, *TSG Jan. 2021 909-911*
- Robust Secondary Frequency Control for Virtual Synchronous Machine-Based Microgrid Cluster Using Equivalent Modeling. *Hu, W.*, +, *TSG July 2021 2879-2889*
- Supplementary Controller for Seamless Transitions Between Microgrids Operation Modes. *Azimi, S.M.*, +, *TSG May 2021 2102-2112*
- Supplementary Feedforward Control of DGs in a Reconfigurable Microgrid for Load Restoration. *Park, J.*, +, *TSG Nov. 2021 4641-4654*
- System Redundancy Enhancement of Secondary Frequency Control Under Latency Attacks. *Chen, C.*, +, *TSG Jan. 2021 647-658*
- Transient Stability and Current Injection Design of Paralleled Current-Controlled VSCs and Virtual Synchronous Generators. *Shen, C.*, +, *TSG March 2021 1118-1134*

Frequency estimation

A Novel Event Detection and Classification Scheme Using Wide-Area Frequency Measurements. *Shaw, P.*, +, *TSG May 2021 2320-2330*

Frequency measurement

A Novel Event Detection and Classification Scheme Using Wide-Area Frequency Measurements. *Shaw, P.*, +, *TSG May 2021 2320-2330*

Frequency response

A Two-Level Simulation-Assisted Sequential Distribution System Restoration Model With Frequency Dynamics Constraints. *Zhang, Q.*, +, *TSG Sept. 2021 3835-3846*

An Adaptive PV Frequency Control Strategy Based on Real-Time Inertia Estimation. *Su, Y.*, +, *TSG May 2021 2355-2364*

Analysis of IoT-Based Load Altering Attacks Against Power Grids Using the Theory of Second-Order Dynamical Systems. *Lakshminarayana, S.*, +, *TSG Sept. 2021 4415-4425*

Distribution Feeder-Scale Fast Frequency Response via Optimal Coordination of Net-Load Resources—Part I: Solution Design. *Lundstrom, B.*, +, *TSG March 2021 1289-1302*

Extraction of Dynamic Frequency Response Characteristics and Modelling of Modern Air Conditioners. *Bai, F.*, +, *TSG Jan. 2021 897-900*

Frequency Regulation in Isolated Microgrids Through Optimal Droop Gain and Voltage Control. *Alghamdi, B.*, +, *TSG March 2021 988-998*

Frequency Regulation With Heterogeneous Energy Resources: A Realization Using Distributed Control. *Anderson, T.*, +, *TSG Sept. 2021 4126-4136*

Photovoltaic System Power Reserve Determination Using Parabolic Approximation of Frequency Response. *Baskarad, T.*, +, *TSG July 2021 3175-3184*

Provision of Primary Frequency Response as Ancillary Service From Active Distribution Networks to the Transmission System. *Kontis, E.O.*, +, *TSG Nov. 2021 4971-4982*

Real-Time Control of Battery Energy Storage Systems to Provide Ancillary Services Considering Voltage-Dependent Capability of DC-AC Converters. *Yuan, Z.*, +, *TSG Sept. 2021 4164-4175*

Supplementary Feedforward Control of DGs in a Reconfigurable Microgrid for Load Restoration. *Park, J.*, +, *TSG Nov. 2021 4641-4654*

Frequency-domain analysis

Fast Steady-State Computation of Electrical Networks Involving Nonlinear and Photovoltaic Components. *Ramirez, A.*, +, *TSG July 2021 3107-3114*

Modeling of DC Distribution System Based on High Frequency Transient Components. *Jia, K.*, +, *TSG Jan. 2021 671-679*

Fuzzy control

Disturbance Observer and Tube-Based Model Predictive Controlled Electric Vehicles for Frequency Regulation of an Isolated Power Grid. *Oshnoei, A.*, +, *TSG Sept. 2021 4351-4362*

Enhancement of Frequency Regulation in AC Microgrid: A Fuzzy-MPC Controlled Virtual Synchronous Generator. *Long, B.*, +, *TSG July 2021 3138-3149*

Practical Challenges in Real-Time Demand Response. *Duan, C.*, +, *TSG Sept. 2021 4573-4576*

Voltage Stabilization Control for Microgrid With Asymmetric Membership Function-Based Wavelet Petri Fuzzy Neural Network. *Lin, F.*, +, *TSG Sept. 2021 3731-3741*

Fuzzy neural networks

Voltage Stabilization Control for Microgrid With Asymmetric Membership Function-Based Wavelet Petri Fuzzy Neural Network. *Lin, F.*, +, *TSG Sept. 2021 3731-3741*

Fuzzy set theory

Aggregate Operation Model for Numerous Small-Capacity Distributed Energy Resources Considering Uncertainty. *Yi, Z.*, +, *TSG Sept. 2021 4208-4224*

Operational Reliability Assessment of Integrated Heat and Electricity Systems Considering the Load Uncertainties. *Ding, Y.*, +, *TSG Sept. 2021 3928-3939*

G**Game theory**

A Community Sharing Market With PV and Energy Storage: An Adaptive Bidding-Based Double-Side Auction Mechanism. *He, L.*, +, *TSG May 2021 2450-2461*

A New Cooperative Framework for a Fair and Cost-Optimal Allocation of Resources Within a Low Voltage Electricity Community. *Hupez, M.*, +, *TSG May 2021 2201-2211*

A New Method for Peer Matching and Negotiation of Prosumers in Peer-to-Peer Energy Markets. *Khorasany, M.*, +, *TSG May 2021 2472-2483*

An Incentive-Based Mechanism to Alleviate Active Power Congestion in a Multi-Agent Distribution System. *Fattaheian-Dehkordi, S.*, +, *TSG May 2021 1978-1988*

Approaching Prosumer Social Optimum via Energy Sharing With Proof of Convergence. *Chen, Y.*, +, *TSG May 2021 2484-2495*

Bargaining Game-Based Profit Allocation of Virtual Power Plant in Frequency Regulation Market Considering Battery Cycle Life. *Chen, W.*, +, *TSG July 2021 2913-2928*

Blockchain for Transacting Energy and Carbon Allowance in Networked Microgrids. *Yan, M.*, +, *TSG Nov. 2021 4702-4714*

Coalition Graph Game-Based P2P Energy Trading With Local Voltage Management. *Azim, M.I.*, +, *TSG Sept. 2021 4389-4402*

Community Energy Cooperation With the Presence of Cheating Behaviors. *Cui, S.*, +, *TSG Jan. 2021 561-573*

Cooperative P2P Energy Trading in Active Distribution Networks: An MILP-Based Nash Bargaining Solution. *Zhong, W.*, +, *TSG March 2021 1264-1276*

Data-Driven Planning of Electric Vehicle Charging Infrastructure: A Case Study of Sydney, Australia. *Li, C.*, +, *TSG July 2021 3289-3304*

Data-Driven Stochastic Game With Social Attributes for Peer-to-Peer Energy Sharing. *Chen, L.*, +, *TSG Nov. 2021 5158-5171*

Defense Strategy Against Load Redistribution Attacks on Power Systems Considering Insider Threats. *Liu, Z.*, +, *TSG March 2021 1529-1540*

Distribution Network-Constrained Optimization of Peer-to-Peer Transactive Energy Trading Among Multi-Microgrids. *Yan, M.*, +, *TSG March 2021 1033-1047*

Exploiting the Potentials of HVAC Systems in Transactive Energy Markets. *Nemathkah, F.*, +, *TSG Sept. 2021 4039-4048*

Game Theoretic-Based Distributed Charging Strategy for PEVs in a Smart Charging Station. *Wan, Y.*, +, *TSG Jan. 2021 538-547*

Moving-Target Defense Against Cyber-Physical Attacks in Power Grids via Game Theory. *Lakshminarayana, S.*, +, *TSG Nov. 2021 5244-5257*

Network-Constrained Stackelberg Game for Pricing Demand Flexibility in Power Distribution Systems. *Aguiar, N.*, +, *TSG Sept. 2021 4049-4058*

Optimal Sharing and Fair Cost Allocation of Community Energy Storage. *Yang, Y.*, +, *TSG Sept. 2021 4185-4194*

Plug-in Electric Vehicle Charging With Multiple Charging Options: A Systematic Analysis of Service Providers' Pricing Strategies. *Zhang, Y.*, +, *TSG Jan. 2021 524-537*

Risk Trading in Energy Communities. *Vespermann, N.*, +, *TSG March 2021 1249-1263*

Scaling Up Cooperative Game Theory-Based Energy Management Using Prosumer Clustering. *Han, L.*, +, *TSG Jan. 2021 289-300*

Games

Hierarchical Coupled Driving-and-Charging Model of Electric Vehicles, Stations and Grid Operators. *Sohet, B.*, +, *TSG Nov. 2021 5146-5157*

Gas industry

Resilience-Motivated Distribution System Restoration Considering Electricity-Water-Gas Interdependency. *Li, J.*, +, *TSG Nov. 2021 4799-4812*

Gaussian processes

A Data-Driven Storage Control Framework for Dynamic Pricing. *Wu, J.*, +, *TSG Jan. 2021 737-750*

Conditional Multivariate Elliptical Copulas to Model Residential Load Profiles From Smart Meter Data. *Duque, E.M.S.*, +, *TSG Sept. 2021 4280-4294*

Data-Driven Islanding Detection Using a Principal Subspace of Voltage Angle Differences. *Rabuzin, T.*, +, *TSG Sept. 2021 4250-4258*

Data-Driven Multi-Agent Deep Reinforcement Learning for Distribution System Decentralized Voltage Control With High Penetration of PVs. *Cao, D.*, +, *TSG Sept. 2021 4137-4150*

Enriching Load Data Using Micro-PMUs and Smart Meters. *Bu, F.*, +, *TSG Nov. 2021 5084-5094*

Online Learning and Distributed Control for Residential Demand Response. *Chen, X.*, +, *TSG Nov. 2021 4843-4853*

Privacy-Preserving Distributed Clustering for Electrical Load Profiling. *Jia, M.*, +, *TSG March 2021 1429-1444*

Generative adversarial networks

A New AC False Data Injection Attack Method Without Network Information. *Jiao, R.*, +, *TSG Nov. 2021 5280-5289*

Genetic algorithms

Aggregated BESS Dynamic Models for Active Distribution Network Studies. *Calero, F.*, +, *TSG May 2021 2077-2088*

Bayesian Learning-Based Multi-Objective Distribution Power Network Reconfiguration. *Zhong, T.*, +, *TSG March 2021 1174-1184*

Diesel Generator Model Parameterization for Microgrid Simulation Using Hybrid Box-Constrained Levenberg-Marquardt Algorithm. *Long, Q.*, +, *TSG March 2021 943-952*

Joint Optimization of Wind Turbine Micrositing and Cabling in an Offshore Wind Farm. *Tao, S.*, +, *TSG Jan. 2021 834-844*

Load-Switching Strategy for Voltage Balancing of Bipolar DC Distribution Networks Based on Optimal Automatic Commutation Algorithm. *Liao, J.*, +, *TSG July 2021 2966-2979*

Optimal Energy Management of Microgrids Using Quantum Teaching Learning Based Algorithm. *Raghav, L.P.*, +, *TSG Nov. 2021 4834-4842*

Geographic information systems

Agent-Based Modeling of Feeder-Level Electric Vehicle Diffusion for Distribution Planning. *Sun, L.*, +, *TSG Jan. 2021 751-760*

Transaction-Oriented Dynamic Power Flow Tracing for Distribution Networks—Definition and Implementation in GIS Environment. *Vega-Fuentes, E.*, +, *TSG March 2021 1303-1313*

Global Positioning System

Isochronous Architecture-Based Voltage-Active Power Droop for Multi-Inverter Systems. *Patel, S.*, +, *TSG March 2021 1088-1103*

Spoofing Resilient State Estimation for the Power Grid Using an Extended Kalman Filter. *Chauhan, S.V.S.*, +, *TSG July 2021 3404-3414*

Synchrophasor Data Under GPS Spoofing: Attack Detection and Mitigation Using Residuals. *Chauhan, S.V.S.*, +, *TSG July 2021 3415-3424*

Gradient methods

A Historical-Correlation-Driven Robust Optimization Approach for Microgrid Dispatch. *Qiu, H.*, +, *TSG March 2021 1135-1148*

Automated Control of Transactive HVACs in Energy Distribution Systems. *Liu, B.*, +, *TSG May 2021 2462-2471*

Optimal Power Flow Design for Enhancing Dynamic Performance: Potentials of Reactive Power. *Inoue, M.*, +, *TSG Jan. 2021 599-611*

Graph theory

Adaptive Weighted Recurrence Graphs for Appliance Recognition in Non-Intrusive Load Monitoring. *Faustine, A.*, +, *TSG Jan. 2021 398-406*

Coalition Graph Game-Based P2P Energy Trading With Local Voltage Management. *Azim, M.I.*, +, *TSG Sept. 2021 4389-4402*

Data-Driven Approach for Analyzing Spatiotemporal Price Elasticities of EV Public Charging Demands Based on Conditional Random Fields. *Bao, Z.*, +, *TSG Sept. 2021 4363-4376*

Distributed Multi-Area State Estimation for Power Systems With Switching Communication Graphs. *Wang, J.*, +, *TSG Jan. 2021 787-797*

Hierarchical Bipartite Graph Matching Method for Transactive V2V Power Exchange in Distribution Power System. *Zeng, L.*, +, *TSG Jan. 2021 301-311*

Missing Data Recovery in Large Power Systems Using Network Embedding. *Wu, T.*, +, *TSG Jan. 2021 680-691*

Optimal Planning and Operation of Hidden Moving Target Defense for Maximal Detection Effectiveness. *Liu, B.*, +, *TSG Sept. 2021 4447-4459*

Resilient Economic Control for Distributed Microgrids Under False Data Injection Attacks. *Zhang, W.*, +, *TSG Sept. 2021 4435-4446*

Spatial-Temporal Residential Short-Term Load Forecasting via Graph Neural Networks. *Lin, W.*, +, *TSG Nov. 2021 5373-5384*

Greedy algorithms

A Detection Mechanism Against Load-Redistribution Attacks in Smart Grids. *Kaviani, R.*, +, *TSG Jan. 2021 704-714*

A Three-Layer Stochastic Energy Management Approach for Electric Bus Transit Centers With PV and Energy Storage Systems. *Liu, Y.*, +, *TSG March 2021 1346-1357*

FeederGAN: Synthetic Feeder Generation via Deep Graph Adversarial Nets. *Liang, M.*, +, *TSG March 2021 1163-1173*

Ground source heat pumps

Primary Frequency Control in Isolated Microgrids Using Thermostatically Controllable Loads. *Mendieta, W.*, +, *TSG Jan. 2021 93-105*

H

H^∞ control

A Scalable Control Design for Grid-Forming Inverters in Microgrids. *Watson, J.D.*, +, *TSG Nov. 2021 4726-4739*

Observer-Based Resilient Integrated Distributed Control Against Cyberattacks on Sensors and Actuators in Islanded AC Microgrids. *Shi, M.*, +, *TSG May 2021 1953-1963*

Hardware-in-the-loop simulation

Chopperless Fault Ride-Through Control for DC Microgrids. *Xia, Y.*, +, *TSG March 2021 965-976*

Development of an Encoding Method on a Co-Simulation Platform for Mitigating the Impact of Unreliable Communication. *Xie, F.*, +, *TSG May 2021 2496-2507*

Distribution Feeder-Scale Fast Frequency Response via Optimal Coordination of Net-Load Resources—Part I: Solution Design. *Lundstrom, B.*, +, *TSG March 2021 1289-1302*

Distribution Feeder-Scale Fast Frequency Response via Optimal Coordination of Net-Load Resources—Part II: Large-Scale Demonstration. *Lundstrom, B.*, +, *TSG March 2021 1445-1454*

Isochronous Architecture-Based Voltage-Active Power Droop for Multi-Inverter Systems. *Patel, S.*, +, *TSG March 2021 1088-1103*

MPC-Controlled Virtual Synchronous Generator to Enhance Frequency and Voltage Dynamic Performance in Islanded Microgrids. *Long, B.*, +, *TSG March 2021 953-964*

Online Assessment of Conservation Voltage Reduction Effects With Micro-perturbation. *Xu, J.*, +, *TSG May 2021 2224-2238*

Privacy-Preserving Distributed Average Observers in Distribution Systems With Grid-Forming Inverters. *Du, Y.*, +, *TSG Nov. 2021 5000-5010*

Two-Level Islanding Detection Method for Grid-Connected Photovoltaic System-Based Microgrid With Small Non-Detection Zone. *Bakhshi-Jafarabadi, R.*, +, *TSG March 2021 1063-1072*

Harmonic oscillators

LVRT Operation Enhancement of Single-Stage Photovoltaic Power Plants: An Analytical Approach. *Nasiri, M.*, +, *TSG Nov. 2021 5020-5029*

Hazards

Back Up Protection Scheme for High Impedance Faults Detection in Transmission Systems Based on Synchrophasor Measurements. *Vlahinic, S.*, +, *TSG March 2021 1736-1746*

Heat pumps

Exploiting Power-to-Heat Assets in District Heating Networks to Regulate Electric Power Network. *Khatibi, M.*, +, *TSG May 2021 2048-2059*

Operational Reliability Assessment of Integrated Heat and Electricity Systems Considering the Load Uncertainties. *Ding, Y.*, +, *TSG Sept. 2021 3928-3939*

Primary Frequency Control in Isolated Microgrids Using Thermostatically Controllable Loads. *Mendieta, W.*, +, *TSG Jan. 2021 93-105*

Heuristic programming

Design of Setting Group-Based Overcurrent Protection Scheme for Active Distribution Networks Using MILP. *Ghotbi-Maleki, M.*, +, *TSG March 2021 1185-1193*

Hidden Markov models

Resident Behavior Detection Model for Environment Responsive Demand Response. *Baek, K.*, +, *TSG Sept. 2021 3980-3989*

Hierarchical systems

Distribution Feeder-Scale Fast Frequency Response via Optimal Coordination of Net-Load Resources—Part I: Solution Design. *Lundstrom, B.*, +, *TSG March 2021 1289-1302*

High-frequency transmission line measurement

Fault Detection for Covered Conductors With High-Frequency Voltage Signals: From Local Patterns to Global Features. *Chen, K.*, +, *TSG March 2021 1602-1614*

Hilbert transforms

Detection of Synchrophasor False Data Injection Attack Using Feature Interactive Network. *Qiu, W.*, +, *TSG Jan. 2021 659-670*

Faulty Feeder Detection Based on Fundamental Component Shift and Multiple-Transient-Feature Fusion in Distribution Networks. *Wei, X.*, +, *TSG March 2021 1699-1711*

Toward Load Identification Based on the Hilbert Transform and Sequence to Sequence Long Short-Term Memory. *Le, T.*, +, *TSG July 2021 3252-3264*

Home networks

Two Secure and Efficient Lightweight Data Aggregation Schemes for Smart Grid. *Qian, J.*, +, *TSG May 2021 2625-2637*

HVAC

Automated Control of Transactive HVACs in Energy Distribution Systems. *Liu, B.*, +, *TSG May 2021 2462-2471*

Exploiting the Potentials of HVAC Systems in Transactive Energy Markets. *Nematkhah, F.*, +, *TSG Sept. 2021 4039-4048*

Fast Wasserstein-Distance-Based Distributionally Robust Chance-Constrained Power Dispatch for Multi-Zone HVAC Systems. *Chen, G.*, +, *TSG Sept. 2021 4016-4028*

Multi-Agent Deep Reinforcement Learning for HVAC Control in Commercial Buildings. *Yu, L.*, +, *TSG Jan. 2021 407-419*

Optimal HVAC Control for Demand Response via Chance-Constrained Two-Stage Stochastic Program. *Mansy, H.*, +, *TSG May 2021 2188-2200*

Optimal HVAC System Operation Using Online Learning of Interconnected Neural Networks. *Jang, Y.*, +, *TSG July 2021 3030-3042*

Time-Frequency Mask Estimation Based on Deep Neural Network for Flexible Load Disaggregation in Buildings. *Song, J.*, +, *TSG July 2021 3242-3251*

Tri-Level Scheduling Model Considering Residential Demand Flexibility of Aggregated HVACs and EVs Under Distribution LMP. *Wang, X.*, +, *TSG Sept. 2021 3990-4002*

HVDC power converters

Spatio-Temporal Decomposition and Coordination for Distributed Load Restoration in AC/DC Hybrid System. *Zhao, J.*, +, *TSG March 2021 1685-1698*

HVDC power transmission

Spatio-Temporal Decomposition and Coordination for Distributed Load Restoration in AC/DC Hybrid System. *Zhao, J.*, +, *TSG March 2021 1685-1698*

Hybrid electric vehicles

Integrated Electricity and Hydrogen Energy Sharing in Coupled Energy Systems. *Tao, Y.*, +, *TSG March 2021 1149-1162*

Hybrid power systems

An MILP-Based Planning Model of a Photovoltaic/Diesel/Battery Stand-Alone Microgrid Considering the Reliability. *Wu, X.*, +, *TSG Sept. 2021 3809-3818*

Evaluating and Selecting Renewable Energy Sources for a Microgrid: A Bi-Capacity-Based Multi-Criteria Decision Making Approach. *Zhang, L.*, +, *TSG March 2021 921-931*

Primary Frequency Control in Isolated Microgrids Using Thermostatically Controllable Loads. *Mendieta, W.*, +, *TSG Jan. 2021 93-105*

Resilient Wide-Area Damping Control for Inter-Area Oscillations to Tolerate Deception Attacks. *Yao, W.*, +, *TSG Sept. 2021 4238-4249*

Two-Stage Planning of Network-Constrained Hybrid Energy Supply Stations for Electric and Natural Gas Vehicles. *Gan, W.*, +, *TSG May 2021 2013-2026*

Hydroelectric generators

Generator Parameter Calibration by Adaptive Approximate Bayesian Computation With Sequential Monte Carlo Sampler. *Khazeynasab, S.R.*, +, *TSG Sept. 2021 4327-4338*

Hydrogen

Optimal Power Flow Design for Enhancing Dynamic Performance: Potentials of Reactive Power. *Inoue, M.*, +, *TSG Jan. 2021 599-611*

Hydrogen powered vehicles

Integrated Electricity and Hydrogen Energy Sharing in Coupled Energy Systems. *Tao, Y.*, +, *TSG March 2021 1149-1162*

I**IEC standards**

Design of Setting Group-Based Overcurrent Protection Scheme for Active Distribution Networks Using MILP. *Ghotbi-Maleki, M.*, +, *TSG March 2021 1185-1193*

IEEE publishing

Outstanding Associate Editors and Reviewers 2020. *Canizares, C.*, *TSG March 2021 920*

IEEE standards

Dual Inertia-Emulation Control for Interlinking Converters in Grid-Tying Applications. *Paniagua, J.*, +, *TSG Sept. 2021 3868-3876*

Iteration-Based Linearized Distribution-Level Locational Marginal Price for Three-Phase Unbalanced Distribution Systems. *Cai, M.*, +, *TSG Nov. 2021 4886-4896*

Multiple Line Outage Detection in Power Systems by Sparse Recovery Using Transient Data. *Ding, L.*, +, *TSG July 2021 3448-3457*

Network-Constrained Stackelberg Game for Pricing Demand Flexibility in Power Distribution Systems. *Aguiar, N.*, +, *TSG Sept. 2021 4049-4058*

Optimal Coordination of Phasor Data Concentrators in Hierarchical Synchrophasor Networks. *Pourramezan, R.*, +, *TSG May 2021 2402-2412*

Spatial-Temporal Data Analysis-Based Event Detection in Weakly Damped Power Systems. *Zhu, L.*, +, *TSG Nov. 2021 5472-5474*

Tri-Level Scheduling Model Considering Residential Demand Flexibility of Aggregated HVACs and EVs Under Distribution LMP. *Wang, X.*, +, *TSG Sept. 2021 3990-4002*

Vulnerability Assessment of Deep Reinforcement Learning Models for Power System Topology Optimization. *Zheng, Y.*, +, *TSG July 2021 3613-3623*

Image color analysis

Load Photo: A Novel Analysis Method for Load Data. *Wang, H.*, +, *TSG March 2021 1394-1404*

Image segmentation

Micro-Cracks Identification and Characterization on the Sheds of Composite Insulators by Fractal Dimension. *Jin, H.*, +, *TSG March 2021 1821-1824*

Image texture

Micro-Cracks Identification and Characterization on the Sheds of Composite Insulators by Fractal Dimension. *Jin, H.*, +, *TSG March 2021 1821-1824*

Importance sampling

A Novel Framework for the Operational Reliability Evaluation of Integrated Electric Power-Gas Networks. *Ansari, O.A.*, +, *TSG Sept. 2021 3901-3913*

Incentive schemes

Contract-Based Incentive Mechanisms for Honeypot Defense in Advanced Metering Infrastructure. *Tian, W.*, +, *TSG Sept. 2021 4259-4268*

Incentive Based Demand Response Program for Power System Flexibility Enhancement. *Mohandes, B.*, +, *TSG May 2021 2212-2223*

Incentives to Manipulate Demand Response Baselines With Uncertain Event Schedules. *Ellman, D.*, +, *TSG March 2021 1358-1369*

Indoor environment

Step Towards Energy-Water Smart Microgrids; Buildings Thermal Energy and Water Demand Management Embedded in Economic Dispatch. *Moa-zeni, F.*, +, *TSG Sept. 2021 3680-3691*

Induction motors

A Model-Free Voltage Control Approach to Mitigate Motor Stalling and FIDVR for Smart Grids. *Park, B.*, +, *TSG Jan. 2021 67-78*

An Adaptive Virtual Impedance Control for Improving Power Sharing Among Inverters in Islanded AC Microgrids. *Vijay, A.S.*, +, *TSG July 2021 2991-3003*

Imitation and Transfer Q-Learning-Based Parameter Identification for Composite Load Modeling. *Xie, J.*, +, *TSG March 2021 1674-1684*

- Transient Voltage Stability of Paralleled Synchronous and Virtual Synchronous Generators With Induction Motor Loads. *Cheng, H.*, +, *TSG Nov. 2021 4983-4999*
- Inductive power transmission**
- Distributed Expansion Planning of Electric Vehicle Dynamic Wireless Charging System in Coupled Power-Traffic Networks. *Xia, F.*, +, *TSG July 2021 3326-3338*
- Industrial control**
- A Deep Learning-Based Cyberattack Detection System for Transmission Protective Relays. *Khaw, Y.M.*, +, *TSG May 2021 2554-2565*
- Inference mechanisms**
- Power System Disturbance Classification With Online Event-Driven Neuro-morphic Computing. *Mahapatra, K.*, +, *TSG May 2021 2343-2354*
- Infinite horizon**
- Decentralized Optimal Stabilization of Active Loads in Islanded Microgrids. *Dissanayake, A.M.*, +, *TSG March 2021 932-942*
- Information systems**
- Resilient Wide-Area Damping Control for Inter-Area Oscillations to Tolerate Deception Attacks. *Yao, W.*, +, *TSG Sept. 2021 4238-4249*
- Information technology**
- A Blockchain-Enabled Multi-Settlement Quasi-Ideal Peer-to-Peer Trading Framework. *AlAshery, M.K.*, +, *TSG Jan. 2021 885-896*
- Multi-Round Double Auction-Enabled Peer-to-Peer Energy Exchange in Active Distribution Networks. *Haggi, H.*, +, *TSG Sept. 2021 4403-4414*
- Resilient Wide-Area Damping Control for Inter-Area Oscillations to Tolerate Deception Attacks. *Yao, W.*, +, *TSG Sept. 2021 4238-4249*
- Insulation**
- Fault Detection for Covered Conductors With High-Frequency Voltage Signals: From Local Patterns to Global Features. *Chen, K.*, +, *TSG March 2021 1602-1614*
- Integer programming**
- A Linear Branch Flow Model for Radial Distribution Networks and Its Application to Reactive Power Optimization and Network Reconfiguration. *Yang, T.*, +, *TSG May 2021 2027-2036*
- A Novel Framework for the Operational Reliability Evaluation of Integrated Electric Power-Gas Networks. *Ansari, O.A.*, +, *TSG Sept. 2021 3901-3913*
- A Transactive Retail Market Mechanism for Active Distribution Network Integrated With Large-Scale Distributed Energy Resources. *Huang, C.*, +, *TSG Sept. 2021 4225-4237*
- A Two-Level Simulation-Assisted Sequential Distribution System Restoration Model With Frequency Dynamics Constraints. *Zhang, Q.*, +, *TSG Sept. 2021 3835-3846*
- An MILP Model for Optimal Placement of Sectionalizing Switches and Tie Lines in Distribution Networks With Complex Topologies. *Jooshaki, M.*, +, *TSG Nov. 2021 4740-4751*
- An MILP-Based Planning Model of a Photovoltaic/Diesel/Battery Stand-Alone Microgrid Considering the Reliability. *Wu, X.*, +, *TSG Sept. 2021 3809-3818*
- An Optimal Placement Model for Electric Springs in Distribution Networks. *Liang, L.*, +, *TSG Jan. 2021 491-501*
- Cooperative Optimization of Networked Microgrids for Supporting Grid Flexibility Services Using Model Predictive Control. *Garcia-Torres, F.*, +, *TSG May 2021 1893-1903*
- Cooperative P2P Energy Trading in Active Distribution Networks: An MILP-Based Nash Bargaining Solution. *Zhong, W.*, +, *TSG March 2021 1264-1276*
- Cyber-Vulnerability Analysis for Real-Time Power Market Operation. *Zhang, Q.*, +, *TSG July 2021 3527-3537*
- Data-Driven Probabilistic Fault Location of Electric Power Distribution Systems Incorporating Data Uncertainties. *Jiang, Y.*, *TSG Sept. 2021 4522-4534*
- Demand Response for Industrial Micro-Grid Considering Photovoltaic Power Uncertainty and Battery Operational Cost. *Huang, C.*, +, *TSG July 2021 3043-3055*
- Design of Setting Group-Based Overcurrent Protection Scheme for Active Distribution Networks Using MILP. *Ghotbi-Maleki, M.*, +, *TSG March 2021 1185-1193*
- Distributed Expansion Planning of Electric Vehicle Dynamic Wireless Charging System in Coupled Power-Traffic Networks. *Xia, F.*, +, *TSG July 2021 3326-3338*
- Distributed Optimal Conservation Voltage Reduction in Integrated Primary-Secondary Distribution Systems. *Zhang, Q.*, +, *TSG Sept. 2021 3889-3900*
- Distribution Market-Clearing and Pricing Considering Coordination of DSOs and ISO: An EPEC Approach. *Chen, H.*, +, *TSG July 2021 3150-3162*
- Distribution Network-Constrained Optimization of Peer-to-Peer Transactive Energy Trading Among Multi-Microgrids. *Yan, M.*, +, *TSG March 2021 1033-1047*
- Distribution System Resilience in Ice Storms by Optimal Routing of Mobile Devices on Congested Roads. *Yan, M.*, +, *TSG March 2021 1314-1328*
- Distributionally Robust Chance-Constrained Optimal Power-Gas Flow Under Bidirectional Interactions Considering Uncertain Wind Power. *Yang, L.*, +, *TSG March 2021 1722-1735*
- Distributionally Robust Microgrid Formation Approach for Service Restoration Under Random Contingency. *Cai, S.*, +, *TSG Nov. 2021 4926-4937*
- Energy Flow Optimization of Integrated Gas and Power Systems in Continuous Time and Space. *Zheng, C.*, +, *TSG May 2021 2611-2624*
- Frequency-Constrained Resilient Scheduling of Microgrid: A Distributionally Robust Approach. *Chu, Z.*, +, *TSG Nov. 2021 4914-4925*
- Hierarchical Voltage Control Strategy in Distribution Networks Considering Customized Charging Navigation of Electric Vehicles. *Sun, X.*, +, *TSG Nov. 2021 4752-4764*
- Incentive Based Demand Response Program for Power System Flexibility Enhancement. *Mohandes, B.*, +, *TSG May 2021 2212-2223*
- Integrated Transmission and Distribution System Expansion Planning Under Uncertainty. *Munoz-Delgado, G.*, +, *TSG Sept. 2021 4113-4125*
- Joint Topology Identification and State Estimation in Unobservable Distribution Grids. *Karimi, H.S.*, +, *TSG Nov. 2021 5299-5309*
- MicroGrid Resilience-Oriented Scheduling: A Robust MISOCP Model. *Zografou-Barredo, N.*, +, *TSG May 2021 1867-1879*
- MILP-Based Fault Diagnosis Model in Active Power Distribution Networks. *Wang, C.*, +, *TSG Sept. 2021 3847-3857*
- Multistage Stochastic Optimization for Microgrid Operation Under Islanding Uncertainty. *Lee, J.*, +, *TSG Jan. 2021 56-66*
- On the Implementation of OPF-Based Setpoints for Active Distribution Networks. *Liu, M.Z.*, +, *TSG July 2021 2929-2940*
- Optimal DG Allocation and Volt-Var Dispatch for a Droop-Based Microgrid. *Gupta, Y.*, +, *TSG Jan. 2021 169-181*
- Optimal PMU Restoration for Power System Observability Recovery After Massive Attacks. *Edib, S.N.*, +, *TSG March 2021 1565-1576*
- Optimal Reserve Management of Electric Vehicle Aggregator: Discrete Bilevel Optimization Model and Exact Algorithm. *Liu, W.*, +, *TSG Sept. 2021 4003-4015*
- Optimal Restoration of Active Distribution Systems With Voltage Control and Closed-Loop Operation. *Vargas, R.*, +, *TSG May 2021 2295-2306*
- Phase Identification of Single-Phase Customers and PV Panels via Smart Meter Data. *Heidari-Akhijahani, A.*, +, *TSG Sept. 2021 4543-4552*
- Price-Based Dynamic Optimal Power Flow With Emergency Repair. *Schmitz, M.*, +, *TSG Jan. 2021 324-337*
- Price-Maker Bidding and Offering Strategies for Networked Microgrids in Day-Ahead Electricity Markets. *Hu, B.*, +, *TSG Nov. 2021 5201-5211*
- Reactive Power Management for Networked Microgrid Resilience in Extreme Conditions. *Shaker, A.*, +, *TSG Sept. 2021 3940-3953*
- Reserve Model of Energy Storage in Day-Ahead Joint Energy and Reserve Markets: A Stochastic UC Solution. *Tang, Z.*, +, *TSG Jan. 2021 372-382*
- Resilience-Motivated Distribution System Restoration Considering Electricity-Water-Gas Interdependency. *Li, J.*, +, *TSG Nov. 2021 4799-4812*
- Resilient Restoration of Distribution Systems in Coordination With Electric Bus Scheduling. *Li, B.*, +, *TSG July 2021 3314-3325*
- Risk-Averse Coordinated Operation of a Multi-Energy Microgrid Considering Voltage/Var Control and Thermal Flow: An Adaptive Stochastic Approach. *Li, Z.*, +, *TSG Sept. 2021 3914-3927*

- Stealthy Cyberattacks on Loads and Distributed Generation Aimed at Multi-Transmission Line Congestions in Smart Grids. *Khazaei, J.*, *TSG May 2021 2518-2528*
- Step Towards Energy-Water Smart Microgrids; Buildings Thermal Energy and Water Demand Management Embedded in Economic Dispatch. *Moa-zeni, F.*, +, *TSG Sept. 2021 3680-3691*
- Switch Status Identification in Distribution Networks Using Harmonic Synchrophasor Measurements. *Chen, L.*, +, *TSG May 2021 2413-2424*
- Two-Stage Volt/Var Control in Active Distribution Networks With Multi-Agent Deep Reinforcement Learning Method. *Sun, X.*, +, *TSG July 2021 2903-2912*
- Uncertainty-Aware Deployment of Mobile Energy Storage Systems for Distribution Grid Resilience. *Nazemi, M.*, +, *TSG July 2021 3200-3214*
- Unsupervised Event Detection, Clustering, and Use Case Exposition in Micro-PMU Measurements. *Aligholian, A.*, +, *TSG July 2021 3624-3636*
- Verification of Neural Network Behaviour: Formal Guarantees for Power System Applications. *Venzke, A.*, +, *TSG Jan. 2021 383-397*
- Integrated circuit reliability**
- Component-Level Reliability Evaluation Model for Cyber Power Devices. *Balachandran, T.*, +, *TSG Jan. 2021 692-703*
- Intelligent control**
- Step Towards Energy-Water Smart Microgrids; Buildings Thermal Energy and Water Demand Management Embedded in Economic Dispatch. *Moa-zeni, F.*, +, *TSG Sept. 2021 3680-3691*
- Interconnected systems**
- Optimal HVAC System Operation Using Online Learning of Interconnected Neural Networks. *Jang, Y.*, +, *TSG July 2021 3030-3042*
- Internet**
- Aggregated Model of Data Network for the Provision of Demand Response in Generation and Transmission Expansion Planning. *Chen, M.*, +, *TSG Jan. 2021 512-523*
- Incentive-Compatible Demand Response for Spatially Coupled Internet Data Centers in Electricity Markets. *Chen, M.*, +, *TSG July 2021 3056-3069*
- Internet Data Center Load Modeling for Demand Response Considering the Coupling of Multiple Regulation Methods. *Chen, M.*, +, *TSG May 2021 2060-2076*
- Starlink Space Network-Enhanced Cyber-Physical Power System. *Duan, T.*, +, *TSG July 2021 3673-3675*
- Internet of Things**
- Analysis of IoT-Based Load Altering Attacks Against Power Grids Using the Theory of Second-Order Dynamical Systems. *Lakshminarayana, S.*, +, *TSG Sept. 2021 4415-4425*
- Contract-Based Incentive Mechanisms for Honeypot Defense in Advanced Metering Infrastructure. *Tian, W.*, +, *TSG Sept. 2021 4259-4268*
- System Redundancy Enhancement of Secondary Frequency Control Under Latency Attacks. *Chen, C.*, +, *TSG Jan. 2021 647-658*
- Internetworking**
- An Identity Based Authentication Protocol for Smart Grid Environment Using Physical Uncloneable Function. *Badar, H.M.S.*, +, *TSG Sept. 2021 4426-4434*
- Interoperability**
- On the Use of Common Information Model for Smart Grid Applications — A Conceptual Approach. *Shahid, K.*, +, *TSG Nov. 2021 5060-5072*
- Inverters**
- A Decentralized Approach for Voltage Control by Multiple Distributed Energy Resources. *Fusco, G.*, +, *TSG July 2021 3115-3127*
- A Harmonic Time-Current-Voltage Directional Relay for Optimal Protection Coordination of Inverter-Based Islanded Microgrids. *El-Sayed, W.T.*, +, *TSG May 2021 1904-1917*
- A Hybrid Islanding Detection Method Based on the Rates of Changes in Voltage and Active Power for the Multi-Inverter Systems. *Seyedi, M.*, +, *TSG July 2021 2800-2811*
- A Two-Level Simulation-Assisted Sequential Distribution System Restoration Model With Frequency Dynamics Constraints. *Zhang, Q.*, +, *TSG Sept. 2021 3835-3846*
- Aggregation of Voltage-Controlled Devices During Distribution Network Reduction. *Pecenak, Z.K.*, +, *TSG Jan. 2021 33-42*
- An Adaptive PV Frequency Control Strategy Based on Real-Time Inertia Estimation. *Su, Y.*, +, *TSG May 2021 2355-2364*
- An Adaptive Virtual Impedance Control for Improving Power Sharing Among Inverters in Islanded AC Microgrids. *Vijay, A.S.*, +, *TSG July 2021 2991-3003*
- Characteristics of Parallel Inverters Applying Virtual Synchronous Generator Control. *Chen, M.*, +, *TSG Nov. 2021 4690-4701*
- Comprehensive Analytical Expressions for Assessing and Maximizing Technical Benefits of Photovoltaics to Distribution Systems. *Mahmoud, K.*, +, *TSG Nov. 2021 4938-4949*
- Coordinated Control of Air-Conditioning Loads for System Frequency Regulation. *Jiang, T.*, +, *TSG Jan. 2021 548-560*
- Deep Reinforcement Learning Based Volt-VAR Optimization in Smart Distribution Systems. *Zhang, Y.*, +, *TSG Jan. 2021 361-371*
- Development of an Encoding Method on a Co-Simulation Platform for Mitigating the Impact of Unreliable Communication. *Xie, F.*, +, *TSG May 2021 2496-2507*
- Direct-Quadrature Sequence Models for Energy-Function Based Transient Stability Analysis of Unbalanced Inverter-Based Microgrids. *Roos, M.*, +, *TSG Sept. 2021 3692-3704*
- Distributed Optimal Conservation Voltage Reduction in Integrated Primary-Secondary Distribution Systems. *Zhang, Q.*, +, *TSG Sept. 2021 3889-3900*
- Distributed Optimization for Integrated Frequency Regulation and Economic Dispatch in Microgrids. *Xu, Y.*, +, *TSG Nov. 2021 4595-4606*
- Distribution Feeder-Scale Fast Frequency Response via Optimal Coordination of Net-Load Resources—Part I: Solution Design. *Lundstrom, B.*, +, *TSG March 2021 1289-1302*
- Distribution Feeder-Scale Fast Frequency Response via Optimal Coordination of Net-Load Resources—Part II: Large-Scale Demonstration. *Lundstrom, B.*, +, *TSG March 2021 1445-1454*
- Extraction of Dynamic Frequency Response Characteristics and Modelling of Modern Air Conditioners. *Bai, F.*, +, *TSG Jan. 2021 897-900*
- Frequency Restoration and Oscillation Damping of Distributed VSGs in Microgrid With Low Bandwidth Communication. *Shi, M.*, +, *TSG March 2021 1011-1021*
- Frequency-Constrained Resilient Scheduling of Microgrid: A Distributionally Robust Approach. *Chu, Z.*, +, *TSG Nov. 2021 4914-4925*
- Isochronous Architecture-Based Voltage-Active Power Droop for Multi-Inverter Systems. *Patel, S.*, +, *TSG March 2021 1088-1103*
- LVRT Operation Enhancement of Single-Stage Photovoltaic Power Plants: An Analytical Approach. *Nasiri, M.*, +, *TSG Nov. 2021 5020-5029*
- MILP-Based Fault Diagnosis Model in Active Power Distribution Networks. *Wang, C.*, +, *TSG Sept. 2021 3847-3857*
- Modeling of Time-Delayed Distributed Cyber-Physical Power Systems for Small-Signal Stability Analysis. *Xu, L.*, +, *TSG July 2021 3425-3437*
- Network Modeling Influence on Small-Signal Reduced-Order Models of Inverter-Based AC Microgrids Considering Virtual Impedance. *Manrique Machado, S.d.J.M.*, +, *TSG Jan. 2021 79-92*
- On the Impact of Fault Ride-Through on Transient Stability of Autonomous Microgrids: Nonlinear Analysis and Solution. *Eskandari, M.*, +, *TSG March 2021 999-1010*
- On the Implementation of OPF-Based Setpoints for Active Distribution Networks. *Liu, M.Z.*, +, *TSG July 2021 2929-2940*
- Online Optimization for Networked Distributed Energy Resources With Time-Coupling Constraints. *Fan, S.*, +, *TSG Jan. 2021 251-267*
- Perturbation-Based Diagnosis of False Data Injection Attack Using Distributed Energy Resources. *Jhala, K.*, +, *TSG March 2021 1589-1601*
- Privacy-Preserving Distributed Average Observers in Distribution Systems With Grid-Forming Inverters. *Du, Y.*, +, *TSG Nov. 2021 5000-5010*
- Resilience for Communication Faults in Reactive Power Sharing of Microgrids. *Li, X.*, +, *TSG July 2021 2788-2799*
- Robust Regional Coordination of Inverter-Based Volt/Var Control via Multi-Agent Deep Reinforcement Learning. *Liu, H.*, +, *TSG Nov. 2021 5420-5433*
- Second Harmonic Injection-Based Recovery Control of PV DC Boosting Integration System. *Jia, K.*, +, *TSG March 2021 1022-1032*

Stability Analysis of Low-Voltage Distribution Feeders Operated as Islanded Microgrids. *Wang, B.*, +, *TSG Nov. 2021 4681-4689*

Supplementary Controller for Seamless Transitions Between Microgrids Operation Modes. *Azimi, S.M.*, +, *TSG May 2021 2102-2112*

Supplementary Feedforward Control of DGs in a Reconfigurable Microgrid for Load Restoration. *Park, J.*, +, *TSG Nov. 2021 4641-4654*

The Added Value of Coordinating Inverter Control. *Lusis, P.*, +, *TSG March 2021 1238-1248*

Two-Stage Deep Reinforcement Learning for Inverter-Based Volt-VAR Control in Active Distribution Networks. *Liu, H.*, +, *TSG May 2021 2037-2047*
Waveform Difference Feature-Based Protection Scheme for Islanded Microgrids. *He, L.*, +, *TSG May 2021 1939-1952*

Investment

Algorithm for Simultaneous Medium Voltage Grid Planning and Electric Vehicle Scheduling. *Rotering, N.*, +, *TSG July 2021 3305-3313*

Including Dynamic Line Rating Into the Optimal Planning of Distributed Energy Resources. *Morozovska, K.*, +, *TSG Nov. 2021 5052-5059*

Integrated Transmission and Distribution System Expansion Planning Under Uncertainty. *Munoz-Delgado, G.*, +, *TSG Sept. 2021 4113-4125*

Optimal Sharing and Fair Cost Allocation of Community Energy Storage. *Yang, Y.*, +, *TSG Sept. 2021 4185-4194*

Strategic Participation of Residential Thermal Demand Response in Energy and Capacity Markets. *Anwar, M.B.*, +, *TSG July 2021 3070-3085*

Two-Stage Planning of Network-Constrained Hybrid Energy Supply Stations for Electric and Natural Gas Vehicles. *Gan, W.*, +, *TSG May 2021 2013-2026*

Iterative methods

A Dynamic Equivalent Model for District Heating Networks: Formulation, Existence and Application in Distributed Electricity-Heat Operation. *Zheng, W.*, +, *TSG May 2021 2685-2695*

A Synchronphasor Data Compression Technique With Iteration-Enhanced Phasor Principal Component Analysis. *Zhang, F.*, +, *TSG May 2021 2365-2377*

An Asynchronous Forward-Backward-Splitting Power Flow Algorithm of Coupled Transmission and Active Distribution Systems. *Tang, K.*, +, *TSG Nov. 2021 5457-5471*

An Iterative Response-Surface-Based Approach for Chance-Constrained AC Optimal Power Flow Considering Dependent Uncertainty. *Xu, Y.*, +, *TSG May 2021 2696-2707*

An Optimization-Based Approach to Recover the Detected Attacked Grid Variables After False Data Injection Attack. *Jorjani, M.*, +, *TSG Nov. 2021 5322-5334*

Chance-Constrained Optimal Power Flow of Integrated Transmission and Distribution Networks With Limited Information Interaction. *Tang, K.*, +, *TSG Jan. 2021 821-833*

Coordination of Distribution Network Reinforcement and DER Planning in Competitive Market. *Xiao, X.*, +, *TSG May 2021 2261-2271*

Distributed Control of Multi-Energy Storage Systems for Voltage Regulation in Distribution Networks: A Back-and-Forth Communication Framework. *Yu, P.*, +, *TSG May 2021 1964-1977*

Distributionally Robust Chance-Constrained Optimal Power-Gas Flow Under Bidirectional Interactions Considering Uncertain Wind Power. *Yang, L.*, +, *TSG March 2021 1722-1735*

Efficient Robust Scheduling of Integrated Electricity and Heat Systems: A Direct Constraint Tightening Approach. *Jiang, Y.*, +, *TSG July 2021 3016-3029*

Interval Distribution Power Flow With Relative-Distance-Measure Arithmetic. *Ngo, V.*, +, *TSG Sept. 2021 3858-3867*

Online Optimization for Real-Time Peer-to-Peer Electricity Market Mechanisms. *Guo, Z.*, +, *TSG Sept. 2021 4151-4163*

Optimal Pricing of Public Electric Vehicle Charging Stations Considering Operations of Coupled Transportation and Power Systems. *Cui, Y.*, +, *TSG July 2021 3278-3288*

Parallel and Distributed Optimization Method With Constraint Decomposition for Energy Management of Microgrids. *Li, Q.*, +, *TSG Nov. 2021 4627-4640*

Spatio-Temporal Decomposition and Coordination for Distributed Load Restoration in AC/DC Hybrid System. *Zhao, J.*, +, *TSG March 2021 1685-1698*

J

Jacobian matrices

An Inversion-Free Robust Power-Flow Algorithm for Microgrids. *Kumar, A.*, +, *TSG July 2021 2844-2859*

Current Injection Power Flow Analysis and Optimal Generation Dispatch for Bipolar DC Microgrids. *Lee, J.*, +, *TSG May 2021 1918-1928*

K

Kalman filters

A Novel Event Detection and Classification Scheme Using Wide-Area Frequency Measurements. *Shaw, P.*, +, *TSG May 2021 2320-2330*

Dynamic State Estimation of Smart Distribution Grids Using Compressed Measurements. *Mohammadrezae, R.*, +, *TSG Sept. 2021 4535-4542*

Forecast-Based Consensus Control for DC Microgrids Using Distributed Long Short-Term Memory Deep Learning Models. *Alavi, S.A.*, +, *TSG Sept. 2021 3718-3730*

Online Smart Meter Measurement Error Estimation Based on EKF and LMRLS Method. *Kong, X.*, +, *TSG Sept. 2021 4269-4279*

Spoofing Resilient State Estimation for the Power Grid Using an Extended Kalman Filter. *Chauhan, S.V.S.*, +, *TSG July 2021 3404-3414*

Wide-Band Current Transformers for Traveling-Waves-Based Protection Applications. *Ameli, A.*, +, *TSG Jan. 2021 845-858*

L

Laboratory techniques

An Adaptive Virtual Impedance Control for Improving Power Sharing Among Inverters in Islanded AC Microgrids. *Vijay, A.S.*, +, *TSG July 2021 2991-3003*

Large-scale systems

Real-Time Coupling of Geographically Distributed Research Infrastructures: Taxonomy, Overview, and Real-World Smart Grid Applications. *Syed, M.H.*, +, *TSG March 2021 1747-1760*

Learning (artificial intelligence)

A Cyber-Physical Anomaly Detection for Wide-Area Protection Using Machine Learning. *Singh, V.K.*, +, *TSG July 2021 3514-3526*

A Microgrid Energy Management System Based on Non-Intrusive Load Monitoring via Multitask Learning. *Cimen, H.*, +, *TSG March 2021 977-987*

A Reinforcement Learning-Based Decision System for Electricity Pricing Plan Selection by Smart Grid End Users. *Lu, T.*, +, *TSG May 2021 2176-2187*

A Scalable Privacy-Preserving Multi-Agent Deep Reinforcement Learning Approach for Large-Scale Peer-to-Peer Transactive Energy Trading. *Ye, Y.*, +, *TSG Nov. 2021 5185-5200*

Adversarial Semi-Supervised Learning for Diagnosing Faults and Attacks in Power Grids. *Farajzadeh-Zanjani, M.*, +, *TSG July 2021 3468-3478*

An Adaptive Approach for Dynamic Load Modeling in Microgrids. *Chavarro-Barrera, L.*, +, *TSG July 2021 2834-2843*

An Adaptive PV Frequency Control Strategy Based on Real-Time Inertia Estimation. *Su, Y.*, +, *TSG May 2021 2355-2364*

An Edge-Cloud Integrated Solution for Buildings Demand Response Using Reinforcement Learning. *Zhang, X.*, +, *TSG Jan. 2021 420-431*

Bayesian Learning-Based Multi-Objective Distribution Power Network Reconfiguration. *Zhong, T.*, +, *TSG March 2021 1174-1184*

Capturing Spatio-Temporal Dependencies in the Probabilistic Forecasting of Distribution Locational Marginal Prices. *Toubeau, J.*, +, *TSG May 2021 2663-2674*

Causative Cyberattacks on Online Learning-Based Automated Demand Response Systems. *Acharya, S.*, +, *TSG July 2021 3548-3559*

Data-Driven Approach for Analyzing Spatiotemporal Price Elasticities of EV Public Charging Demands Based on Conditional Random Fields. *Bao, Z.*, +, *TSG Sept. 2021 4363-4376*

- Data-Driven Copy-Paste Imputation for Energy Time Series. *Weber, M.*, +, *TSG Nov. 2021 5409-5419*
- Data-Driven Dynamic Models of Active Distribution Networks Using Unsupervised Learning Techniques on Field Measurements. *Mitrentsis, G.*, +, *TSG July 2021 2952-2965*
- Data-Driven Multi-Agent Deep Reinforcement Learning for Distribution System Decentralized Voltage Control With High Penetration of PVs. *Cao, D.*, +, *TSG Sept. 2021 4137-4150*
- Data-Driven Risk Preference Analysis in Day-Ahead Electricity Market. *Zhao, H.*, +, *TSG May 2021 2508-2517*
- Decentralized Optimal Stabilization of Active Loads in Islanded Microgrids. *Dissanayake, A.M.*, +, *TSG March 2021 932-942*
- Deep Learning Method With Manual Post-Processing for Identification of Spectral Patterns of Waveform Distortion in PV Installations. *de Oliveira, R.A.*, +, *TSG Nov. 2021 5444-5456*
- Deep Reinforcement Learning Based Volt-VAR Optimization in Smart Distribution Systems. *Zhang, Y.*, +, *TSG Jan. 2021 361-371*
- Deep Reinforcement Learning for Demand Response in Distribution Networks. *Bahrami, S.*, +, *TSG March 2021 1496-1506*
- Deep-Reinforcement-Learning-Based Capacity Scheduling for PV-Battery Storage System. *Huang, B.*, +, *TSG May 2021 2272-2283*
- Domain Randomization for Demand Response of an Electric Water Heater. *Peirelinck, T.*, +, *TSG March 2021 1370-1379*
- Electricity Consumer Characteristics Identification: A Federated Learning Approach. *Wang, Y.*, +, *TSG July 2021 3637-3647*
- Enhanced Wind Generation Forecast Using Robust Ensemble Learning. *Su, H.*, +, *TSG Jan. 2021 912-915*
- Fault Detection for Covered Conductors With High-Frequency Voltage Signals: From Local Patterns to Global Features. *Chen, K.*, +, *TSG March 2021 1602-1614*
- Imitation and Transfer Q-Learning-Based Parameter Identification for Composite Load Modeling. *Xie, J.*, +, *TSG March 2021 1674-1684*
- Learning-Based Predictive Control via Real-Time Aggregate Flexibility. *Li, T.*, +, *TSG Nov. 2021 4897-4913*
- Multi-Agent Deep Reinforcement Learning for HVAC Control in Commercial Buildings. *Yu, L.*, +, *TSG Jan. 2021 407-419*
- Multi-Agent Safe Policy Learning for Power Management of Networked Microgrids. *Zhang, Q.*, +, *TSG March 2021 1048-1062*
- Online Learning and Distributed Control for Residential Demand Response. *Chen, X.*, +, *TSG Nov. 2021 4843-4853*
- Online Multi-Agent Reinforcement Learning for Decentralized Inverter-Based Volt-VAR Control. *Liu, H.*, +, *TSG July 2021 2980-2990*
- Online Rolling Evolutionary Decoder-Dispatch Framework for the Secondary Frequency Regulation of Time-Varying Electrical-Grid-Electric-Vehicle System. *Dong, C.*, +, *TSG Jan. 2021 871-884*
- Online Scheduling of a Residential Microgrid via Monte-Carlo Tree Search and a Learned Model. *Shuai, H.*, +, *TSG March 2021 1073-1087*
- Optimal Energy Management of Microgrids Using Quantum Teaching Learning Based Algorithm. *Raghav, L.P.*, +, *TSG Nov. 2021 4834-4842*
- Optimal HVAC System Operation Using Online Learning of Interconnected Neural Networks. *Jang, Y.*, +, *TSG July 2021 3030-3042*
- Optimal Policy Characterization Enhanced Actor-Critic Approach for Electric Vehicle Charging Scheduling in a Power Distribution Network. *Jin, J.*, +, *TSG March 2021 1416-1428*
- Privacy Preserving Load Control of Residential Microgrid via Deep Reinforcement Learning. *Qin, Z.*, +, *TSG Sept. 2021 4079-4089*
- Robust Regional Coordination of Inverter-Based Volt/Var Control via Multi-Agent Deep Reinforcement Learning. *Liu, H.*, +, *TSG Nov. 2021 5420-5433*
- Scalable Designs for Reinforcement Learning-Based Wide-Area Damping Control. *Mukherjee, S.*, +, *TSG May 2021 2389-2401*
- Spatial-Temporal Residential Short-Term Load Forecasting via Graph Neural Networks. *Lin, W.*, +, *TSG Nov. 2021 5373-5384*
- Time Series Classification for Locating Forced Oscillation Sources. *Meng, Y.*, +, *TSG March 2021 1712-1721*
- Two-Stage Deep Reinforcement Learning for Inverter-Based Volt-VAR Control in Active Distribution Networks. *Liu, H.*, +, *TSG May 2021 2037-2047*
- Two-Stage Volt/Var Control in Active Distribution Networks With Multi-Agent Deep Reinforcement Learning Method. *Sun, X.*, +, *TSG July 2021 2903-2912*
- Learning systems**
- Learning-Based Predictive Control via Real-Time Aggregate Flexibility. *Li, T.*, +, *TSG Nov. 2021 4897-4913*
- Least squares approximations**
- A Robust State Estimation Method Based on SOCP for Integrated Electricity-Heat System. *Chen, Y.*, +, *TSG Jan. 2021 810-820*
- Online Smart Meter Measurement Error Estimation Based on EKF and LMRLS Method. *Kong, X.*, +, *TSG Sept. 2021 4269-4279*
- Stealthy Cyberattacks on Loads and Distributed Generation Aimed at Multi-Transmission Line Congestions in Smart Grids. *Khazaei, J.*, *TSG May 2021 2518-2528*
- Tri-Level Scheduling Model Considering Residential Demand Flexibility of Aggregated HVACs and EVs Under Distribution LMP. *Wang, X.*, +, *TSG Sept. 2021 3990-4002*
- Linear matrix inequalities**
- A Cyber Attack Mitigation Scheme for Series Compensated DFIG-Based Wind Parks. *Ghafouri, M.*, +, *TSG Nov. 2021 5221-5232*
- Dynamic Event-Based Model Predictive Load Frequency Control for Power Systems Under Cyber Attacks. *Liu, Y.*, +, *TSG Jan. 2021 715-725*
- Linear programming**
- A Novel Framework for the Operational Reliability Evaluation of Integrated Electric Power-Gas Networks. *Ansari, O.A.*, +, *TSG Sept. 2021 3901-3913*
- A Two-Level Simulation-Assisted Sequential Distribution System Restoration Model With Frequency Dynamics Constraints. *Zhang, Q.*, +, *TSG Sept. 2021 3835-3846*
- Aggregate Operation Model for Numerous Small-Capacity Distributed Energy Resources Considering Uncertainty. *Yi, Z.*, +, *TSG Sept. 2021 4208-4224*
- An Energy Sharing Mechanism Achieving the Same Flexibility as Centralized Dispatch. *Chen, Y.*, +, *TSG July 2021 3379-3389*
- An MILP-Based Planning Model of a Photovoltaic/Diesel/Battery Stand-Alone Microgrid Considering the Reliability. *Wu, X.*, +, *TSG Sept. 2021 3809-3818*
- An Optimal Placement Model for Electric Springs in Distribution Networks. *Liang, L.*, +, *TSG Jan. 2021 491-501*
- Analysis of IoT-Based Load Altering Attacks Against Power Grids Using the Theory of Second-Order Dynamical Systems. *Lakshminarayana, S.*, +, *TSG Sept. 2021 4415-4425*
- Cooperative P2P Energy Trading in Active Distribution Networks: An MILP-Based Nash Bargaining Solution. *Zhong, W.*, +, *TSG March 2021 1264-1276*
- Cyber-Vulnerability Analysis for Real-Time Power Market Operation. *Zhang, Q.*, +, *TSG July 2021 3527-3537*
- Data-Driven Distributionally Robust Co-Optimization of P2P Energy Trading and Network Operation for Interconnected Microgrids. *Li, J.*, +, *TSG Nov. 2021 5172-5184*
- Demand Response for Industrial Micro-Grid Considering Photovoltaic Power Uncertainty and Battery Operational Cost. *Huang, C.*, +, *TSG July 2021 3043-3055*
- Design of Setting Group-Based Overcurrent Protection Scheme for Active Distribution Networks Using MILP. *Ghotbi-Maleki, M.*, +, *TSG March 2021 1185-1193*
- Distributed Expansion Planning of Electric Vehicle Dynamic Wireless Charging System in Coupled Power-Traffic Networks. *Xia, F.*, +, *TSG July 2021 3326-3338*
- Distributed Optimal Conservation Voltage Reduction in Integrated Primary-Secondary Distribution Systems. *Zhang, Q.*, +, *TSG Sept. 2021 3889-3900*
- Distributionally Robust Chance-Constrained Optimal Power-Gas Flow Under Bidirectional Interactions Considering Uncertain Wind Power. *Yang, L.*, +, *TSG March 2021 1722-1735*
- Distributionally Robust Microgrid Formation Approach for Service Restoration Under Random Contingency. *Cai, S.*, +, *TSG Nov. 2021 4926-4937*

- Efficient Robust Scheduling of Integrated Electricity and Heat Systems: A Direct Constraint Tightening Approach. *Jiang, Y.*, +, *TSG July 2021 3016-3029*
- Energy Flow Optimization of Integrated Gas and Power Systems in Continuous Time and Space. *Zheng, C.*, +, *TSG May 2021 2611-2624*
- Energy Management and Control of a Flywheel Storage System for Peak Shaving Applications. *Tziouani, L.*, +, *TSG Sept. 2021 4195-4207*
- False Data Injection Attacks Against State-of-Charge Estimation of Battery Energy Storage Systems in Smart Distribution Networks. *Zhuang, P.*, +, *TSG May 2021 2566-2577*
- Hierarchical Voltage Control Strategy in Distribution Networks Considering Customized Charging Navigation of Electric Vehicles. *Sun, X.*, +, *TSG Nov. 2021 4752-4764*
- Interval Distribution Power Flow With Relative-Distance-Measure Arithmetic. *Ngo, V.*, +, *TSG Sept. 2021 3858-3867*
- Iteration-Based Linearized Distribution-Level Locational Marginal Price for Three-Phase Unbalanced Distribution Systems. *Cai, M.*, +, *TSG Nov. 2021 4886-4896*
- Joint Topology Identification and State Estimation in Unobservable Distribution Grids. *Karimi, H.S.*, +, *TSG Nov. 2021 5299-5309*
- Mobility-Aware Charging Scheduling for Shared On-Demand Electric Vehicle Fleet Using Deep Reinforcement Learning. *Liang, Y.*, +, *TSG March 2021 1380-1393*
- Operational Reliability Assessment of Integrated Heat and Electricity Systems Considering the Load Uncertainties. *Ding, Y.*, +, *TSG Sept. 2021 3928-3939*
- Optimal DG Allocation and Volt-Var Dispatch for a Droop-Based Microgrid. *Gupta, Y.*, +, *TSG Jan. 2021 169-181*
- Optimal PMU Restoration for Power System Observability Recovery After Massive Attacks. *Edib, S.N.*, +, *TSG March 2021 1565-1576*
- Optimal Reserve Management of Electric Vehicle Aggregator: Discrete Bilevel Optimization Model and Exact Algorithm. *Liu, W.*, +, *TSG Sept. 2021 4003-4015*
- Price-Maker Bidding and Offering Strategies for Networked Microgrids in Day-Ahead Electricity Markets. *Hu, B.*, +, *TSG Nov. 2021 5201-5211*
- Risk-Averse Coordinated Operation of a Multi-Energy Microgrid Considering Voltage/Var Control and Thermal Flow: An Adaptive Stochastic Approach. *Li, Z.*, +, *TSG Sept. 2021 3914-3927*
- Stealthy Cyberattacks on Loads and Distributed Generation Aimed at Multi-Transmission Line Congestions in Smart Grids. *Khazaei, J.*, *TSG May 2021 2518-2528*
- Step Towards Energy-Water Smart Microgrids; Buildings Thermal Energy and Water Demand Management Embedded in Economic Dispatch. *Moaeni, F.*, +, *TSG Sept. 2021 3680-3691*
- Switch Status Identification in Distribution Networks Using Harmonic Synchronophasor Measurements. *Chen, L.*, +, *TSG May 2021 2413-2424*
- Verification of Neural Network Behaviour: Formal Guarantees for Power System Applications. *Venzke, A.*, +, *TSG Jan. 2021 383-397*
- Linear quadratic control**
- Decentralized Optimal Stabilization of Active Loads in Islanded Microgrids. *Dissanayake, A.M.*, +, *TSG March 2021 932-942*
- Disturbance Observer and Tube-Based Model Predictive Controlled Electric Vehicles for Frequency Regulation of an Isolated Power Grid. *Oshnoei, A.*, +, *TSG Sept. 2021 4351-4362*
- Linear Quadratic Regulator Based Smooth Transition Between Microgrid Operation Modes. *Ganjian-Aboukheili, M.*, +, *TSG Nov. 2021 4854-4864*
- Linear quadratic Gaussian control**
- Coordinated Optimal Volt/Var Control for Distribution Networks via D-PMUs and EV Chargers by Exploiting the Eigensystem Realization. *Mejia-Ruiz, G.E.*, +, *TSG May 2021 2425-2438*
- Load (electric)**
- Anomaly Detection, Localization and Classification Using Drifting Synchronophasor Data Streams. *Ahmed, A.*, +, *TSG July 2021 3570-3580*
- Conditional Multivariate Elliptical Copulas to Model Residential Load Profiles From Smart Meter Data. *Duque, E.M.S.*, +, *TSG Sept. 2021 4280-4294*
- Cooperative Optimization of Networked Microgrids for Supporting Grid Flexibility Services Using Model Predictive Control. *Garcia-Torres, F.*, +, *TSG May 2021 1893-1903*
- Cyber-Vulnerability Analysis for Real-Time Power Market Operation. *Zhang, Q.*, +, *TSG July 2021 3527-3537*
- Distribution Feeder-Scale Fast Frequency Response via Optimal Coordination of Net-Load Resources—Part II: Large-Scale Demonstration. *Lundstrom, B.*, +, *TSG March 2021 1445-1454*
- Frequency Regulation With Heterogeneous Energy Resources: A Realization Using Distributed Control. *Anderson, T.*, +, *TSG Sept. 2021 4126-4136*
- Imitation and Transfer Q-Learning-Based Parameter Identification for Composite Load Modeling. *Xie, J.*, +, *TSG March 2021 1674-1684*
- MPC-Controlled Virtual Synchronous Generator to Enhance Frequency and Voltage Dynamic Performance in Islanded Microgrids. *Long, B.*, +, *TSG March 2021 953-964*
- Optimal Pricing of Public Electric Vehicle Charging Stations Considering Operations of Coupled Transportation and Power Systems. *Cui, Y.*, +, *TSG July 2021 3278-3288*
- Stealthy Cyberattacks on Loads and Distributed Generation Aimed at Multi-Transmission Line Congestions in Smart Grids. *Khazaei, J.*, *TSG May 2021 2518-2528*
- Load dispatching**
- Hierarchical Voltage Control Strategy in Distribution Networks Considering Customized Charging Navigation of Electric Vehicles. *Sun, X.*, +, *TSG Nov. 2021 4752-4764*
- Incentive-Compatible Demand Response for Spatially Coupled Internet Data Centers in Electricity Markets. *Chen, M.*, +, *TSG July 2021 3056-3069*
- Online Rolling Evolutionary Decoder-Dispatch Framework for the Secondary Frequency Regulation of Time-Varying Electrical-Grid-Electric-Vehicle System. *Dong, C.*, +, *TSG Jan. 2021 871-884*
- Power Loss Minimization of Off-Grid Solar DC Nano-Grids—Part I: Centralized Control Algorithm. *Samende, C.*, +, *TSG Nov. 2021 4715-4725*
- Load distribution**
- A Detection Mechanism Against Load-Redistribution Attacks in Smart Grids. *Kaviani, R.*, +, *TSG Jan. 2021 704-714*
- Defense Strategy Against Load Redistribution Attacks on Power Systems Considering Insider Threats. *Liu, Z.*, +, *TSG March 2021 1529-1540*
- Load flow**
- A Homomorphic Encryption-Based Private Collaborative Distributed Energy Management System. *Cheng, Z.*, +, *TSG Nov. 2021 5233-5243*
- A Linear Branch Flow Model for Radial Distribution Networks and Its Application to Reactive Power Optimization and Network Reconfiguration. *Yang, T.*, +, *TSG May 2021 2027-2036*
- A New Cooperative Framework for a Fair and Cost-Optimal Allocation of Resources Within a Low Voltage Electricity Community. *Hupez, M.*, +, *TSG May 2021 2201-2211*
- A SOCP Relaxation for Cycle Constraints in the Optimal Power Flow Problem. *Soofi, A.F.*, +, *TSG March 2021 1663-1673*
- A Three-Layer Stochastic Energy Management Approach for Electric Bus Transit Centers With PV and Energy Storage Systems. *Liu, Y.*, +, *TSG March 2021 1346-1357*
- A Transactive Retail Market Mechanism for Active Distribution Network Integrated With Large-Scale Distributed Energy Resources. *Huang, C.*, +, *TSG Sept. 2021 4225-4237*
- Active Distribution Grids Providing Voltage Support: The Swiss Case. *Karagiannopoulos, S.*, +, *TSG Jan. 2021 268-278*
- An Asynchronous Forward-Backward-Splitting Power Flow Algorithm of Coupled Transmission and Active Distribution Systems. *Tang, K.*, +, *TSG Nov. 2021 5457-5471*
- An Inversion-Free Robust Power-Flow Algorithm for Microgrids. *Kumar, A.*, +, *TSG July 2021 2844-2859*
- An Iterative Response-Surface-Based Approach for Chance-Constrained AC Optimal Power Flow Considering Dependent Uncertainty. *Xu, Y.*, +, *TSG May 2021 2696-2707*
- An Optimal Placement Model for Electric Springs in Distribution Networks. *Liang, L.*, +, *TSG Jan. 2021 491-501*

- Association Rule Mining for Localizing Solar Power in Different Distribution Grid Feeders. *Saleem, B.*, +, *TSG May 2021 2589-2600*
- Chance-Constrained Optimal Power Flow of Integrated Transmission and Distribution Networks With Limited Information Interaction. *Tang, K.*, +, *TSG Jan. 2021 821-833*
- Data-Driven Multi-Agent Deep Reinforcement Learning for Distribution System Decentralized Voltage Control With High Penetration of PVs. *Cao, D.*, +, *TSG Sept. 2021 4137-4150*
- Decentralized Low-Rank State Estimation for Power Distribution Systems. *Sagan, A.*, +, *TSG July 2021 3097-3106*
- Deep Reinforcement Learning Based Volt-VAR Optimization in Smart Distribution Systems. *Zhang, Y.*, +, *TSG Jan. 2021 361-371*
- Deep Reinforcement Learning for Demand Response in Distribution Networks. *Bahrami, S.*, +, *TSG March 2021 1496-1506*
- Detection of Stealthy Cyber-Physical Line Disconnection Attacks in Smart Grid. *James Ranjith Kumar, R.*, +, *TSG Sept. 2021 4484-4493*
- Distributed Coordinated Reactive Power Control for Voltage Regulation in Distribution Networks. *Tang, Z.*, +, *TSG Jan. 2021 312-323*
- Distributed State of Charge-Based Droop Control Algorithm for Reducing Power Losses in Multi-Port Converter-Enabled Solar DC Nano-Grids. *Samende, C.*, +, *TSG Nov. 2021 4584-4594*
- Distribution Network-Constrained Optimization of Peer-to-Peer Transactive Energy Trading Among Multi-Microgrids. *Yan, M.*, +, *TSG March 2021 1033-1047*
- Distributionally Robust Optimal Power Flow in Multi-Microgrids With Decomposition and Guaranteed Convergence. *Huang, W.*, +, *TSG Jan. 2021 43-55*
- Dual Inertia-Emulation Control for Interlinking Converters in Grid-Tying Applications. *Paniagua, J.*, +, *TSG Sept. 2021 3868-3876*
- Energy Flow Optimization of Integrated Gas and Power Systems in Continuous Time and Space. *Zheng, C.*, +, *TSG May 2021 2611-2624*
- Ensuring Distribution Network Integrity Using Dynamic Operating Limits for Prosumers. *Petrou, K.*, +, *TSG Sept. 2021 3877-3888*
- Exactness of OPF Relaxation on Three-Phase Radial Networks With Delta Connections. *Zhou, F.*, +, *TSG July 2021 3232-3241*
- Fast Probabilistic Hosting Capacity Analysis for Active Distribution Systems. *Taheri, S.*, +, *TSG May 2021 2000-2012*
- Frequency-Constrained Resilient Scheduling of Microgrid: A Distributionally Robust Approach. *Chu, Z.*, +, *TSG Nov. 2021 4914-4925*
- Guaranteed Phase & Topology Identification in Three Phase Distribution Grids. *Bariya, M.*, +, *TSG July 2021 3605-3612*
- Hierarchical Voltage Control Strategy in Distribution Networks Considering Customized Charging Navigation of Electric Vehicles. *Sun, X.*, +, *TSG Nov. 2021 4752-4764*
- Incentive-Compatible Demand Response for Spatially Coupled Internet Data Centers in Electricity Markets. *Chen, M.*, +, *TSG July 2021 3056-3069*
- Including Dynamic Line Rating Into the Optimal Planning of Distributed Energy Resources. *Morozovska, K.*, +, *TSG Nov. 2021 5052-5059*
- Interval Distribution Power Flow With Relative-Distance-Measure Arithmetic. *Ngo, V.*, +, *TSG Sept. 2021 3858-3867*
- Iteration-Based Linearized Distribution-Level Locational Marginal Price for Three-Phase Unbalanced Distribution Systems. *Cai, M.*, +, *TSG Nov. 2021 4886-4896*
- Leveraging Two-Stage Adaptive Robust Optimization for Power Flexibility Aggregation. *Chen, X.*, +, *TSG Sept. 2021 3954-3965*
- MicroGrid Resilience-Oriented Scheduling: A Robust MISOCF Model. *Zografou-Barredo, N.*, +, *TSG May 2021 1867-1879*
- Mitigating Smart Meter Asynchrony Error Via Multi-Objective Low Rank Matrix Recovery. *Yuan, Y.*, +, *TSG Sept. 2021 4308-4317*
- Multi-Agent Safe Policy Learning for Power Management of Networked Microgrids. *Zhang, Q.*, +, *TSG March 2021 1048-1062*
- Multi-Stage Quadratic Flexible Optimal Power Flow With a Rolling Horizon. *Zhong, C.*, +, *TSG July 2021 3128-3137*
- On the Implementation of OPF-Based Setpoints for Active Distribution Networks. *Liu, M.Z.*, +, *TSG July 2021 2929-2940*
- Online Scheduling of a Residential Microgrid via Monte-Carlo Tree Search and a Learned Model. *Shuai, H.*, +, *TSG March 2021 1073-1087*
- Optimal Planning and Operation of Hidden Moving Target Defense for Maximal Detection Effectiveness. *Liu, B.*, +, *TSG Sept. 2021 4447-4459*
- Optimal Power Flow Design for Enhancing Dynamic Performance: Potentials of Reactive Power. *Inoue, M.*, +, *TSG Jan. 2021 599-611*
- Price-Based Dynamic Optimal Power Flow With Emergency Repair. *Schmitz, M.*, +, *TSG Jan. 2021 324-337*
- Privacy-Preserving Distributed Optimal Power Flow With Partially Homomorphic Encryption. *Wu, T.*, +, *TSG Sept. 2021 4506-4521*
- Self-Assessment of Health Conditions of Electrical Assets and Grid Components: A Contribution to Smart Grids. *Montanari, G.C.*, +, *TSG March 2021 1206-1214*
- Toward Complete Characterization of the Steady-State Security Region for the Electricity-Gas Integrated Energy System. *Su, J.*, +, *TSG July 2021 3004-3015*
- Transaction-Oriented Dynamic Power Flow Tracing for Distribution Networks—Definition and Implementation in GIS Environment. *Vega-Fuentes, E.*, +, *TSG March 2021 1303-1313*
- Two-Stage Volt/Var Control in Active Distribution Networks With Multi-Agent Deep Reinforcement Learning Method. *Sun, X.*, +, *TSG July 2021 2903-2912*
- Unsupervised Congestion Status Identification Using LMP Data. *Zheng, K.*, +, *TSG Jan. 2021 726-736*
- Voltage-Dependent Load Models in Unbalanced Optimal Power Flow Using Power Cones. *Claeys, S.*, +, *TSG July 2021 2890-2902*
- Load flow control**
- A Grid-Friendly Sustainable Neighborhood Energy Trading Mechanism for MV-LV Network. *Liu, A.*, +, *TSG May 2021 2239-2248*
- Current Injection Power Flow Analysis and Optimal Generation Dispatch for Bipolar DC Microgrids. *Lee, J.*, +, *TSG May 2021 1918-1928*
- Distributed Control Strategy for Low-Voltage Three-Phase Four-Wire Microgrids: Consensus Power-Based Control. *Ferreira, D.M.*, +, *TSG July 2021 3215-3231*
- Distributed Optimal Conservation Voltage Reduction in Integrated Primary-Secondary Distribution Systems. *Zhang, Q.*, +, *TSG Sept. 2021 3889-3900*
- Hierarchical Voltage Control Strategy in Distribution Networks Considering Customized Charging Navigation of Electric Vehicles. *Sun, X.*, +, *TSG Nov. 2021 4752-4764*
- Minimizing Energy Storage Utilization in a Stand-Alone DC Microgrid Using Photovoltaic Flexible Power Control. *Yan, H.W.*, +, *TSG Sept. 2021 3755-3764*
- Multi-Stage Quadratic Flexible Optimal Power Flow With a Rolling Horizon. *Zhong, C.*, +, *TSG July 2021 3128-3137*
- Power Loss Minimization of Off-Grid Solar DC Nano-Grids—Part I: Centralized Control Algorithm. *Samende, C.*, +, *TSG Nov. 2021 4715-4725*
- Synchronization of Low Voltage Grids Fed by Smart and Conventional Transformers. *Giacomuzzi, S.*, +, *TSG July 2021 2941-2951*
- Load forecasting**
- A Novel Closed-Loop Clustering Algorithm for Hierarchical Load Forecasting. *Zhang, C.*, +, *TSG Jan. 2021 432-441*
- An Adaptive Ensemble Data Driven Approach for Nonparametric Probabilistic Forecasting of Electricity Load. *Wan, C.*, +, *TSG Nov. 2021 5396-5408*
- Data-Driven Copy-Paste Imputation for Energy Time Series. *Weber, M.*, +, *TSG Nov. 2021 5409-5419*
- Develop Load Shape Dictionary Through Efficient Clustering Based on Elastic Dissimilarity Measure. *Liang, H.*, +, *TSG Jan. 2021 442-452*
- Forecast-Based Consensus Control for DC Microgrids Using Distributed Long Short-Term Memory Deep Learning Models. *Alavi, S.A.*, +, *TSG Sept. 2021 3718-3730*
- Hybrid Multitask Multi-Information Fusion Deep Learning for Household Short-Term Load Forecasting. *Jiang, L.*, +, *TSG Nov. 2021 5362-5372*
- Load Photo: A Novel Analysis Method for Load Data. *Wang, H.*, +, *TSG March 2021 1394-1404*
- Probabilistic Forecasting of Regional Net-Load With Conditional Extremes and Gridded NWP. *Browell, J.*, +, *TSG Nov. 2021 5011-5019*

Probabilistic Load Forecasting via Neural Basis Expansion Model Based Prediction Intervals. *Wen, H., +, TSG July 2021 3648-3660*

Spatial-Temporal Residential Short-Term Load Forecasting via Graph Neural Networks. *Lin, W., +, TSG Nov. 2021 5373-5384*

Statistical Load Forecasting Using Optimal Quantile Regression Random Forest and Risk Assessment Index. *Aprillia, H., +, TSG March 2021 1467-1480*

Load management

Data-Driven Copy-Paste Imputation for Energy Time Series. *Weber, M., +, TSG Nov. 2021 5409-5419*

Enriching Load Data Using Micro-PMUs and Smart Meters. *Bu, F., +, TSG Nov. 2021 5084-5094*

Fully-Convolutional Denoising Auto-Encoders for NILM in Large Non-Residential Buildings. *Garcia-Perez, D., +, TSG May 2021 2722-2731*

Incentive Design for Flexibility Provisions From Residential Energy Hubs in Smart Grid. *Alharbi, W., +, TSG May 2021 2113-2124*

Robust Hierarchical Control Mechanism for Aggregated Thermostatically Controlled Loads. *Gong, X., +, TSG Jan. 2021 453-467*

Time-Frequency Mask Estimation Based on Deep Neural Network for Flexible Load Disaggregation in Buildings. *Song, J., +, TSG July 2021 3242-3251*

TraceGAN: Synthesizing Appliance Power Signatures Using Generative Adversarial Networks. *Harell, A., +, TSG Sept. 2021 4553-4563*

Tri-Level Scheduling Model Considering Residential Demand Flexibility of Aggregated HVACs and EVs Under Distribution LMP. *Wang, X., +, TSG Sept. 2021 3990-4002*

Load modeling

Correction to "Queuing Analysis-Based PEV Load Modeling Considering Battery Charging Behavior and Their Impact on Distribution System Operation" [Jan 18 261-273]. *Hafez, O., +, TSG March 2021 1830*

Prioritized Replay Dueling DDQN Based Grid-Edge Control of Community Energy Storage System. *Song, H., +, TSG Nov. 2021 4950-4961*

Load monitoring

Adaptive Weighted Recurrence Graphs for Appliance Recognition in Non-Intrusive Load Monitoring. *Faustine, A., +, TSG Jan. 2021 398-406*

Generalizability Improvement of Deep Learning-Based Non-Intrusive Load Monitoring System Using Data Augmentation. *Rafiq, H., +, TSG July 2021 3265-3277*

Privacy Preserving in Non-Intrusive Load Monitoring: A Differential Privacy Perspective. *Wang, H., +, TSG May 2021 2529-2543*

Stealthy Black-Box Attacks on Deep Learning Non-Intrusive Load Monitoring Models. *Wang, J., +, TSG July 2021 3479-3492*

Toward Load Identification Based on the Hilbert Transform and Sequence to Sequence Long Short-Term Memory. *Le, T., +, TSG July 2021 3252-3264*

Load regulation

Aggregated Model of Data Network for the Provision of Demand Response in Generation and Transmission Expansion Planning. *Chen, M., +, TSG Jan. 2021 512-523*

Domain Randomization for Demand Response of an Electric Water Heater. *Peirelinck, T., +, TSG March 2021 1370-1379*

Dynamic Event-Based Model Predictive Load Frequency Control for Power Systems Under Cyber Attacks. *Liu, Y., +, TSG Jan. 2021 715-725*

Enhancement of Frequency Regulation in AC Microgrid: A Fuzzy-MPC Controlled Virtual Synchronous Generator. *Long, B., +, TSG July 2021 3138-3149*

Exploiting Power-to-Heat Assets in District Heating Networks to Regulate Electric Power Network. *Khatibi, M., +, TSG May 2021 2048-2059*

Internet Data Center Load Modeling for Demand Response Considering the Coupling of Multiple Regulation Methods. *Chen, M., +, TSG May 2021 2060-2076*

Online Assessment of Conservation Voltage Reduction Effects With Micro-perturbation. *Xu, J., +, TSG May 2021 2224-2238*

Online Learning and Distributed Control for Residential Demand Response. *Chen, X., +, TSG Nov. 2021 4843-4853*

Primary Frequency Control in Isolated Microgrids Using Thermostatically Controllable Loads. *Mendieta, W., +, TSG Jan. 2021 93-105*

Privacy Preserving Load Control of Residential Microgrid via Deep Reinforcement Learning. *Qin, Z., +, TSG Sept. 2021 4079-4089*

Robust Hierarchical Control Mechanism for Aggregated Thermostatically Controlled Loads. *Gong, X., +, TSG Jan. 2021 453-467*

Robust Load Frequency Control of Power Systems Against Random Time-Delay Attacks. *Xiahou, K.S., +, TSG Jan. 2021 909-911*

Load shedding

An Adaptive PV Frequency Control Strategy Based on Real-Time Inertia Estimation. *Su, Y., +, TSG May 2021 2355-2364*

Frequency-Constrained Resilient Scheduling of Microgrid: A Distributionally Robust Approach. *Chu, Z., +, TSG Nov. 2021 4914-4925*

MicroGrid Resilience-Oriented Scheduling: A Robust MISOC Model. *Zografou-Barredo, N., +, TSG May 2021 1867-1879*

Multi-Stage Multi-Zone Defender-Attacker-Defender Model for Optimal Resilience Strategy With Distribution Line Hardening and Energy Storage System Deployment. *Zhang, H., +, TSG March 2021 1194-1205*

Power System Resilience Enhancement in Typhoons Using a Three-Stage Day-Ahead Unit Commitment. *Ding, T., +, TSG May 2021 2153-2164*

Long Term Evolution

Development of an Encoding Method on a Co-Simulation Platform for Mitigating the Impact of Unreliable Communication. *Xie, F., +, TSG May 2021 2496-2507*

Losses

A Three-Layer Stochastic Energy Management Approach for Electric Bus Transit Centers With PV and Energy Storage Systems. *Liu, Y., +, TSG March 2021 1346-1357*

An Inversion-Free Robust Power-Flow Algorithm for Microgrids. *Kumar, A., +, TSG July 2021 2844-2859*

Consensus Multi-Agent Reinforcement Learning for Volt-VAR Control in Power Distribution Networks. *Gao, Y., +, TSG July 2021 3594-3604*

Load-Switching Strategy for Voltage Balancing of Bipolar DC Distribution Networks Based on Optimal Automatic Commutation Algorithm. *Liao, J., +, TSG July 2021 2966-2979*

Push-Based Distributed Economic Dispatch in Smart Grids Over Time-Varying Unbalanced Directed Graphs. *Wang, Z., +, TSG July 2021 3185-3199*

Robust Regional Coordination of Inverter-Based Volt/Var Control via Multi-Agent Deep Reinforcement Learning. *Liu, H., +, TSG Nov. 2021 5420-5433*

The Added Value of Coordinating Inverter Control. *Lusis, P., +, TSG March 2021 1238-1248*

Tri-Level Scheduling Model Considering Residential Demand Flexibility of Aggregated HVACs and EVs Under Distribution LMP. *Wang, X., +, TSG Sept. 2021 3990-4002*

Two-Stage Deep Reinforcement Learning for Inverter-Based Volt-VAR Control in Active Distribution Networks. *Liu, H., +, TSG May 2021 2037-2047*

Lyapunov methods

Cross-Layer Distributed Control Strategy for Cyber Resilient Microgrids. *Zhou, Q., +, TSG Sept. 2021 3705-3717*

Decentralized Optimal Stabilization of Active Loads in Islanded Microgrids. *Dissanayake, A.M., +, TSG March 2021 932-942*

Distributed Control of DC Microgrids for Optimal Coordination of Conventional and Renewable Generators. *Fan, Z., +, TSG Nov. 2021 4607-4615*

Distributed Robust Frequency Restoration and Active Power Sharing for Autonomous Microgrids With Event-Triggered Strategy. *Zhao, D., +, TSG Sept. 2021 3819-3834*

On the Impact of Fault Ride-Through on Transient Stability of Autonomous Microgrids: Nonlinear Analysis and Solution. *Eskandari, M., +, TSG March 2021 999-1010*

Region of Attraction Estimation for DC Microgrids With Constant Power Loads Using Potential Theory. *Chang, F., +, TSG Sept. 2021 3793-3808*

Robust Secondary Frequency Control for Virtual Synchronous Machine-Based Microgrid Cluster Using Equivalent Modeling. *Hu, W., +, TSG July 2021 2879-2889*

Voltage-Based Distributed Optimal Control for Generation Cost Minimization and Bounded Bus Voltage Regulation in DC Microgrids. *Peng, J., +, TSG Jan. 2021 106-116*

Wide-Area Damping Control Resilience Towards Cyber-Attacks: A Dynamic Loop Approach. *Patel, A., +, TSG July 2021 3438-3447*

M

Machine control

- An Adaptive Virtual Impedance Control for Improving Power Sharing Among Inverters in Islanded AC Microgrids. *Vijay, A.S.*, +, *TSG July 2021 2991-3003*
- MPC-Controlled Virtual Synchronous Generator to Enhance Frequency and Voltage Dynamic Performance in Islanded Microgrids. *Long, B.*, +, *TSG March 2021 953-964*
- Resilience Against Data Manipulation in Distributed Synchrophasor-Based Mode Estimation. *Rajabi, A.*, +, *TSG July 2021 3538-3547*
- Robust Secondary Frequency Control for Virtual Synchronous Machine-Based Microgrid Cluster Using Equivalent Modeling. *Hu, W.*, +, *TSG July 2021 2879-2889*

Maintenance engineering

- Predicting Weather-Related Failure Risk in Distribution Systems Using Bayesian Neural Network. *Du, Y.*, +, *TSG Jan. 2021 350-360*
- Price-Based Dynamic Optimal Power Flow With Emergency Repair. *Schmitz, M.*, +, *TSG Jan. 2021 324-337*
- Self-Assessment of Health Conditions of Electrical Assets and Grid Components: A Contribution to Smart Grids. *Montanari, G.C.*, +, *TSG March 2021 1206-1214*

Marketing

- Selling Demand Response Using Options. *Muthirayan, D.*, +, *TSG Jan. 2021 279-288*

Markov processes

- A Novel Framework for the Operational Reliability Evaluation of Integrated Electric Power–Gas Networks. *Ansari, O.A.*, +, *TSG Sept. 2021 3901-3913*
- A Reinforcement Learning-Based Decision System for Electricity Pricing Plan Selection by Smart Grid End Users. *Lu, T.*, +, *TSG May 2021 2176-2187*
- Automated Control of Transactive HVACs in Energy Distribution Systems. *Liu, B.*, +, *TSG May 2021 2462-2471*
- Consensus Multi-Agent Reinforcement Learning for Volt-VAR Control in Power Distribution Networks. *Gao, Y.*, +, *TSG July 2021 3594-3604*
- Deep Reinforcement Learning for Continuous Electric Vehicles Charging Control With Dynamic User Behaviors. *Yan, L.*, +, *TSG Nov. 2021 5124-5134*
- Enriching Load Data Using Micro-PMUs and Smart Meters. *Bu, F.*, +, *TSG Nov. 2021 5084-5094*
- Mobility-Aware Charging Scheduling for Shared On-Demand Electric Vehicle Fleet Using Deep Reinforcement Learning. *Liang, Y.*, +, *TSG March 2021 1380-1393*
- Multi-Agent Deep Reinforcement Learning for HVAC Control in Commercial Buildings. *Yu, L.*, +, *TSG Jan. 2021 407-419*
- Online Multi-Agent Reinforcement Learning for Decentralized Inverter-Based Volt-VAR Control. *Liu, H.*, +, *TSG July 2021 2980-2990*
- Privacy Preserving Load Control of Residential Microgrid via Deep Reinforcement Learning. *Qin, Z.*, +, *TSG Sept. 2021 4079-4089*
- Robust Regional Coordination of Inverter-Based Volt/Var Control via Multi-Agent Deep Reinforcement Learning. *Liu, H.*, +, *TSG Nov. 2021 5420-5433*

Mathematical analysis

- Voltage-Dependent Load Models in Unbalanced Optimal Power Flow Using Power Cones. *Claeys, S.*, +, *TSG July 2021 2890-2902*

Mathematical morphology

- Source Authentication of Distribution Synchrophasors for Cybersecurity of Microgrids. *Cui, Y.*, +, *TSG Sept. 2021 4577-4580*
- Waveform Difference Feature-Based Protection Scheme for Islanded Microgrids. *He, L.*, +, *TSG May 2021 1939-1952*

Mathematical programming

- Accurate Modeling of a Profit-Driven Power to Hydrogen and Methane Plant Toward Strategic Bidding Within Multi-Type Markets. *Pan, G.*, +, *TSG Jan. 2021 338-349*
- Privacy-Preserving Distributed Optimal Power Flow With Partially Homomorphic Encryption. *Wu, T.*, +, *TSG Sept. 2021 4506-4521*

Matlab

- Synchronization of Low Voltage Grids Fed by Smart and Conventional Transformers. *Giacomuzzi, S.*, +, *TSG July 2021 2941-2951*

Matrix algebra

- A Linear Branch Flow Model for Radial Distribution Networks and Its Application to Reactive Power Optimization and Network Reconfiguration. *Yang, T.*, +, *TSG May 2021 2027-2036*
- A Regularized Tensor Completion Approach for PMU Data Recovery. *Ghasemkhani, A.*, +, *TSG March 2021 1519-1528*
- A Scheduled Intentional Islanding Method Based on Ranking of Possible Islanding Zone. *Mishra, A.*, +, *TSG May 2021 1853-1866*
- A SOCP Relaxation for Cycle Constraints in the Optimal Power Flow Problem. *Soofi, A.F.*, +, *TSG March 2021 1663-1673*
- Data-Driven False Data Injection Attacks Against Power Grids: A Random Matrix Approach. *Lakshminarayana, S.*, +, *TSG Jan. 2021 635-646*
- Data-Driven Islanding Detection Using a Principal Subspace of Voltage Angle Differences. *Rabuzin, T.*, +, *TSG Sept. 2021 4250-4258*
- Decentralized Low-Rank State Estimation for Power Distribution Systems. *Sagan, A.*, +, *TSG July 2021 3097-3106*
- FeederGAN: Synthetic Feeder Generation via Deep Graph Adversarial Nets. *Liang, M.*, +, *TSG March 2021 1163-1173*
- Missing Data Recovery in Large Power Systems Using Network Embedding. *Wu, T.*, +, *TSG Jan. 2021 680-691*
- Mitigating Smart Meter Asynchrony Error Via Multi-Objective Low Rank Matrix Recovery. *Yuan, Y.*, +, *TSG Sept. 2021 4308-4317*
- Time Series Classification for Locating Forced Oscillation Sources. *Meng, Y.*, +, *TSG March 2021 1712-1721*
- Unsupervised Congestion Status Identification Using LMP Data. *Zheng, K.*, +, *TSG Jan. 2021 726-736*

Maximum likelihood estimation

- Data-Driven Islanding Detection Using a Principal Subspace of Voltage Angle Differences. *Rabuzin, T.*, +, *TSG Sept. 2021 4250-4258*
- Generator Parameter Calibration by Adaptive Approximate Bayesian Computation With Sequential Monte Carlo Sampler. *Khazeiynasab, S.R.*, +, *TSG Sept. 2021 4327-4338*

Maximum power point trackers

- Second Harmonic Injection-Based Recovery Control of PV DC Boosting Integration System. *Jia, K.*, +, *TSG March 2021 1022-1032*
- Two-Level Islanding Detection Method for Grid-Connected Photovoltaic System-Based Microgrid With Small Non-Detection Zone. *Bakhshi-Jafarabadi, R.*, +, *TSG March 2021 1063-1072*

Mean square error methods

- Robust Hierarchical Control Mechanism for Aggregated Thermostatically Controlled Loads. *Gong, X.*, +, *TSG Jan. 2021 453-467*

Measurement errors

- Online Smart Meter Measurement Error Estimation Based on EKF and LMRLS Method. *Kong, X.*, +, *TSG Sept. 2021 4269-4279*
- Waveform Difference Feature-Based Protection Scheme for Islanded Microgrids. *He, L.*, +, *TSG May 2021 1939-1952*

Mesh generation

- Algorithm for Simultaneous Medium Voltage Grid Planning and Electric Vehicle Scheduling. *Roterling, N.*, +, *TSG July 2021 3305-3313*

Message authentication

- A Privacy-Aware Reconfigurable Authenticated Key Exchange Scheme for Secure Communication in Smart Grids. *Gope, P.*, +, *TSG Nov. 2021 5335-5348*
- Signcryption Based Authenticated and Key Exchange Protocol for EI-Based V2G Environment. *Ahmed, S.*, +, *TSG Nov. 2021 5290-5298*

Metaheuristics

- An MILP Model for Optimal Placement of Sectionalizing Switches and Tie Lines in Distribution Networks With Complex Topologies. *Jooshaki, M.*, +, *TSG Nov. 2021 4740-4751*

Metering

- A Queueing Network Analysis of a Hierarchical Communication Architecture for Advanced Metering Infrastructure. *Choi, J.S.*, +, *TSG Sept. 2021 4318-4326*

Countering FDI Attacks on DERs Coordinated Control System Using FMI-Compatible Cosimulation. *Jafarigiv, D.*, +, *TSG March 2021 1640-1650*

Resident Behavior Detection Model for Environment Responsive Demand Response. *Baek, K.*, +, *TSG Sept. 2021 3980-3989*

Stealthy Black-Box Attacks on Deep Learning Non-Intrusive Load Monitoring Models. *Wang, J.*, +, *TSG July 2021 3479-3492*

Microgrids

A Converter-Based Power System Stabilizer for Stability Enhancement of Droop-Controlled Islanded Microgrids. *Guo, K.*, +, *TSG Nov. 2021 4616-4626*

A Scalable Control Design for Grid-Forming Inverters in Microgrids. *Watson, J.D.*, +, *TSG Nov. 2021 4726-4739*

Branching Dueling Q-Network-Based Online Scheduling of a Microgrid With Distributed Energy Storage Systems. *Shuai, H.*, +, *TSG Nov. 2021 5479-5482*

Continuous Group-Wise Double Auction for Prosumers in Distribution-Level Markets. *Yu, A.*, +, *TSG Nov. 2021 4822-4833*

Prioritized Replay Dueling DDQN Based Grid-Edge Control of Community Energy Storage System. *Song, H.*, +, *TSG Nov. 2021 4950-4961*

Transient Voltage Stability of Paralleled Synchronous and Virtual Synchronous Generators With Induction Motor Loads. *Cheng, H.*, +, *TSG Nov. 2021 4983-4999*

Minimax techniques

A Historical-Correlation-Driven Robust Optimization Approach for Microgrid Dispatch. *Qiu, H.*, +, *TSG March 2021 1135-1148*

Mechanism Design for Fair and Efficient DSO Flexibility Markets. *Tsaou-soglou, G.*, +, *TSG May 2021 2249-2260*

Minimization

A Regularized Tensor Completion Approach for PMU Data Recovery. *Ghasemkhani, A.*, +, *TSG March 2021 1519-1528*

Fast Probabilistic Hosting Capacity Analysis for Active Distribution Systems. *Taheri, S.*, +, *TSG May 2021 2000-2012*

Risk-Constrained Minimization of Combined Event Detection and Decision Time for Online Transient Stability Assessment. *Gonzalez, J.*, +, *TSG Sept. 2021 4564-4572*

Mixture models

Privacy-Preserving Distributed Clustering for Electrical Load Profiling. *Jia, M.*, +, *TSG March 2021 1429-1444*

Mobile computing

Distribution System Resilience in Ice Storms by Optimal Routing of Mobile Devices on Congested Roads. *Yan, M.*, +, *TSG March 2021 1314-1328*

Modal analysis

Synchronous Waveform Measurements to Locate Transient Events and Incipient Faults in Power Distribution Networks. *Izadi, M.*, +, *TSG Sept. 2021 4295-4307*

Monte Carlo methods

Agent-Based Modeling of Feeder-Level Electric Vehicle Diffusion for Distribution Planning. *Sun, L.*, +, *TSG Jan. 2021 751-760*

An MILP-Based Planning Model of a Photovoltaic/Diesel/Battery Stand-Alone Microgrid Considering the Reliability. *Wu, X.*, +, *TSG Sept. 2021 3809-3818*

Generator Parameter Calibration by Adaptive Approximate Bayesian Computation With Sequential Monte Carlo Sampler. *Khazeynasab, S.R.*, +, *TSG Sept. 2021 4327-4338*

Incentive Design for Flexibility Provisions From Residential Energy Hubs in Smart Grid. *Alharbi, W.*, +, *TSG May 2021 2113-2124*

Online Scheduling of a Residential Microgrid via Monte-Carlo Tree Search and a Learned Model. *Shuai, H.*, +, *TSG March 2021 1073-1087*

Reliability Analyses of Wide-Area Protection System Considering Cyber-Physical System Constraints. *He, R.*, +, *TSG July 2021 3458-3467*

Spoofing Resilient State Estimation for the Power Grid Using an Extended Kalman Filter. *Chauhan, S.V.S.*, +, *TSG July 2021 3404-3414*

Synchrophasor Data Under GPS Spoofing: Attack Detection and Mitigation Using Residuals. *Chauhan, S.V.S.*, +, *TSG July 2021 3415-3424*

Multi-agent systems

A Community Sharing Market With PV and Energy Storage: An Adaptive Bidding-Based Double-Side Auction Mechanism. *He, L.*, +, *TSG May 2021 2450-2461*

A Scalable Privacy-Preserving Multi-Agent Deep Reinforcement Learning Approach for Large-Scale Peer-to-Peer Transactive Energy Trading. *Ye, Y.*, +, *TSG Nov. 2021 5185-5200*

A Self-Organizing Multi-Agent System for Distributed Voltage Regulation. *Faiya, B.A.*, +, *TSG Sept. 2021 4102-4112*

Adaptive Congestion Control for Electric Vehicle Charging in the Smart Grid. *Zishan, A.A.*, +, *TSG May 2021 2439-2449*

An Incentive-Based Mechanism to Alleviate Active Power Congestion in a Multi-Agent Distribution System. *Fattaheian-Dehkordi, S.*, +, *TSG May 2021 1978-1988*

Chance-Constrained Peer-to-Peer Joint Energy and Reserve Market Considering Renewable Generation Uncertainty. *Guo, Z.*, +, *TSG Jan. 2021 798-809*

Consensus Multi-Agent Reinforcement Learning for Volt-VAR Control in Power Distribution Networks. *Gao, Y.*, +, *TSG July 2021 3594-3604*

Data-Driven Multi-Agent Deep Reinforcement Learning for Distribution System Decentralized Voltage Control With High Penetration of PVs. *Cao, D.*, +, *TSG Sept. 2021 4137-4150*

Distributed Predictive Control Strategy for Frequency Restoration of Microgrids Considering Optimal Dispatch. *F. A.N.*, +, *TSG July 2021 2748-2759*

Distributed Robust Frequency Restoration and Active Power Sharing for Autonomous Microgrids With Event-Triggered Strategy. *Zhao, D.*, +, *TSG Sept. 2021 3819-3834*

Multi-Agent Safe Policy Learning for Power Management of Networked Microgrids. *Zhang, Q.*, +, *TSG March 2021 1048-1062*

Online Multi-Agent Reinforcement Learning for Decentralized Inverter-Based Volt-VAR Control. *Liu, H.*, +, *TSG July 2021 2980-2990*

Online Optimization for Real-Time Peer-to-Peer Electricity Market Mechanisms. *Guo, Z.*, +, *TSG Sept. 2021 4151-4163*

Robust Hybrid Control for Demand Side Management in Islanded Microgrids. *Albea, C.*, +, *TSG Nov. 2021 4865-4875*

Multi-robot systems

Distributed Multi-Area State Estimation for Power Systems With Switching Communication Graphs. *Wang, J.*, +, *TSG Jan. 2021 787-797*

Distributed Robust Frequency Restoration and Active Power Sharing for Autonomous Microgrids With Event-Triggered Strategy. *Zhao, D.*, +, *TSG Sept. 2021 3819-3834*

Multilayers

A Blockchain-Enabled Multi-Settlement Quasi-Ideal Peer-to-Peer Trading Framework. *AlAshery, M.K.*, +, *TSG Jan. 2021 885-896*

Multiprocessing systems

A Compensated Distributed-Parameter Line Decoupling Approach for Real Time Applications. *Ahmed, B.*, +, *TSG March 2021 1761-1771*

RTCE: Real-Time Co-Emulation Framework for EMT-Based Power System and Communication Network on FPGA-MPSoC Hardware Architecture. *Duan, T.*, +, *TSG May 2021 2544-2553*

N

Natural gas technology

A Novel Framework for the Operational Reliability Evaluation of Integrated Electric Power-Gas Networks. *Ansari, O.A.*, +, *TSG Sept. 2021 3901-3913*

Accurate Modeling of a Profit-Driven Power to Hydrogen and Methane Plant Toward Strategic Bidding Within Multi-Type Markets. *Pan, G.*, +, *TSG Jan. 2021 338-349*

Energy Flow Optimization of Integrated Gas and Power Systems in Continuous Time and Space. *Zheng, C.*, +, *TSG May 2021 2611-2624*

Resilience-Motivated Distribution System Restoration Considering Electricity-Water-Gas Interdependency. *Li, J.*, +, *TSG Nov. 2021 4799-4812*

Two-Stage Planning of Network-Constrained Hybrid Energy Supply Stations for Electric and Natural Gas Vehicles. *Gan, W.*, +, *TSG May 2021 2013-2026*

Negotiation support systems

A New Method for Peer Matching and Negotiation of Prosumers in Peer-to-Peer Energy Markets. *Khorasany, M.*, +, *TSG May 2021 2472-2483*

Network topology

Leveraging Network Topology Optimization to Strengthen Power Grid Resilience Against Cyber-Physical Attacks. *Liu, Z.*, +, *TSG March 2021 1552-1564*

Neural network architecture

Power System Disturbance Classification With Online Event-Driven Neuro-morphic Computing. *Mahapatra, K.*, +, *TSG May 2021 2343-2354*

Neural networks

A Microgrid Energy Management System Based on Non-Intrusive Load Monitoring via Multitask Learning. *Cimen, H.*, +, *TSG March 2021 977-987*

A Two-Stage Protection Method for Detection and Mitigation of Coordinated EVSE Switching Attacks. *Kabir, M.E.*, +, *TSG Sept. 2021 4377-4388*

An Adaptive Distributionally Robust Model for Three-Phase Distribution Network Reconfiguration. *Zheng, W.*, +, *TSG March 2021 1224-1237*

Artificial Neural Network-Based Stealth Attack on Battery Energy Storage Systems. *Pasetti, M.*, +, *TSG Nov. 2021 5310-5321*

Countering FDI Attacks on DERs Coordinated Control System Using FMI-Compatible Cosimulation. *Jafarigiv, D.*, +, *TSG March 2021 1640-1650*

Deep Learning Method With Manual Post-Processing for Identification of Spectral Patterns of Waveform Distortion in PV Installations. *de Oliveira, R.A.*, +, *TSG Nov. 2021 5444-5456*

Detecting False Data Injection Attacks in Smart Grids: A Semi-Supervised Deep Learning Approach. *Zhang, Y.*, +, *TSG Jan. 2021 623-634*

Electricity Consumer Characteristics Identification: A Federated Learning Approach. *Wang, Y.*, +, *TSG July 2021 3637-3647*

Missing Data Recovery in Large Power Systems Using Network Embedding. *Wu, T.*, +, *TSG Jan. 2021 680-691*

Mobility-Aware Charging Scheduling for Shared On-Demand Electric Vehicle Fleet Using Deep Reinforcement Learning. *Liang, Y.*, +, *TSG March 2021 1380-1393*

Nonlinear Multiple Models Adaptive Secondary Voltage Control of Microgrids. *Ma, Z.*, +, *TSG Jan. 2021 227-238*

Online Rolling Evolutionary Decoder-Dispatch Framework for the Secondary Frequency Regulation of Time-Varying Electrical-Grid-Electric-Vehicle System. *Dong, C.*, +, *TSG Jan. 2021 871-884*

Optimal Policy Characterization Enhanced Actor-Critic Approach for Electric Vehicle Charging Scheduling in a Power Distribution Network. *Jin, J.*, +, *TSG March 2021 1416-1428*

Predicting Weather-Related Failure Risk in Distribution Systems Using Bayesian Neural Network. *Du, Y.*, +, *TSG Jan. 2021 350-360*

Risk-Constrained Minimization of Combined Event Detection and Decision Time for Online Transient Stability Assessment. *Gonzalez, J.*, +, *TSG Sept. 2021 4564-4572*

Robust Regional Coordination of Inverter-Based Volt/Var Control via Multi-Agent Deep Reinforcement Learning. *Liu, H.*, +, *TSG Nov. 2021 5420-5433*

Scenario Reduction for Stochastic Day-Ahead Scheduling: A Mixed Auto-encoder Based Time-Series Clustering Approach. *Liang, J.*, +, *TSG May 2021 2652-2662*

Spatial-Temporal Residential Short-Term Load Forecasting via Graph Neural Networks. *Lin, W.*, +, *TSG Nov. 2021 5373-5384*

Time-Frequency Mask Estimation Based on Deep Neural Network for Flexible Load Disaggregation in Buildings. *Song, J.*, +, *TSG July 2021 3242-3251*

TraceGAN: Synthesizing Appliance Power Signatures Using Generative Adversarial Networks. *Harell, A.*, +, *TSG Sept. 2021 4553-4563*

Unsupervised Event Detection, Clustering, and Use Case Exposition in Micro-PMU Measurements. *Aligholian, A.*, +, *TSG July 2021 3624-3636*

Verification of Neural Network Behaviour: Formal Guarantees for Power System Applications. *Venzke, A.*, +, *TSG Jan. 2021 383-397*

Neurocontrollers

Decentralized Optimal Stabilization of Active Loads in Islanded Microgrids. *Dissanayake, A.M.*, +, *TSG March 2021 932-942*

Nonlinear Multiple Models Adaptive Secondary Voltage Control of Microgrids. *Ma, Z.*, +, *TSG Jan. 2021 227-238*

Optimal HVAC System Operation Using Online Learning of Interconnected Neural Networks. *Jang, Y.*, +, *TSG July 2021 3030-3042*

Scalable Designs for Reinforcement Learning-Based Wide-Area Damping Control. *Mukherjee, S.*, +, *TSG May 2021 2389-2401*

Verification of Neural Network Behaviour: Formal Guarantees for Power System Applications. *Venzke, A.*, +, *TSG Jan. 2021 383-397*

Voltage Stabilization Control for Microgrid With Asymmetric Membership Function-Based Wavelet Petri Fuzzy Neural Network. *Lin, F.*, +, *TSG Sept. 2021 3731-3741*

Neuromorphic engineering

Power System Disturbance Classification With Online Event-Driven Neuro-morphic Computing. *Mahapatra, K.*, +, *TSG May 2021 2343-2354*

Newton method

An Inversion-Free Robust Power-Flow Algorithm for Microgrids. *Kumar, A.*, +, *TSG July 2021 2844-2859*

Game Theoretic-Based Distributed Charging Strategy for PEVs in a Smart Charging Station. *Wan, Y.*, +, *TSG Jan. 2021 538-547*

Newton-Raphson method

Current Injection Power Flow Analysis and Optimal Generation Dispatch for Bipolar DC Microgrids. *Lee, J.*, +, *TSG May 2021 1918-1928*

Noise

Fault Detection for Covered Conductors With High-Frequency Voltage Signals: From Local Patterns to Global Features. *Chen, K.*, +, *TSG March 2021 1602-1614*

Nonlinear control systems

Decentralized Optimal Stabilization of Active Loads in Islanded Microgrids. *Dissanayake, A.M.*, +, *TSG March 2021 932-942*

Distributed Observer-Based Finite-Time Control of AC Microgrid Under Attack. *Lu, R.*, +, *TSG Jan. 2021 157-168*

Distributed Robust Frequency Restoration and Active Power Sharing for Autonomous Microgrids With Event-Triggered Strategy. *Zhao, D.*, +, *TSG Sept. 2021 3819-3834*

Nonlinear Multiple Models Adaptive Secondary Voltage Control of Microgrids. *Ma, Z.*, +, *TSG Jan. 2021 227-238*

Supplementary Controller for Seamless Transitions Between Microgrids Operation Modes. *Azimi, S.M.*, +, *TSG May 2021 2102-2112*

Nonlinear differential equations

On the Impact of Fault Ride-Through on Transient Stability of Autonomous Microgrids: Nonlinear Analysis and Solution. *Eskandari, M.*, +, *TSG March 2021 999-1010*

Nonlinear dynamical systems

A Model-Free Voltage Control Approach to Mitigate Motor Stalling and FIDVR for Smart Grids. *Park, B.*, +, *TSG Jan. 2021 67-78*

Nonlinear filters

Dynamic State Estimation of Smart Distribution Grids Using Compressed Measurements. *Mohammadrezaee, R.*, +, *TSG Sept. 2021 4535-4542*

Online Smart Meter Measurement Error Estimation Based on EKF and LMRLS Method. *Kong, X.*, +, *TSG Sept. 2021 4269-4279*

Spoofing Resilient State Estimation for the Power Grid Using an Extended Kalman Filter. *Chauhan, S.V.S.*, +, *TSG July 2021 3404-3414*

Nonlinear functions

Step Towards Energy-Water Smart Microgrids; Buildings Thermal Energy and Water Demand Management Embedded in Economic Dispatch. *Moa-zeni, F.*, +, *TSG Sept. 2021 3680-3691*

Nonlinear programming

A Harmonic Time-Current-Voltage Directional Relay for Optimal Protection Coordination of Inverter-Based Islanded Microgrids. *El-Sayed, W.T.*, +, *TSG May 2021 1904-1917*

Demand Response for Industrial Micro-Grid Considering Photovoltaic Power Uncertainty and Battery Operational Cost. *Huang, C.*, +, *TSG July 2021 3043-3055*

Fast Probabilistic Hosting Capacity Analysis for Active Distribution Systems. *Taheri, S.*, +, *TSG May 2021 2000-2012*

Frequency-Constrained Resilient Scheduling of Microgrid: A Distributionally Robust Approach. *Chu, Z.*, +, *TSG Nov. 2021 4914-4925*

Joint Topology Identification and State Estimation in Unobservable Distribution Grids. *Karimi, H.S.*, +, *TSG Nov. 2021 5299-5309*

Optimal Reserve Management of Electric Vehicle Aggregator: Discrete Bilevel Optimization Model and Exact Algorithm. *Liu, W.*, +, *TSG Sept. 2021 4003-4015*

Price-Maker Bidding and Offering Strategies for Networked Microgrids in Day-Ahead Electricity Markets. *Hu, B.*, +, *TSG Nov. 2021 5201-5211*

Stealthy Cyberattacks on Loads and Distributed Generation Aimed at Multi-Transmission Line Congestions in Smart Grids. *Khazaei, J.*, *TSG May 2021 2518-2528*

Two-Stage Volt/Var Control in Active Distribution Networks With Multi-Agent Deep Reinforcement Learning Method. *Sun, X.*, +, *TSG July 2021 2903-2912*

Nonlinear systems

Adaptive Master-Slave Control Strategy for Medium Voltage DC Distribution Systems Based on a Novel Nonlinear Droop Controller. *Xie, X.*, +, *TSG Nov. 2021 4765-4777*

Numerical analysis

An Adaptive Ensemble Data Driven Approach for Nonparametric Probabilistic Forecasting of Electricity Load. *Wan, C.*, +, *TSG Nov. 2021 5396-5408*

Consensus Multi-Agent Reinforcement Learning for Volt-VAR Control in Power Distribution Networks. *Gao, Y.*, +, *TSG July 2021 3594-3604*

Decentralized Failure-Tolerant Optimization of Electric Vehicle Charging. *Aravena, I.*, +, *TSG Sept. 2021 4068-4078*

Distributed Optimal Conservation Voltage Reduction in Integrated Primary-Secondary Distribution Systems. *Zhang, Q.*, +, *TSG Sept. 2021 3889-3900*

Distributed State of Charge-Based Droop Control Algorithm for Reducing Power Losses in Multi-Port Converter-Enabled Solar DC Nano-Grids. *Samende, C.*, +, *TSG Nov. 2021 4584-4594*

Distribution Network-Constrained Optimization of Peer-to-Peer Transactive Energy Trading Among Multi-Microgrids. *Yan, M.*, +, *TSG March 2021 1033-1047*

Exactness of OPF Relaxation on Three-Phase Radial Networks With Delta Connections. *Zhou, F.*, +, *TSG July 2021 3232-3241*

Mitigating Smart Meter Asynchrony Error Via Multi-Objective Low Rank Matrix Recovery. *Yuan, Y.*, +, *TSG Sept. 2021 4308-4317*

New Analytical Model of Microgrid Frequency and Voltage Variations Due to Network Reconfiguration. *Park, J.*, +, *TSG Jan. 2021 905-908*

Resilience-Motivated Distribution System Restoration Considering Electricity-Water-Gas Interdependency. *Li, J.*, +, *TSG Nov. 2021 4799-4812*

Risk-Averse Optimal Energy and Reserve Scheduling for Virtual Power Plants Incorporating Demand Response Programs. *Vahedipour-Dahraie, M.*, +, *TSG March 2021 1405-1415*

Robust Regional Coordination of Inverter-Based Volt/Var Control via Multi-Agent Deep Reinforcement Learning. *Liu, H.*, +, *TSG Nov. 2021 5420-5433*

Spatial-Temporal Data Analysis-Based Event Detection in Weakly Damped Power Systems. *Zhu, L.*, +, *TSG Nov. 2021 5472-5474*

Two-Stage Deep Reinforcement Learning for Inverter-Based Volt-VAR Control in Active Distribution Networks. *Liu, H.*, +, *TSG May 2021 2037-2047*

O

Object oriented modeling

ACN-Sim: An Open-Source Simulator for Data-Driven Electric Vehicle Charging Research. *Lee, Z.J.*, +, *TSG Nov. 2021 5113-5123*

Observability

Enhancing the Spatio-Temporal Observability of Grid-Edge Resources in Distribution Grids. *Lin, S.*, +, *TSG Nov. 2021 5434-5443*

On the Use of Common Information Model for Smart Grid Applications — A Conceptual Approach. *Shahid, K.*, +, *TSG Nov. 2021 5060-5072*

Observers

Distributed Observer-Based Finite-Time Control of AC Microgrid Under Attack. *Lu, R.*, +, *TSG Jan. 2021 157-168*

Disturbance Observer and Tube-Based Model Predictive Controlled Electric Vehicles for Frequency Regulation of an Isolated Power Grid. *Oshnoei, A.*, +, *TSG Sept. 2021 4351-4362*

Observer-Based Resilient Integrated Distributed Control Against Cyberattacks on Sensors and Actuators in Islanded AC Microgrids. *Shi, M.*, +, *TSG May 2021 1953-1963*

Offshore installations

Joint Optimization of Wind Turbine Micrositing and Cabling in an Offshore Wind Farm. *Tao, S.*, +, *TSG Jan. 2021 834-844*

Oligopoly

Plug-in Electric Vehicle Charging With Multiple Charging Options: A Systematic Analysis of Service Providers' Pricing Strategies. *Zhang, Y.*, +, *TSG Jan. 2021 524-537*

On load tap changers

Consensus Multi-Agent Reinforcement Learning for Volt-VAR Control in Power Distribution Networks. *Gao, Y.*, +, *TSG July 2021 3594-3604*

Deep Reinforcement Learning Based Volt-VAR Optimization in Smart Distribution Systems. *Zhang, Y.*, +, *TSG Jan. 2021 361-371*

Distributed Coordinated Reactive Power Control for Voltage Regulation in Distribution Networks. *Tang, Z.*, +, *TSG Jan. 2021 312-323*

Hierarchical Voltage Control Strategy in Distribution Networks Considering Customized Charging Navigation of Electric Vehicles. *Sun, X.*, +, *TSG Nov. 2021 4752-4764*

Optimal Restoration of Active Distribution Systems With Voltage Control and Closed-Loop Operation. *Vargas, R.*, +, *TSG May 2021 2295-2306*

Two-Stage Volt/Var Control in Active Distribution Networks With Multi-Agent Deep Reinforcement Learning Method. *Sun, X.*, +, *TSG July 2021 2903-2912*

Open source software

ACN-Sim: An Open-Source Simulator for Data-Driven Electric Vehicle Charging Research. *Lee, Z.J.*, +, *TSG Nov. 2021 5113-5123*

Open systems

Networked Microgrids for Grid Resilience, Robustness, and Efficiency: A Review. *Chen, B.*, +, *TSG Jan. 2021 18-32*

Optimal control

A Demand Response-Based Solution to Overloading in Underdeveloped Distribution Networks. *Jibrán, M.*, +, *TSG Sept. 2021 4059-4067*

A Mean-Field Voltage Control Approach for Active Distribution Networks With Uncertainties. *Wei, B.*, +, *TSG March 2021 1455-1466*

An Edge-Cloud Integrated Solution for Buildings Demand Response Using Reinforcement Learning. *Zhang, X.*, +, *TSG Jan. 2021 420-431*

Automated Control of Transactive HVACs in Energy Distribution Systems. *Liu, B.*, +, *TSG May 2021 2462-2471*

Decentralized Optimal Stabilization of Active Loads in Islanded Microgrids. *Dissanayake, A.M.*, +, *TSG March 2021 932-942*

Distributed Control of DC Microgrids for Optimal Coordination of Conventional and Renewable Generators. *Fan, Z.*, +, *TSG Nov. 2021 4607-4615*

Distributed Resilient Optimal Current Sharing Control for an Islanded DC Microgrid Under DoS Attacks. *Lian, Z.*, +, *TSG Sept. 2021 4494-4505*

Linear Quadratic Regulator Based Smooth Transition Between Microgrid Operation Modes. *Ganjian-Aboukheili, M.*, +, *TSG Nov. 2021 4854-4864*

Multi-Agent Safe Policy Learning for Power Management of Networked Microgrids. *Zhang, Q.*, +, *TSG March 2021 1048-1062*

Multi-Stage Quadratic Flexible Optimal Power Flow With a Rolling Horizon. *Zhong, C.*, +, *TSG July 2021 3128-3137*

Optimal Restoration of Active Distribution Systems With Voltage Control and Closed-Loop Operation. *Vargas, R.*, +, *TSG May 2021 2295-2306*

Provision of Primary Frequency Response as Ancillary Service From Active Distribution Networks to the Transmission System. *Kontis, E.O.*, +, *TSG Nov. 2021 4971-4982*

Resilient Wide-Area Damping Control for Inter-Area Oscillations to Tolerate Deception Attacks. *Yao, W.*, +, *TSG Sept. 2021 4238-4249*

Voltage-Based Distributed Optimal Control for Generation Cost Minimization and Bounded Bus Voltage Regulation in DC Microgrids. *Peng, J.*, +, *TSG Jan. 2021 106-116*

Optimization

A Cluster-Based Model for Charging a Single-Depot Fleet of Electric Vehicles. *Sepehri, K.*, +, *TSG July 2021 3339-3352*

- A Comprehensive Resilience-Oriented FLISR Method for Distribution Systems. *Liu, J.*, +, *TSG May 2021 2136-2152*
- A Data-Driven Storage Control Framework for Dynamic Pricing. *Wu, J.*, +, *TSG Jan. 2021 737-750*
- A Demand Response-Based Solution to Overloading in Underdeveloped Distribution Networks. *Jibran, M.*, +, *TSG Sept. 2021 4059-4067*
- A Grid-Friendly Sustainable Neighborhood Energy Trading Mechanism for MV-LV Network. *Liu, A.*, +, *TSG May 2021 2239-2248*
- A Hierarchical Data-Driven Wind Farm Power Optimization Approach Using Stochastic Projected Simplex Method. *Xu, Z.*, +, *TSG July 2021 3560-3569*
- A Homomorphic Encryption-Based Private Collaborative Distributed Energy Management System. *Cheng, Z.*, +, *TSG Nov. 2021 5233-5243*
- A Nested Transactive Energy Market Model to Trade Demand-Side Flexibility of Residential Consumers. *Nizami, M.S.H.*, +, *TSG Jan. 2021 479-490*
- A Novel Energy Sharing Mechanism for Smart Microgrid. *Li, S.*, +, *TSG Nov. 2021 5475-5478*
- A Novel Framework for Optimizing Ramping Capability of Hybrid Energy Storage Systems. *Luo, Y.*, +, *TSG March 2021 1651-1662*
- A Robust State Estimation Method Based on SOCP for Integrated Electricity-Heat System. *Chen, Y.*, +, *TSG Jan. 2021 810-820*
- A Scalable Privacy-Preserving Multi-Agent Deep Reinforcement Learning Approach for Large-Scale Peer-to-Peer Transactive Energy Trading. *Ye, Y.*, +, *TSG Nov. 2021 5185-5200*
- A Self-Organizing Multi-Agent System for Distributed Voltage Regulation. *Faiya, B.A.*, +, *TSG Sept. 2021 4102-4112*
- Accurate Modeling of a Profit-Driven Power to Hydrogen and Methane Plant Toward Strategic Bidding Within Multi-Type Markets. *Pan, G.*, +, *TSG Jan. 2021 338-349*
- Active Distribution Grids Providing Voltage Support: The Swiss Case. *Karagiannopoulos, S.*, +, *TSG Jan. 2021 268-278*
- Adaptive Charging Networks: A Framework for Smart Electric Vehicle Charging. *Lee, Z.J.*, +, *TSG Sept. 2021 4339-4350*
- Aggregate Operation Model for Numerous Small-Capacity Distributed Energy Resources Considering Uncertainty. *Yi, Z.*, +, *TSG Sept. 2021 4208-4224*
- Aggregation of Demand-Side Flexibility in Electricity Markets: Negative Impact Analysis and Mitigation Method. *Wang, S.*, +, *TSG Jan. 2021 774-786*
- An Adaptive Approach for Dynamic Load Modeling in Microgrids. *Chavarrro-Barrera, L.*, +, *TSG July 2021 2834-2843*
- An Edge-Cloud Integrated Solution for Buildings Demand Response Using Reinforcement Learning. *Zhang, X.*, +, *TSG Jan. 2021 420-431*
- An Operation Model for Distribution Companies Using the Flexibility of Electric Vehicle Aggregators. *Lu, X.*, +, *TSG March 2021 1507-1518*
- An Optimization-Based Approach to Recover the Detected Attacked Grid Variables After False Data Injection Attack. *Jorjani, M.*, +, *TSG Nov. 2021 5322-5334*
- Automated Control of Transactive HVACs in Energy Distribution Systems. *Liu, B.*, +, *TSG May 2021 2462-2471*
- Bargaining Game-Based Profit Allocation of Virtual Power Plant in Frequency Regulation Market Considering Battery Cycle Life. *Chen, W.*, +, *TSG July 2021 2913-2928*
- Bayesian Learning-Based Multi-Objective Distribution Power Network Reconfiguration. *Zhong, T.*, +, *TSG March 2021 1174-1184*
- Bi-Level Robust Optimization for Distribution System With Multiple Microgrids Considering Uncertainty Distribution Locational Marginal Price. *Wang, L.*, +, *TSG March 2021 1104-1117*
- Blockchain for Transacting Energy and Carbon Allowance in Networked Microgrids. *Yan, M.*, +, *TSG Nov. 2021 4702-4714*
- Branching Dueling Q-Network-Based Online Scheduling of a Microgrid With Distributed Energy Storage Systems. *Shuai, H.*, +, *TSG Nov. 2021 5479-5482*
- Chance-Constrained Optimal Power Flow of Integrated Transmission and Distribution Networks With Limited Information Interaction. *Tang, K.*, +, *TSG Jan. 2021 821-833*
- Chance-Constrained Peer-to-Peer Joint Energy and Reserve Market Considering Renewable Generation Uncertainty. *Guo, Z.*, +, *TSG Jan. 2021 798-809*
- Community Energy Cooperation With the Presence of Cheating Behaviors. *Cui, S.*, +, *TSG Jan. 2021 561-573*
- Cooperative P2P Energy Trading in Active Distribution Networks: An MILP-Based Nash Bargaining Solution. *Zhong, W.*, +, *TSG March 2021 1264-1276*
- Coordinated Energy Management of Prosumers in a Distribution System Considering Network Congestion. *Hu, J.*, +, *TSG Jan. 2021 468-478*
- Coordinated Optimal Volt/Var Control for Distribution Networks via D-PMUs and EV Chargers by Exploiting the Eigensystem Realization. *Mejia-Ruiz, G.E.*, +, *TSG May 2021 2425-2438*
- Data-Driven Distributionally Robust Hierarchical Coordination for Home Energy Management. *Saberi, H.*, +, *TSG Sept. 2021 4090-4101*
- Data-Driven Planning of Electric Vehicle Charging Infrastructure: A Case Study of Sydney, Australia. *Li, C.*, +, *TSG July 2021 3289-3304*
- Decentralized Failure-Tolerant Optimization of Electric Vehicle Charging. *Aravena, I.*, +, *TSG Sept. 2021 4068-4078*
- Deep Reinforcement Learning Based Volt-VAR Optimization in Smart Distribution Systems. *Zhang, Y.*, +, *TSG Jan. 2021 361-371*
- Deep-Reinforcement-Learning-Based Capacity Scheduling for PV-Battery Storage System. *Huang, B.*, +, *TSG May 2021 2272-2283*
- Demand Response for Industrial Micro-Grid Considering Photovoltaic Power Uncertainty and Battery Operational Cost. *Huang, C.*, +, *TSG July 2021 3043-3055*
- Design Framework for Privacy-Aware Demand-Side Management With Realistic Energy Storage Model. *Avula, R.R.*, +, *TSG July 2021 3503-3513*
- Distributed Consensus-Based Economic Dispatch in Power Grids Using the Paillier Cryptosystem. *Yan, Y.*, +, *TSG July 2021 3493-3502*
- Distributed Control of Multi-Energy Storage Systems for Voltage Regulation in Distribution Networks: A Back-and-Forth Communication Framework. *Yu, P.*, +, *TSG May 2021 1964-1977*
- Distributed Coordinated Reactive Power Control for Voltage Regulation in Distribution Networks. *Tang, Z.*, +, *TSG Jan. 2021 312-323*
- Distributed Energy Trading in Smart Grid Over Directed Communication Network. *Ullah, M.H.*, +, *TSG July 2021 3669-3672*
- Distributed Optimization for Integrated Frequency Regulation and Economic Dispatch in Microgrids. *Xu, Y.*, +, *TSG Nov. 2021 4595-4606*
- Distributed State of Charge-Based Droop Control Algorithm for Reducing Power Losses in Multi-Port Converter-Enabled Solar DC Nano-Grids. *Samende, C.*, +, *TSG Nov. 2021 4584-4594*
- Distribution Feeder-Scale Fast Frequency Response via Optimal Coordination of Net-Load Resources—Part I: Solution Design. *Lundstrom, B.*, +, *TSG March 2021 1289-1302*
- Distribution Feeder-Scale Fast Frequency Response via Optimal Coordination of Net-Load Resources—Part II: Large-Scale Demonstration. *Lundstrom, B.*, +, *TSG March 2021 1445-1454*
- Distribution Market-Clearing and Pricing Considering Coordination of DSOs and ISO: An EPEC Approach. *Chen, H.*, +, *TSG July 2021 3150-3162*
- Distribution Network Reconfiguration for Short-Term Voltage Stability Enhancement: An Efficient Deep Learning Approach. *Huang, W.*, +, *TSG Nov. 2021 5385-5395*
- Distributionally Robust Chance-Constrained Optimal Power-Gas Flow Under Bidirectional Interactions Considering Uncertain Wind Power. *Yang, L.*, +, *TSG March 2021 1722-1735*
- Distributionally Robust Microgrid Formation Approach for Service Restoration Under Random Contingency. *Cai, S.*, +, *TSG Nov. 2021 4926-4937*
- Distributionally Robust Optimal Power Flow in Multi-Microgrids With Decomposition and Guaranteed Convergence. *Huang, W.*, +, *TSG Jan. 2021 43-55*
- Dynamic Stochastic Demand Response With Energy Storage. *Xiao, Y.*, +, *TSG Nov. 2021 4813-4821*
- Efficient Assignment of Electric Vehicles to Charging Stations. *Elghitani, F.*, +, *TSG Jan. 2021 761-773*

- Efficient Real-Time EV Charging Scheduling via Ordinal Optimization. *Long, T., +, TSG Sept. 2021 4029-4038*
- Efficient Robust Scheduling of Integrated Electricity and Heat Systems: A Direct Constraint Tightening Approach. *Jiang, Y., +, TSG July 2021 3016-3029*
- Energy Management and Control of a Flywheel Storage System for Peak Shaving Applications. *Tziovani, L., +, TSG Sept. 2021 4195-4207*
- Fast Wasserstein-Distance-Based Distributionally Robust Chance-Constrained Power Dispatch for Multi-Zone HVAC Systems. *Chen, G., +, TSG Sept. 2021 4016-4028*
- Frequency Regulation With Heterogeneous Energy Resources: A Realization Using Distributed Control. *Anderson, T., +, TSG Sept. 2021 4126-4136*
- Game Theoretic-Based Distributed Charging Strategy for PEVs in a Smart Charging Station. *Wan, Y., +, TSG Jan. 2021 538-547*
- Hierarchical Coupled Driving-and-Charging Model of Electric Vehicles, Stations and Grid Operators. *Sohet, B., +, TSG Nov. 2021 5146-5157*
- Imitation and Transfer Q-Learning-Based Parameter Identification for Composite Load Modeling. *Xie, J., +, TSG March 2021 1674-1684*
- Incentive Based Demand Response Program for Power System Flexibility Enhancement. *Mohandes, B., +, TSG May 2021 2212-2223*
- Incentive Design for Flexibility Provisions From Residential Energy Hubs in Smart Grid. *Alharbi, W., +, TSG May 2021 2113-2124*
- Inducing Human Behavior to Maximize Operation Performance at PEV Charging Station. *Zeng, T., +, TSG July 2021 3353-3363*
- Integrated Electricity and Hydrogen Energy Sharing in Coupled Energy Systems. *Tao, Y., +, TSG March 2021 1149-1162*
- Integrating Battery Aging in the Optimization for Bidirectional Charging of Electric Vehicles. *Schwenk, K., +, TSG Nov. 2021 5135-5145*
- Iteration-Based Linearized Distribution-Level Locational Marginal Price for Three-Phase Unbalanced Distribution Systems. *Cai, M., +, TSG Nov. 2021 4886-4896*
- Joint Optimization of Wind Turbine Micrositing and Cabling in an Offshore Wind Farm. *Tao, S., +, TSG Jan. 2021 834-844*
- Learning-Based Predictive Control via Real-Time Aggregate Flexibility. *Li, T., +, TSG Nov. 2021 4897-4913*
- Leveraging Network Topology Optimization to Strengthen Power Grid Resilience Against Cyber-Physical Attacks. *Liu, Z., +, TSG March 2021 1552-1564*
- Leveraging Two-Stage Adaptive Robust Optimization for Power Flexibility Aggregation. *Chen, X., +, TSG Sept. 2021 3954-3965*
- Linear Quadratic Regulator Based Smooth Transition Between Microgrid Operation Modes. *Ganjian-Aboukheili, M., +, TSG Nov. 2021 4854-4864*
- Mixed-Stage Energy Management for Decentralized Microgrid Cluster Based on Enhanced Tube Model Predictive Control. *Xie, P., +, TSG Sept. 2021 3780-3792*
- Multi-Agent Safe Policy Learning for Power Management of Networked Microgrids. *Zhang, Q., +, TSG March 2021 1048-1062*
- Multi-Stage Multi-Zone Defender-Attacker-Defender Model for Optimal Resilience Strategy With Distribution Line Hardening and Energy Storage System Deployment. *Zhang, H., +, TSG March 2021 1194-1205*
- Multi-Stage Quadratic Flexible Optimal Power Flow With a Rolling Horizon. *Zhong, C., +, TSG July 2021 3128-3137*
- Multistage Stochastic Optimization for Microgrid Operation Under Islanding Uncertainty. *Lee, J., +, TSG Jan. 2021 56-66*
- Network-Constrained Stackelberg Game for Pricing Demand Flexibility in Power Distribution Systems. *Aguiar, N., +, TSG Sept. 2021 4049-4058*
- Online Learning and Distributed Control for Residential Demand Response. *Chen, X., +, TSG Nov. 2021 4843-4853*
- Online Optimization for Networked Distributed Energy Resources With Time-Coupling Constraints. *Fan, S., +, TSG Jan. 2021 251-267*
- Online Optimization for Real-Time Peer-to-Peer Electricity Market Mechanisms. *Guo, Z., +, TSG Sept. 2021 4151-4163*
- Online Rolling Evolutionary Decoder-Dispatch Framework for the Secondary Frequency Regulation of Time-Varying Electrical-Grid-Electric-Vehicle System. *Dong, C., +, TSG Jan. 2021 871-884*
- Online Scheduling of a Residential Microgrid via Monte-Carlo Tree Search and a Learned Model. *Shuai, H., +, TSG March 2021 1073-1087*
- Optimal Dispatch With Transformer Dynamic Thermal Rating in ADNs Incorporating High PV Penetration. *Li, Y., +, TSG May 2021 1989-1999*
- Optimal Energy Management of Microgrids Using Quantum Teaching Learning Based Algorithm. *Raghav, L.P., +, TSG Nov. 2021 4834-4842*
- Optimal HVAC System Operation Using Online Learning of Interconnected Neural Networks. *Jang, Y., +, TSG July 2021 3030-3042*
- Optimal Planning and Operation of Hidden Moving Target Defense for Maximal Detection Effectiveness. *Liu, B., +, TSG Sept. 2021 4447-4459*
- Optimal Pricing of Public Electric Vehicle Charging Stations Considering Operations of Coupled Transportation and Power Systems. *Cui, Y., +, TSG July 2021 3278-3288*
- Optimal Reserve Management of Electric Vehicle Aggregator: Discrete Bilevel Optimization Model and Exact Algorithm. *Liu, W., +, TSG Sept. 2021 4003-4015*
- Optimal Sharing and Fair Cost Allocation of Community Energy Storage. *Yang, Y., +, TSG Sept. 2021 4185-4194*
- Peer-to-Peer Energy Trading in Transactive Markets Considering Physical Network Constraints. *Ullah, M.H., +, TSG July 2021 3390-3403*
- Plug-in Electric Vehicle Charging With Multiple Charging Options: A Systematic Analysis of Service Providers' Pricing Strategies. *Zhang, Y., +, TSG Jan. 2021 524-537*
- Price-Maker Bidding and Offering Strategies for Networked Microgrids in Day-Ahead Electricity Markets. *Hu, B., +, TSG Nov. 2021 5201-5211*
- Resident Behavior Detection Model for Environment Responsive Demand Response. *Baek, K., +, TSG Sept. 2021 3980-3989*
- Risk Trading in Energy Communities. *Vespermann, N., +, TSG March 2021 1249-1263*
- Robust Hierarchical Control Mechanism for Aggregated Thermostatically Controlled Loads. *Gong, X., +, TSG Jan. 2021 453-467*
- Self-Assessment of Health Conditions of Electrical Assets and Grid Components: A Contribution to Smart Grids. *Montanari, G.C., +, TSG March 2021 1206-1214*
- Stability Analysis of Microgrid Islanding Transients Based on Interconnected Dissipative Subsystems. *Roos, M.H., +, TSG Nov. 2021 4655-4667*
- Stochastic Scheduling of Mobile Energy Storage in Coupled Distribution and Transportation Networks for Conversion Capacity Enhancement. *Liu, X., +, TSG Jan. 2021 117-130*
- Strategic Participation of Residential Thermal Demand Response in Energy and Capacity Markets. *Anwar, M.B., +, TSG July 2021 3070-3085*
- Transactive Energy Supported Economic Operation for Multi-Energy Complementary Microgrids. *Yang, Z., +, TSG Jan. 2021 4-17*
- Tri-Level Scheduling Model Considering Residential Demand Flexibility of Aggregated HVACs and EVs Under Distribution LMP. *Wang, X., +, TSG Sept. 2021 3990-4002*
- Two-Stage Deep Reinforcement Learning for Inverter-Based Volt-VAR Control in Active Distribution Networks. *Liu, H., +, TSG May 2021 2037-2047*
- Two-Stage Planning of Network-Constrained Hybrid Energy Supply Stations for Electric and Natural Gas Vehicles. *Gan, W., +, TSG May 2021 2013-2026*
- Voltage-Based Distributed Optimal Control for Generation Cost Minimization and Bounded Bus Voltage Regulation in DC Microgrids. *Peng, J., +, TSG Jan. 2021 106-116*
- Vulnerability Assessment of Deep Reinforcement Learning Models for Power System Topology Optimization. *Zheng, Y., +, TSG July 2021 3613-3623*
- Oscillations**
- Resilience Against Data Manipulation in Distributed Synchrophasor-Based Mode Estimation. *Rajabi, A., +, TSG July 2021 3538-3547*
- Scalable Designs for Reinforcement Learning-Based Wide-Area Damping Control. *Mukherjee, S., +, TSG May 2021 2389-2401*
- Spatial-Temporal Data Analysis-Based Event Detection in Weakly Damped Power Systems. *Zhu, L., +, TSG Nov. 2021 5472-5474*
- Outsourcing**
- Privacy-Preserving Hierarchical State Estimation in Untrustworthy Cloud Environments. *Wang, J., +, TSG March 2021 1541-1551*

Overcurrent protection

- A Harmonic Time-Current-Voltage Directional Relay for Optimal Protection Coordination of Inverter-Based Islanded Microgrids. *El-Sayed, W.T.*, +, *TSG May 2021 1904-1917*
- Design of Setting Group-Based Overcurrent Protection Scheme for Active Distribution Networks Using MILP. *Ghotbi-Maleki, M.*, +, *TSG March 2021 1185-1193*

P**Parabolic equations**

- Photovoltaic System Power Reserve Determination Using Parabolic Approximation of Frequency Response. *Baskarad, T.*, +, *TSG July 2021 3175-3184*

Parallel processing

- A Compensated Distributed-Parameter Line Decoupling Approach for Real Time Applications. *Ahmed, B.*, +, *TSG March 2021 1761-1771*
- SCCO: A State-Caching-Based Coagulation Platform for Cybor-Physical Power System Evaluation. *Wang, Q.*, +, *TSG March 2021 1615-1625*

Parameter estimation

- Data-Driven Dynamic Models of Active Distribution Networks Using Unsupervised Learning Techniques on Field Measurements. *Mitrentsis, G.*, +, *TSG July 2021 2952-2965*
- Online Smart Meter Measurement Error Estimation Based on EKF and LMRLS Method. *Kong, X.*, +, *TSG Sept. 2021 4269-4279*
- Tri-Level Scheduling Model Considering Residential Demand Flexibility of Aggregated HVACs and EVs Under Distribution LMP. *Wang, X.*, +, *TSG Sept. 2021 3990-4002*

Pareto distribution

- Probabilistic Forecasting of Regional Net-Load With Conditional Extremes and Gridded NWP. *Browell, J.*, +, *TSG Nov. 2021 5011-5019*

Pareto optimization

- Bayesian Learning-Based Multi-Objective Distribution Power Network Reconfiguration. *Zhong, T.*, +, *TSG March 2021 1174-1184*
- Multi-Objective Sizing of Battery Energy Storage Systems for Stackable Grid Applications. *Arias, N.B.*, +, *TSG May 2021 2708-2721*

Partial differential equations

- A Mean-Field Voltage Control Approach for Active Distribution Networks With Uncertainties. *Wei, B.*, +, *TSG March 2021 1455-1466*

Partial discharge measurement

- Self-Assessment of Health Conditions of Electrical Assets and Grid Components: A Contribution to Smart Grids. *Montanari, G.C.*, +, *TSG March 2021 1206-1214*

Partial discharges

- Fault Detection for Covered Conductors With High-Frequency Voltage Signals: From Local Patterns to Global Features. *Chen, K.*, +, *TSG March 2021 1602-1614*

Particle swarm optimization

- Blockchain Based Secure Data Aggregation and Distributed Power Dispatching for Microgrids. *Luo, X.*, +, *TSG Nov. 2021 5268-5279*
- Joint Optimization of Wind Turbine Micrositing and Cabling in an Offshore Wind Farm. *Tao, S.*, +, *TSG Jan. 2021 834-844*

Pattern classification

- A Cyber-Physical Anomaly Detection for Wide-Area Protection Using Machine Learning. *Singh, V.K.*, +, *TSG July 2021 3514-3526*
- Adversarial Semi-Supervised Learning for Diagnosing Faults and Attacks in Power Grids. *Farajzadeh-Zanjani, M.*, +, *TSG July 2021 3468-3478*
- An Adaptive Ensemble Data Driven Approach for Nonparametric Probabilistic Forecasting of Electricity Load. *Wan, C.*, +, *TSG Nov. 2021 5396-5408*
- Real-Time Synchrophasor Data Anomaly Detection and Classification Using *Isolation Forest*, *KMeans*, and *LoOP*. *Khaledian, E.*, +, *TSG May 2021 2378-2388*
- Time Series Classification for Locating Forced Oscillation Sources. *Meng, Y.*, +, *TSG March 2021 1712-1721*
- Toward Load Identification Based on the Hilbert Transform and Sequence to Sequence Long Short-Term Memory. *Le, T.*, +, *TSG July 2021 3252-3264*

Pattern clustering

- A Novel Closed-Loop Clustering Algorithm for Hierarchical Load Forecasting. *Zhang, C.*, +, *TSG Jan. 2021 432-441*
- Aggregate Operation Model for Numerous Small-Capacity Distributed Energy Resources Considering Uncertainty. *Yi, Z.*, +, *TSG Sept. 2021 4208-4224*
- An Adaptive Ensemble Data Driven Approach for Nonparametric Probabilistic Forecasting of Electricity Load. *Wan, C.*, +, *TSG Nov. 2021 5396-5408*
- Data-Driven Copy-Paste Imputation for Energy Time Series. *Weber, M.*, +, *TSG Nov. 2021 5409-5419*
- Data-Driven Dynamic Models of Active Distribution Networks Using Unsupervised Learning Techniques on Field Measurements. *Mitrentsis, G.*, +, *TSG July 2021 2952-2965*
- Deep Learning Method With Manual Post-Processing for Identification of Spectral Patterns of Waveform Distortion in PV Installations. *de Oliveira, R.A.*, +, *TSG Nov. 2021 5444-5456*
- Design of Setting Group-Based Overcurrent Protection Scheme for Active Distribution Networks Using MILP. *Ghotbi-Maleki, M.*, +, *TSG March 2021 1185-1193*
- Develop Load Shape Dictionary Through Efficient Clustering Based on Elastic Dissimilarity Measure. *Liang, H.*, +, *TSG Jan. 2021 442-452*
- Distributed Dynamic Clustering Algorithm for Formation of Heterogeneous Virtual Power Plants Based on Power Requirements. *Zhang, R.*, +, *TSG Jan. 2021 192-204*
- Fault Detection for Covered Conductors With High-Frequency Voltage Signals: From Local Patterns to Global Features. *Chen, K.*, +, *TSG March 2021 1602-1614*
- Privacy-Preserving Distributed Clustering for Electrical Load Profiling. *Jia, M.*, +, *TSG March 2021 1429-1444*
- Scaling Up Cooperative Game Theory-Based Energy Management Using Prosumer Clustering. *Han, L.*, +, *TSG Jan. 2021 289-300*
- Scenario Reduction for Stochastic Day-Ahead Scheduling: A Mixed Auto-encoder Based Time-Series Clustering Approach. *Liang, J.*, +, *TSG May 2021 2652-2662*
- Unsupervised Event Detection, Clustering, and Use Case Exposition in Micro-PMU Measurements. *Aligholian, A.*, +, *TSG July 2021 3624-3636*

Peer-to-peer computing

- A New Method for Peer Matching and Negotiation of Prosumers in Peer-to-Peer Energy Markets. *Khorasany, M.*, +, *TSG May 2021 2472-2483*
- A Scalable Privacy-Preserving Multi-Agent Deep Reinforcement Learning Approach for Large-Scale Peer-to-Peer Transactive Energy Trading. *Ye, Y.*, +, *TSG Nov. 2021 5185-5200*
- An Architecture and Performance Evaluation of Blockchain-Based Peer-to-Peer Energy Trading. *Abdella, J.*, +, *TSG July 2021 3364-3378*
- Chance-Constrained Peer-to-Peer Joint Energy and Reserve Market Considering Renewable Generation Uncertainty. *Guo, Z.*, +, *TSG Jan. 2021 798-809*
- Coalition Graph Game-Based P2P Energy Trading With Local Voltage Management. *Azim, M.I.*, +, *TSG Sept. 2021 4389-4402*
- Cooperative P2P Energy Trading in Active Distribution Networks: An MILP-Based Nash Bargaining Solution. *Zhong, W.*, +, *TSG March 2021 1264-1276*
- Data-Driven Distributionally Robust Co-Optimization of P2P Energy Trading and Network Operation for Interconnected Microgrids. *Li, J.*, +, *TSG Nov. 2021 5172-5184*
- Data-Driven Stochastic Game With Social Attributes for Peer-to-Peer Energy Sharing. *Chen, L.*, +, *TSG Nov. 2021 5158-5171*
- Online Multi-Agent Reinforcement Learning for Decentralized Inverter-Based Volt-VAR Control. *Liu, H.*, +, *TSG July 2021 2980-2990*
- Online Optimization for Real-Time Peer-to-Peer Electricity Market Mechanisms. *Guo, Z.*, +, *TSG Sept. 2021 4151-4163*
- Peer-to-Peer Energy Trading in Transactive Markets Considering Physical Network Constraints. *Ullah, M.H.*, +, *TSG July 2021 3390-3403*
- Transaction-Oriented Dynamic Power Flow Tracing for Distribution Networks—Definition and Implementation in GIS Environment. *Vega-Fuentes, E.*, +, *TSG March 2021 1303-1313*

Transactive Energy Market Mechanism With Loss Implication. *Azizi, A.*, +, *TSG March 2021 1215-1223*

Performance index

Dynamic Event-Based Model Predictive Load Frequency Control for Power Systems Under Cyber Attacks. *Liu, Y.*, +, *TSG Jan. 2021 715-725*

Perturbation techniques

Online Assessment of Conservation Voltage Reduction Effects With Micro-perturbation. *Xu, J.*, +, *TSG May 2021 2224-2238*

Wide-Area Damping Control Resilience Towards Cyber-Attacks: A Dynamic Loop Approach. *Patel, A.*, +, *TSG July 2021 3438-3447*

Phase measurement

Spoofing Resilient State Estimation for the Power Grid Using an Extended Kalman Filter. *Chauhan, S.V.S.*, +, *TSG July 2021 3404-3414*

Waveform Difference Feature-Based Protection Scheme for Islanded Microgrids. *He, L.*, +, *TSG May 2021 1939-1952*

Phasor measurement

A Cyber-Physical Anomaly Detection for Wide-Area Protection Using Machine Learning. *Singh, V.K.*, +, *TSG July 2021 3514-3526*

A General Design Method for Phasor Estimation in Different Applications. *Xu, S.*, +, *TSG May 2021 2307-2319*

A Regularized Tensor Completion Approach for PMU Data Recovery. *Ghasemkhani, A.*, +, *TSG March 2021 1519-1528*

A Synchronphasor Data Compression Technique With Iteration-Enhanced Phasor Principal Component Analysis. *Zhang, F.*, +, *TSG May 2021 2365-2377*

Anomaly Detection, Localization and Classification Using Drifting Synchronphasor Data Streams. *Ahmed, A.*, +, *TSG July 2021 3570-3580*

Back Up Protection Scheme for High Impedance Faults Detection in Transmission Systems Based on Synchronphasor Measurements. *Vlahinic, S.*, +, *TSG March 2021 1736-1746*

Coordinated Optimal Volt/Var Control for Distribution Networks via D-PMUs and EV Chargers by Exploiting the Eigensystem Realization. *Mejia-Ruiz, G.E.*, +, *TSG May 2021 2425-2438*

Countering FDI Attacks on DERs Coordinated Control System Using FMI-Compatible Cosimulation. *Jafarigiv, D.*, +, *TSG March 2021 1640-1650*

Cyberattacks Against Event-Based Analysis in Micro-PMUs: Attack Models and Counter Measures. *Kamal, M.*, +, *TSG March 2021 1577-1588*

Detection of Synchronphasor False Data Injection Attack Using Feature Interactive Network. *Qiu, W.*, +, *TSG Jan. 2021 659-670*

Development of an Encoding Method on a Co-Simulation Platform for Mitigating the Impact of Unreliable Communication. *Xie, F.*, +, *TSG May 2021 2496-2507*

Enhancing the Spatio-Temporal Observability of Grid-Edge Resources in Distribution Grids. *Lin, S.*, +, *TSG Nov. 2021 5434-5443*

Enriching Load Data Using Micro-PMUs and Smart Meters. *Bu, F.*, +, *TSG Nov. 2021 5084-5094*

Fault Location Method for Three-Terminal Lines in Distribution Network Based on Line Voltage Measured by μ MPMU. *Yun, Z.*, +, *TSG Nov. 2021 5095-5112*

Fractional Dynamics of PMU Data. *Shalalfeh, L.*, +, *TSG May 2021 2578-2588*

Generator Parameter Calibration by Adaptive Approximate Bayesian Computation With Sequential Monte Carlo Sampler. *Khazeynasab, S.R.*, +, *TSG Sept. 2021 4327-4338*

MILP-Based Fault Diagnosis Model in Active Power Distribution Networks. *Wang, C.*, +, *TSG Sept. 2021 3847-3857*

Mitigating Smart Meter Asynchrony Error Via Multi-Objective Low Rank Matrix Recovery. *Yuan, Y.*, +, *TSG Sept. 2021 4308-4317*

Model-Free Lossless Data Compression for Real-Time Low-Latency Transmission in Smart Grids. *Yan, L.*, +, *TSG May 2021 2601-2610*

Multiple Line Outage Detection in Power Systems by Sparse Recovery Using Transient Data. *Ding, L.*, +, *TSG July 2021 3448-3457*

Optimal Coordination of Phasor Data Concentrators in Hierarchical Synchronphasor Networks. *Pourramezan, R.*, +, *TSG May 2021 2402-2412*

Optimal PMU Restoration for Power System Observability Recovery After Massive Attacks. *Edib, S.N.*, +, *TSG March 2021 1565-1576*

Real-Time Area Angle Monitoring Using Synchronphasors: A Practical Framework and Utility Deployment. *Ju, W.*, +, *TSG Jan. 2021 859-870*

Real-Time Synchronphasor Data Anomaly Detection and Classification Using *Isolation Forest*, *KMeans*, and *LoOP*. *Khaledian, E.*, +, *TSG May 2021 2378-2388*

Resilience Against Data Manipulation in Distributed Synchronphasor-Based Mode Estimation. *Rajabi, A.*, +, *TSG July 2021 3538-3547*

Spatial-Temporal Data Analysis-Based Event Detection in Weakly Damped Power Systems. *Zhu, L.*, +, *TSG Nov. 2021 5472-5474*

Spoofing Resilient State Estimation for the Power Grid Using an Extended Kalman Filter. *Chauhan, S.V.S.*, +, *TSG July 2021 3404-3414*

Switch Status Identification in Distribution Networks Using Harmonic Synchronphasor Measurements. *Chen, L.*, +, *TSG May 2021 2413-2424*

Synchronphasor Data Under GPS Spoofing: Attack Detection and Mitigation Using Residuals. *Chauhan, S.V.S.*, +, *TSG July 2021 3415-3424*

Targeted False Data Injection Attacks Against AC State Estimation Without Network Parameters. *Du, M.*, +, *TSG Nov. 2021 5349-5361*

Time Series Classification for Locating Forced Oscillation Sources. *Meng, Y.*, +, *TSG March 2021 1712-1721*

Time-Synchronization Attack Detection in Unbalanced Three-Phase Systems. *Delcourt, M.*, +, *TSG Sept. 2021 4460-4470*

Unsupervised Event Detection, Clustering, and Use Case Exposition in Micro-PMU Measurements. *Aligholian, A.*, +, *TSG July 2021 3624-3636*

Photovoltaic power systems

A Three-Layer Stochastic Energy Management Approach for Electric Bus Transit Centers With PV and Energy Storage Systems. *Liu, Y.*, +, *TSG March 2021 1346-1357*

Aggregated BESS Dynamic Models for Active Distribution Network Studies. *Calero, F.*, +, *TSG May 2021 2077-2088*

An Adaptive PV Frequency Control Strategy Based on Real-Time Inertia Estimation. *Su, Y.*, +, *TSG May 2021 2355-2364*

An MILP-Based Planning Model of a Photovoltaic/Diesel/Battery Stand-Alone Microgrid Considering the Reliability. *Wu, X.*, +, *TSG Sept. 2021 3809-3818*

Artificial Neural Network-Based Stealth Attack on Battery Energy Storage Systems. *Pasetti, M.*, +, *TSG Nov. 2021 5310-5321*

Association Rule Mining for Localizing Solar Power in Different Distribution Grid Feeders. *Saleem, B.*, +, *TSG May 2021 2589-2600*

Bargaining Game-Based Profit Allocation of Virtual Power Plant in Frequency Regulation Market Considering Battery Cycle Life. *Chen, W.*, +, *TSG July 2021 2913-2928*

Countering FDI Attacks on DERs Coordinated Control System Using FMI-Compatible Cosimulation. *Jafarigiv, D.*, +, *TSG March 2021 1640-1650*

Deep-Reinforcement-Learning-Based Capacity Scheduling for PV-Battery Storage System. *Huang, B.*, +, *TSG May 2021 2272-2283*

Demand Response for Industrial Micro-Grid Considering Photovoltaic Power Uncertainty and Battery Operational Cost. *Huang, C.*, +, *TSG July 2021 3043-3055*

Development of an Encoding Method on a Co-Simulation Platform for Mitigating the Impact of Unreliable Communication. *Xie, F.*, +, *TSG May 2021 2496-2507*

Enhancing the Spatio-Temporal Observability of Grid-Edge Resources in Distribution Grids. *Lin, S.*, +, *TSG Nov. 2021 5434-5443*

Ensuring Distribution Network Integrity Using Dynamic Operating Limits for Prosumers. *Petrou, K.*, +, *TSG Sept. 2021 3877-3888*

Fast Steady-State Computation of Electrical Networks Involving Nonlinear and Photovoltaic Components. *Ramirez, A.*, +, *TSG July 2021 3107-3114*

Frequency Regulation With Heterogeneous Energy Resources: A Realization Using Distributed Control. *Anderson, T.*, +, *TSG Sept. 2021 4126-4136*

LVRT Operation Enhancement of Single-Stage Photovoltaic Power Plants: An Analytical Approach. *Nasiri, M.*, +, *TSG Nov. 2021 5020-5029*

Minimizing Energy Storage Utilization in a Stand-Alone DC Microgrid Using Photovoltaic Flexible Power Control. *Yan, H.W.*, +, *TSG Sept. 2021 3755-3764*

Optimal Dispatch With Transformer Dynamic Thermal Rating in ADNs Incorporating High PV Penetration. *Li, Y.*, +, *TSG May 2021 1989-1999*

Photovoltaic System Power Reserve Determination Using Parabolic Approximation of Frequency Response. *Baskarad, T.*, +, *TSG July 2021 3175-3184*

Robust Regional Coordination of Inverter-Based Volt/Var Control via Multi-Agent Deep Reinforcement Learning. *Liu, H.*, +, *TSG Nov. 2021 5420-5433*

Second Harmonic Injection-Based Recovery Control of PV DC Boosting Integration System. *Jia, K.*, +, *TSG March 2021 1022-1032*

State Estimation for Situational Awareness of Active Distribution System With Photovoltaic Power Plants. *Fang, Z.*, +, *TSG Jan. 2021 239-250*

The Added Value of Coordinating Inverter Control. *Lusis, P.*, +, *TSG March 2021 1238-1248*

Two-Level Islanding Detection Method for Grid-Connected Photovoltaic System-Based Microgrid With Small Non-Detection Zone. *Bakhshi-Jarabadi, R.*, +, *TSG March 2021 1063-1072*

Two-Stage Decoupled Estimation Approach of Aggregated Baseline Load Under High Penetration of Behind-the-Meter PV System. *Li, K.*, +, *TSG Nov. 2021 4876-4885*

Two-Stage Planning of Network-Constrained Hybrid Energy Supply Stations for Electric and Natural Gas Vehicles. *Gan, W.*, +, *TSG May 2021 2013-2026*

Two-Stage Volt/Var Control in Active Distribution Networks With Multi-Agent Deep Reinforcement Learning Method. *Sun, X.*, +, *TSG July 2021 2903-2912*

Photovoltaic systems

Comprehensive Analytical Expressions for Assessing and Maximizing Technical Benefits of Photovoltaics to Distribution Systems. *Mahmoud, K.*, +, *TSG Nov. 2021 4938-4949*

PI control

A Novel Distributed Control Method for Interlinking Converters in an Islanded Hybrid AC/DC Microgrid. *Chang, J.*, +, *TSG Sept. 2021 3765-3779*

Practical Challenges in Real-Time Demand Response. *Duan, C.*, +, *TSG Sept. 2021 4573-4576*

Piecewise linear techniques

Incentive Based Demand Response Program for Power System Flexibility Enhancement. *Mohandes, B.*, +, *TSG May 2021 2212-2223*

MicroGrid Resilience-Oriented Scheduling: A Robust MISOCF Model. *Zografou-Barredo, N.*, +, *TSG May 2021 1867-1879*

Pipelines

A Novel Framework for the Operational Reliability Evaluation of Integrated Electric Power-Gas Networks. *Ansari, O.A.*, +, *TSG Sept. 2021 3901-3913*

Pipes

Dynamic Security Control in Heat and Electricity Integrated Energy System With an Equivalent Heating Network Model. *Zhang, S.*, +, *TSG Nov. 2021 4788-4798*

Poles and towers

Load-Switching Strategy for Voltage Balancing of Bipolar DC Distribution Networks Based on Optimal Automatic Commutation Algorithm. *Liao, J.*, +, *TSG July 2021 2966-2979*

Polynomials

An Iterative Response-Surface-Based Approach for Chance-Constrained AC Optimal Power Flow Considering Dependent Uncertainty. *Xu, Y.*, +, *TSG May 2021 2696-2707*

Energy Flow Optimization of Integrated Gas and Power Systems in Continuous Time and Space. *Zheng, C.*, +, *TSG May 2021 2611-2624*

Position control

Practical Challenges in Real-Time Demand Response. *Duan, C.*, +, *TSG Sept. 2021 4573-4576*

Potential transformers

Fault Location Method for Three-Terminal Lines in Distribution Network Based on Line Voltage Measured by μ MPMU. *Yun, Z.*, +, *TSG Nov. 2021 5095-5112*

Power cables

A Three-Layer Stochastic Energy Management Approach for Electric Bus Transit Centers With PV and Energy Storage Systems. *Liu, Y.*, +, *TSG March 2021 1346-1357*

Distributed Expansion Planning of Electric Vehicle Dynamic Wireless Charging System in Coupled Power-Traffic Networks. *Xia, F.*, +, *TSG July 2021 3326-3338*

Optimal Power Flow Design for Enhancing Dynamic Performance: Potentials of Reactive Power. *Inoue, M.*, +, *TSG Jan. 2021 599-611*

Peer-to-Peer Energy Trading in Transactive Markets Considering Physical Network Constraints. *Ullah, M.H.*, +, *TSG July 2021 3390-3403*

The Added Value of Coordinating Inverter Control. *Lusis, P.*, +, *TSG March 2021 1238-1248*

Power capacitors

Anomaly Detection, Localization and Classification Using Drifting Synchronophasor Data Streams. *Ahmed, A.*, +, *TSG July 2021 3570-3580*

Two-Stage Volt/Var Control in Active Distribution Networks With Multi-Agent Deep Reinforcement Learning Method. *Sun, X.*, +, *TSG July 2021 2903-2912*

Power consumption

A Microgrid Energy Management System Based on Non-Intrusive Load Monitoring via Multitask Learning. *Cimen, H.*, +, *TSG March 2021 977-987*

A Privacy-Preserving Homomorphic Scheme With Multiple Dimensions and Fault Tolerance for Metering Data Aggregation in Smart Grid. *Mohammadali, A.*, +, *TSG Nov. 2021 5212-5220*

Aggregation of Demand-Side Flexibility in Electricity Markets: Negative Impact Analysis and Mitigation Method. *Wang, S.*, +, *TSG Jan. 2021 774-786*

Conditional Multivariate Elliptical Copulas to Model Residential Load Profiles From Smart Meter Data. *Duque, E.M.S.*, +, *TSG Sept. 2021 4280-4294*

Develop Load Shape Dictionary Through Efficient Clustering Based on Elastic Dissimilarity Measure. *Liang, H.*, +, *TSG Jan. 2021 442-452*

Electricity Consumer Characteristics Identification: A Federated Learning Approach. *Wang, Y.*, +, *TSG July 2021 3637-3647*

Incentives to Manipulate Demand Response Baselines With Uncertain Event Schedules. *Ellman, D.*, +, *TSG March 2021 1358-1369*

Internet Data Center Load Modeling for Demand Response Considering the Coupling of Multiple Regulation Methods. *Chen, M.*, +, *TSG May 2021 2060-2076*

Multi-Agent Deep Reinforcement Learning for HVAC Control in Commercial Buildings. *Yu, L.*, +, *TSG Jan. 2021 407-419*

Optimal HVAC Control for Demand Response via Chance-Constrained Two-Stage Stochastic Program. *Mansy, H.*, +, *TSG May 2021 2188-2200*

Stealthy Black-Box Attacks on Deep Learning Non-Intrusive Load Monitoring Models. *Wang, J.*, +, *TSG July 2021 3479-3492*

Time-Frequency Mask Estimation Based on Deep Neural Network for Flexible Load Disaggregation in Buildings. *Song, J.*, +, *TSG July 2021 3242-3251*

Toward Load Identification Based on the Hilbert Transform and Sequence to Sequence Long Short-Term Memory. *Le, T.*, +, *TSG July 2021 3252-3264*

TraceGAN: Synthesizing Appliance Power Signatures Using Generative Adversarial Networks. *Harell, A.*, +, *TSG Sept. 2021 4553-4563*

Power control

A Cascaded Distributed Control Framework in DC Microgrids. *Zhou, J.*, +, *TSG Jan. 2021 205-214*

A Novel Distributed Control Method for Interlinking Converters in an Islanded Hybrid AC/DC Microgrid. *Chang, J.*, +, *TSG Sept. 2021 3765-3779*

Coordinated Control of Air-Conditioning Loads for System Frequency Regulation. *Jiang, T.*, +, *TSG Jan. 2021 548-560*

Distributed Power Sharing Control for Islanded Single-/Three-Phase Microgrids With Admissible Voltage and Energy Storage Constraints. *Zhou, J.*, +, *TSG July 2021 2760-2775*

Enhancement of Frequency Regulation in AC Microgrid: A Fuzzy-MPC Controlled Virtual Synchronous Generator. *Long, B.*, +, *TSG July 2021 3138-3149*

Minimizing Energy Storage Utilization in a Stand-Alone DC Microgrid Using Photovoltaic Flexible Power Control. *Yan, H.W.*, +, *TSG Sept. 2021 3755-3764*

Real-Time Control of Battery Energy Storage Systems to Provide Ancillary Services Considering Voltage-Dependent Capability of DC-AC Converters. *Yuan, Z.*, +, *TSG Sept. 2021 4164-4175*

Supplementary Controller for Seamless Transitions Between Microgrids Operation Modes. *Azimi, S.M.*, +, *TSG May 2021 2102-2112*

Voltage Stabilization Control for Microgrid With Asymmetric Membership Function-Based Wavelet Petri Fuzzy Neural Network. *Lin, F.*, +, *TSG Sept. 2021 3731-3741*

Power converters

Adaptive Master-Slave Control Strategy for Medium Voltage DC Distribution Systems Based on a Novel Nonlinear Droop Controller. *Xie, X.*, +, *TSG Nov. 2021 4765-4777*

Analysis and Validations of Modularized Distributed TL-UPQC Systems With Supervisory Remote Management System. *Abdalaal, R.M.*, +, *TSG May 2021 2638-2651*

Distributed Control Strategy for Low-Voltage Three-Phase Four-Wire Microgrids: Consensus Power-Based Control. *Ferreira, D.M.*, +, *TSG July 2021 3215-3231*

Distributed State of Charge-Based Droop Control Algorithm for Reducing Power Losses in Multi-Port Converter-Enabled Solar DC Nano-Grids. *Samende, C.*, +, *TSG Nov. 2021 4584-4594*

Dynamic Modeling of Battery Energy Storage and Applications in Transmission Systems. *Calero, F.*, +, *TSG Jan. 2021 589-598*

MPC-Controlled Virtual Synchronous Generator to Enhance Frequency and Voltage Dynamic Performance in Islanded Microgrids. *Long, B.*, +, *TSG March 2021 953-964*

Power Loss Minimization of Off-Grid Solar DC Nano-Grids—Part I: Centralized Control Algorithm. *Samende, C.*, +, *TSG Nov. 2021 4715-4725*

State Estimation for Situational Awareness of Active Distribution System With Photovoltaic Power Plants. *Fang, Z.*, +, *TSG Jan. 2021 239-250*

Synchronization of Low Voltage Grids Fed by Smart and Conventional Transformers. *Giacomuzzi, S.*, +, *TSG July 2021 2941-2951*

Power distribution

Comprehensive Analytical Expressions for Assessing and Maximizing Technical Benefits of Photovoltaics to Distribution Systems. *Mahmoud, K.*, +, *TSG Nov. 2021 4938-4949*

Fast Probabilistic Hosting Capacity Analysis for Active Distribution Systems. *Taheri, S.*, +, *TSG May 2021 2000-2012*

Power distribution control

A Decentralized Approach for Voltage Control by Multiple Distributed Energy Resources. *Fusco, G.*, +, *TSG July 2021 3115-3127*

A Demand Response-Based Solution to Overloading in Underdeveloped Distribution Networks. *Jibran, M.*, +, *TSG Sept. 2021 4059-4067*

A Grid-Friendly Sustainable Neighborhood Energy Trading Mechanism for MV-LV Network. *Liu, A.*, +, *TSG May 2021 2239-2248*

A Harmonic Time-Current-Voltage Directional Relay for Optimal Protection Coordination of Inverter-Based Islanded Microgrids. *El-Sayed, W.T.*, +, *TSG May 2021 1904-1917*

A Mean-Field Voltage Control Approach for Active Distribution Networks With Uncertainties. *Wei, B.*, +, *TSG March 2021 1455-1466*

A Three-Layer Stochastic Energy Management Approach for Electric Bus Transit Centers With PV and Energy Storage Systems. *Liu, Y.*, +, *TSG March 2021 1346-1357*

A Two-Layer Control Scheme Based on $P - V$ Droop Characteristic for Accurate Power Sharing and Voltage Regulation in DC Microgrids. *Baharizadeh, M.*, +, *TSG July 2021 2776-2787*

Active Distribution Grids Providing Voltage Support: The Swiss Case. *Karagiannopoulos, S.*, +, *TSG Jan. 2021 268-278*

Adaptive Congestion Control for Electric Vehicle Charging in the Smart Grid. *Zishan, A.A.*, +, *TSG May 2021 2439-2449*

Adaptive Master-Slave Control Strategy for Medium Voltage DC Distribution Systems Based on a Novel Nonlinear Droop Controller. *Xie, X.*, +, *TSG Nov. 2021 4765-4777*

Aggregated BESS Dynamic Models for Active Distribution Network Studies. *Calero, F.*, +, *TSG May 2021 2077-2088*

Aggregation of Voltage-Controlled Devices During Distribution Network Reduction. *Pecenak, Z.K.*, +, *TSG Jan. 2021 33-42*

An Asynchronous Forward-Backward-Splitting Power Flow Algorithm of Coupled Transmission and Active Distribution Systems. *Tang, K.*, +, *TSG Nov. 2021 5457-5471*

Buffered-Microgrid Structure for Future Power Networks; a Seamless Microgrid Control. *Nasser, N.*, +, *TSG Jan. 2021 131-140*

Consensus Multi-Agent Reinforcement Learning for Volt-VAR Control in Power Distribution Networks. *Gao, Y.*, +, *TSG July 2021 3594-3604*

Cooperative Optimization of Networked Microgrids for Supporting Grid Flexibility Services Using Model Predictive Control. *Garcia-Torres, F.*, +, *TSG May 2021 1893-1903*

Coordinated Optimal Volt/Var Control for Distribution Networks via D-PMUs and EV Chargers by Exploiting the Eigensystem Realization. *Mejia-Ruiz, G.E.*, +, *TSG May 2021 2425-2438*

Cross-Layer Distributed Control Strategy for Cyber Resilient Microgrids. *Zhou, Q.*, +, *TSG Sept. 2021 3705-3717*

Current Injection Power Flow Analysis and Optimal Generation Dispatch for Bipolar DC Microgrids. *Lee, J.*, +, *TSG May 2021 1918-1928*

Data-Driven Multi-Agent Deep Reinforcement Learning for Distribution System Decentralized Voltage Control With High Penetration of PVs. *Cao, D.*, +, *TSG Sept. 2021 4137-4150*

Decentralized Low-Rank State Estimation for Power Distribution Systems. *Sagan, A.*, +, *TSG July 2021 3097-3106*

Deep Reinforcement Learning Based Volt-VAR Optimization in Smart Distribution Systems. *Zhang, Y.*, +, *TSG Jan. 2021 361-371*

Development of an Encoding Method on a Co-Simulation Platform for Mitigating the Impact of Unreliable Communication. *Xie, F.*, +, *TSG May 2021 2496-2507*

Distributed Control of DC Microgrids for Optimal Coordination of Conventional and Renewable Generators. *Fan, Z.*, +, *TSG Nov. 2021 4607-4615*

Distributed Control of Multi-Energy Storage Systems for Voltage Regulation in Distribution Networks: A Back-and-Forth Communication Framework. *Yu, P.*, +, *TSG May 2021 1964-1977*

Distributed Coordinated Reactive Power Control for Voltage Regulation in Distribution Networks. *Tang, Z.*, +, *TSG Jan. 2021 312-323*

Distributed Optimal Conservation Voltage Reduction in Integrated Primary-Secondary Distribution Systems. *Zhang, Q.*, +, *TSG Sept. 2021 3889-3900*

Distributed Optimization for Integrated Frequency Regulation and Economic Dispatch in Microgrids. *Xu, Y.*, +, *TSG Nov. 2021 4595-4606*

Distributed Power Sharing Control for Islanded Single-/Three-Phase Microgrids With Admissible Voltage and Energy Storage Constraints. *Zhou, J.*, +, *TSG July 2021 2760-2775*

Distributed Resilient Optimal Current Sharing Control for an Islanded DC Microgrid Under DoS Attacks. *Lian, Z.*, +, *TSG Sept. 2021 4494-4505*

Distributed State of Charge-Based Droop Control Algorithm for Reducing Power Losses in Multi-Port Converter-Enabled Solar DC Nano-Grids. *Samende, C.*, +, *TSG Nov. 2021 4584-4594*

Distribution Feeder-Scale Fast Frequency Response via Optimal Coordination of Net-Load Resources—Part II: Large-Scale Demonstration. *Lundstrom, B.*, +, *TSG March 2021 1445-1454*

Distribution Network Reconfiguration for Short-Term Voltage Stability Enhancement: An Efficient Deep Learning Approach. *Huang, W.*, +, *TSG Nov. 2021 5385-5395*

Frequency Regulation With Heterogeneous Energy Resources: A Realization Using Distributed Control. *Anderson, T.*, +, *TSG Sept. 2021 4126-4136*

Hierarchical Voltage Control Strategy in Distribution Networks Considering Customized Charging Navigation of Electric Vehicles. *Sun, X.*, +, *TSG Nov. 2021 4752-4764*

Load-Switching Strategy for Voltage Balancing of Bipolar DC Distribution Networks Based on Optimal Automatic Commutation Algorithm. *Liao, J.*, +, *TSG July 2021 2966-2979*

On the Implementation of OPF-Based Setpoints for Active Distribution Networks. *Liu, M.Z.*, +, *TSG July 2021 2929-2940*

Online Multi-Agent Reinforcement Learning for Decentralized Inverter-Based Volt-VAR Control. *Liu, H.*, +, *TSG July 2021 2980-2990*

Online Optimization for Networked Distributed Energy Resources With Time-Coupling Constraints. *Fan, S.*, +, *TSG Jan. 2021 251-267*

- Optimal Restoration of Active Distribution Systems With Voltage Control and Closed-Loop Operation. *Vargas, R.*, +, *TSG May 2021 2295-2306*
- Power Loss Minimization of Off-Grid Solar DC Nano-Grids—Part I: Centralized Control Algorithm. *Samende, C.*, +, *TSG Nov. 2021 4715-4725*
- Privacy-Preserving Distributed Average Observers in Distribution Systems With Grid-Forming Inverters. *Du, Y.*, +, *TSG Nov. 2021 5000-5010*
- Provision of Primary Frequency Response as Ancillary Service From Active Distribution Networks to the Transmission System. *Kontis, E.O.*, +, *TSG Nov. 2021 4971-4982*
- Robust Regional Coordination of Inverter-Based Volt/Var Control via Multi-Agent Deep Reinforcement Learning. *Liu, H.*, +, *TSG Nov. 2021 5420-5433*
- State Estimation for Situational Awareness of Active Distribution System With Photovoltaic Power Plants. *Fang, Z.*, +, *TSG Jan. 2021 239-250*
- The Added Value of Coordinating Inverter Control. *Lusis, P.*, +, *TSG March 2021 1238-1248*
- Transaction-Oriented Dynamic Power Flow Tracing for Distribution Networks—Definition and Implementation in GIS Environment. *Vega-Fuentes, E.*, +, *TSG March 2021 1303-1313*
- Two-Stage Deep Reinforcement Learning for Inverter-Based Volt-VAR Control in Active Distribution Networks. *Liu, H.*, +, *TSG May 2021 2037-2047*
- Two-Stage Volt/Var Control in Active Distribution Networks With Multi-Agent Deep Reinforcement Learning Method. *Sun, X.*, +, *TSG July 2021 2903-2912*
- Waveform Difference Feature-Based Protection Scheme for Islanded Microgrids. *He, L.*, +, *TSG May 2021 1939-1952*
- Power distribution economics**
- A Grid-Friendly Sustainable Neighborhood Energy Trading Mechanism for MV-LV Network. *Liu, A.*, +, *TSG May 2021 2239-2248*
- A Novel Energy Trading Framework Using Adapted Blockchain Technology. *Hamouda, M.R.*, +, *TSG May 2021 2165-2175*
- A Three-Layer Stochastic Energy Management Approach for Electric Bus Transit Centers With PV and Energy Storage Systems. *Liu, Y.*, +, *TSG March 2021 1346-1357*
- Agent-Based Modeling of Feeder-Level Electric Vehicle Diffusion for Distribution Planning. *Sun, L.*, +, *TSG Jan. 2021 751-760*
- Algorithm for Simultaneous Medium Voltage Grid Planning and Electric Vehicle Scheduling. *Rotering, N.*, +, *TSG July 2021 3305-3313*
- An Operation Model for Distribution Companies Using the Flexibility of Electric Vehicle Aggregators. *Lu, X.*, +, *TSG March 2021 1507-1518*
- Bi-Level Robust Optimization for Distribution System With Multiple Microgrids Considering Uncertainty Distribution Locational Marginal Price. *Wang, L.*, +, *TSG March 2021 1104-1117*
- Blockchain for Transacting Energy and Carbon Allowance in Networked Microgrids. *Yan, M.*, +, *TSG Nov. 2021 4702-4714*
- Capturing Spatio-Temporal Dependencies in the Probabilistic Forecasting of Distribution Locational Marginal Prices. *Toubeau, J.*, +, *TSG May 2021 2663-2674*
- Cooperative Optimization of Networked Microgrids for Supporting Grid Flexibility Services Using Model Predictive Control. *Garcia-Torres, F.*, +, *TSG May 2021 1893-1903*
- Current Injection Power Flow Analysis and Optimal Generation Dispatch for Bipolar DC Microgrids. *Lee, J.*, +, *TSG May 2021 1918-1928*
- Distributed Control of Multi-Energy Storage Systems for Voltage Regulation in Distribution Networks: A Back-and-Forth Communication Framework. *Yu, P.*, +, *TSG May 2021 1964-1977*
- Distributed Expansion Planning of Electric Vehicle Dynamic Wireless Charging System in Coupled Power-Traffic Networks. *Xia, F.*, +, *TSG July 2021 3326-3338*
- Distributed Optimization for Integrated Frequency Regulation and Economic Dispatch in Microgrids. *Xu, Y.*, +, *TSG Nov. 2021 4595-4606*
- Distribution Feeder-Scale Fast Frequency Response via Optimal Coordination of Net-Load Resources—Part II: Large-Scale Demonstration. *Lundstrom, B.*, +, *TSG March 2021 1445-1454*
- Distribution Market-Clearing and Pricing Considering Coordination of DSOs and ISO: An EPEC Approach. *Chen, H.*, +, *TSG July 2021 3150-3162*
- Distribution Network Reconfiguration for Short-Term Voltage Stability Enhancement: An Efficient Deep Learning Approach. *Huang, W.*, +, *TSG Nov. 2021 5385-5395*
- Ensuring Distribution Network Integrity Using Dynamic Operating Limits for Prosumers. *Petrou, K.*, +, *TSG Sept. 2021 3877-3888*
- Frequency Regulation With Heterogeneous Energy Resources: A Realization Using Distributed Control. *Anderson, T.*, +, *TSG Sept. 2021 4126-4136*
- Hierarchical Voltage Control Strategy in Distribution Networks Considering Customized Charging Navigation of Electric Vehicles. *Sun, X.*, +, *TSG Nov. 2021 4752-4764*
- Incentive Design for Flexibility Provisions From Residential Energy Hubs in Smart Grid. *Alharbi, W.*, +, *TSG May 2021 2113-2124*
- Integrated Transmission and Distribution System Expansion Planning Under Uncertainty. *Munoz-Delgado, G.*, +, *TSG Sept. 2021 4113-4125*
- Iteration-Based Linearized Distribution-Level Locational Marginal Price for Three-Phase Unbalanced Distribution Systems. *Cai, M.*, +, *TSG Nov. 2021 4886-4896*
- Linear Quadratic Regulator Based Smooth Transition Between Microgrid Operation Modes. *Ganjian-Aboukheili, M.*, +, *TSG Nov. 2021 4854-4864*
- Multi-Round Double Auction-Enabled Peer-to-Peer Energy Exchange in Active Distribution Networks. *Haggi, H.*, +, *TSG Sept. 2021 4403-4414*
- Online Optimization for Networked Distributed Energy Resources With Time-Coupling Constraints. *Fan, S.*, +, *TSG Jan. 2021 251-267*
- Optimal Policy Characterization Enhanced Actor-Critic Approach for Electric Vehicle Charging Scheduling in a Power Distribution Network. *Jin, J.*, +, *TSG March 2021 1416-1428*
- Peer-to-Peer Energy Trading in Transactive Markets Considering Physical Network Constraints. *Ullah, M.H.*, +, *TSG July 2021 3390-3403*
- Transactive Energy Market Mechanism With Loss Implication. *Azizi, A.*, +, *TSG March 2021 1215-1223*
- Tri-Level Scheduling Model Considering Residential Demand Flexibility of Aggregated HVACs and EVs Under Distribution LMP. *Wang, X.*, +, *TSG Sept. 2021 3990-4002*
- Power distribution faults**
- A Comprehensive Resilience-Oriented FLISR Method for Distribution Systems. *Liu, J.*, +, *TSG May 2021 2136-2152*
- A FDI Attack-Resilient Distributed Secondary Control Strategy for Islanded Microgrids. *Chen, Y.*, +, *TSG May 2021 1929-1938*
- A Harmonic Time-Current-Voltage Directional Relay for Optimal Protection Coordination of Inverter-Based Islanded Microgrids. *El-Sayed, W.T.*, +, *TSG May 2021 1904-1917*
- A Hybrid Islanding Detection Method Based on the Rates of Changes in Voltage and Active Power for the Multi-Inverter Systems. *Seyedi, M.*, +, *TSG July 2021 2800-2811*
- A Novel Energy Trading Framework Using Adapted Blockchain Technology. *Hamouda, M.R.*, +, *TSG May 2021 2165-2175*
- A Novel Fault Location Methodology for Smart Distribution Networks. *Mirshakali, H.*, +, *TSG March 2021 1277-1288*
- A Scheduled Intentional Islanding Method Based on Ranking of Possible Islanding Zone. *Mishra, A.*, +, *TSG May 2021 1853-1866*
- A Two-Layer Control Scheme Based on $P - V$ Droop Characteristic for Accurate Power Sharing and Voltage Regulation in DC Microgrids. *Baharizadeh, M.*, +, *TSG July 2021 2776-2787*
- A Unified Distributed Cooperative Control of DC Microgrids Using Consensus Protocol. *Li, Y.*, +, *TSG May 2021 1880-1892*
- An Adaptive Virtual Impedance Control for Improving Power Sharing Among Inverters in Islanded AC Microgrids. *Vijay, A.S.*, +, *TSG July 2021 2991-3003*
- An Inversion-Free Robust Power-Flow Algorithm for Microgrids. *Kumar, A.*, +, *TSG July 2021 2844-2859*
- Correction to “Application of Smart Meters in High-Impedance Fault Detection on Distribution Systems” [May 19 3465-3473]. *Chakraborty, S.*, +, *TSG March 2021 1828*
- Data-Driven Islanding Detection Using a Principal Subspace of Voltage Angle Differences. *Rabuzin, T.*, +, *TSG Sept. 2021 4250-4258*

- Data-Driven Probabilistic Fault Location of Electric Power Distribution Systems Incorporating Data Uncertainties. *Jiang, Y., TSG Sept. 2021 4522-4534*
- Direct-Quadrature Sequence Models for Energy-Function Based Transient Stability Analysis of Unbalanced Inverter-Based Microgrids. *Roos, M., +, TSG Sept. 2021 3692-3704*
- Distributed Power Sharing Control for Islanded Single-/Three-Phase Microgrids With Admissible Voltage and Energy Storage Constraints. *Zhou, J., +, TSG July 2021 2760-2775*
- Distributed Robust Frequency Restoration and Active Power Sharing for Autonomous Microgrids With Event-Triggered Strategy. *Zhao, D., +, TSG Sept. 2021 3819-3834*
- Early Identification and Location of Short-Circuit Fault in Grid-Connected AC Microgrid. *Zheng, X., +, TSG July 2021 2869-2878*
- Fast Islanding Detection of Nested Grids Including Multiple Resources Based on Phase Criteria. *Zamani, R., +, TSG Nov. 2021 4962-4970*
- Faulty Feeder Detection Based on Fundamental Component Shift and Multiple-Transient-Feature Fusion in Distribution Networks. *Wei, X., +, TSG March 2021 1699-1711*
- Frequency-Constrained Resilient Scheduling of Microgrid: A Distributionally Robust Approach. *Chu, Z., +, TSG Nov. 2021 4914-4925*
- Islanding Detection Method With Load Power Factor Improvement and High Frequency Transient Suppressing. *Azzaoui, M.E., TSG Sept. 2021 4176-4184*
- Linear Quadratic Regulator Based Smooth Transition Between Microgrid Operation Modes. *Ganjian-Aboukheili, M., +, TSG Nov. 2021 4854-4864*
- MILP-Based Fault Diagnosis Model in Active Power Distribution Networks. *Wang, C., +, TSG Sept. 2021 3847-3857*
- Modeling of DC Distribution System Based on High Frequency Transient Components. *Jia, K., +, TSG Jan. 2021 671-679*
- MPC-Controlled Virtual Synchronous Generator to Enhance Frequency and Voltage Dynamic Performance in Islanded Microgrids. *Long, B., +, TSG March 2021 953-964*
- Observer-Based Resilient Integrated Distributed Control Against Cyberattacks on Sensors and Actuators in Islanded AC Microgrids. *Shi, M., +, TSG May 2021 1953-1963*
- On the Impact of Fault Ride-Through on Transient Stability of Autonomous Microgrids: Nonlinear Analysis and Solution. *Eskandari, M., +, TSG March 2021 999-1010*
- Online Detection of Inter-Turn Winding Faults in Single-Phase Distribution Transformers Using Smart Meter Data. *Ashok, K., +, TSG Nov. 2021 5073-5083*
- Optimal Restoration of Active Distribution Systems With Voltage Control and Closed-Loop Operation. *Vargas, R., +, TSG May 2021 2295-2306*
- Price-Based Dynamic Optimal Power Flow With Emergency Repair. *Schmitz, M., +, TSG Jan. 2021 324-337*
- Push-Based Distributed Economic Dispatch in Smart Grids Over Time-Varying Unbalanced Directed Graphs. *Wang, Z., +, TSG July 2021 3185-3199*
- Reactive Power Management for Networked Microgrid Resilience in Extreme Conditions. *Shaker, A., +, TSG Sept. 2021 3940-3953*
- Resilience for Communication Faults in Reactive Power Sharing of Microgrids. *Li, X., +, TSG July 2021 2788-2799*
- Stability Analysis of Low-Voltage Distribution Feeders Operated as Islanded Microgrids. *Wang, B., +, TSG Nov. 2021 4681-4689*
- Stability Analysis of Microgrid Islanding Transients Based on Interconnected Dissipative Subsystems. *Roos, M.H., +, TSG Nov. 2021 4655-4667*
- Synchronous Waveform Measurements to Locate Transient Events and Incipient Faults in Power Distribution Networks. *Izadi, M., +, TSG Sept. 2021 4295-4307*
- Voltage Stabilization Control for Microgrid With Asymmetric Membership Function-Based Wavelet Petri Fuzzy Neural Network. *Lin, F., +, TSG Sept. 2021 3731-3741*
- Waveform Difference Feature-Based Protection Scheme for Islanded Microgrids. *He, L., +, TSG May 2021 1939-1952*
- Wide-Band Current Transformers for Traveling-Waves-Based Protection Applications. *Ameli, A., +, TSG Jan. 2021 845-858*
- Power distribution lines**
- A Compensated Distributed-Parameter Line Decoupling Approach for Real Time Applications. *Ahmed, B., +, TSG March 2021 1761-1771*
- A Comprehensive Resilience-Oriented FLISR Method for Distribution Systems. *Liu, J., +, TSG May 2021 2136-2152*
- A Novel Fault Location Methodology for Smart Distribution Networks. *Mirshekali, H., +, TSG March 2021 1277-1288*
- Multi-Stage Multi-Zone Defender-Attacker-Defender Model for Optimal Resilience Strategy With Distribution Line Hardening and Energy Storage System Deployment. *Zhang, H., +, TSG March 2021 1194-1205*
- The Added Value of Coordinating Inverter Control. *Lusis, P., +, TSG March 2021 1238-1248*
- Power distribution planning**
- A Novel Energy Trading Framework Using Adapted Blockchain Technology. *Hamouda, M.R., +, TSG May 2021 2165-2175*
- Agent-Based Modeling of Feeder-Level Electric Vehicle Diffusion for Distribution Planning. *Sun, L., +, TSG Jan. 2021 751-760*
- Algorithm for Simultaneous Medium Voltage Grid Planning and Electric Vehicle Scheduling. *Rotering, N., +, TSG July 2021 3305-3313*
- An MILP Model for Optimal Placement of Sectionalizing Switches and Tie Lines in Distribution Networks With Complex Topologies. *Jooshaki, M., +, TSG Nov. 2021 4740-4751*
- An Optimal Placement Model for Electric Springs in Distribution Networks. *Liang, L., +, TSG Jan. 2021 491-501*
- Conditional Multivariate Elliptical Copulas to Model Residential Load Profiles From Smart Meter Data. *Duque, E.M.S., +, TSG Sept. 2021 4280-4294*
- Consensus Multi-Agent Reinforcement Learning for Volt-VAR Control in Power Distribution Networks. *Gao, Y., +, TSG July 2021 3594-3604*
- Coordination of Distribution Network Reinforcement and DER Planning in Competitive Market. *Xiao, X., +, TSG May 2021 2261-2271*
- Distributed Expansion Planning of Electric Vehicle Dynamic Wireless Charging System in Coupled Power-Traffic Networks. *Xia, F., +, TSG July 2021 3326-3338*
- Integrated Transmission and Distribution System Expansion Planning Under Uncertainty. *Munoz-Delgado, G., +, TSG Sept. 2021 4113-4125*
- Tri-Level Scheduling Model Considering Residential Demand Flexibility of Aggregated HVACs and EVs Under Distribution LMP. *Wang, X., +, TSG Sept. 2021 3990-4002*
- Power distribution protection**
- A Harmonic Time-Current-Voltage Directional Relay for Optimal Protection Coordination of Inverter-Based Islanded Microgrids. *El-Sayed, W.T., +, TSG May 2021 1904-1917*
- Design of Setting Group-Based Overcurrent Protection Scheme for Active Distribution Networks Using MILP. *Ghotbi-Maleki, M., +, TSG March 2021 1185-1193*
- Modeling of DC Distribution System Based on High Frequency Transient Components. *Jia, K., +, TSG Jan. 2021 671-679*
- Waveform Difference Feature-Based Protection Scheme for Islanded Microgrids. *He, L., +, TSG May 2021 1939-1952*
- Wide-Band Current Transformers for Traveling-Waves-Based Protection Applications. *Ameli, A., +, TSG Jan. 2021 845-858*
- Power distribution reliability**
- A Comprehensive Resilience-Oriented FLISR Method for Distribution Systems. *Liu, J., +, TSG May 2021 2136-2152*
- An MILP Model for Optimal Placement of Sectionalizing Switches and Tie Lines in Distribution Networks With Complex Topologies. *Jooshaki, M., +, TSG Nov. 2021 4740-4751*
- Bi-Level Robust Optimization for Distribution System With Multiple Microgrids Considering Uncertainty Distribution Locational Marginal Price. *Wang, L., +, TSG March 2021 1104-1117*
- Data-Driven Probabilistic Fault Location of Electric Power Distribution Systems Incorporating Data Uncertainties. *Jiang, Y., TSG Sept. 2021 4522-4534*
- Linear Quadratic Regulator Based Smooth Transition Between Microgrid Operation Modes. *Ganjian-Aboukheili, M., +, TSG Nov. 2021 4854-4864*

MILP-Based Fault Diagnosis Model in Active Power Distribution Networks. *Wang, C., +, TSG Sept. 2021 3847-3857*

Predicting Weather-Related Failure Risk in Distribution Systems Using Bayesian Neural Network. *Du, Y., +, TSG Jan. 2021 350-360*

Resilience-Motivated Distribution System Restoration Considering Electricity-Water-Gas Interdependency. *Li, J., +, TSG Nov. 2021 4799-4812*

Power electronics

Correction to “Application of Smart Meters in High-Impedance Fault Detection on Distribution Systems” [May 19 3465-3473]. *Chakraborty, S., +, TSG March 2021 1828*

Development of an Encoding Method on a Co-Simulation Platform for Mitigating the Impact of Unreliable Communication. *Xie, F., +, TSG May 2021 2496-2507*

Fast Steady-State Computation of Electrical Networks Involving Nonlinear and Photovoltaic Components. *Ramirez, A., +, TSG July 2021 3107-3114*

Faulty Feeder Detection Based on Fundamental Component Shift and Multiple-Transient-Feature Fusion in Distribution Networks. *Wei, X., +, TSG March 2021 1699-1711*

Region of Attraction Estimation for DC Microgrids With Constant Power Loads Using Potential Theory. *Chang, F., +, TSG Sept. 2021 3793-3808*

Robust Secondary Frequency Control for Virtual Synchronous Machine-Based Microgrid Cluster Using Equivalent Modeling. *Hu, W., +, TSG July 2021 2879-2889*

Synchronization of Low Voltage Grids Fed by Smart and Conventional Transformers. *Giacomuzzi, S., +, TSG July 2021 2941-2951*

Transient Stability and Current Injection Design of Paralleled Current-Controlled VSCs and Virtual Synchronous Generators. *Shen, C., +, TSG March 2021 1118-1134*

Power engineering computing

A Blockchain-Enabled Multi-Settlement Quasi-Ideal Peer-to-Peer Trading Framework. *AlAshery, M.K., +, TSG Jan. 2021 885-896*

A Compensated Distributed-Parameter Line Decoupling Approach for Real Time Applications. *Ahmed, B., +, TSG March 2021 1761-1771*

A Cyber-Physical Anomaly Detection for Wide-Area Protection Using Machine Learning. *Singh, V.K., +, TSG July 2021 3514-3526*

A Deep Learning-Based Cyberattack Detection System for Transmission Protective Relays. *Khaw, Y.M., +, TSG May 2021 2554-2565*

A Detection Mechanism Against Load-Redistribution Attacks in Smart Grids. *Kaviani, R., +, TSG Jan. 2021 704-714*

A FDI Attack-Resilient Distributed Secondary Control Strategy for Islanded Microgrids. *Chen, Y., +, TSG May 2021 1929-1938*

A Homomorphic Encryption-Based Private Collaborative Distributed Energy Management System. *Cheng, Z., +, TSG Nov. 2021 5233-5243*

A Microgrid Energy Management System Based on Non-Intrusive Load Monitoring via Multitask Learning. *Cimen, H., +, TSG March 2021 977-987*

A Novel Energy Sharing Mechanism for Smart Microgrid. *Li, S., +, TSG Nov. 2021 5475-5478*

A Novel Energy Trading Framework Using Adapted Blockchain Technology. *Hamouda, M.R., +, TSG May 2021 2165-2175*

A Reinforcement Learning-Based Decision System for Electricity Pricing Plan Selection by Smart Grid End Users. *Lu, T., +, TSG May 2021 2176-2187*

A Synchrophasor Data Compression Technique With Iteration-Enhanced Phasor Principal Component Analysis. *Zhang, F., +, TSG May 2021 2365-2377*

Adaptive Congestion Control for Electric Vehicle Charging in the Smart Grid. *Zishan, A.A., +, TSG May 2021 2439-2449*

Adaptive Weighted Recurrence Graphs for Appliance Recognition in Non-Intrusive Load Monitoring. *Faustine, A., +, TSG Jan. 2021 398-406*

Agent-Based Modeling of Feeder-Level Electric Vehicle Diffusion for Distribution Planning. *Sun, L., +, TSG Jan. 2021 751-760*

An Adaptive Approach for Dynamic Load Modeling in Microgrids. *Chavarrro-Barrera, L., +, TSG July 2021 2834-2843*

An Adaptive Distributionally Robust Model for Three-Phase Distribution Network Reconfiguration. *Zheng, W., +, TSG March 2021 1224-1237*

An Adaptive Ensemble Data Driven Approach for Nonparametric Probabilistic Forecasting of Electricity Load. *Wan, C., +, TSG Nov. 2021 5396-5408*

An Identity Based Authentication Protocol for Smart Grid Environment Using Physical Unclonable Function. *Badar, H.M.S., +, TSG Sept. 2021 4426-4434*

An Optimization-Based Approach to Recover the Detected Attacked Grid Variables After False Data Injection Attack. *Jorjani, M., +, TSG Nov. 2021 5322-5334*

Anomaly Detection, Localization and Classification Using Drifting Synchrophasor Data Streams. *Ahmed, A., +, TSG July 2021 3570-3580*

Artificial Neural Network-Based Stealth Attack on Battery Energy Storage Systems. *Pasetti, M., +, TSG Nov. 2021 5310-5321*

Back Up Protection Scheme for High Impedance Faults Detection in Transmission Systems Based on Synchrophasor Measurements. *Vlahinic, S., +, TSG March 2021 1736-1746*

Blockchain for Transacting Energy and Carbon Allowance in Networked Microgrids. *Yan, M., +, TSG Nov. 2021 4702-4714*

Capturing Spatio-Temporal Dependencies in the Probabilistic Forecasting of Distribution Locational Marginal Prices. *Toubeau, J., +, TSG May 2021 2663-2674*

Causative Cyberattacks on Online Learning-Based Automated Demand Response Systems. *Acharya, S., +, TSG July 2021 3548-3559*

Consensus Multi-Agent Reinforcement Learning for Volt-VAR Control in Power Distribution Networks. *Gao, Y., +, TSG July 2021 3594-3604*

Constructing Demand-Side Bidding Curves Based on a Decoupled Full-Cycle Process. *Ruan, G., +, TSG Jan. 2021 502-511*

Contract-Based Incentive Mechanisms for Honeypot Defense in Advanced Metering Infrastructure. *Tian, W., +, TSG Sept. 2021 4259-4268*

Cyber-Vulnerability Analysis for Real-Time Power Market Operation. *Zhang, Q., +, TSG July 2021 3527-3537*

Cyberattacks Against Event-Based Analysis in Micro-PMUs: Attack Models and Counter Measures. *Kamal, M., +, TSG March 2021 1577-1588*

Data-Driven Copy-Paste Imputation for Energy Time Series. *Weber, M., +, TSG Nov. 2021 5409-5419*

Data-Driven False Data Injection Attacks Against Power Grids: A Random Matrix Approach. *Lakshminarayana, S., +, TSG Jan. 2021 635-646*

Data-Driven Risk Preference Analysis in Day-Ahead Electricity Market. *Zhao, H., +, TSG May 2021 2508-2517*

Deep Learning-Based Real-Time Switching of Hybrid AC/DC Transmission Networks. *Dabbaghjamesh, M., +, TSG May 2021 2331-2342*

Deep Reinforcement Learning for Continuous Electric Vehicles Charging Control With Dynamic User Behaviors. *Yan, L., +, TSG Nov. 2021 5124-5134*

Deep-Reinforcement-Learning-Based Capacity Scheduling for PV-Battery Storage System. *Huang, B., +, TSG May 2021 2272-2283*

Defense Strategy Against Load Redistribution Attacks on Power Systems Considering Insider Threats. *Liu, Z., +, TSG March 2021 1529-1540*

Detecting False Data Injection Attacks in Smart Grids: A Semi-Supervised Deep Learning Approach. *Zhang, Y., +, TSG Jan. 2021 623-634*

Detection of Cyber-Attacks of Power Systems Through Benford's Law. *Milano, F., +, TSG May 2021 2741-2744*

Detection of Synchrophasor False Data Injection Attack Using Feature Interactive Network. *Qiu, W., +, TSG Jan. 2021 659-670*

Development of an Encoding Method on a Co-Simulation Platform for Mitigating the Impact of Unreliable Communication. *Xie, F., +, TSG May 2021 2496-2507*

Distributed Consensus-Based Economic Dispatch in Power Grids Using the Paillier Cryptosystem. *Yan, Y., +, TSG July 2021 3493-3502*

Distributed Privacy-Preserving Active Power Sharing and Frequency Regulation in Microgrids. *Fan, B., +, TSG July 2021 3665-3668*

Distributed Resilient Optimal Current Sharing Control for an Islanded DC Microgrid Under DoS Attacks. *Lian, Z., +, TSG Sept. 2021 4494-4505*

Distribution Feeder-Scale Fast Frequency Response via Optimal Coordination of Net-Load Resources—Part I: Solution Design. *Lundstrom, B., +, TSG March 2021 1289-1302*

- Distribution System Resilience in Ice Storms by Optimal Routing of Mobile Devices on Congested Roads. *Yan, M., +, TSG March 2021 1314-1328*
- Domain Randomization for Demand Response of an Electric Water Heater. *Peirelinck, T., +, TSG March 2021 1370-1379*
- Electricity Consumer Characteristics Identification: A Federated Learning Approach. *Wang, Y., +, TSG July 2021 3637-3647*
- Enabling Online Scheduling for Multi-Microgrid Systems: An Event-Triggered Approach. *Yang, X., +, TSG May 2021 1836-1852*
- Enhancing the Spatio-Temporal Observability of Grid-Edge Resources in Distribution Grids. *Lin, S., +, TSG Nov. 2021 5434-5443*
- False Data Injection Attacks Against State-of-Charge Estimation of Battery Energy Storage Systems in Smart Distribution Networks. *Zhuang, P., +, TSG May 2021 2566-2577*
- Faulty Feeder Detection Based on Fundamental Component Shift and Multiple-Transient-Feature Fusion in Distribution Networks. *Wei, X., +, TSG March 2021 1699-1711*
- FeederGAN: Synthetic Feeder Generation via Deep Graph Adversarial Nets. *Liang, M., +, TSG March 2021 1163-1173*
- Fractional Dynamics of PMU Data. *Shalalfeh, L., +, TSG May 2021 2578-2588*
- Fully-Convolutional Denoising Auto-Encoders for NILM in Large Non-Residential Buildings. *Garcia-Perez, D., +, TSG May 2021 2722-2731*
- Generalizability Improvement of Deep Learning-Based Non-Intrusive Load Monitoring System Using Data Augmentation. *Rafiq, H., +, TSG July 2021 3265-3277*
- Hybrid Multitask Multi-Information Fusion Deep Learning for Household Short-Term Load Forecasting. *Jiang, L., +, TSG Nov. 2021 5362-5372*
- Imitation and Transfer Q-Learning-Based Parameter Identification for Composite Load Modeling. *Xie, J., +, TSG March 2021 1674-1684*
- Incentive-Compatible Demand Response for Spatially Coupled Internet Data Centers in Electricity Markets. *Chen, M., +, TSG July 2021 3056-3069*
- Intrusion Detection for Cybersecurity of Smart Meters. *Sun, C., +, TSG Jan. 2021 612-622*
- Isochronous Architecture-Based Voltage-Active Power Droop for Multi-Inverter Systems. *Patel, S., +, TSG March 2021 1088-1103*
- Learning-Based Simultaneous Detection and Characterization of Time Delay Attack in Cyber-Physical Systems. *Ganesh, P., +, TSG July 2021 3581-3593*
- Leveraging Network Topology Optimization to Strengthen Power Grid Resilience Against Cyber-Physical Attacks. *Liu, Z., +, TSG March 2021 1552-1564*
- Load Photo: A Novel Analysis Method for Load Data. *Wang, H., +, TSG March 2021 1394-1404*
- Missing Data Recovery in Large Power Systems Using Network Embedding. *Wu, T., +, TSG Jan. 2021 680-691*
- Mobility-Aware Charging Scheduling for Shared On-Demand Electric Vehicle Fleet Using Deep Reinforcement Learning. *Liang, Y., +, TSG March 2021 1380-1393*
- Model-Free Lossless Data Compression for Real-Time Low-Latency Transmission in Smart Grids. *Yan, L., +, TSG May 2021 2601-2610*
- Modeling of Time-Delayed Distributed Cyber-Physical Power Systems for Small-Signal Stability Analysis. *Xu, L., +, TSG July 2021 3425-3437*
- Network Parameter Coordinated False Data Injection Attacks Against Power System AC State Estimation. *Liu, C., +, TSG March 2021 1626-1639*
- Online Detection of Inter-Turn Winding Faults in Single-Phase Distribution Transformers Using Smart Meter Data. *Ashok, K., +, TSG Nov. 2021 5073-5083*
- Online Optimization for Real-Time Peer-to-Peer Electricity Market Mechanisms. *Guo, Z., +, TSG Sept. 2021 4151-4163*
- Optimal Coordination of Phasor Data Concentrators in Hierarchical Synchrophasor Networks. *Pourramezan, R., +, TSG May 2021 2402-2412*
- Optimal PMU Restoration for Power System Observability Recovery After Massive Attacks. *Edtb, S.N., +, TSG March 2021 1565-1576*
- Optimal Policy Characterization Enhanced Actor-Critic Approach for Electric Vehicle Charging Scheduling in a Power Distribution Network. *Jin, J., +, TSG March 2021 1416-1428*
- Perturbation-Based Diagnosis of False Data Injection Attack Using Distributed Energy Resources. *Jhala, K., +, TSG March 2021 1589-1601*
- Power System Disturbance Classification With Online Event-Driven Neuro-morphic Computing. *Mahapatra, K., +, TSG May 2021 2343-2354*
- Privacy Preserving in Non-Intrusive Load Monitoring: A Differential Privacy Perspective. *Wang, H., +, TSG May 2021 2529-2543*
- Privacy-Preserving Distributed Average Observers in Distribution Systems With Grid-Forming Inverters. *Du, Y., +, TSG Nov. 2021 5000-5010*
- Privacy-Preserving Distributed Clustering for Electrical Load Profiling. *Jia, M., +, TSG March 2021 1429-1444*
- Privacy-Preserving Distributed Optimal Power Flow With Partially Homomorphic Encryption. *Wu, T., +, TSG Sept. 2021 4506-4521*
- Privacy-Preserving Hierarchical State Estimation in Untrustworthy Cloud Environments. *Wang, J., +, TSG March 2021 1541-1551*
- Probabilistic Load Forecasting via Neural Basis Expansion Model Based Prediction Intervals. *Wen, H., +, TSG July 2021 3648-3660*
- Protection Against False Data Injection Attacks Considering Degrees of Freedom in Attack Vectors. *Sreeram, T.S., +, TSG Nov. 2021 5258-5267*
- Push-Sum-Enabled Resilient Microgrid Control. *Babahajani, P., +, TSG July 2021 3661-3664*
- Real-Time Synchrophasor Data Anomaly Detection and Classification Using *Isolation Forest*, *KMeans*, and *LoOP*. *Khaledian, E., +, TSG May 2021 2378-2388*
- Reliability Analyses of Wide-Area Protection System Considering Cyber-Physical System Constraints. *He, R., +, TSG July 2021 3458-3467*
- Resilience Against Data Manipulation in Distributed Synchrophasor-Based Mode Estimation. *Rajabi, A., +, TSG July 2021 3538-3547*
- Resilient Control and Analysis for DC Microgrid System Under DoS and Impulsive FDI Attacks. *Liu, X., +, TSG Sept. 2021 3742-3754*
- Resilient Wide-Area Damping Control for Inter-Area Oscillations to Tolerate Deception Attacks. *Yao, W., +, TSG Sept. 2021 4238-4249*
- Risk-Constrained Minimization of Combined Event Detection and Decision Time for Online Transient Stability Assessment. *Gonzalez, J., +, TSG Sept. 2021 4564-4572*
- Robust Regional Coordination of Inverter-Based Volt/Var Control via Multi-Agent Deep Reinforcement Learning. *Liu, H., +, TSG Nov. 2021 5420-5433*
- SCCO: A State-Caching-Based Coagulation Platform for Cybor-Physical Power System Evaluation. *Wang, Q., +, TSG March 2021 1615-1625*
- Scenario Reduction for Stochastic Day-Ahead Scheduling: A Mixed Auto-encoder Based Time-Series Clustering Approach. *Liang, J., +, TSG May 2021 2652-2662*
- Source Authentication of Distribution Synchrophasors for Cybersecurity of Microgrids. *Cui, Y., +, TSG Sept. 2021 4577-4580*
- Spatial-Temporal Residential Short-Term Load Forecasting via Graph Neural Networks. *Lin, W., +, TSG Nov. 2021 5373-5384*
- Starlink Space Network-Enhanced Cyber-Physical Power System. *Duan, T., +, TSG July 2021 3673-3675*
- Statistical Load Forecasting Using Optimal Quantile Regression Random Forest and Risk Assessment Index. *Aprillia, H., +, TSG March 2021 1467-1480*
- Stealthy Black-Box Attacks on Deep Learning Non-Intrusive Load Monitoring Models. *Wang, J., +, TSG July 2021 3479-3492*
- Stealthy Cyberattacks on Loads and Distributed Generation Aimed at Multi-Transmission Line Congestions in Smart Grids. *Khazaei, J., TSG May 2021 2518-2528*
- Synchrophasor Data Under GPS Spoofing: Attack Detection and Mitigation Using Residuals. *Chauhan, S.V.S., +, TSG July 2021 3415-3424*
- Targeted False Data Injection Attacks Against AC State Estimation Without Network Parameters. *Du, M., +, TSG Nov. 2021 5349-5361*
- The Utilization of Shared Energy Storage in Energy Systems: A Comprehensive Review. *Dai, R., +, TSG July 2021 3163-3174*
- Time Series Classification for Locating Forced Oscillation Sources. *Meng, Y., +, TSG March 2021 1712-1721*
- Toward Load Identification Based on the Hilbert Transform and Sequence to Sequence Long Short-Term Memory. *Le, T., +, TSG July 2021 3252-3264*

- TraceGAN: Synthesizing Appliance Power Signatures Using Generative Adversarial Networks. *Harell, A.*, +, *TSG Sept. 2021 4553-4563*
- Transactive Energy Market Mechanism With Loss Implication. *Azizi, A.*, +, *TSG March 2021 1215-1223*
- Two Secure and Efficient Lightweight Data Aggregation Schemes for Smart Grid. *Qian, J.*, +, *TSG May 2021 2625-2637*
- Two-Stage Volt/Var Control in Active Distribution Networks With Multi-Agent Deep Reinforcement Learning Method. *Sun, X.*, +, *TSG July 2021 2903-2912*
- Unsupervised Congestion Status Identification Using LMP Data. *Zheng, K.*, +, *TSG Jan. 2021 726-736*
- Unsupervised Event Detection, Clustering, and Use Case Exposition in Micro-PMU Measurements. *Aligholian, A.*, +, *TSG July 2021 3624-3636*
- Verification of Neural Network Behaviour: Formal Guarantees for Power System Applications. *Venzke, A.*, +, *TSG Jan. 2021 383-397*
- Voltage Stabilization Control for Microgrid With Asymmetric Membership Function-Based Wavelet Petri Fuzzy Neural Network. *Lin, F.*, +, *TSG Sept. 2021 3731-3741*
- Vulnerability Assessment of Deep Reinforcement Learning Models for Power System Topology Optimization. *Zheng, Y.*, +, *TSG July 2021 3613-3623*
- Wide-Area Damping Control Resilience Towards Cyber-Attacks: A Dynamic Loop Approach. *Patel, A.*, +, *TSG July 2021 3438-3447*
- Power factor**
- Dynamic Modeling of Battery Energy Storage and Applications in Transmission Systems. *Calero, F.*, +, *TSG Jan. 2021 589-598*
- Fast Islanding Detection of Nested Grids Including Multiple Resources Based on Phase Criteria. *Zamani, R.*, +, *TSG Nov. 2021 4962-4970*
- Islanding Detection Method With Load Power Factor Improvement and High Frequency Transient Suppressing. *Azzaoui, M.E.*, *TSG Sept. 2021 4176-4184*
- Power generation control**
- A Cascaded Distributed Control Framework in DC Microgrids. *Zhou, J.*, +, *TSG Jan. 2021 205-214*
- A Cluster-Based Model for Charging a Single-Depot Fleet of Electric Vehicles. *Sepetanc, K.*, +, *TSG July 2021 3339-3352*
- A Cyber Attack Mitigation Scheme for Series Compensated DFIG-Based Wind Parks. *Ghafouri, M.*, +, *TSG Nov. 2021 5221-5232*
- A FDI Attack-Resilient Distributed Secondary Control Strategy for Islanded Microgrids. *Chen, Y.*, +, *TSG May 2021 1929-1938*
- A Harmonic Time-Current-Voltage Directional Relay for Optimal Protection Coordination of Inverter-Based Islanded Microgrids. *El-Sayed, W.T.*, +, *TSG May 2021 1904-1917*
- A Mean-Field Voltage Control Approach for Active Distribution Networks With Uncertainties. *Wei, B.*, +, *TSG March 2021 1455-1466*
- A Unified Distributed Cooperative Control of DC Microgrids Using Consensus Protocol. *Li, Y.*, +, *TSG May 2021 1880-1892*
- Active Distribution Grids Providing Voltage Support: The Swiss Case. *Karagiannopoulos, S.*, +, *TSG Jan. 2021 268-278*
- Aggregation of Voltage-Controlled Devices During Distribution Network Reduction. *Pecenak, Z.K.*, +, *TSG Jan. 2021 33-42*
- An Adaptive PV Frequency Control Strategy Based on Real-Time Inertia Estimation. *Su, Y.*, +, *TSG May 2021 2355-2364*
- An Energy Management System With Short-Term Fluctuation Reserves and Battery Degradation for Isolated Microgrids. *Cordova, S.*, +, *TSG Nov. 2021 4668-4680*
- Analysis of IoT-Based Load Altering Attacks Against Power Grids Using the Theory of Second-Order Dynamical Systems. *Lakshminarayana, S.*, +, *TSG Sept. 2021 4415-4425*
- Artificial Neural Network-Based Stealth Attack on Battery Energy Storage Systems. *Pasetti, M.*, +, *TSG Nov. 2021 5310-5321*
- Bargaining Game-Based Profit Allocation of Virtual Power Plant in Frequency Regulation Market Considering Battery Cycle Life. *Chen, W.*, +, *TSG July 2021 2913-2928*
- Buffered-Microgrid Structure for Future Power Networks; a Seamless Microgrid Control. *Nasser, N.*, +, *TSG Jan. 2021 131-140*
- Chopperless Fault Ride-Through Control for DC Microgrids. *Xia, Y.*, +, *TSG March 2021 965-976*
- Cooperative Optimization of Networked Microgrids for Supporting Grid Flexibility Services Using Model Predictive Control. *Garcia-Torres, F.*, +, *TSG May 2021 1893-1903*
- Coordinated Control of Air-Conditioning Loads for System Frequency Regulation. *Jiang, T.*, +, *TSG Jan. 2021 548-560*
- Countering FDI Attacks on DERs Coordinated Control System Using FMI-Compatible Cosimulation. *Jafarigiv, D.*, +, *TSG March 2021 1640-1650*
- Cross-Layer Distributed Control Strategy for Cyber Resilient Microgrids. *Zhou, Q.*, +, *TSG Sept. 2021 3705-3717*
- Current Injection Power Flow Analysis and Optimal Generation Dispatch for Bipolar DC Microgrids. *Lee, J.*, +, *TSG May 2021 1918-1928*
- Decentralized Optimal Stabilization of Active Loads in Islanded Microgrids. *Dissanayake, A.M.*, +, *TSG March 2021 932-942*
- Distributed Control of DC Microgrids for Optimal Coordination of Conventional and Renewable Generators. *Fan, Z.*, +, *TSG Nov. 2021 4607-4615*
- Distributed Control of Multi-Energy Storage Systems for Voltage Regulation in Distribution Networks: A Back-and-Forth Communication Framework. *Yu, P.*, +, *TSG May 2021 1964-1977*
- Distributed Control Strategy for Low-Voltage Three-Phase Four-Wire Microgrids: Consensus Power-Based Control. *Ferreira, D.M.*, +, *TSG July 2021 3215-3231*
- Distributed Coordinated Reactive Power Control for Voltage Regulation in Distribution Networks. *Tang, Z.*, +, *TSG Jan. 2021 312-323*
- Distributed Dynamic Clustering Algorithm for Formation of Heterogeneous Virtual Power Plants Based on Power Requirements. *Zhang, R.*, +, *TSG Jan. 2021 192-204*
- Distributed Observer-Based Finite-Time Control of AC Microgrid Under Attack. *Lu, R.*, +, *TSG Jan. 2021 157-168*
- Distributed Power Sharing Control for Islanded Single-/Three-Phase Microgrids With Admissible Voltage and Energy Storage Constraints. *Zhou, J.*, +, *TSG July 2021 2760-2775*
- Distributed Robust Frequency Restoration and Active Power Sharing for Autonomous Microgrids With Event-Triggered Strategy. *Zhao, D.*, +, *TSG Sept. 2021 3819-3834*
- Distribution Feeder-Scale Fast Frequency Response via Optimal Coordination of Net-Load Resources—Part I: Solution Design. *Lundstrom, B.*, +, *TSG March 2021 1289-1302*
- Distribution Feeder-Scale Fast Frequency Response via Optimal Coordination of Net-Load Resources—Part II: Large-Scale Demonstration. *Lundstrom, B.*, +, *TSG March 2021 1445-1454*
- Distributionally Robust Optimal Power Flow in Multi-Microgrids With Decomposition and Guaranteed Convergence. *Huang, W.*, +, *TSG Jan. 2021 43-55*
- Disturbance Observer and Tube-Based Model Predictive Controlled Electric Vehicles for Frequency Regulation of an Isolated Power Grid. *Oshnoei, A.*, +, *TSG Sept. 2021 4351-4362*
- Dual Inertia-Emulation Control for Interlinking Converters in Grid-Tying Applications. *Paniagua, J.*, +, *TSG Sept. 2021 3868-3876*
- Dynamic Modeling of Battery Energy Storage and Applications in Transmission Systems. *Calero, F.*, +, *TSG Jan. 2021 589-598*
- Extraction of Dynamic Frequency Response Characteristics and Modelling of Modern Air Conditioners. *Bai, F.*, +, *TSG Jan. 2021 897-900*
- Forecast-Based Consensus Control for DC Microgrids Using Distributed Long Short-Term Memory Deep Learning Models. *Alavi, S.A.*, +, *TSG Sept. 2021 3718-3730*
- Frequency Regulation in Isolated Microgrids Through Optimal Droop Gain and Voltage Control. *Alghamdi, B.*, +, *TSG March 2021 988-998*
- Frequency Regulation With Heterogeneous Energy Resources: A Realization Using Distributed Control. *Anderson, T.*, +, *TSG Sept. 2021 4126-4136*
- Frequency Restoration and Oscillation Damping of Distributed VSGs in Microgrid With Low Bandwidth Communication. *Shi, M.*, +, *TSG March 2021 1011-1021*
- Integrated Planning of a Solar/Storage Collective. *Contreras-Ocana, J.E.*, +, *TSG Jan. 2021 215-226*

- Isochronous Architecture-Based Voltage-Active Power Droop for Multi-Inverter Systems. *Patel, S.*, +, *TSG March 2021 1088-1103*
- Linear Quadratic Regulator Based Smooth Transition Between Microgrid Operation Modes. *Ganjian-Aboukheili, M.*, +, *TSG Nov. 2021 4854-4864*
- LVRT Operation Enhancement of Single-Stage Photovoltaic Power Plants: An Analytical Approach. *Nasiri, M.*, +, *TSG Nov. 2021 5020-5029*
- Minimizing Energy Storage Utilization in a Stand-Alone DC Microgrid Using Photovoltaic Flexible Power Control. *Yan, H.W.*, +, *TSG Sept. 2021 3755-3764*
- Modeling of Time-Delayed Distributed Cyber-Physical Power Systems for Small-Signal Stability Analysis. *Xu, L.*, +, *TSG July 2021 3425-3437*
- MPC-Controlled Virtual Synchronous Generator to Enhance Frequency and Voltage Dynamic Performance in Islanded Microgrids. *Long, B.*, +, *TSG March 2021 953-964*
- Multi-Agent Safe Policy Learning for Power Management of Networked Microgrids. *Zhang, Q.*, +, *TSG March 2021 1048-1062*
- Observer-Based Resilient Integrated Distributed Control Against Cyberattacks on Sensors and Actuators in Islanded AC Microgrids. *Shi, M.*, +, *TSG May 2021 1953-1963*
- On the Impact of Fault Ride-Through on Transient Stability of Autonomous Microgrids: Nonlinear Analysis and Solution. *Eskandari, M.*, +, *TSG March 2021 999-1010*
- Optimal HVAC Control for Demand Response via Chance-Constrained Two-Stage Stochastic Program. *Mansy, H.*, +, *TSG May 2021 2188-2200*
- Optimal Schedule for Networked Microgrids Under Deregulated Power Market Environment Using Model Predictive Control. *Garcia-Torres, F.*, +, *TSG Jan. 2021 182-191*
- Photovoltaic System Power Reserve Determination Using Parabolic Approximation of Frequency Response. *Baskarad, T.*, +, *TSG July 2021 3175-3184*
- Power System Resilience Enhancement in Typhoons Using a Three-Stage Day-Ahead Unit Commitment. *Ding, T.*, +, *TSG May 2021 2153-2164*
- Primary Frequency Control in Isolated Microgrids Using Thermostatically Controllable Loads. *Mendieta, W.*, +, *TSG Jan. 2021 93-105*
- Privacy-Preserving Distributed Average Observers in Distribution Systems With Grid-Forming Inverters. *Du, Y.*, +, *TSG Nov. 2021 5000-5010*
- Provision of Primary Frequency Response as Ancillary Service From Active Distribution Networks to the Transmission System. *Kontis, E.O.*, +, *TSG Nov. 2021 4971-4982*
- Real-Time Control of Battery Energy Storage Systems to Provide Ancillary Services Considering Voltage-Dependent Capability of DC-AC Converters. *Yuan, Z.*, +, *TSG Sept. 2021 4164-4175*
- Resilient Control and Analysis for DC Microgrid System Under DoS and Impulsive FDI Attacks. *Liu, X.*, +, *TSG Sept. 2021 3742-3754*
- Resilient Economic Control for Distributed Microgrids Under False Data Injection Attacks. *Zhang, W.*, +, *TSG Sept. 2021 4435-4446*
- Robust Hierarchical Control Mechanism for Aggregated Thermostatically Controlled Loads. *Gong, X.*, +, *TSG Jan. 2021 453-467*
- Robust Hybrid Control for Demand Side Management in Islanded Microgrids. *Albea, C.*, +, *TSG Nov. 2021 4865-4875*
- Robust Load Frequency Control of Power Systems Against Random Time-Delay Attacks. *Xiahou, K.S.*, +, *TSG Jan. 2021 909-911*
- Robust Regional Coordination of Inverter-Based Volt/Var Control via Multi-Agent Deep Reinforcement Learning. *Liu, H.*, +, *TSG Nov. 2021 5420-5433*
- Robust Secondary Frequency Control for Virtual Synchronous Machine-Based Microgrid Cluster Using Equivalent Modeling. *Hu, W.*, +, *TSG July 2021 2879-2889*
- Second Harmonic Injection-Based Recovery Control of PV DC Boosting Integration System. *Jia, K.*, +, *TSG March 2021 1022-1032*
- State Estimation for Situational Awareness of Active Distribution System With Photovoltaic Power Plants. *Fang, Z.*, +, *TSG Jan. 2021 239-250*
- Supplementary Controller for Seamless Transitions Between Microgrids Operation Modes. *Azimi, S.M.*, +, *TSG May 2021 2102-2112*
- Supplementary Feedforward Control of DGs in a Reconfigurable Microgrid for Load Restoration. *Park, J.*, +, *TSG Nov. 2021 4641-4654*
- Transient Stability and Current Injection Design of Paralleled Current-Controlled VSCs and Virtual Synchronous Generators. *Shen, C.*, +, *TSG March 2021 1118-1134*
- Two-Time-Scale Energy Management for Microgrids With Data-Based Day-Ahead Distributionally Robust Chance-Constrained Scheduling. *Yuan, Z.*, +, *TSG Nov. 2021 4778-4787*
- Voltage Stabilization Control for Microgrid With Asymmetric Membership Function-Based Wavelet Petri Fuzzy Neural Network. *Lin, F.*, +, *TSG Sept. 2021 3731-3741*
- Voltage-Based Distributed Optimal Control for Generation Cost Minimization and Bounded Bus Voltage Regulation in DC Microgrids. *Peng, J.*, +, *TSG Jan. 2021 106-116*
- Power generation dispatch**
- A Dynamic Equivalent Model for District Heating Networks: Formulation, Existence and Application in Distributed Electricity-Heat Operation. *Zheng, W.*, +, *TSG May 2021 2685-2695*
- A Historical-Correlation-Driven Robust Optimization Approach for Microgrid Dispatch. *Qiu, H.*, +, *TSG March 2021 1135-1148*
- A Novel Communication-Less Approach to Economic Dispatch for Microgrids. *Lyu, C.*, +, *TSG Jan. 2021 901-904*
- A Transactive Retail Market Mechanism for Active Distribution Network Integrated With Large-Scale Distributed Energy Resources. *Huang, C.*, +, *TSG Sept. 2021 4225-4237*
- An Energy Management System With Short-Term Fluctuation Reserves and Battery Degradation for Isolated Microgrids. *Cordova, S.*, +, *TSG Nov. 2021 4668-4680*
- Bi-Level Robust Optimization for Distribution System With Multiple Microgrids Considering Uncertainty Distribution Locational Marginal Price. *Wang, L.*, +, *TSG March 2021 1104-1117*
- Blockchain Based Secure Data Aggregation and Distributed Power Dispatching for Microgrids. *Luo, X.*, +, *TSG Nov. 2021 5268-5279*
- Current Injection Power Flow Analysis and Optimal Generation Dispatch for Bipolar DC Microgrids. *Lee, J.*, +, *TSG May 2021 1918-1928*
- Distributed Consensus-Based Economic Dispatch in Power Grids Using the Paillier Cryptosystem. *Yan, Y.*, +, *TSG July 2021 3493-3502*
- Distributed Optimization for Integrated Frequency Regulation and Economic Dispatch in Microgrids. *Xu, Y.*, +, *TSG Nov. 2021 4595-4606*
- Distributed Predictive Control Strategy for Frequency Restoration of Microgrids Considering Optimal Dispatch. *F. A.N.*, +, *TSG July 2021 2748-2759*
- Distribution Feeder-Scale Fast Frequency Response via Optimal Coordination of Net-Load Resources—Part I: Solution Design. *Lundstrom, B.*, +, *TSG March 2021 1289-1302*
- Distribution Feeder-Scale Fast Frequency Response via Optimal Coordination of Net-Load Resources—Part II: Large-Scale Demonstration. *Lundstrom, B.*, +, *TSG March 2021 1445-1454*
- Distribution System Resilience in Ice Storms by Optimal Routing of Mobile Devices on Congested Roads. *Yan, M.*, +, *TSG March 2021 1314-1328*
- Dynamic Stochastic Demand Response With Energy Storage. *Xiao, Y.*, +, *TSG Nov. 2021 4813-4821*
- Fast Wasserstein-Distance-Based Distributionally Robust Chance-Constrained Power Dispatch for Multi-Zone HVAC Systems. *Chen, G.*, +, *TSG Sept. 2021 4016-4028*
- Hierarchical Voltage Control Strategy in Distribution Networks Considering Customized Charging Navigation of Electric Vehicles. *Sun, X.*, +, *TSG Nov. 2021 4752-4764*
- Incentive Based Demand Response Program for Power System Flexibility Enhancement. *Mohandes, B.*, +, *TSG May 2021 2212-2223*
- Integrated Electricity and Hydrogen Energy Sharing in Coupled Energy Systems. *Tao, Y.*, +, *TSG March 2021 1149-1162*
- Market-Based Energy Management Model of a Building Microgrid Considering Battery Degradation. *Antoniadou-Plytaria, K.*, +, *TSG March 2021 1794-1804*
- Online Rolling Evolutionary Decoder-Dispatch Framework for the Secondary Frequency Regulation of Time-Varying Electrical-Grid-Electric-Vehicle System. *Dong, C.*, +, *TSG Jan. 2021 871-884*

- Operational Reliability Assessment of Integrated Heat and Electricity Systems Considering the Load Uncertainties. *Ding, Y.*, +, *TSG Sept. 2021* 3928-3939
- Parallel and Distributed Optimization Method With Constraint Decomposition for Energy Management of Microgrids. *Li, Q.*, +, *TSG Nov. 2021* 4627-4640
- Power System Resilience Enhancement in Typhoons Using a Three-Stage Day-Ahead Unit Commitment. *Ding, T.*, +, *TSG May 2021* 2153-2164
- Push-Based Distributed Economic Dispatch in Smart Grids Over Time-Varying Unbalanced Directed Graphs. *Wang, Z.*, +, *TSG July 2021* 3185-3199
- Real-Time Distributed Economic Dispatch Adapted to General Convex Cost Functions: A Secant Approximation-Based Method. *Zhong, H.*, +, *TSG May 2021* 2089-2101
- Reserve Model of Energy Storage in Day-Ahead Joint Energy and Reserve Markets: A Stochastic UC Solution. *Tang, Z.*, +, *TSG Jan. 2021* 372-382
- Resilient Restoration of Distribution Systems in Coordination With Electric Bus Scheduling. *Li, B.*, +, *TSG July 2021* 3314-3325
- Risk-Averse Coordinated Operation of a Multi-Energy Microgrid Considering Voltage/Var Control and Thermal Flow: An Adaptive Stochastic Approach. *Li, Z.*, +, *TSG Sept. 2021* 3914-3927
- Risk-Averse Optimal Energy and Reserve Scheduling for Virtual Power Plants Incorporating Demand Response Programs. *Vahedipour-Dahraie, M.*, +, *TSG March 2021* 1405-1415
- Step Towards Energy-Water Smart Microgrids; Buildings Thermal Energy and Water Demand Management Embedded in Economic Dispatch. *Moa-zeni, F.*, +, *TSG Sept. 2021* 3680-3691
- Tracking Equilibrium Point Under Real-Time Price-Based Residential Demand Response. *Ding, T.*, +, *TSG May 2021* 2736-2740
- Tri-Level Scheduling Model Considering Residential Demand Flexibility of Aggregated HVACs and EVs Under Distribution LMP. *Wang, X.*, +, *TSG Sept. 2021* 3990-4002
- Two-Stage Volt/Var Control in Active Distribution Networks With Multi-Agent Deep Reinforcement Learning Method. *Sun, X.*, +, *TSG July 2021* 2903-2912
- Two-Time-Scale Energy Management for Microgrids With Data-Based Day-Ahead Distributionally Robust Chance-Constrained Scheduling. *Yuan, Z.*, +, *TSG Nov. 2021* 4778-4787
- Power generation economics**
- A Blockchain-Enabled Multi-Settlement Quasi-Ideal Peer-to-Peer Trading Framework. *AlAshery, M.K.*, +, *TSG Jan. 2021* 885-896
- A Community-Based Energy Market Design Using Decentralized Decision-Making Under Uncertainty. *Crespo-Vazquez, J.L.*, +, *TSG March 2021* 1782-1793
- A Grid-Friendly Sustainable Neighborhood Energy Trading Mechanism for MV-LV Network. *Liu, A.*, +, *TSG May 2021* 2239-2248
- A Historical-Correlation-Driven Robust Optimization Approach for Microgrid Dispatch. *Qiu, H.*, +, *TSG March 2021* 1135-1148
- A New Cooperative Framework for a Fair and Cost-Optimal Allocation of Resources Within a Low Voltage Electricity Community. *Hupez, M.*, +, *TSG May 2021* 2201-2211
- A Novel Energy Trading Framework Using Adapted Blockchain Technology. *Hamouda, M.R.*, +, *TSG May 2021* 2165-2175
- A Transactive Retail Market Mechanism for Active Distribution Network Integrated With Large-Scale Distributed Energy Resources. *Huang, C.*, +, *TSG Sept. 2021* 4225-4237
- Accurate Modeling of a Profit-Driven Power to Hydrogen and Methane Plant Toward Strategic Bidding Within Multi-Type Markets. *Pan, G.*, +, *TSG Jan. 2021* 338-349
- Algorithm for Simultaneous Medium Voltage Grid Planning and Electric Vehicle Scheduling. *Rotering, N.*, +, *TSG July 2021* 3305-3313
- Artificial Neural Network-Based Stealth Attack on Battery Energy Storage Systems. *Pasetti, M.*, +, *TSG Nov. 2021* 5310-5321
- Bargaining Game-Based Profit Allocation of Virtual Power Plant in Frequency Regulation Market Considering Battery Cycle Life. *Chen, W.*, +, *TSG July 2021* 2913-2928
- Benefits of Home Energy Storage Utilization: An Australian Case Study of Demand Charge Practices in Residential Sector. *Kong, W.*, +, *TSG July 2021* 3086-3096
- Bi-Level Robust Optimization for Distribution System With Multiple Microgrids Considering Uncertainty Distribution Locational Marginal Price. *Wang, L.*, +, *TSG March 2021* 1104-1117
- Blockchain Based Secure Data Aggregation and Distributed Power Dispatching for Microgrids. *Luo, X.*, +, *TSG Nov. 2021* 5268-5279
- Capturing Spatio-Temporal Dependencies in the Probabilistic Forecasting of Distribution Locational Marginal Prices. *Toubeau, J.*, +, *TSG May 2021* 2663-2674
- Chance-Constrained Peer-to-Peer Joint Energy and Reserve Market Considering Renewable Generation Uncertainty. *Guo, Z.*, +, *TSG Jan. 2021* 798-809
- Combined Impact of Demand Response Aggregators and Carbon Taxation on Emissions Reduction in Electric Power Systems. *Algarni, A.S.*, +, *TSG March 2021* 1825-1827
- Cooperative Optimization of Networked Microgrids for Supporting Grid Flexibility Services Using Model Predictive Control. *Garcia-Torres, F.*, +, *TSG May 2021* 1893-1903
- Current Injection Power Flow Analysis and Optimal Generation Dispatch for Bipolar DC Microgrids. *Lee, J.*, +, *TSG May 2021* 1918-1928
- Deep-Reinforcement-Learning-Based Capacity Scheduling for PV-Battery Storage System. *Huang, B.*, +, *TSG May 2021* 2272-2283
- Distributed Consensus-Based Economic Dispatch in Power Grids Using the Paillier Cryptosystem. *Yan, Y.*, +, *TSG July 2021* 3493-3502
- Distributed Energy Trading in Smart Grid Over Directed Communication Network. *Ullah, M.H.*, +, *TSG July 2021* 3669-3672
- Distributed Predictive Control Strategy for Frequency Restoration of Microgrids Considering Optimal Dispatch. *F. A.N.*, +, *TSG July 2021* 2748-2759
- Distribution Feeder-Scale Fast Frequency Response via Optimal Coordination of Net-Load Resources—Part I: Solution Design. *Lundstrom, B.*, +, *TSG March 2021* 1289-1302
- Distribution Feeder-Scale Fast Frequency Response via Optimal Coordination of Net-Load Resources—Part II: Large-Scale Demonstration. *Lundstrom, B.*, +, *TSG March 2021* 1445-1454
- Efficient Real-Time EV Charging Scheduling via Ordinal Optimization. *Long, T.*, +, *TSG Sept. 2021* 4029-4038
- Enabling Online Scheduling for Multi-Microgrid Systems: An Event-Triggered Approach. *Yang, X.*, +, *TSG May 2021* 1836-1852
- Ensuring Distribution Network Integrity Using Dynamic Operating Limits for Prosumers. *Petrou, K.*, +, *TSG Sept. 2021* 3877-3888
- Exploiting Power-to-Heat Assets in District Heating Networks to Regulate Electric Power Network. *Khatibi, M.*, +, *TSG May 2021* 2048-2059
- Frequency Regulation With Heterogeneous Energy Resources: A Realization Using Distributed Control. *Anderson, T.*, +, *TSG Sept. 2021* 4126-4136
- Hierarchical Bipartite Graph Matching Method for Transactive V2V Power Exchange in Distribution Power System. *Zeng, L.*, +, *TSG Jan. 2021* 301-311
- Incentive Based Demand Response Program for Power System Flexibility Enhancement. *Mohandes, B.*, +, *TSG May 2021* 2212-2223
- Integrated Electricity and Hydrogen Energy Sharing in Coupled Energy Systems. *Tao, Y.*, +, *TSG March 2021* 1149-1162
- Iteration-Based Linearized Distribution-Level Locational Marginal Price for Three-Phase Unbalanced Distribution Systems. *Cai, M.*, +, *TSG Nov. 2021* 4886-4896
- Linear Quadratic Regulator Based Smooth Transition Between Microgrid Operation Modes. *Ganjan-Aboukheili, M.*, +, *TSG Nov. 2021* 4854-4864
- Market-Based Energy Management Model of a Building Microgrid Considering Battery Degradation. *Antoniadou-Plytaria, K.*, +, *TSG March 2021* 1794-1804
- Multi-Objective Sizing of Battery Energy Storage Systems for Stackable Grid Applications. *Arias, N.B.*, +, *TSG May 2021* 2708-2721
- Network-Constrained Stackelberg Game for Pricing Demand Flexibility in Power Distribution Systems. *Aguiar, N.*, +, *TSG Sept. 2021* 4049-4058
- Online Optimization for Real-Time Peer-to-Peer Electricity Market Mechanisms. *Guo, Z.*, +, *TSG Sept. 2021* 4151-4163

- Optimal HVAC Control for Demand Response via Chance-Constrained Two-Stage Stochastic Program. *Mansy, H.*, +, *TSG May 2021 2188-2200*
- Optimal Policy Characterization Enhanced Actor-Critic Approach for Electric Vehicle Charging Scheduling in a Power Distribution Network. *Jin, J.*, +, *TSG March 2021 1416-1428*
- Optimal Schedule for Networked Microgrids Under Deregulated Power Market Environment Using Model Predictive Control. *Garcia-Torres, F.*, +, *TSG Jan. 2021 182-191*
- Parallel and Distributed Optimization Method With Constraint Decomposition for Energy Management of Microgrids. *Li, Q.*, +, *TSG Nov. 2021 4627-4640*
- Peer-to-Peer Energy Trading in Transactive Markets Considering Physical Network Constraints. *Ullah, M.H.*, +, *TSG July 2021 3390-3403*
- Push-Based Distributed Economic Dispatch in Smart Grids Over Time-Varying Unbalanced Directed Graphs. *Wang, Z.*, +, *TSG July 2021 3185-3199*
- Quantitative Model of the Electricity-Shifting Curve in an Energy Hub Based on Aggregated Utility Curve of Multi-Energy Demands. *Zhao, N.*, +, *TSG March 2021 1329-1345*
- Real-Time Distributed Economic Dispatch Adapted to General Convex Cost Functions: A Secant Approximation-Based Method. *Zhong, H.*, +, *TSG May 2021 2089-2101*
- Reserve Model of Energy Storage in Day-Ahead Joint Energy and Reserve Markets: A Stochastic UC Solution. *Tang, Z.*, +, *TSG Jan. 2021 372-382*
- Resident Behavior Detection Model for Environment Responsive Demand Response. *Baek, K.*, +, *TSG Sept. 2021 3980-3989*
- Resilient Economic Control for Distributed Microgrids Under False Data Injection Attacks. *Zhang, W.*, +, *TSG Sept. 2021 4435-4446*
- Risk-Averse Coordinated Operation of a Multi-Energy Microgrid Considering Voltage/Var Control and Thermal Flow: An Adaptive Stochastic Approach. *Li, Z.*, +, *TSG Sept. 2021 3914-3927*
- Robust Hierarchical Control Mechanism for Aggregated Thermostatically Controlled Loads. *Gong, X.*, +, *TSG Jan. 2021 453-467*
- Stealthy Black-Box Attacks on Deep Learning Non-Intrusive Load Monitoring Models. *Wang, J.*, +, *TSG July 2021 3479-3492*
- Step Towards Energy-Water Smart Microgrids; Buildings Thermal Energy and Water Demand Management Embedded in Economic Dispatch. *Moa-zeni, F.*, +, *TSG Sept. 2021 3680-3691*
- Tracking Equilibrium Point Under Real-Time Price-Based Residential Demand Response. *Ding, T.*, +, *TSG May 2021 2736-2740*
- Transactive Energy Market Mechanism With Loss Implication. *Azizi, A.*, +, *TSG March 2021 1215-1223*
- Tri-Level Scheduling Model Considering Residential Demand Flexibility of Aggregated HVACs and EVs Under Distribution LMP. *Wang, X.*, +, *TSG Sept. 2021 3990-4002*
- Two-Stage Planning of Network-Constrained Hybrid Energy Supply Stations for Electric and Natural Gas Vehicles. *Gan, W.*, +, *TSG May 2021 2013-2026*
- Two-Time-Scale Energy Management for Microgrids With Data-Based Day-Ahead Distributionally Robust Chance-Constrained Scheduling. *Yuan, Z.*, +, *TSG Nov. 2021 4778-4787*
- Power generation faults**
- A Comprehensive Resilience-Oriented FLISR Method for Distribution Systems. *Liu, J.*, +, *TSG May 2021 2136-2152*
- A Harmonic Time-Current-Voltage Directional Relay for Optimal Protection Coordination of Inverter-Based Islanded Microgrids. *El-Sayed, W.T.*, +, *TSG May 2021 1904-1917*
- Anomaly Detection, Localization and Classification Using Drifting Synchronophasor Data Streams. *Ahmed, A.*, +, *TSG July 2021 3570-3580*
- Chopperless Fault Ride-Through Control for DC Microgrids. *Xia, Y.*, +, *TSG March 2021 965-976*
- Countering FDI Attacks on DERs Coordinated Control System Using FMI-Compatible Cosimulation. *Jafarigiv, D.*, +, *TSG March 2021 1640-1650*
- LVRT Operation Enhancement of Single-Stage Photovoltaic Power Plants: An Analytical Approach. *Nasiri, M.*, +, *TSG Nov. 2021 5020-5029*
- MILP-Based Fault Diagnosis Model in Active Power Distribution Networks. *Wang, C.*, +, *TSG Sept. 2021 3847-3857*
- Resilient Economic Control for Distributed Microgrids Under False Data Injection Attacks. *Zhang, W.*, +, *TSG Sept. 2021 4435-4446*
- Second Harmonic Injection-Based Recovery Control of PV DC Boosting Integration System. *Jia, K.*, +, *TSG March 2021 1022-1032*
- Two-Level Islanding Detection Method for Grid-Connected Photovoltaic System-Based Microgrid With Small Non-Detection Zone. *Bakshi-Jarabadi, R.*, +, *TSG March 2021 1063-1072*
- Power generation planning**
- A Novel Energy Trading Framework Using Adapted Blockchain Technology. *Hamouda, M.R.*, +, *TSG May 2021 2165-2175*
- Algorithm for Simultaneous Medium Voltage Grid Planning and Electric Vehicle Scheduling. *Rotering, N.*, +, *TSG July 2021 3305-3313*
- An MILP-Based Planning Model of a Photovoltaic/Diesel/Battery Stand-Alone Microgrid Considering the Reliability. *Wu, X.*, +, *TSG Sept. 2021 3809-3818*
- Capturing Spatio-Temporal Dependencies in the Probabilistic Forecasting of Distribution Locational Marginal Prices. *Toubeau, J.*, +, *TSG May 2021 2663-2674*
- Integrated Transmission and Distribution System Expansion Planning Under Uncertainty. *Munoz-Delgado, G.*, +, *TSG Sept. 2021 4113-4125*
- Joint Optimization of Wind Turbine Micrositing and Cabling in an Offshore Wind Farm. *Tao, S.*, +, *TSG Jan. 2021 834-844*
- Reactive Power Management for Networked Microgrid Resilience in Extreme Conditions. *Shaker, A.*, +, *TSG Sept. 2021 3940-3953*
- Resident Behavior Detection Model for Environment Responsive Demand Response. *Baek, K.*, +, *TSG Sept. 2021 3980-3989*
- Tri-Level Scheduling Model Considering Residential Demand Flexibility of Aggregated HVACs and EVs Under Distribution LMP. *Wang, X.*, +, *TSG Sept. 2021 3990-4002*
- Two-Stage Planning of Network-Constrained Hybrid Energy Supply Stations for Electric and Natural Gas Vehicles. *Gan, W.*, +, *TSG May 2021 2013-2026*
- Power generation protection**
- A Harmonic Time-Current-Voltage Directional Relay for Optimal Protection Coordination of Inverter-Based Islanded Microgrids. *El-Sayed, W.T.*, +, *TSG May 2021 1904-1917*
- A Two-Stage Protection Method for Detection and Mitigation of Coordinated EVSE Switching Attacks. *Kabir, M.E.*, +, *TSG Sept. 2021 4377-4388*
- On the Impact of Fault Ride-Through on Transient Stability of Autonomous Microgrids: Nonlinear Analysis and Solution. *Eskandari, M.*, +, *TSG March 2021 999-1010*
- Power generation reliability**
- A Comprehensive Resilience-Oriented FLISR Method for Distribution Systems. *Liu, J.*, +, *TSG May 2021 2136-2152*
- A Novel Framework for the Operational Reliability Evaluation of Integrated Electric Power-Gas Networks. *Ansari, O.A.*, +, *TSG Sept. 2021 3901-3913*
- Data-Driven Risk Preference Analysis in Day-Ahead Electricity Market. *Zhao, H.*, +, *TSG May 2021 2508-2517*
- Extraction of Dynamic Frequency Response Characteristics and Modelling of Modern Air Conditioners. *Bai, F.*, +, *TSG Jan. 2021 897-900*
- False Data Injection Attacks Against Synchronization Systems in Microgrids. *Mohamed, A.S.*, +, *TSG Sept. 2021 4471-4483*
- Frequency-Constrained Resilient Scheduling of Microgrid: A Distributionally Robust Approach. *Chu, Z.*, +, *TSG Nov. 2021 4914-4925*
- Linear Quadratic Regulator Based Smooth Transition Between Microgrid Operation Modes. *Ganjian-Aboukheili, M.*, +, *TSG Nov. 2021 4854-4864*
- MILP-Based Fault Diagnosis Model in Active Power Distribution Networks. *Wang, C.*, +, *TSG Sept. 2021 3847-3857*
- Operational Reliability Assessment of Integrated Heat and Electricity Systems Considering the Load Uncertainties. *Ding, Y.*, +, *TSG Sept. 2021 3928-3939*
- Optimal Schedule for Networked Microgrids Under Deregulated Power Market Environment Using Model Predictive Control. *Garcia-Torres, F.*, +, *TSG Jan. 2021 182-191*
- Power System Resilience Enhancement in Typhoons Using a Three-Stage Day-Ahead Unit Commitment. *Ding, T.*, +, *TSG May 2021 2153-2164*

- Reserve Model of Energy Storage in Day-Ahead Joint Energy and Reserve Markets: A Stochastic UC Solution. *Tang, Z.*, +, *TSG Jan. 2021* 372-382
- Two-Time-Scale Energy Management for Microgrids With Data-Based Day-Ahead Distributionally Robust Chance-Constrained Scheduling. *Yuan, Z.*, +, *TSG Nov. 2021* 4778-4787
- Power generation scheduling**
- A Cluster-Based Model for Charging a Single-Depot Fleet of Electric Vehicles. *Sepehri, K.*, +, *TSG July 2021* 3339-3352
- A Community-Based Energy Market Design Using Decentralized Decision-Making Under Uncertainty. *Crespo-Vazquez, J.L.*, +, *TSG March 2021* 1782-1793
- A Dynamic Equivalent Model for District Heating Networks: Formulation, Existence and Application in Distributed Electricity-Heat Operation. *Zheng, W.*, +, *TSG May 2021* 2685-2695
- A New Cooperative Framework for a Fair and Cost-Optimal Allocation of Resources Within a Low Voltage Electricity Community. *Hupez, M.*, +, *TSG May 2021* 2201-2211
- Algorithm for Simultaneous Medium Voltage Grid Planning and Electric Vehicle Scheduling. *Rotering, N.*, +, *TSG July 2021* 3305-3313
- Deep-Reinforcement-Learning-Based Capacity Scheduling for PV-Battery Storage System. *Huang, B.*, +, *TSG May 2021* 2272-2283
- Distribution System Resilience in Ice Storms by Optimal Routing of Mobile Devices on Congested Roads. *Yan, M.*, +, *TSG March 2021* 1314-1328
- Efficient Real-Time EV Charging Scheduling via Ordinal Optimization. *Long, T.*, +, *TSG Sept. 2021* 4029-4038
- Enabling Online Scheduling for Multi-Microgrid Systems: An Event-Triggered Approach. *Yang, X.*, +, *TSG May 2021* 1836-1852
- Energy Flow Optimization of Integrated Gas and Power Systems in Continuous Time and Space. *Zheng, C.*, +, *TSG May 2021* 2611-2624
- Frequency-Constrained Resilient Scheduling of Microgrid: A Distributionally Robust Approach. *Chu, Z.*, +, *TSG Nov. 2021* 4914-4925
- Incentive Based Demand Response Program for Power System Flexibility Enhancement. *Mohandes, B.*, +, *TSG May 2021* 2212-2223
- MicroGrid Resilience-Oriented Scheduling: A Robust MISOCOP Model. *Zografou-Barredo, N.*, +, *TSG May 2021* 1867-1879
- Multistage Stochastic Optimization for Microgrid Operation Under Islanding Uncertainty. *Lee, J.*, +, *TSG Jan. 2021* 56-66
- Online Optimization for Real-Time Peer-to-Peer Electricity Market Mechanisms. *Guo, Z.*, +, *TSG Sept. 2021* 4151-4163
- Optimal Policy Characterization Enhanced Actor-Critic Approach for Electric Vehicle Charging Scheduling in a Power Distribution Network. *Jin, J.*, +, *TSG March 2021* 1416-1428
- Power System Resilience Enhancement in Typhoons Using a Three-Stage Day-Ahead Unit Commitment. *Ding, T.*, +, *TSG May 2021* 2153-2164
- Price-Based Dynamic Optimal Power Flow With Emergency Repair. *Schmitz, M.*, +, *TSG Jan. 2021* 324-337
- Reactive Power Management for Networked Microgrid Resilience in Extreme Conditions. *Shaker, A.*, +, *TSG Sept. 2021* 3940-3953
- Reserve Model of Energy Storage in Day-Ahead Joint Energy and Reserve Markets: A Stochastic UC Solution. *Tang, Z.*, +, *TSG Jan. 2021* 372-382
- Risk-Averse Optimal Energy and Reserve Scheduling for Virtual Power Plants Incorporating Demand Response Programs. *Vahedipour-Dahraie, M.*, +, *TSG March 2021* 1405-1415
- Scenario Reduction for Stochastic Day-Ahead Scheduling: A Mixed Auto-encoder Based Time-Series Clustering Approach. *Liang, J.*, +, *TSG May 2021* 2652-2662
- Tri-Level Scheduling Model Considering Residential Demand Flexibility of Aggregated HVACs and EVs Under Distribution LMP. *Wang, X.*, +, *TSG Sept. 2021* 3990-4002
- Two-Time-Scale Energy Management for Microgrids With Data-Based Day-Ahead Distributionally Robust Chance-Constrained Scheduling. *Yuan, Z.*, +, *TSG Nov. 2021* 4778-4787
- Uncertainty-Aware Deployment of Mobile Energy Storage Systems for Distribution Grid Resilience. *Nazemi, M.*, +, *TSG July 2021* 3200-3214
- Power grids**
- A Blockchain-Enabled Multi-Settlement Quasi-Ideal Peer-to-Peer Trading Framework. *AlAshery, M.K.*, +, *TSG Jan. 2021* 885-896
- A Compensated Distributed-Parameter Line Decoupling Approach for Real Time Applications. *Ahmed, B.*, +, *TSG March 2021* 1761-1771
- A Comprehensive Resilience-Oriented FLISR Method for Distribution Systems. *Liu, J.*, +, *TSG May 2021* 2136-2152
- A Cyber Attack Mitigation Scheme for Series Compensated DFIG-Based Wind Parks. *Ghafouri, M.*, +, *TSG Nov. 2021* 5221-5232
- A Detection Mechanism Against Load-Redistribution Attacks in Smart Grids. *Kaviani, R.*, +, *TSG Jan. 2021* 704-714
- A Grid-Friendly Sustainable Neighborhood Energy Trading Mechanism for MV-LV Network. *Liu, A.*, +, *TSG May 2021* 2239-2248
- A Hybrid Islanding Detection Method Based on the Rates of Changes in Voltage and Active Power for the Multi-Inverter Systems. *Seyedi, M.*, +, *TSG July 2021* 2800-2811
- A Model-Free Voltage Control Approach to Mitigate Motor Stalling and FIDVR for Smart Grids. *Park, B.*, +, *TSG Jan. 2021* 67-78
- A New Cooperative Framework for a Fair and Cost-Optimal Allocation of Resources Within a Low Voltage Electricity Community. *Hupez, M.*, +, *TSG May 2021* 2201-2211
- A Regularized Tensor Completion Approach for PMU Data Recovery. *Ghasemkhani, A.*, +, *TSG March 2021* 1519-1528
- A Two-Stage Protection Method for Detection and Mitigation of Coordinated EVSE Switching Attacks. *Kabir, M.E.*, +, *TSG Sept. 2021* 4377-4388
- Active Distribution Grids Providing Voltage Support: The Swiss Case. *Karagiannopoulos, S.*, +, *TSG Jan. 2021* 268-278
- Adversarial Semi-Supervised Learning for Diagnosing Faults and Attacks in Power Grids. *Farajzadeh-Zanjani, M.*, +, *TSG July 2021* 3468-3478
- Aggregated BESS Dynamic Models for Active Distribution Network Studies. *Calero, F.*, +, *TSG May 2021* 2077-2088
- Aggregation of Demand-Side Flexibility in Electricity Markets: Negative Impact Analysis and Mitigation Method. *Wang, S.*, +, *TSG Jan. 2021* 774-786
- Algorithm for Simultaneous Medium Voltage Grid Planning and Electric Vehicle Scheduling. *Rotering, N.*, +, *TSG July 2021* 3305-3313
- An Adaptive PV Frequency Control Strategy Based on Real-Time Inertia Estimation. *Su, Y.*, +, *TSG May 2021* 2355-2364
- An Incentive-Based Mechanism to Alleviate Active Power Congestion in a Multi-Agent Distribution System. *Fataheian-Dehkordi, S.*, +, *TSG May 2021* 1978-1988
- An MILP Model for Optimal Placement of Sectionalizing Switches and Tie Lines in Distribution Networks With Complex Topologies. *Jooshaki, M.*, +, *TSG Nov. 2021* 4740-4751
- An Optimization-Based Approach to Recover the Detected Attacked Grid Variables After False Data Injection Attack. *Jorjani, M.*, +, *TSG Nov. 2021* 5322-5334
- Analysis and Validations of Modularized Distributed TL-UPQC Systems With Supervisory Remote Management System. *Abdalaal, R.M.*, +, *TSG May 2021* 2638-2651
- Analysis of IoT-Based Load Altering Attacks Against Power Grids Using the Theory of Second-Order Dynamical Systems. *Lakshminarayana, S.*, +, *TSG Sept. 2021* 4415-4425
- Anomaly Detection, Localization and Classification Using Drifting Synchronphasor Data Streams. *Ahmed, A.*, +, *TSG July 2021* 3570-3580
- Artificial Neural Network-Based Stealth Attack on Battery Energy Storage Systems. *Pasetti, M.*, +, *TSG Nov. 2021* 5310-5321
- Association Rule Mining for Localizing Solar Power in Different Distribution Grid Feeders. *Saleem, B.*, +, *TSG May 2021* 2589-2600
- Brown Measure Based Spectral Distribution Analysis for Spatial-Temporal Localization of Cascading Events in Power Grids. *Yang, F.*, +, *TSG March 2021* 1805-1820
- Buffered-Microgrid Structure for Future Power Networks; a Seamless Microgrid Control. *Nasser, N.*, +, *TSG Jan. 2021* 131-140
- Capturing Spatio-Temporal Dependencies in the Probabilistic Forecasting of Distribution Locational Marginal Prices. *Toubeau, J.*, +, *TSG May 2021* 2663-2674
- Characteristics of Parallel Inverters Applying Virtual Synchronous Generator Control. *Chen, M.*, +, *TSG Nov. 2021* 4690-4701
- Chopperless Fault Ride-Through Control for DC Microgrids. *Xia, Y.*, +, *TSG March 2021* 965-976

- Conditional Multivariate Elliptical Copulas to Model Residential Load Profiles From Smart Meter Data. *Duque, E.M.S.*, +, *TSG Sept. 2021 4280-4294*
- Cooperative Optimization of Networked Microgrids for Supporting Grid Flexibility Services Using Model Predictive Control. *Garcia-Torres, F.*, +, *TSG May 2021 1893-1903*
- Coordinated Optimal Volt/Var Control for Distribution Networks via D-PMUs and EV Chargers by Exploiting the Eigensystem Realization. *Mejia-Ruiz, G.E.*, +, *TSG May 2021 2425-2438*
- Cyber Spoofing Detection for Grid Distributed Synchronasor Using Dynamic Dual-Kernel SVM. *Qiu, W.*, +, *TSG May 2021 2732-2735*
- Cyberattacks Against Event-Based Analysis in Micro-PMUs: Attack Models and Counter Measures. *Kamal, M.*, +, *TSG March 2021 1577-1588*
- Data-Driven False Data Injection Attacks Against Power Grids: A Random Matrix Approach. *Lakshminarayana, S.*, +, *TSG Jan. 2021 635-646*
- Data-Driven Islanding Detection Using a Principal Subspace of Voltage Angle Differences. *Rabuzin, T.*, +, *TSG Sept. 2021 4250-4258*
- Deep Learning-Based Real-Time Switching of Hybrid AC/DC Transmission Networks. *Dabbaghjamesh, M.*, +, *TSG May 2021 2331-2342*
- Detection of Synchronasor False Data Injection Attack Using Feature Interactive Network. *Qiu, W.*, +, *TSG Jan. 2021 659-670*
- Development of an Encoding Method on a Co-Simulation Platform for Mitigating the Impact of Unreliable Communication. *Xie, F.*, +, *TSG May 2021 2496-2507*
- Distributed Consensus-Based Economic Dispatch in Power Grids Using the Paillier Cryptosystem. *Yan, Y.*, +, *TSG July 2021 3493-3502*
- Distributed Control of Multi-Energy Storage Systems for Voltage Regulation in Distribution Networks: A Back-and-Forth Communication Framework. *Yu, P.*, +, *TSG May 2021 1964-1977*
- Distributed State of Charge-Based Droop Control Algorithm for Reducing Power Losses in Multi-Port Converter-Enabled Solar DC Nano-Grids. *Samende, C.*, +, *TSG Nov. 2021 4584-4594*
- Distributionally Robust Optimal Power Flow in Multi-Microgrids With Decomposition and Guaranteed Convergence. *Huang, W.*, +, *TSG Jan. 2021 43-55*
- Disturbance Observer and Tube-Based Model Predictive Controlled Electric Vehicles for Frequency Regulation of an Isolated Power Grid. *Oshnoei, A.*, +, *TSG Sept. 2021 4351-4362*
- Dual Inertia-Emulation Control for Interlinking Converters in Grid-Tying Applications. *Paniagua, J.*, +, *TSG Sept. 2021 3868-3876*
- Dynamic Modeling of Battery Energy Storage and Applications in Transmission Systems. *Calero, F.*, +, *TSG Jan. 2021 589-598*
- Early Identification and Location of Short-Circuit Fault in Grid-Connected AC Microgrid. *Zheng, X.*, +, *TSG July 2021 2869-2878*
- Efficient Real-Time EV Charging Scheduling via Ordinal Optimization. *Long, T.*, +, *TSG Sept. 2021 4029-4038*
- Energy Management and Control of a Flywheel Storage System for Peak Shaving Applications. *Tziouvani, L.*, +, *TSG Sept. 2021 4195-4207*
- Enhancing the Spatio-Temporal Observability of Grid-Edge Resources in Distribution Grids. *Lin, S.*, +, *TSG Nov. 2021 5434-5443*
- Frequency Regulation With Heterogeneous Energy Resources: A Realization Using Distributed Control. *Anderson, T.*, +, *TSG Sept. 2021 4126-4136*
- Frequency Restoration and Oscillation Damping of Distributed VSGs in Microgrid With Low Bandwidth Communication. *Shi, M.*, +, *TSG March 2021 1011-1021*
- Frequency-Constrained Resilient Scheduling of Microgrid: A Distributionally Robust Approach. *Chu, Z.*, +, *TSG Nov. 2021 4914-4925*
- Guaranteed Phase & Topology Identification in Three Phase Distribution Grids. *Bariya, M.*, +, *TSG July 2021 3605-3612*
- Hierarchical Bipartite Graph Matching Method for Transactive V2V Power Exchange in Distribution Power System. *Zeng, L.*, +, *TSG Jan. 2021 301-311*
- Hierarchical Voltage Control Strategy in Distribution Networks Considering Customized Charging Navigation of Electric Vehicles. *Sun, X.*, +, *TSG Nov. 2021 4752-4764*
- Leveraging Network Topology Optimization to Strengthen Power Grid Resilience Against Cyber-Physical Attacks. *Liu, Z.*, +, *TSG March 2021 1552-1564*
- Linear Quadratic Regulator Based Smooth Transition Between Microgrid Operation Modes. *Ganjian-Aboukheili, M.*, +, *TSG Nov. 2021 4854-4864*
- LVRT Operation Enhancement of Single-Stage Photovoltaic Power Plants: An Analytical Approach. *Nasiri, M.*, +, *TSG Nov. 2021 5020-5029*
- Moving-Target Defense Against Cyber-Physical Attacks in Power Grids via Game Theory. *Lakshminarayana, S.*, +, *TSG Nov. 2021 5244-5257*
- MPC-Controlled Virtual Synchronous Generator to Enhance Frequency and Voltage Dynamic Performance in Islanded Microgrids. *Long, B.*, +, *TSG March 2021 953-964*
- Multi-Objective Sizing of Battery Energy Storage Systems for Stackable Grid Applications. *Arias, N.B.*, +, *TSG May 2021 2708-2721*
- Multi-Stage Multi-Zone Defender-Attacker-Defender Model for Optimal Resilience Strategy With Distribution Line Hardening and Energy Storage System Deployment. *Zhang, H.*, +, *TSG March 2021 1194-1205*
- Multi-Stage Quadratic Flexible Optimal Power Flow With a Rolling Horizon. *Zhong, C.*, +, *TSG July 2021 3128-3137*
- Multistage Stochastic Optimization for Microgrid Operation Under Islanding Uncertainty. *Lee, J.*, +, *TSG Jan. 2021 56-66*
- Network Parameter Coordinated False Data Injection Attacks Against Power System AC State Estimation. *Liu, C.*, +, *TSG March 2021 1626-1639*
- Networked Microgrids for Grid Resilience, Robustness, and Efficiency: A Review. *Chen, B.*, +, *TSG Jan. 2021 18-32*
- Online Rolling Evolutionary Decoder-Dispatch Framework for the Secondary Frequency Regulation of Time-Varying Electrical-Grid-Electric-Vehicle System. *Dong, C.*, +, *TSG Jan. 2021 871-884*
- Optimal Coordination of Phasor Data Concentrators in Hierarchical Synchronasor Networks. *Pourramezan, R.*, +, *TSG May 2021 2402-2412*
- Power Loss Minimization of Off-Grid Solar DC Nano-Grids—Part I: Centralized Control Algorithm. *Samende, C.*, +, *TSG Nov. 2021 4715-4725*
- Primary Frequency Control in Isolated Microgrids Using Thermostatically Controllable Loads. *Mendieta, W.*, +, *TSG Jan. 2021 93-105*
- Privacy-Preserving Distributed Average Observers in Distribution Systems With Grid-Forming Inverters. *Du, Y.*, +, *TSG Nov. 2021 5000-5010*
- Privacy-Preserving Hierarchical State Estimation in Untrustworthy Cloud Environments. *Wang, J.*, +, *TSG March 2021 1541-1551*
- Reactive Power Management for Networked Microgrid Resilience in Extreme Conditions. *Shaker, A.*, +, *TSG Sept. 2021 3940-3953*
- Real-Time Control of Battery Energy Storage Systems to Provide Ancillary Services Considering Voltage-Dependent Capability of DC-AC Converters. *Yuan, Z.*, +, *TSG Sept. 2021 4164-4175*
- Real-Time Synchronasor Data Anomaly Detection and Classification Using *Isolation Forest*, *KMeans*, and *LoOP*. *Khaledian, E.*, +, *TSG May 2021 2378-2388*
- Region of Attraction Estimation for DC Microgrids With Constant Power Loads Using Potential Theory. *Chang, F.*, +, *TSG Sept. 2021 3793-3808*
- Reserve Model of Energy Storage in Day-Ahead Joint Energy and Reserve Markets: A Stochastic UC Solution. *Tang, Z.*, +, *TSG Jan. 2021 372-382*
- Resilience Against Data Manipulation in Distributed Synchronasor-Based Mode Estimation. *Rajabi, A.*, +, *TSG July 2021 3538-3547*
- Resilient Restoration of Distribution Systems in Coordination With Electric Bus Scheduling. *Li, B.*, +, *TSG July 2021 3314-3325*
- Robust Secondary Frequency Control for Virtual Synchronous Machine-Based Microgrid Cluster Using Equivalent Modeling. *Hu, W.*, +, *TSG July 2021 2879-2889*
- Scalable Designs for Reinforcement Learning-Based Wide-Area Damping Control. *Mukherjee, S.*, +, *TSG May 2021 2389-2401*
- Second Harmonic Injection-Based Recovery Control of PV DC Boosting Integration System. *Jia, K.*, +, *TSG March 2021 1022-1032*
- Solid-State Technologies for Flexible and Efficient Marine DC Microgrids. *Kim, S.*, +, *TSG July 2021 2860-2868*
- Spatial-Temporal Residential Short-Term Load Forecasting via Graph Neural Networks. *Lin, W.*, +, *TSG Nov. 2021 5373-5384*
- Spoofing Resilient State Estimation for the Power Grid Using an Extended Kalman Filter. *Chauhan, S.V.S.*, +, *TSG July 2021 3404-3414*

- Stability Analysis of Low-Voltage Distribution Feeders Operated as Isolated Microgrids. *Wang, B.*, +, *TSG Nov. 2021 4681-4689*
- State Estimation for Situational Awareness of Active Distribution System With Photovoltaic Power Plants. *Fang, Z.*, +, *TSG Jan. 2021 239-250*
- Supplementary Feedforward Control of DGs in a Reconfigurable Microgrid for Load Restoration. *Park, J.*, +, *TSG Nov. 2021 4641-4654*
- Synchronization of Low Voltage Grids Fed by Smart and Conventional Transformers. *Giacomuzzi, S.*, +, *TSG July 2021 2941-2951*
- Synchrophasor Data Under GPS Spoofing: Attack Detection and Mitigation Using Residuals. *Chauhan, S.V.S.*, +, *TSG July 2021 3415-3424*
- The Added Value of Coordinating Inverter Control. *Lusis, P.*, +, *TSG March 2021 1238-1248*
- Transactive Energy Supported Economic Operation for Multi-Energy Complementary Microgrids. *Yang, Z.*, +, *TSG Jan. 2021 4-17*
- Transient Stability and Current Injection Design of Paralleled Current-Controlled VSCs and Virtual Synchronous Generators. *Shen, C.*, +, *TSG March 2021 1118-1134*
- Tri-Level Scheduling Model Considering Residential Demand Flexibility of Aggregated HVACs and EVs Under Distribution LMP. *Wang, X.*, +, *TSG Sept. 2021 3990-4002*
- Two-Level Islanding Detection Method for Grid-Connected Photovoltaic System-Based Microgrid With Small Non-Detection Zone. *Bakhshi-Jafarabadi, R.*, +, *TSG March 2021 1063-1072*
- Two-Time-Scale Energy Management for Microgrids With Data-Based Day-Ahead Distributionally Robust Chance-Constrained Scheduling. *Yuan, Z.*, +, *TSG Nov. 2021 4778-4787*
- Uncertainty-Aware Deployment of Mobile Energy Storage Systems for Distribution Grid Resilience. *Nazemi, M.*, +, *TSG July 2021 3200-3214*
- Voltage Stabilization Control for Microgrid With Asymmetric Membership Function-Based Wavelet Petri Fuzzy Neural Network. *Lin, F.*, +, *TSG Sept. 2021 3731-3741*
- Power markets**
- A Blockchain-Enabled Multi-Settlement Quasi-Ideal Peer-to-Peer Trading Framework. *AlAshery, M.K.*, +, *TSG Jan. 2021 885-896*
- A Cluster-Based Model for Charging a Single-Depot Fleet of Electric Vehicles. *Sepehanc, K.*, +, *TSG July 2021 3339-3352*
- A Community Sharing Market With PV and Energy Storage: An Adaptive Bidding-Based Double-Side Auction Mechanism. *He, L.*, +, *TSG May 2021 2450-2461*
- A Community-Based Energy Market Design Using Decentralized Decision-Making Under Uncertainty. *Crespo-Vazquez, J.L.*, +, *TSG March 2021 1782-1793*
- A Grid-Friendly Sustainable Neighborhood Energy Trading Mechanism for MV-LV Network. *Liu, A.*, +, *TSG May 2021 2239-2248*
- A Nested Transactive Energy Market Model to Trade Demand-Side Flexibility of Residential Consumers. *Nizami, M.S.H.*, +, *TSG Jan. 2021 479-490*
- A Novel Energy Trading Framework Using Adapted Blockchain Technology. *Hamouda, M.R.*, +, *TSG May 2021 2165-2175*
- A Novel Framework for Optimizing Ramping Capability of Hybrid Energy Storage Systems. *Luo, Y.*, +, *TSG March 2021 1651-1662*
- A Reinforcement Learning-Based Decision System for Electricity Pricing Plan Selection by Smart Grid End Users. *Lu, T.*, +, *TSG May 2021 2176-2187*
- A Transactive Retail Market Mechanism for Active Distribution Network Integrated With Large-Scale Distributed Energy Resources. *Huang, C.*, +, *TSG Sept. 2021 4225-4237*
- Accurate Modeling of a Profit-Driven Power to Hydrogen and Methane Plant Toward Strategic Bidding Within Multi-Type Markets. *Pan, G.*, +, *TSG Jan. 2021 338-349*
- Aggregation of Demand-Side Flexibility in Electricity Markets: Negative Impact Analysis and Mitigation Method. *Wang, S.*, +, *TSG Jan. 2021 774-786*
- Algorithm for Simultaneous Medium Voltage Grid Planning and Electric Vehicle Scheduling. *Rotering, N.*, +, *TSG July 2021 3305-3313*
- An Architecture and Performance Evaluation of Blockchain-Based Peer-to-Peer Energy Trading. *Abdella, J.*, +, *TSG July 2021 3364-3378*
- Approaching Prosumer Social Optimum via Energy Sharing With Proof of Convergence. *Chen, Y.*, +, *TSG May 2021 2484-2495*
- Bargaining Game-Based Profit Allocation of Virtual Power Plant in Frequency Regulation Market Considering Battery Cycle Life. *Chen, W.*, +, *TSG July 2021 2913-2928*
- Bi-Level Robust Optimization for Distribution System With Multiple Microgrids Considering Uncertainty Distribution Locational Marginal Price. *Wang, L.*, +, *TSG March 2021 1104-1117*
- Blockchain for Transacting Energy and Carbon Allowance in Networked Microgrids. *Yan, M.*, +, *TSG Nov. 2021 4702-4714*
- Capturing Spatio-Temporal Dependencies in the Probabilistic Forecasting of Distribution Locational Marginal Prices. *Toubeau, J.*, +, *TSG May 2021 2663-2674*
- Chance-Constrained Peer-to-Peer Joint Energy and Reserve Market Considering Renewable Generation Uncertainty. *Guo, Z.*, +, *TSG Jan. 2021 798-809*
- Conditional Multivariate Elliptical Copulas to Model Residential Load Profiles From Smart Meter Data. *Duque, E.M.S.*, +, *TSG Sept. 2021 4280-4294*
- Constructing Demand-Side Bidding Curves Based on a Decoupled Full-Cycle Process. *Ruan, G.*, +, *TSG Jan. 2021 502-511*
- Continuous Group-Wise Double Auction for Prosumers in Distribution-Level Markets. *Yu, A.*, +, *TSG Nov. 2021 4822-4833*
- Cooperative Optimization of Networked Microgrids for Supporting Grid Flexibility Services Using Model Predictive Control. *Garcia-Torres, F.*, +, *TSG May 2021 1893-1903*
- Cooperative P2P Energy Trading in Active Distribution Networks: An MILP-Based Nash Bargaining Solution. *Zhong, W.*, +, *TSG March 2021 1264-1276*
- Coordinated Energy Management of Prosumers in a Distribution System Considering Network Congestion. *Hu, J.*, +, *TSG Jan. 2021 468-478*
- Coordination of Distribution Network Reinforcement and DER Planning in Competitive Market. *Xiao, X.*, +, *TSG May 2021 2261-2271*
- Cyber-Vulnerability Analysis for Real-Time Power Market Operation. *Zhang, Q.*, +, *TSG July 2021 3527-3537*
- Data-Driven Distributionally Robust Co-Optimization of P2P Energy Trading and Network Operation for Interconnected Microgrids. *Li, J.*, +, *TSG Nov. 2021 5172-5184*
- Data-Driven Planning of Electric Vehicle Charging Infrastructure: A Case Study of Sydney, Australia. *Li, C.*, +, *TSG July 2021 3289-3304*
- Data-Driven Risk Preference Analysis in Day-Ahead Electricity Market. *Zhao, H.*, +, *TSG May 2021 2508-2517*
- Decentralized Failure-Tolerant Optimization of Electric Vehicle Charging. *Aravena, I.*, +, *TSG Sept. 2021 4068-4078*
- Deep Reinforcement Learning for Continuous Electric Vehicles Charging Control With Dynamic User Behaviors. *Yan, L.*, +, *TSG Nov. 2021 5124-5134*
- Deep Reinforcement Learning for Demand Response in Distribution Networks. *Bahrami, S.*, +, *TSG March 2021 1496-1506*
- Deep-Reinforcement-Learning-Based Capacity Scheduling for PV-Battery Storage System. *Huang, B.*, +, *TSG May 2021 2272-2283*
- Distributed Energy Trading in Smart Grid Over Directed Communication Network. *Ullah, M.H.*, +, *TSG July 2021 3669-3672*
- Distributed State of Charge-Based Droop Control Algorithm for Reducing Power Losses in Multi-Port Converter-Enabled Solar DC Nano-Grids. *Samende, C.*, +, *TSG Nov. 2021 4584-4594*
- Distribution Market-Clearing and Pricing Considering Coordination of DSOs and ISO: An EPEC Approach. *Chen, H.*, +, *TSG July 2021 3150-3162*
- Distribution Network-Constrained Optimization of Peer-to-Peer Transactive Energy Trading Among Multi-Microgrids. *Yan, M.*, +, *TSG March 2021 1033-1047*
- Dynamic Stochastic Demand Response With Energy Storage. *Xiao, Y.*, +, *TSG Nov. 2021 4813-4821*
- Exploiting Power-to-Heat Assets in District Heating Networks to Regulate Electric Power Network. *Khatibi, M.*, +, *TSG May 2021 2048-2059*
- Exploiting the Potentials of HVAC Systems in Transactive Energy Markets. *Nemathkah, F.*, +, *TSG Sept. 2021 4039-4048*

- Frequency Regulation With Heterogeneous Energy Resources: A Realization Using Distributed Control. *Anderson, T.*, +, *TSG Sept. 2021 4126-4136*
- Hierarchical Bipartite Graph Matching Method for Transactive V2V Power Exchange in Distribution Power System. *Zeng, L.*, +, *TSG Jan. 2021 301-311*
- Incentive-Compatible Demand Response for Spatially Coupled Internet Data Centers in Electricity Markets. *Chen, M.*, +, *TSG July 2021 3056-3069*
- Integrated Electricity and Hydrogen Energy Sharing in Coupled Energy Systems. *Tao, Y.*, +, *TSG March 2021 1149-1162*
- Integrated Planning of a Solar/Storage Collective. *Contreras-Ocana, J.E.*, +, *TSG Jan. 2021 215-226*
- Iteration-Based Linearized Distribution-Level Locational Marginal Price for Three-Phase Unbalanced Distribution Systems. *Cai, M.*, +, *TSG Nov. 2021 4886-4896*
- Mechanism Design for Fair and Efficient DSO Flexibility Markets. *Tsaou-soglou, G.*, +, *TSG May 2021 2249-2260*
- Multi-Round Double Auction-Enabled Peer-to-Peer Energy Exchange in Active Distribution Networks. *Haggi, H.*, +, *TSG Sept. 2021 4403-4414*
- Network-Secure and Price-Elastic Aggregator Bidding in Energy and Reserve Markets. *Attarha, A.*, +, *TSG May 2021 2284-2294*
- Online Optimization for Real-Time Peer-to-Peer Electricity Market Mechanisms. *Guo, Z.*, +, *TSG Sept. 2021 4151-4163*
- Optimal Reserve Management of Electric Vehicle Aggregator: Discrete Bilevel Optimization Model and Exact Algorithm. *Liu, W.*, +, *TSG Sept. 2021 4003-4015*
- Optimal Schedule for Networked Microgrids Under Deregulated Power Market Environment Using Model Predictive Control. *Garcia-Torres, F.*, +, *TSG Jan. 2021 182-191*
- Peer-to-Peer Energy Trading in Transactive Markets Considering Physical Network Constraints. *Ullah, M.H.*, +, *TSG July 2021 3390-3403*
- Price-Maker Bidding and Offering Strategies for Networked Microgrids in Day-Ahead Electricity Markets. *Hu, B.*, +, *TSG Nov. 2021 5201-5211*
- Privacy-Preserving Distributed Clustering for Electrical Load Profiling. *Jia, M.*, +, *TSG March 2021 1429-1444*
- Reserve Model of Energy Storage in Day-Ahead Joint Energy and Reserve Markets: A Stochastic UC Solution. *Tang, Z.*, +, *TSG Jan. 2021 372-382*
- Risk Trading in Energy Communities. *Vespermann, N.*, +, *TSG March 2021 1249-1263*
- Risk-Averse Optimal Energy and Reserve Scheduling for Virtual Power Plants Incorporating Demand Response Programs. *Vahedipour-Dahraie, M.*, +, *TSG March 2021 1405-1415*
- Robust Hierarchical Control Mechanism for Aggregated Thermostatically Controlled Loads. *Gong, X.*, +, *TSG Jan. 2021 453-467*
- Selling Demand Response Using Options. *Muthirayan, D.*, +, *TSG Jan. 2021 279-288*
- Strategic Participation of Residential Thermal Demand Response in Energy and Capacity Markets. *Anwar, M.B.*, +, *TSG July 2021 3070-3085*
- Transaction-Oriented Dynamic Power Flow Tracing for Distribution Networks—Definition and Implementation in GIS Environment. *Vega-Fuentes, E.*, +, *TSG March 2021 1303-1313*
- Transactive Energy Market Mechanism With Loss Implication. *Azizi, A.*, +, *TSG March 2021 1215-1223*
- Transactive Energy Supported Economic Operation for Multi-Energy Complementary Microgrids. *Yang, Z.*, +, *TSG Jan. 2021 4-17*
- Tri-Level Scheduling Model Considering Residential Demand Flexibility of Aggregated HVACs and EVs Under Distribution LMP. *Wang, X.*, +, *TSG Sept. 2021 3990-4002*
- Unsupervised Congestion Status Identification Using LMP Data. *Zheng, K.*, +, *TSG Jan. 2021 726-736*
- Power meters**
- Distribution Feeder-Scale Fast Frequency Response via Optimal Coordination of Net-Load Resources—Part I: Solution Design. *Lundstrom, B.*, +, *TSG March 2021 1289-1302*
- Dynamic State Estimation of Smart Distribution Grids Using Compressed Measurements. *Mohammadrezaee, R.*, +, *TSG Sept. 2021 4535-4542*
- Generalizability Improvement of Deep Learning-Based Non-Intrusive Load Monitoring System Using Data Augmentation. *Rafiq, H.*, +, *TSG July 2021 3265-3277*
- Protection Against False Data Injection Attacks Considering Degrees of Freedom in Attack Vectors. *Sreeram, T.S.*, +, *TSG Nov. 2021 5258-5267*
- Two-Stage Decoupled Estimation Approach of Aggregated Baseline Load Under High Penetration of Behind-the-Meter PV System. *Li, K.*, +, *TSG Nov. 2021 4876-4885*
- Power overhead lines**
- Fault Detection for Covered Conductors With High-Frequency Voltage Signals: From Local Patterns to Global Features. *Chen, K.*, +, *TSG March 2021 1602-1614*
- The Added Value of Coordinating Inverter Control. *Lusis, P.*, +, *TSG March 2021 1238-1248*
- Power plants**
- Photovoltaic System Power Reserve Determination Using Parabolic Approximation of Frequency Response. *Baskarad, T.*, +, *TSG July 2021 3175-3184*
- Time Series Classification for Locating Forced Oscillation Sources. *Meng, Y.*, +, *TSG March 2021 1712-1721*
- Power supply quality**
- A Decentralized Approach for Voltage Control by Multiple Distributed Energy Resources. *Fusco, G.*, +, *TSG July 2021 3115-3127*
- A Hybrid Islanding Detection Method Based on the Rates of Changes in Voltage and Active Power for the Multi-Inverter Systems. *Seyedi, M.*, +, *TSG July 2021 2800-2811*
- A Secondary Control Method for Voltage Unbalance Compensation and Accurate Load Sharing in Networked Microgrids. *Golsorkhi, M.S.*, +, *TSG July 2021 2822-2833*
- A Three-Layer Stochastic Energy Management Approach for Electric Bus Transit Centers With PV and Energy Storage Systems. *Liu, Y.*, +, *TSG March 2021 1346-1357*
- An Identity Based Authentication Protocol for Smart Grid Environment Using Physical Unclonable Function. *Badar, H.M.S.*, +, *TSG Sept. 2021 4426-4434*
- An Optimal Placement Model for Electric Springs in Distribution Networks. *Liang, L.*, +, *TSG Jan. 2021 491-501*
- Analysis and Validations of Modularized Distributed TL-UPQC Systems With Supervisory Remote Management System. *Abdalaal, R.M.*, +, *TSG May 2021 2638-2651*
- Deep Learning Method With Manual Post-Processing for Identification of Spectral Patterns of Waveform Distortion in PV Installations. *de Oliveira, R.A.*, +, *TSG Nov. 2021 5444-5456*
- Distributed Power Sharing Control for Islanded Single-/Three-Phase Microgrids With Admissible Voltage and Energy Storage Constraints. *Zhou, J.*, +, *TSG July 2021 2760-2775*
- Load-Switching Strategy for Voltage Balancing of Bipolar DC Distribution Networks Based on Optimal Automatic Commutation Algorithm. *Liao, J.*, +, *TSG July 2021 2966-2979*
- Push-Based Distributed Economic Dispatch in Smart Grids Over Time-Varying Unbalanced Directed Graphs. *Wang, Z.*, +, *TSG July 2021 3185-3199*
- Two-Level Islanding Detection Method for Grid-Connected Photovoltaic System-Based Microgrid With Small Non-Detection Zone. *Bakhshi-Jarabadi, R.*, +, *TSG March 2021 1063-1072*
- Power system analysis computing**
- Current Injection Power Flow Analysis and Optimal Generation Dispatch for Bipolar DC Microgrids. *Lee, J.*, +, *TSG May 2021 1918-1928*
- False Data Injection Attacks Against Synchronization Systems in Microgrids. *Mohamed, A.S.*, +, *TSG Sept. 2021 4471-4483*
- Fault Detection for Covered Conductors With High-Frequency Voltage Signals: From Local Patterns to Global Features. *Chen, K.*, +, *TSG March 2021 1602-1614*
- Forecast-Based Consensus Control for DC Microgrids Using Distributed Long Short-Term Memory Deep Learning Models. *Alavi, S.A.*, +, *TSG Sept. 2021 3718-3730*
- Power system CAD**
- Cross-Layer Distributed Control Strategy for Cyber Resilient Microgrids. *Zhou, Q.*, +, *TSG Sept. 2021 3705-3717*
- Current Injection Power Flow Analysis and Optimal Generation Dispatch for Bipolar DC Microgrids. *Lee, J.*, +, *TSG May 2021 1918-1928*

Observer-Based Resilient Integrated Distributed Control Against Cyberattacks on Sensors and Actuators in Islanded AC Microgrids. *Shi, M.*, +, *TSG May 2021 1953-1963*

Power system control

A Novel Distributed Control Method for Interlinking Converters in an Islanded Hybrid AC/DC Microgrid. *Chang, J.*, +, *TSG Sept. 2021 3765-3779*

A Secondary Control Method for Voltage Unbalance Compensation and Accurate Load Sharing in Networked Microgrids. *Golsorkhi, M.S.*, +, *TSG July 2021 2822-2833*

An Adaptive Approach for Dynamic Load Modeling in Microgrids. *Chavarrro-Barrera, L.*, +, *TSG July 2021 2834-2843*

Component-Level Reliability Evaluation Model for Cyber Power Devices. *Balachandran, T.*, +, *TSG Jan. 2021 692-703*

Cyber Spoofing Detection for Grid Distributed Synchrophasor Using Dynamic Dual-Kernel SVM. *Qiu, W.*, +, *TSG May 2021 2732-2735*

Distributed Dynamic Clustering Algorithm for Formation of Heterogeneous Virtual Power Plants Based on Power Requirements. *Zhang, R.*, +, *TSG Jan. 2021 192-204*

Distributed Predictive Control Strategy for Frequency Restoration of Microgrids Considering Optimal Dispatch. *F, A.N.*, +, *TSG July 2021 2748-2759*

Dynamic Event-Based Model Predictive Load Frequency Control for Power Systems Under Cyber Attacks. *Liu, Y.*, +, *TSG Jan. 2021 715-725*

Dynamic Security Control in Heat and Electricity Integrated Energy System With an Equivalent Heating Network Model. *Zhang, S.*, +, *TSG Nov. 2021 4788-4798*

Enhancement of Frequency Regulation in AC Microgrid: A Fuzzy-MPC Controlled Virtual Synchronous Generator. *Long, B.*, +, *TSG July 2021 3138-3149*

Fully-Convolutional Denoising Auto-Encoders for NILM in Large Non-Residential Buildings. *Garcia-Perez, D.*, +, *TSG May 2021 2722-2731*

Modeling of Time-Delayed Distributed Cyber-Physical Power Systems for Small-Signal Stability Analysis. *Xu, L.*, +, *TSG July 2021 3425-3437*

Online Assessment of Conservation Voltage Reduction Effects With Micro-perturbation. *Xu, J.*, +, *TSG May 2021 2224-2238*

Optimal Coordination of Phasor Data Concentrators in Hierarchical Synchrophasor Networks. *Pourramezan, R.*, +, *TSG May 2021 2402-2412*

Resilient Wide-Area Damping Control for Inter-Area Oscillations to Tolerate Deception Attacks. *Yao, W.*, +, *TSG Sept. 2021 4238-4249*

Risk-Averse Coordinated Operation of a Multi-Energy Microgrid Considering Voltage/Var Control and Thermal Flow: An Adaptive Stochastic Approach. *Li, Z.*, +, *TSG Sept. 2021 3914-3927*

Robust Hierarchical Control Mechanism for Aggregated Thermostatically Controlled Loads. *Gong, X.*, +, *TSG Jan. 2021 453-467*

Robust Load Frequency Control of Power Systems Against Random Time-Delay Attacks. *Xiahou, K.S.*, +, *TSG Jan. 2021 909-911*

Scalable Designs for Reinforcement Learning-Based Wide-Area Damping Control. *Mukherjee, S.*, +, *TSG May 2021 2389-2401*

Spoofing Resilient State Estimation for the Power Grid Using an Extended Kalman Filter. *Chauhan, S.V.S.*, +, *TSG July 2021 3404-3414*

Power system dynamic stability

A Model-Free Voltage Control Approach to Mitigate Motor Stalling and FIDVR for Smart Grids. *Park, B.*, +, *TSG Jan. 2021 67-78*

Power system economics

Continuous Group-Wise Double Auction for Prosumers in Distribution-Level Markets. *Yu, A.*, +, *TSG Nov. 2021 4822-4833*

Data-Driven Approach for Analyzing Spatiotemporal Price Elasticities of EV Public Charging Demands Based on Conditional Random Fields. *Bao, Z.*, +, *TSG Sept. 2021 4363-4376*

Optimal Pricing of Public Electric Vehicle Charging Stations Considering Operations of Coupled Transportation and Power Systems. *Cui, Y.*, +, *TSG July 2021 3278-3288*

Risk-Averse Coordinated Operation of a Multi-Energy Microgrid Considering Voltage/Var Control and Thermal Flow: An Adaptive Stochastic Approach. *Li, Z.*, +, *TSG Sept. 2021 3914-3927*

Strategic Participation of Residential Thermal Demand Response in Energy and Capacity Markets. *Anwar, M.B.*, +, *TSG July 2021 3070-3085*

Power system faults

Power System Disturbance Classification With Online Event-Driven Neuro-morphic Computing. *Mahapatra, K.*, +, *TSG May 2021 2343-2354*

Reliability Analyses of Wide-Area Protection System Considering Cyber-Physical System Constraints. *He, R.*, +, *TSG July 2021 3458-3467*

Power system harmonics

Deep Learning Method With Manual Post-Processing for Identification of Spectral Patterns of Waveform Distortion in PV Installations. *de Oliveira, R.A.*, +, *TSG Nov. 2021 5444-5456*

Fast Steady-State Computation of Electrical Networks Involving Nonlinear and Photovoltaic Components. *Ramirez, A.*, +, *TSG July 2021 3107-3114*

Second Harmonic Injection-Based Recovery Control of PV DC Boosting Integration System. *Jia, K.*, +, *TSG March 2021 1022-1032*

Power system interconnection

A Secondary Control Method for Voltage Unbalance Compensation and Accurate Load Sharing in Networked Microgrids. *Golsorkhi, M.S.*, +, *TSG July 2021 2822-2833*

Data-Driven Distributionally Robust Co-Optimization of P2P Energy Trading and Network Operation for Interconnected Microgrids. *Li, J.*, +, *TSG Nov. 2021 5172-5184*

Distributed State of Charge-Based Droop Control Algorithm for Reducing Power Losses in Multi-Port Converter-Enabled Solar DC Nano-Grids. *Samende, C.*, +, *TSG Nov. 2021 4584-4594*

Dual Inertia-Emulation Control for Interlinking Converters in Grid-Tying Applications. *Pantagua, J.*, +, *TSG Sept. 2021 3868-3876*

Minimizing Energy Storage Utilization in a Stand-Alone DC Microgrid Using Photovoltaic Flexible Power Control. *Yan, H.W.*, +, *TSG Sept. 2021 3755-3764*

Privacy-Preserving Hierarchical State Estimation in Untrustworthy Cloud Environments. *Wang, J.*, +, *TSG March 2021 1541-1551*

Robust Load Frequency Control of Power Systems Against Random Time-Delay Attacks. *Xiahou, K.S.*, +, *TSG Jan. 2021 909-911*

Power system management

An Incentive-Based Mechanism to Alleviate Active Power Congestion in a Multi-Agent Distribution System. *Fattaheian-Dehkordi, S.*, +, *TSG May 2021 1978-1988*

An Optimal Placement Model for Electric Springs in Distribution Networks. *Liang, L.*, +, *TSG Jan. 2021 491-501*

Impact of Communication Packet Delivery Ratio on Reliability of Optimal Load Tracking and Allocation in DC Microgrids. *Nazari, M.H.*, +, *TSG July 2021 2812-2821*

Integrated Planning of a Solar/Storage Collective. *Contreras-Ocana, J.E.*, +, *TSG Jan. 2021 215-226*

Leveraging Two-Stage Adaptive Robust Optimization for Power Flexibility Aggregation. *Chen, X.*, +, *TSG Sept. 2021 3954-3965*

Load Photo: A Novel Analysis Method for Load Data. *Wang, H.*, +, *TSG March 2021 1394-1404*

Reactive Power Management for Networked Microgrid Resilience in Extreme Conditions. *Shaker, A.*, +, *TSG Sept. 2021 3940-3953*

Self-Assessment of Health Conditions of Electrical Assets and Grid Components: A Contribution to Smart Grids. *Montanari, G.C.*, +, *TSG March 2021 1206-1214*

Power system measurement

A Cyber-Physical Anomaly Detection for Wide-Area Protection Using Machine Learning. *Singh, V.K.*, +, *TSG July 2021 3514-3526*

A Novel Event Detection and Classification Scheme Using Wide-Area Frequency Measurements. *Shaw, P.*, +, *TSG May 2021 2320-2330*

A Robust State Estimation Method Based on SOCP for Integrated Electricity-Heat System. *Chen, Y.*, +, *TSG Jan. 2021 810-820*

Data-Driven False Data Injection Attacks Against Power Grids: A Random Matrix Approach. *Lakshminarayana, S.*, +, *TSG Jan. 2021 635-646*

Decentralized Low-Rank State Estimation for Power Distribution Systems. *Sagan, A.*, +, *TSG July 2021 3097-3106*

Deep Learning Method With Manual Post-Processing for Identification of Spectral Patterns of Waveform Distortion in PV Installations. *de Oliveira, R.A.*, +, *TSG Nov. 2021 5444-5456*

Detection of Stealthy Cyber-Physical Line Disconnection Attacks in Smart Grid. *James Ranjith Kumar, R.*, +, *TSG Sept. 2021 4484-4493*

Fully-Convolutional Denoising Auto-Encoders for NILM in Large Non-Residential Buildings. *Garcia-Perez, D.*, +, *TSG May 2021 2722-2731*

Online Detection of Inter-Turn Winding Faults in Single-Phase Distribution Transformers Using Smart Meter Data. *Ashok, K.*, +, *TSG Nov. 2021 5073-5083*

Optimal Coordination of Phasor Data Concentrators in Hierarchical Synchrophasor Networks. *Pourramezan, R.*, +, *TSG May 2021 2402-2412*

Perturbation-Based Diagnosis of False Data Injection Attack Using Distributed Energy Resources. *Jhala, K.*, +, *TSG March 2021 1589-1601*

Privacy Preserving in Non-Intrusive Load Monitoring: A Differential Privacy Perspective. *Wang, H.*, +, *TSG May 2021 2529-2543*

Reliability Analyses of Wide-Area Protection System Considering Cyber-Physical System Constraints. *He, R.*, +, *TSG July 2021 3458-3467*

Risk-Constrained Minimization of Combined Event Detection and Decision Time for Online Transient Stability Assessment. *Gonzalez, J.*, +, *TSG Sept. 2021 4564-4572*

Scalable Designs for Reinforcement Learning-Based Wide-Area Damping Control. *Mukherjee, S.*, +, *TSG May 2021 2389-2401*

Spoofing Resilient State Estimation for the Power Grid Using an Extended Kalman Filter. *Chauhan, S.V.S.*, +, *TSG July 2021 3404-3414*

Synchronous Waveform Measurements to Locate Transient Events and Incipient Faults in Power Distribution Networks. *Izadi, M.*, +, *TSG Sept. 2021 4295-4307*

Time-Synchronization Attack Detection in Unbalanced Three-Phase Systems. *Delcourt, M.*, +, *TSG Sept. 2021 4460-4470*

TraceGAN: Synthesizing Appliance Power Signatures Using Generative Adversarial Networks. *Harell, A.*, +, *TSG Sept. 2021 4553-4563*

Unsupervised Event Detection, Clustering, and Use Case Exposition in Micro-PMU Measurements. *Aligholian, A.*, +, *TSG July 2021 3624-3636*

Power system parameter estimation

Imitation and Transfer Q-Learning-Based Parameter Identification for Composite Load Modeling. *Xie, J.*, +, *TSG March 2021 1674-1684*

Power system planning

A Reinforcement Learning-Based Decision System for Electricity Pricing Plan Selection by Smart Grid End Users. *Lu, T.*, +, *TSG May 2021 2176-2187*

An Iterative Response-Surface-Based Approach for Chance-Constrained AC Optimal Power Flow Considering Dependent Uncertainty. *Xu, Y.*, +, *TSG May 2021 2696-2707*

Optimal Energy-Hub Planning Based on Dimension Reduction and Variable-Sized Unimodal Searching. *Zhao, N.*, +, *TSG March 2021 1481-1495*

Power system protection

A Cyber-Physical Anomaly Detection for Wide-Area Protection Using Machine Learning. *Singh, V.K.*, +, *TSG July 2021 3514-3526*

Distributed Privacy-Preserving Active Power Sharing and Frequency Regulation in Microgrids. *Fan, B.*, +, *TSG July 2021 3665-3668*

Reliability Analyses of Wide-Area Protection System Considering Cyber-Physical System Constraints. *He, R.*, +, *TSG July 2021 3458-3467*

Power system reliability

A Detection Mechanism Against Load-Redistribution Attacks in Smart Grids. *Kaviani, R.*, +, *TSG Jan. 2021 704-714*

A Secondary Control Method for Voltage Unbalance Compensation and Accurate Load Sharing in Networked Microgrids. *Golsorkhi, M.S.*, +, *TSG July 2021 2822-2833*

Component-Level Reliability Evaluation Model for Cyber Power Devices. *Balachandran, T.*, +, *TSG Jan. 2021 692-703*

Evaluating the Dispatchable Capacity of Base Station Backup Batteries in Distribution Networks. *Yong, P.*, +, *TSG Sept. 2021 3966-3979*

Impact of Communication Packet Delivery Ratio on Reliability of Optimal Load Tracking and Allocation in DC Microgrids. *Nazari, M.H.*, +, *TSG July 2021 2812-2821*

Reliability Analyses of Wide-Area Protection System Considering Cyber-Physical System Constraints. *He, R.*, +, *TSG July 2021 3458-3467*

Self-Assessment of Health Conditions of Electrical Assets and Grid Components: A Contribution to Smart Grids. *Montanari, G.C.*, +, *TSG March 2021 1206-1214*

Power system restoration

A Comprehensive Resilience-Oriented FLISR Method for Distribution Systems. *Liu, J.*, +, *TSG May 2021 2136-2152*

A Two-Level Simulation-Assisted Sequential Distribution System Restoration Model With Frequency Dynamics Constraints. *Zhang, Q.*, +, *TSG Sept. 2021 3835-3846*

Distributionally Robust Microgrid Formation Approach for Service Restoration Under Random Contingency. *Cai, S.*, +, *TSG Nov. 2021 4926-4937*

Optimal Restoration of Active Distribution Systems With Voltage Control and Closed-Loop Operation. *Vargas, R.*, +, *TSG May 2021 2295-2306*

Resilience-Motivated Distribution System Restoration Considering Electricity-Water-Gas Interdependency. *Li, J.*, +, *TSG Nov. 2021 4799-4812*

Spatio-Temporal Decomposition and Coordination for Distributed Load Restoration in AC/DC Hybrid System. *Zhao, J.*, +, *TSG March 2021 1685-1698*

Supplementary Feedforward Control of DGs in a Reconfigurable Microgrid for Load Restoration. *Park, J.*, +, *TSG Nov. 2021 4641-4654*

Two-Level Islanding Detection Method for Grid-Connected Photovoltaic System-Based Microgrid With Small Non-Detection Zone. *Bakhshi-Jarabadi, R.*, +, *TSG March 2021 1063-1072*

Power system security

A Cyber-Physical Anomaly Detection for Wide-Area Protection Using Machine Learning. *Singh, V.K.*, +, *TSG July 2021 3514-3526*

A Deep Learning-Based Cyberattack Detection System for Transmission Protective Relays. *Khaw, Y.M.*, +, *TSG May 2021 2554-2565*

A Detection Mechanism Against Load-Redistribution Attacks in Smart Grids. *Kaviani, R.*, +, *TSG Jan. 2021 704-714*

A FDI Attack-Resilient Distributed Secondary Control Strategy for Islanded Microgrids. *Chen, Y.*, +, *TSG May 2021 1929-1938*

A Model-Free Voltage Control Approach to Mitigate Motor Stalling and FIDVR for Smart Grids. *Park, B.*, +, *TSG Jan. 2021 67-78*

A New AC False Data Injection Attack Method Without Network Information. *Jiao, R.*, +, *TSG Nov. 2021 5280-5289*

A Novel Energy Trading Framework Using Adapted Blockchain Technology. *Hamouda, M.R.*, +, *TSG May 2021 2165-2175*

A Privacy-Aware Reconfigurable Authenticated Key Exchange Scheme for Secure Communication in Smart Grids. *Gope, P.*, +, *TSG Nov. 2021 5335-5348*

A Privacy-Preserving Homomorphic Scheme With Multiple Dimensions and Fault Tolerance for Metering Data Aggregation in Smart Grid. *Mohammadali, A.*, +, *TSG Nov. 2021 5212-5220*

An Identity Based Authentication Protocol for Smart Grid Environment Using Physical Uncloneable Function. *Badar, H.M.S.*, +, *TSG Sept. 2021 4426-4434*

An Iterative Response-Surface-Based Approach for Chance-Constrained AC Optimal Power Flow Considering Dependent Uncertainty. *Xu, Y.*, +, *TSG May 2021 2696-2707*

An Optimization-Based Approach to Recover the Detected Attacked Grid Variables After False Data Injection Attack. *Jorjani, M.*, +, *TSG Nov. 2021 5322-5334*

Analysis of IoT-Based Load Altering Attacks Against Power Grids Using the Theory of Second-Order Dynamical Systems. *Lakshminarayana, S.*, +, *TSG Sept. 2021 4415-4425*

Blockchain for Transacting Energy and Carbon Allowance in Networked Microgrids. *Yan, M.*, +, *TSG Nov. 2021 4702-4714*

Cyber Spoofing Detection for Grid Distributed Synchrophasor Using Dynamic Dual-Kernel SVM. *Qiu, W.*, +, *TSG May 2021 2732-2735*

Cyber-Vulnerability Analysis for Real-Time Power Market Operation. *Zhang, Q.*, +, *TSG July 2021 3527-3537*

Cyberattacks Against Event-Based Analysis in Micro-PMUs: Attack Models and Counter Measures. *Kamal, M.*, +, *TSG March 2021 1577-1588*

Data-Driven False Data Injection Attacks Against Power Grids: A Random Matrix Approach. *Lakshminarayana, S.*, +, *TSG Jan. 2021 635-646*

Deep-Reinforcement-Learning-Based Capacity Scheduling for PV-Battery Storage System. *Huang, B.*, +, *TSG May 2021 2272-2283*

Defense Strategy Against Load Redistribution Attacks on Power Systems Considering Insider Threats. *Liu, Z.*, +, *TSG March 2021 1529-1540*

- Detection of Cyber-Attacks of Power Systems Through Benford's Law. *Milano, F.*, +, *TSG May 2021 2741-2744*
- Detection of Stealthy Cyber-Physical Line Disconnection Attacks in Smart Grid. *James Ranjith Kumar, R.*, +, *TSG Sept. 2021 4484-4493*
- Detection of Synchronphasor False Data Injection Attack Using Feature Interactive Network. *Qiu, W.*, +, *TSG Jan. 2021 659-670*
- Distributed Consensus-Based Economic Dispatch in Power Grids Using the Paillier Cryptosystem. *Yan, Y.*, +, *TSG July 2021 3493-3502*
- Distributed Coordinated Reactive Power Control for Voltage Regulation in Distribution Networks. *Tang, Z.*, +, *TSG Jan. 2021 312-323*
- Distributed Privacy-Preserving Active Power Sharing and Frequency Regulation in Microgrids. *Fan, B.*, +, *TSG July 2021 3665-3668*
- Distribution Network-Constrained Optimization of Peer-to-Peer Transactive Energy Trading Among Multi-Microgrids. *Yan, M.*, +, *TSG March 2021 1033-1047*
- Distributionally Robust Microgrid Formation Approach for Service Restoration Under Random Contingency. *Cai, S.*, +, *TSG Nov. 2021 4926-4937*
- Dynamic Security Control in Heat and Electricity Integrated Energy System With an Equivalent Heating Network Model. *Zhang, S.*, +, *TSG Nov. 2021 4788-4798*
- Enhancing the Spatio-Temporal Observability of Grid-Edge Resources in Distribution Grids. *Lin, S.*, +, *TSG Nov. 2021 5434-5443*
- False Data Injection Attacks Against State-of-Charge Estimation of Battery Energy Storage Systems in Smart Distribution Networks. *Zhuang, P.*, +, *TSG May 2021 2566-2577*
- Generator Parameter Calibration by Adaptive Approximate Bayesian Computation With Sequential Monte Carlo Sampler. *Khazeyinasab, S.R.*, +, *TSG Sept. 2021 4327-4338*
- Learning-Based Simultaneous Detection and Characterization of Time Delay Attack in Cyber-Physical Systems. *Ganesh, P.*, +, *TSG July 2021 3581-3593*
- Leveraging Network Topology Optimization to Strengthen Power Grid Resilience Against Cyber-Physical Attacks. *Liu, Z.*, +, *TSG March 2021 1552-1564*
- Moving-Target Defense Against Cyber-Physical Attacks in Power Grids via Game Theory. *Lakshminarayana, S.*, +, *TSG Nov. 2021 5244-5257*
- Multiple Line Outage Detection in Power Systems by Sparse Recovery Using Transient Data. *Ding, L.*, +, *TSG July 2021 3448-3457*
- Network Parameter Coordinated False Data Injection Attacks Against Power System AC State Estimation. *Liu, C.*, +, *TSG March 2021 1626-1639*
- Optimal PMU Restoration for Power System Observability Recovery After Massive Attacks. *Edib, S.N.*, +, *TSG March 2021 1565-1576*
- Reactive Power Management for Networked Microgrid Resilience in Extreme Conditions. *Shaker, A.*, +, *TSG Sept. 2021 3940-3953*
- Real-Time Area Angle Monitoring Using Synchronphasors: A Practical Framework and Utility Deployment. *Ju, W.*, +, *TSG Jan. 2021 859-870*
- Real-Time Control of Battery Energy Storage Systems to Provide Ancillary Services Considering Voltage-Dependent Capability of DC-AC Converters. *Yuan, Z.*, +, *TSG Sept. 2021 4164-4175*
- Reliability Analyses of Wide-Area Protection System Considering Cyber-Physical System Constraints. *He, R.*, +, *TSG July 2021 3458-3467*
- Resilient Control and Analysis for DC Microgrid System Under DoS and Impulsive FDI Attacks. *Liu, X.*, +, *TSG Sept. 2021 3742-3754*
- Risk-Averse Coordinated Operation of a Multi-Energy Microgrid Considering Voltage/Var Control and Thermal Flow: An Adaptive Stochastic Approach. *Li, Z.*, +, *TSG Sept. 2021 3914-3927*
- SCCO: A State-Caching-Based Coagulation Platform for Cyber-Physical Power System Evaluation. *Wang, Q.*, +, *TSG March 2021 1615-1625*
- Source Authentication of Distribution Synchronphasors for Cybersecurity of Microgrids. *Cui, Y.*, +, *TSG Sept. 2021 4577-4580*
- Spatio-Temporal Decomposition and Coordination for Distributed Load Restoration in AC/DC Hybrid System. *Zhao, J.*, +, *TSG March 2021 1685-1698*
- Starlink Space Network-Enhanced Cyber-Physical Power System. *Duan, T.*, +, *TSG July 2021 3673-3675*
- Stealthy Cyberattacks on Loads and Distributed Generation Aimed at Multi-Transmission Line Congestions in Smart Grids. *Khazaei, J.*, *TSG May 2021 2518-2528*
- Synchronphasor Data Under GPS Spoofing: Attack Detection and Mitigation Using Residuals. *Chauhan, S.V.S.*, +, *TSG July 2021 3415-3424*
- Targeted False Data Injection Attacks Against AC State Estimation Without Network Parameters. *Du, M.*, +, *TSG Nov. 2021 5349-5361*
- Toward Complete Characterization of the Steady-State Security Region for the Electricity-Gas Integrated Energy System. *Su, J.*, +, *TSG July 2021 3004-3015*
- Verification of Neural Network Behaviour: Formal Guarantees for Power System Applications. *Venzke, A.*, +, *TSG Jan. 2021 383-397*
- Vulnerability Assessment of Deep Reinforcement Learning Models for Power System Topology Optimization. *Zheng, Y.*, +, *TSG July 2021 3613-3623*
- Wide-Area Damping Control Resilience Towards Cyber-Attacks: A Dynamic Loop Approach. *Patel, A.*, +, *TSG July 2021 3438-3447*
- Power system simulation**
- A Scheduled Intentional Islanding Method Based on Ranking of Possible Islanding Zone. *Mishra, A.*, +, *TSG May 2021 1853-1866*
- Aggregated BESS Dynamic Models for Active Distribution Network Studies. *Calero, F.*, +, *TSG May 2021 2077-2088*
- Aggregated Model of Data Network for the Provision of Demand Response in Generation and Transmission Expansion Planning. *Chen, M.*, +, *TSG Jan. 2021 512-523*
- Countering FDI Attacks on DERs Coordinated Control System Using FMI-Compatible Cosimulation. *Jafarigiv, D.*, +, *TSG March 2021 1640-1650*
- Development of an Encoding Method on a Co-Simulation Platform for Mitigating the Impact of Unreliable Communication. *Xie, F.*, +, *TSG May 2021 2496-2507*
- RTCE: Real-Time Co-Emulation Framework for EMT-Based Power System and Communication Network on FPGA-MPSoC Hardware Architecture. *Duan, T.*, +, *TSG May 2021 2544-2553*
- Power system stability**
- A Converter-Based Power System Stabilizer for Stability Enhancement of Droop-Controlled Islanded Microgrids. *Guo, K.*, +, *TSG Nov. 2021 4616-4626*
- A Model-Free Voltage Control Approach to Mitigate Motor Stalling and FIDVR for Smart Grids. *Park, B.*, +, *TSG Jan. 2021 67-78*
- A Scalable Control Design for Grid-Forming Inverters in Microgrids. *Watson, J.D.*, +, *TSG Nov. 2021 4726-4739*
- A Scheduled Intentional Islanding Method Based on Ranking of Possible Islanding Zone. *Mishra, A.*, +, *TSG May 2021 1853-1866*
- An Adaptive Approach for Dynamic Load Modeling in Microgrids. *Chavarro-Barrera, L.*, +, *TSG July 2021 2834-2843*
- Artificial Neural Network-Based Stealth Attack on Battery Energy Storage Systems. *Pasetti, M.*, +, *TSG Nov. 2021 5310-5321*
- Bargaining Game-Based Profit Allocation of Virtual Power Plant in Frequency Regulation Market Considering Battery Cycle Life. *Chen, W.*, +, *TSG July 2021 2913-2928*
- Detection of Stealthy Cyber-Physical Line Disconnection Attacks in Smart Grid. *James Ranjith Kumar, R.*, +, *TSG Sept. 2021 4484-4493*
- Distributed Control of DC Microgrids for Optimal Coordination of Conventional and Renewable Generators. *Fan, Z.*, +, *TSG Nov. 2021 4607-4615*
- Dual Inertia-Emulation Control for Interlinking Converters in Grid-Tying Applications. *Pantagua, J.*, +, *TSG Sept. 2021 3868-3876*
- Imitation and Transfer Q-Learning-Based Parameter Identification for Composite Load Modeling. *Xie, J.*, +, *TSG March 2021 1674-1684*
- Integrated Electricity and Hydrogen Energy Sharing in Coupled Energy Systems. *Tao, Y.*, +, *TSG March 2021 1149-1162*
- Isochronous Architecture-Based Voltage-Active Power Droop for Multi-Inverter Systems. *Patel, S.*, +, *TSG March 2021 1088-1103*
- Modeling of Time-Delayed Distributed Cyber-Physical Power Systems for Small-Signal Stability Analysis. *Xu, L.*, +, *TSG July 2021 3425-3437*

- MPC-Controlled Virtual Synchronous Generator to Enhance Frequency and Voltage Dynamic Performance in Islanded Microgrids. *Long, B., +, TSG March 2021 953-964*
- Region of Attraction Estimation for DC Microgrids With Constant Power Loads Using Potential Theory. *Chang, F., +, TSG Sept. 2021 3793-3808*
- Resilience Against Data Manipulation in Distributed Synchrophasor-Based Mode Estimation. *Rajabi, A., +, TSG July 2021 3538-3547*
- Resilient Control and Analysis for DC Microgrid System Under DoS and Impulsive FDI Attacks. *Liu, X., +, TSG Sept. 2021 3742-3754*
- Resilient Wide-Area Damping Control for Inter-Area Oscillations to Tolerate Deception Attacks. *Yao, W., +, TSG Sept. 2021 4238-4249*
- Robust Secondary Frequency Control for Virtual Synchronous Machine-Based Microgrid Cluster Using Equivalent Modeling. *Hu, W., +, TSG July 2021 2879-2889*
- Scalable Designs for Reinforcement Learning-Based Wide-Area Damping Control. *Mukherjee, S., +, TSG May 2021 2389-2401*
- Stability Analysis of Low-Voltage Distribution Feeders Operated as Islanded Microgrids. *Wang, B., +, TSG Nov. 2021 4681-4689*
- Supplementary Controller for Seamless Transitions Between Microgrids Operation Modes. *Azimi, S.M., +, TSG May 2021 2102-2112*
- Transient Voltage Stability of Paralleled Synchronous and Virtual Synchronous Generators With Induction Motor Loads. *Cheng, H., +, TSG Nov. 2021 4983-4999*
- Voltage Stabilization Control for Microgrid With Asymmetric Membership Function-Based Wavelet Petri Fuzzy Neural Network. *Lin, F., +, TSG Sept. 2021 3731-3741*
- Wide-Area Damping Control Resilience Towards Cyber-Attacks: A Dynamic Loop Approach. *Patel, A., +, TSG July 2021 3438-3447*
- Power system state estimation**
- A Detection Mechanism Against Load-Redistribution Attacks in Smart Grids. *Kaviani, R., +, TSG Jan. 2021 704-714*
- A Robust State Estimation Method Based on SOCP for Integrated Electricity-Heat System. *Chen, Y., +, TSG Jan. 2021 810-820*
- An Optimization-Based Approach to Recover the Detected Attacked Grid Variables After False Data Injection Attack. *Jorjani, M., +, TSG Nov. 2021 5322-5334*
- Data-Driven False Data Injection Attacks Against Power Grids: A Random Matrix Approach. *Lakshminarayana, S., +, TSG Jan. 2021 635-646*
- Decentralized Low-Rank State Estimation for Power Distribution Systems. *Sagan, A., +, TSG July 2021 3097-3106*
- Detection of Cyber-Attacks of Power Systems Through Benford's Law. *Milano, F., +, TSG May 2021 2741-2744*
- Distributed Multi-Area State Estimation for Power Systems With Switching Communication Graphs. *Wang, J., +, TSG Jan. 2021 787-797*
- Dynamic State Estimation of Smart Distribution Grids Using Compressed Measurements. *Mohammadrezaee, R., +, TSG Sept. 2021 4535-4542*
- False Data Injection Attacks Against State-of-Charge Estimation of Battery Energy Storage Systems in Smart Distribution Networks. *Zhuang, P., +, TSG May 2021 2566-2577*
- Network Parameter Coordinated False Data Injection Attacks Against Power System AC State Estimation. *Liu, C., +, TSG March 2021 1626-1639*
- Privacy-Preserving Hierarchical State Estimation in Untrustworthy Cloud Environments. *Wang, J., +, TSG March 2021 1541-1551*
- Spoofing Resilient State Estimation for the Power Grid Using an Extended Kalman Filter. *Chauhan, S.V.S., +, TSG July 2021 3404-3414*
- State Estimation for Situational Awareness of Active Distribution System With Photovoltaic Power Plants. *Fang, Z., +, TSG Jan. 2021 239-250*
- Switch Status Identification in Distribution Networks Using Harmonic Synchrophasor Measurements. *Chen, L., +, TSG May 2021 2413-2424*
- Targeted False Data Injection Attacks Against AC State Estimation Without Network Parameters. *Du, M., +, TSG Nov. 2021 5349-5361*
- Time-Synchronization Attack Detection in Unbalanced Three-Phase Systems. *Delcourt, M., +, TSG Sept. 2021 4460-4470*
- Power system transient stability**
- Direct-Quadrature Sequence Models for Energy-Function Based Transient Stability Analysis of Unbalanced Inverter-Based Microgrids. *Roos, M., +, TSG Sept. 2021 3692-3704*
- On the Impact of Fault Ride-Through on Transient Stability of Autonomous Microgrids: Nonlinear Analysis and Solution. *Eskandari, M., +, TSG March 2021 999-1010*
- Risk-Constrained Minimization of Combined Event Detection and Decision Time for Online Transient Stability Assessment. *Gonzalez, J., +, TSG Sept. 2021 4564-4572*
- Stability Analysis of Microgrid Islanding Transients Based on Interconnected Dissipative Subsystems. *Roos, M.H., +, TSG Nov. 2021 4655-4667*
- Transient Stability and Current Injection Design of Paralleled Current-Controlled VSCs and Virtual Synchronous Generators. *Shen, C., +, TSG March 2021 1118-1134*
- Power system transients**
- Modeling of DC Distribution System Based on High Frequency Transient Components. *Jia, K., +, TSG Jan. 2021 671-679*
- RTCE: Real-Time Co-Emulation Framework for EMT-Based Power System and Communication Network on FPGA-MPSoC Hardware Architecture. *Duan, T., +, TSG May 2021 2544-2553*
- Power transformer insulation**
- Online Detection of Inter-Turn Winding Faults in Single-Phase Distribution Transformers Using Smart Meter Data. *Ashok, K., +, TSG Nov. 2021 5073-5083*
- Optimal Dispatch With Transformer Dynamic Thermal Rating in ADNs Incorporating High PV Penetration. *Li, Y., +, TSG May 2021 1989-1999*
- Power transformer protection**
- Online Detection of Inter-Turn Winding Faults in Single-Phase Distribution Transformers Using Smart Meter Data. *Ashok, K., +, TSG Nov. 2021 5073-5083*
- Power transformers**
- Adaptive Congestion Control for Electric Vehicle Charging in the Smart Grid. *Zishan, A.A., +, TSG May 2021 2439-2449*
- Inducing Human Behavior to Maximize Operation Performance at PEV Charging Station. *Zeng, T., +, TSG July 2021 3353-3363*
- Synchronization of Low Voltage Grids Fed by Smart and Conventional Transformers. *Giacomuzzi, S., +, TSG July 2021 2941-2951*
- The Added Value of Coordinating Inverter Control. *Lusis, P., +, TSG March 2021 1238-1248*
- Power transmission economics**
- Integrated Transmission and Distribution System Expansion Planning Under Uncertainty. *Munoz-Delgado, G., +, TSG Sept. 2021 4113-4125*
- Power transmission faults**
- Back Up Protection Scheme for High Impedance Faults Detection in Transmission Systems Based on Synchrophasor Measurements. *Vlahinic, S., +, TSG March 2021 1736-1746*
- Edge Computing-Based Fault Location in Distribution Networks by Using Asynchronous Transient Amplitudes at Limited Nodes. *Peng, N., +, TSG Jan. 2021 574-588*
- Modeling of DC Distribution System Based on High Frequency Transient Components. *Jia, K., +, TSG Jan. 2021 671-679*
- Wide-Band Current Transformers for Traveling-Waves-Based Protection Applications. *Ameli, A., +, TSG Jan. 2021 845-858*
- Power transmission lines**
- Back Up Protection Scheme for High Impedance Faults Detection in Transmission Systems Based on Synchrophasor Measurements. *Vlahinic, S., +, TSG March 2021 1736-1746*
- Deep Learning-Based Real-Time Switching of Hybrid AC/DC Transmission Networks. *Dabbaghjamesh, M., +, TSG May 2021 2331-2342*
- Fault Location Method for Three-Terminal Lines in Distribution Network Based on Line Voltage Measured by μ MPPMU. *Yun, Z., +, TSG Nov. 2021 5095-5112*
- Modeling of DC Distribution System Based on High Frequency Transient Components. *Jia, K., +, TSG Jan. 2021 671-679*
- Multiple Line Outage Detection in Power Systems by Sparse Recovery Using Transient Data. *Ding, L., +, TSG July 2021 3448-3457*
- Stealthy Cyberattacks on Loads and Distributed Generation Aimed at Multi-Transmission Line Congestions in Smart Grids. *Khazaei, J., TSG May 2021 2518-2528*
- Unsupervised Congestion Status Identification Using LMP Data. *Zheng, K., +, TSG Jan. 2021 726-736*

- Wide-Band Current Transformers for Traveling-Waves-Based Protection Applications. *Ameli, A., +, TSG Jan. 2021 845-858*
- Power transmission planning**
- Aggregated Model of Data Network for the Provision of Demand Response in Generation and Transmission Expansion Planning. *Chen, M., +, TSG Jan. 2021 512-523*
- Integrated Transmission and Distribution System Expansion Planning Under Uncertainty. *Munoz-Delgado, G., +, TSG Sept. 2021 4113-4125*
- Power transmission protection**
- A Deep Learning-Based Cyberattack Detection System for Transmission Protective Relays. *Khaw, Y.M., +, TSG May 2021 2554-2565*
- Back Up Protection Scheme for High Impedance Faults Detection in Transmission Systems Based on Synchrophasor Measurements. *Vlahinic, S., +, TSG March 2021 1736-1746*
- Modeling of DC Distribution System Based on High Frequency Transient Components. *Jia, K., +, TSG Jan. 2021 671-679*
- Wide-Band Current Transformers for Traveling-Waves-Based Protection Applications. *Ameli, A., +, TSG Jan. 2021 845-858*
- Power transmission reliability**
- Multiple Line Outage Detection in Power Systems by Sparse Recovery Using Transient Data. *Ding, L., +, TSG July 2021 3448-3457*
- Predictive control**
- A Cluster-Based Model for Charging a Single-Depot Fleet of Electric Vehicles. *Sepetanc, K., +, TSG July 2021 3339-3352*
- A Demand Response-Based Solution to Overloading in Underdeveloped Distribution Networks. *Jibran, M., +, TSG Sept. 2021 4059-4067*
- Adaptive Charging Networks: A Framework for Smart Electric Vehicle Charging. *Lee, Z.J., +, TSG Sept. 2021 4339-4350*
- An MPC-Aided Resilient Operation of Multi-Microgrids With Dynamic Boundaries. *Zhao, T., +, TSG May 2021 2125-2135*
- Cooperative Optimization of Networked Microgrids for Supporting Grid Flexibility Services Using Model Predictive Control. *Garcia-Torres, F., +, TSG May 2021 1893-1903*
- Distributed Predictive Control Strategy for Frequency Restoration of Microgrids Considering Optimal Dispatch. *F., A.N., +, TSG July 2021 2748-2759*
- Distributionally Robust Optimal Power Flow in Multi-Microgrids With Decomposition and Guaranteed Convergence. *Huang, W., +, TSG Jan. 2021 43-55*
- Disturbance Observer and Tube-Based Model Predictive Controlled Electric Vehicles for Frequency Regulation of an Isolated Power Grid. *Oshnoei, A., +, TSG Sept. 2021 4351-4362*
- Dynamic Event-Based Model Predictive Load Frequency Control for Power Systems Under Cyber Attacks. *Liu, Y., +, TSG Jan. 2021 715-725*
- Efficient Robust Scheduling of Integrated Electricity and Heat Systems: A Direct Constraint Tightening Approach. *Jiang, Y., +, TSG July 2021 3016-3029*
- Energy Management and Control of a Flywheel Storage System for Peak Shaving Applications. *Tziovani, L., +, TSG Sept. 2021 4195-4207*
- Enhancement of Frequency Regulation in AC Microgrid: A Fuzzy-MPC Controlled Virtual Synchronous Generator. *Long, B., +, TSG July 2021 3138-3149*
- Exploiting Power-to-Heat Assets in District Heating Networks to Regulate Electric Power Network. *Khatibi, M., +, TSG May 2021 2048-2059*
- Frequency Regulation in Isolated Microgrids Through Optimal Droop Gain and Voltage Control. *Alghamdi, B., +, TSG March 2021 988-998*
- Integrated Planning of a Solar/Storage Collective. *Contreras-Ocana, J.E., +, TSG Jan. 2021 215-226*
- Learning-Based Predictive Control via Real-Time Aggregate Flexibility. *Li, T., +, TSG Nov. 2021 4897-4913*
- Mixed-Stage Energy Management for Decentralized Microgrid Cluster Based on Enhanced Tube Model Predictive Control. *Xie, P., +, TSG Sept. 2021 3780-3792*
- MPC-Controlled Virtual Synchronous Generator to Enhance Frequency and Voltage Dynamic Performance in Islanded Microgrids. *Long, B., +, TSG March 2021 953-964*
- Optimal Schedule for Networked Microgrids Under Deregulated Power Market Environment Using Model Predictive Control. *Garcia-Torres, F., +, TSG Jan. 2021 182-191*
- Resilient Wide-Area Damping Control for Inter-Area Oscillations to Tolerate Deception Attacks. *Yao, W., +, TSG Sept. 2021 4238-4249*
- Two-Time-Scale Energy Management for Microgrids With Data-Based Day-Ahead Distributionally Robust Chance-Constrained Scheduling. *Yuan, Z., +, TSG Nov. 2021 4778-4787*
- Pricing**
- A Cluster-Based Model for Charging a Single-Depot Fleet of Electric Vehicles. *Sepetanc, K., +, TSG July 2021 3339-3352*
- A Community Sharing Market With PV and Energy Storage: An Adaptive Bidding-Based Double-Side Auction Mechanism. *He, L., +, TSG May 2021 2450-2461*
- A Community-Based Energy Market Design Using Decentralized Decision-Making Under Uncertainty. *Crespo-Vazquez, J.L., +, TSG March 2021 1782-1793*
- A Data-Driven Storage Control Framework for Dynamic Pricing. *Wu, J., +, TSG Jan. 2021 737-750*
- A Nested Transactive Energy Market Model to Trade Demand-Side Flexibility of Residential Consumers. *Nizami, M.S.H., +, TSG Jan. 2021 479-490*
- A New Method for Peer Matching and Negotiation of Prosumers in Peer-to-Peer Energy Markets. *Khorasany, M., +, TSG May 2021 2472-2483*
- A Novel Energy Trading Framework Using Adapted Blockchain Technology. *Hamouda, M.R., +, TSG May 2021 2165-2175*
- A Reinforcement Learning-Based Decision System for Electricity Pricing Plan Selection by Smart Grid End Users. *Lu, T., +, TSG May 2021 2176-2187*
- A Transactive Retail Market Mechanism for Active Distribution Network Integrated With Large-Scale Distributed Energy Resources. *Huang, C., +, TSG Sept. 2021 4225-4237*
- Accurate Modeling of a Profit-Driven Power to Hydrogen and Methane Plant Toward Strategic Bidding Within Multi-Type Markets. *Pan, G., +, TSG Jan. 2021 338-349*
- An Operation Model for Distribution Companies Using the Flexibility of Electric Vehicle Aggregators. *Lu, X., +, TSG March 2021 1507-1518*
- Bi-Level Robust Optimization for Distribution System With Multiple Microgrids Considering Uncertainty Distribution Locational Marginal Price. *Wang, L., +, TSG March 2021 1104-1117*
- Capturing Spatio-Temporal Dependencies in the Probabilistic Forecasting of Distribution Locational Marginal Prices. *Toubeau, J., +, TSG May 2021 2663-2674*
- Chance Constrained Scheduling and Pricing for Multi-Service Battery Energy Storage. *Zhong, W., +, TSG Nov. 2021 5030-5042*
- Chance-Constrained Peer-to-Peer Joint Energy and Reserve Market Considering Renewable Generation Uncertainty. *Guo, Z., +, TSG Jan. 2021 798-809*
- Combined Impact of Demand Response Aggregators and Carbon Taxation on Emissions Reduction in Electric Power Systems. *Algarni, A.S., +, TSG March 2021 1825-1827*
- Constructing Demand-Side Bidding Curves Based on a Decoupled Full-Cycle Process. *Ruan, G., +, TSG Jan. 2021 502-511*
- Cooperative P2P Energy Trading in Active Distribution Networks: An MILP-Based Nash Bargaining Solution. *Zhong, W., +, TSG March 2021 1264-1276*
- Coordinated Energy Management of Prosumers in a Distribution System Considering Network Congestion. *Hu, J., +, TSG Jan. 2021 468-478*
- Coordination of Distribution Network Reinforcement and DER Planning in Competitive Market. *Xiao, X., +, TSG May 2021 2261-2271*
- Data-Driven Approach for Analyzing Spatiotemporal Price Elasticities of EV Public Charging Demands Based on Conditional Random Fields. *Bao, Z., +, TSG Sept. 2021 4363-4376*
- Deep Reinforcement Learning for Demand Response in Distribution Networks. *Bahrami, S., +, TSG March 2021 1496-1506*
- Distribution Market-Clearing and Pricing Considering Coordination of DSOs and ISO: An EPEC Approach. *Chen, H., +, TSG July 2021 3150-3162*
- Dynamic Stochastic Demand Response With Energy Storage. *Xiao, Y., +, TSG Nov. 2021 4813-4821*

- Ensuring Distribution Network Integrity Using Dynamic Operating Limits for Prosumers. *Petrou, K.*, +, *TSG Sept. 2021 3877-3888*
- Exploiting the Potentials of HVAC Systems in Transactive Energy Markets. *Nemathkah, F.*, +, *TSG Sept. 2021 4039-4048*
- Hierarchical Bipartite Graph Matching Method for Transactive V2V Power Exchange in Distribution Power System. *Zeng, L.*, +, *TSG Jan. 2021 301-311*
- Hierarchical Coupled Driving-and-Charging Model of Electric Vehicles, Stations and Grid Operators. *Sohet, B.*, +, *TSG Nov. 2021 5146-5157*
- Incentive-Compatible Demand Response for Spatially Coupled Internet Data Centers in Electricity Markets. *Chen, M.*, +, *TSG July 2021 3056-3069*
- Inducing Human Behavior to Maximize Operation Performance at PEV Charging Station. *Zeng, T.*, +, *TSG July 2021 3353-3363*
- Integrated Electricity and Hydrogen Energy Sharing in Coupled Energy Systems. *Tao, Y.*, +, *TSG March 2021 1149-1162*
- Iteration-Based Linearized Distribution-Level Locational Marginal Price for Three-Phase Unbalanced Distribution Systems. *Cai, M.*, +, *TSG Nov. 2021 4886-4896*
- Market-Based Energy Management Model of a Building Microgrid Considering Battery Degradation. *Antoniadou-Plytaria, K.*, +, *TSG March 2021 1794-1804*
- MicroGrid Resilience-Oriented Scheduling: A Robust MISOCP Model. *Zografou-Barredo, N.*, +, *TSG May 2021 1867-1879*
- Mobility-Aware Charging Scheduling for Shared On-Demand Electric Vehicle Fleet Using Deep Reinforcement Learning. *Liang, Y.*, +, *TSG March 2021 1380-1393*
- Multi-Round Double Auction-Enabled Peer-to-Peer Energy Exchange in Active Distribution Networks. *Haggi, H.*, +, *TSG Sept. 2021 4403-4414*
- Network-Constrained Stackelberg Game for Pricing Demand Flexibility in Power Distribution Systems. *Aguiar, N.*, +, *TSG Sept. 2021 4049-4058*
- Network-Secure and Price-Elastic Aggregator Bidding in Energy and Reserve Markets. *Attarha, A.*, +, *TSG May 2021 2284-2294*
- Optimal Policy Characterization Enhanced Actor-Critic Approach for Electric Vehicle Charging Scheduling in a Power Distribution Network. *Jin, J.*, +, *TSG March 2021 1416-1428*
- Optimal Pricing of Public Electric Vehicle Charging Stations Considering Operations of Coupled Transportation and Power Systems. *Cui, Y.*, +, *TSG July 2021 3278-3288*
- Optimal Reserve Management of Electric Vehicle Aggregator: Discrete Bilevel Optimization Model and Exact Algorithm. *Liu, W.*, +, *TSG Sept. 2021 4003-4015*
- Optimal Sharing and Fair Cost Allocation of Community Energy Storage. *Yang, Y.*, +, *TSG Sept. 2021 4185-4194*
- Peer-to-Peer Energy Trading in Transactive Markets Considering Physical Network Constraints. *Ullah, M.H.*, +, *TSG July 2021 3390-3403*
- Plug-in Electric Vehicle Charging With Multiple Charging Options: A Systematic Analysis of Service Providers' Pricing Strategies. *Zhang, Y.*, +, *TSG Jan. 2021 524-537*
- Price-Based Dynamic Optimal Power Flow With Emergency Repair. *Schmitz, M.*, +, *TSG Jan. 2021 324-337*
- Price-Maker Bidding and Offering Strategies for Networked Microgrids in Day-Ahead Electricity Markets. *Hu, B.*, +, *TSG Nov. 2021 5201-5211*
- Quantitative Model of the Electricity-Shifting Curve in an Energy Hub Based on Aggregated Utility Curve of Multi-Energy Demands. *Zhao, N.*, +, *TSG March 2021 1329-1345*
- Real-Time Distributed Economic Dispatch Adapted to General Convex Cost Functions: A Secant Approximation-Based Method. *Zhong, H.*, +, *TSG May 2021 2089-2101*
- Risk Trading in Energy Communities. *Vespermann, N.*, +, *TSG March 2021 1249-1263*
- Risk-Averse Optimal Energy and Reserve Scheduling for Virtual Power Plants Incorporating Demand Response Programs. *Vahedipour-Dahraie, M.*, +, *TSG March 2021 1405-1415*
- Selling Demand Response Using Options. *Muthirayan, D.*, +, *TSG Jan. 2021 279-288*
- Tracking Equilibrium Point Under Real-Time Price-Based Residential Demand Response. *Ding, T.*, +, *TSG May 2021 2736-2740*
- Transactive Energy Supported Economic Operation for Multi-Energy Complementary Microgrids. *Yang, Z.*, +, *TSG Jan. 2021 4-17*
- Tri-Level Scheduling Model Considering Residential Demand Flexibility of Aggregated HVACs and EVs Under Distribution LMP. *Wang, X.*, +, *TSG Sept. 2021 3990-4002*
- Unsupervised Congestion Status Identification Using LMP Data. *Zheng, K.*, +, *TSG Jan. 2021 726-736*
- Principal component analysis**
- A Synchrophasor Data Compression Technique With Iteration-Enhanced Phasor Principal Component Analysis. *Zhang, F.*, +, *TSG May 2021 2365-2377*
- Data-Driven Islanding Detection Using a Principal Subspace of Voltage Angle Differences. *Rabuzin, T.*, +, *TSG Sept. 2021 4250-4258*
- Electricity Consumer Characteristics Identification: A Federated Learning Approach. *Wang, Y.*, +, *TSG July 2021 3637-3647*
- Mitigating Smart Meter Asynchrony Error Via Multi-Objective Low Rank Matrix Recovery. *Yuan, Y.*, +, *TSG Sept. 2021 4308-4317*
- Probability**
- A Detection Mechanism Against Load-Redistribution Attacks in Smart Grids. *Kaviani, R.*, +, *TSG Jan. 2021 704-714*
- A Mean-Field Voltage Control Approach for Active Distribution Networks With Uncertainties. *Wei, B.*, +, *TSG March 2021 1455-1466*
- A Reinforcement Learning-Based Decision System for Electricity Pricing Plan Selection by Smart Grid End Users. *Lu, T.*, +, *TSG May 2021 2176-2187*
- Aggregate Operation Model for Numerous Small-Capacity Distributed Energy Resources Considering Uncertainty. *Yi, Z.*, +, *TSG Sept. 2021 4208-4224*
- An Adaptive Ensemble Data Driven Approach for Nonparametric Probabilistic Forecasting of Electricity Load. *Wan, C.*, +, *TSG Nov. 2021 5396-5408*
- Capturing Spatio-Temporal Dependencies in the Probabilistic Forecasting of Distribution Locational Marginal Prices. *Toubeau, J.*, +, *TSG May 2021 2663-2674*
- Chance-Constrained Optimal Power Flow of Integrated Transmission and Distribution Networks With Limited Information Interaction. *Tang, K.*, +, *TSG Jan. 2021 821-833*
- Conditional Multivariate Elliptical Copulas to Model Residential Load Profiles From Smart Meter Data. *Duque, E.M.S.*, +, *TSG Sept. 2021 4280-4294*
- Data-Driven False Data Injection Attacks Against Power Grids: A Random Matrix Approach. *Lakshminarayana, S.*, +, *TSG Jan. 2021 635-646*
- Data-Driven Probabilistic Fault Location of Electric Power Distribution Systems Incorporating Data Uncertainties. *Jiang, Y.*, *TSG Sept. 2021 4522-4534*
- Data-Driven Stochastic Game With Social Attributes for Peer-to-Peer Energy Sharing. *Chen, L.*, +, *TSG Nov. 2021 5158-5171*
- Distributed Multi-Area State Estimation for Power Systems With Switching Communication Graphs. *Wang, J.*, +, *TSG Jan. 2021 787-797*
- Distributionally Robust Microgrid Formation Approach for Service Restoration Under Random Contingency. *Cai, S.*, +, *TSG Nov. 2021 4926-4937*
- Enriching Load Data Using Micro-PMUs and Smart Meters. *Bu, F.*, +, *TSG Nov. 2021 5084-5094*
- Fast Probabilistic Hosting Capacity Analysis for Active Distribution Systems. *Taheri, S.*, +, *TSG May 2021 2000-2012*
- Fast Wasserstein-Distance-Based Distributionally Robust Chance-Constrained Power Dispatch for Multi-Zone HVAC Systems. *Chen, G.*, +, *TSG Sept. 2021 4016-4028*
- Predicting Weather-Related Failure Risk in Distribution Systems Using Bayesian Neural Network. *Du, Y.*, +, *TSG Jan. 2021 350-360*
- Probabilistic Forecasting of Regional Net-Load With Conditional Extremes and Gridded NWP. *Browell, J.*, +, *TSG Nov. 2021 5011-5019*
- Probabilistic Load Forecasting via Neural Basis Expansion Model Based Prediction Intervals. *Wen, H.*, +, *TSG July 2021 3648-3660*
- Real-Time Synchrophasor Data Anomaly Detection and Classification Using *Isolation Forest*, *KMeans*, and *LoOP*. *Khaledian, E.*, +, *TSG May 2021 2378-2388*

Risk-Constrained Minimization of Combined Event Detection and Decision Time for Online Transient Stability Assessment. *Gonzalez, J.*, +, *TSG Sept. 2021 4564-4572*

Scenario Reduction for Stochastic Day-Ahead Scheduling: A Mixed Auto-encoder Based Time-Series Clustering Approach. *Liang, J.*, +, *TSG May 2021 2652-2662*

Stability Analysis of Microgrid Islanding Transients Based on Interconnected Dissipative Subsystems. *Roos, M.H.*, +, *TSG Nov. 2021 4655-4667*

Statistical Load Forecasting Using Optimal Quantile Regression Random Forest and Risk Assessment Index. *Aprillia, H.*, +, *TSG March 2021 1467-1480*

Targeted False Data Injection Attacks Against AC State Estimation Without Network Parameters. *Du, M.*, +, *TSG Nov. 2021 5349-5361*

Uncertainty-Aware Deployment of Mobile Energy Storage Systems for Distribution Grid Resilience. *Nazemi, M.*, +, *TSG July 2021 3200-3214*

Procurement

A Nested Transactive Energy Market Model to Trade Demand-Side Flexibility of Residential Consumers. *Nizami, M.S.H.*, +, *TSG Jan. 2021 479-490*

Profitability

Adaptive Charging Networks: A Framework for Smart Electric Vehicle Charging. *Lee, Z.J.*, +, *TSG Sept. 2021 4339-4350*

Bargaining Game-Based Profit Allocation of Virtual Power Plant in Frequency Regulation Market Considering Battery Cycle Life. *Chen, W.*, +, *TSG July 2021 2913-2928*

Cooperative P2P Energy Trading in Active Distribution Networks: An MILP-Based Nash Bargaining Solution. *Zhong, W.*, +, *TSG March 2021 1264-1276*

Deep-Reinforcement-Learning-Based Capacity Scheduling for PV-Battery Storage System. *Huang, B.*, +, *TSG May 2021 2272-2283*

Ensuring Distribution Network Integrity Using Dynamic Operating Limits for Prosumers. *Petrou, K.*, +, *TSG Sept. 2021 3877-3888*

Peer-to-Peer Energy Trading in Transactive Markets Considering Physical Network Constraints. *Ullah, M.H.*, +, *TSG July 2021 3390-3403*

Plug-in Electric Vehicle Charging With Multiple Charging Options: A Systematic Analysis of Service Providers' Pricing Strategies. *Zhang, Y.*, +, *TSG Jan. 2021 524-537*

Protocols

A Deep Learning-Based Cyberattack Detection System for Transmission Protective Relays. *Khaw, Y.M.*, +, *TSG May 2021 2554-2565*

Public key cryptography

Signcrypton Based Authenticated and Key Exchange Protocol for EI-Based V2G Environment. *Ahmed, S.*, +, *TSG Nov. 2021 5290-5298*

Public transport

Optimal Pricing of Public Electric Vehicle Charging Stations Considering Operations of Coupled Transportation and Power Systems. *Cui, Y.*, +, *TSG July 2021 3278-3288*

Q

Quadratic programming

A Linear Branch Flow Model for Radial Distribution Networks and Its Application to Reactive Power Optimization and Network Reconfiguration. *Yang, T.*, +, *TSG May 2021 2027-2036*

A Transactive Retail Market Mechanism for Active Distribution Network Integrated With Large-Scale Distributed Energy Resources. *Huang, C.*, +, *TSG Sept. 2021 4225-4237*

Cooperative Optimization of Networked Microgrids for Supporting Grid Flexibility Services Using Model Predictive Control. *Garcia-Torres, F.*, +, *TSG May 2021 1893-1903*

Current Injection Power Flow Analysis and Optimal Generation Dispatch for Bipolar DC Microgrids. *Lee, J.*, +, *TSG May 2021 1918-1928*

Distributionally Robust Chance-Constrained Optimal Power-Gas Flow Under Bidirectional Interactions Considering Uncertain Wind Power. *Yang, L.*, +, *TSG March 2021 1722-1735*

Fast Probabilistic Hosting Capacity Analysis for Active Distribution Systems. *Taheri, S.*, +, *TSG May 2021 2000-2012*

Joint Optimization of Wind Turbine Micrositing and Cabling in an Offshore Wind Farm. *Tao, S.*, +, *TSG Jan. 2021 834-844*

Linear Quadratic Regulator Based Smooth Transition Between Microgrid Operation Modes. *Ganjian-Aboukheili, M.*, +, *TSG Nov. 2021 4854-4864*

Real-Time Distributed Economic Dispatch Adapted to General Convex Cost Functions: A Secant Approximation-Based Method. *Zhong, H.*, +, *TSG May 2021 2089-2101*

Tracking Equilibrium Point Under Real-Time Price-Based Residential Demand Response. *Ding, T.*, +, *TSG May 2021 2736-2740*

Quantum computing

Two Secure and Efficient Lightweight Data Aggregation Schemes for Smart Grid. *Qian, J.*, +, *TSG May 2021 2625-2637*

Queueing analysis

Correction to "Queueing Analysis-Based PEV Load Modeling Considering Battery Charging Behavior and Their Impact on Distribution System Operation" [Jan 18 261-273]. *Hafez, O.*, +, *TSG March 2021 1830*

Queueing theory

A Queueing Network Analysis of a Hierarchical Communication Architecture for Advanced Metering Infrastructure. *Choi, J.S.*, +, *TSG Sept. 2021 4318-4326*

Efficient Assignment of Electric Vehicles to Charging Stations. *Elghitani, F.*, +, *TSG Jan. 2021 761-773*

R

Radial basis function networks

Edge Computing-Based Fault Location in Distribution Networks by Using Asynchronous Transient Amplitudes at Limited Nodes. *Peng, N.*, +, *TSG Jan. 2021 574-588*

Radio networks

Real-Time Area Angle Monitoring Using Synchrophasors: A Practical Framework and Utility Deployment. *Ju, W.*, +, *TSG Jan. 2021 859-870*

Random forests

Statistical Load Forecasting Using Optimal Quantile Regression Random Forest and Risk Assessment Index. *Aprillia, H.*, +, *TSG March 2021 1467-1480*

Random number generation

Coordinated Control of Air-Conditioning Loads for System Frequency Regulation. *Jiang, T.*, +, *TSG Jan. 2021 548-560*

Random processes

Data-Driven Approach for Analyzing Spatiotemporal Price Elasticities of EV Public Charging Demands Based on Conditional Random Fields. *Bao, Z.*, +, *TSG Sept. 2021 4363-4376*

Data-Driven False Data Injection Attacks Against Power Grids: A Random Matrix Approach. *Lakshminarayana, S.*, +, *TSG Jan. 2021 635-646*

Random sequences

Online Assessment of Conservation Voltage Reduction Effects With Micro-perturbation. *Xu, J.*, +, *TSG May 2021 2224-2238*

Reactive power

A Linear Branch Flow Model for Radial Distribution Networks and Its Application to Reactive Power Optimization and Network Reconfiguration. *Yang, T.*, +, *TSG May 2021 2027-2036*

A Model-Free Voltage Control Approach to Mitigate Motor Stalling and FIDVR for Smart Grids. *Park, B.*, +, *TSG Jan. 2021 67-78*

Aggregate Flexibility of Virtual Power Plants With Temporal Coupling Constraints. *Wang, S.*, +, *TSG Nov. 2021 5043-5051*

Aggregation of Voltage-Controlled Devices During Distribution Network Reduction. *Pecenak, Z.K.*, +, *TSG Jan. 2021 33-42*

Comprehensive Analytical Expressions for Assessing and Maximizing Technical Benefits of Photovoltaics to Distribution Systems. *Mahmoud, K.*, +, *TSG Nov. 2021 4938-4949*

Data-Driven Multi-Agent Deep Reinforcement Learning for Distribution System Decentralized Voltage Control With High Penetration of PVs. *Cao, D.*, +, *TSG Sept. 2021 4137-4150*

Distributed Coordinated Reactive Power Control for Voltage Regulation in Distribution Networks. *Tang, Z.*, +, *TSG Jan. 2021 312-323*

Iteration-Based Linearized Distribution-Level Locational Marginal Price for Three-Phase Unbalanced Distribution Systems. *Cai, M.*, +, *TSG Nov. 2021 4886-4896*

Leveraging Two-Stage Adaptive Robust Optimization for Power Flexibility Aggregation. *Chen, X.*, +, *TSG Sept. 2021 3954-3965*

MPC-Controlled Virtual Synchronous Generator to Enhance Frequency and Voltage Dynamic Performance in Islanded Microgrids. *Long, B.*, +, *TSG March 2021 953-964*

Multi-Stage Voltage Support Optimization for Microgrids With Multiple Distributed Generation Units. *Liu, X.*, +, *TSG Jan. 2021 141-156*

Observer-Based Resilient Integrated Distributed Control Against Cyberattacks on Sensors and Actuators in Islanded AC Microgrids. *Shi, M.*, +, *TSG May 2021 1953-1963*

Optimal Power Flow Design for Enhancing Dynamic Performance: Potentials of Reactive Power. *Inoue, M.*, +, *TSG Jan. 2021 599-611*

Phase Identification of Single-Phase Customers and PV Panels via Smart Meter Data. *Heidari-Akhijahani, A.*, +, *TSG Sept. 2021 4543-4552*

Reactive Power Management for Networked Microgrid Resilience in Extreme Conditions. *Shaker, A.*, +, *TSG Sept. 2021 3940-3953*

Risk-Averse Coordinated Operation of a Multi-Energy Microgrid Considering Voltage/Var Control and Thermal Flow: An Adaptive Stochastic Approach. *Li, Z.*, +, *TSG Sept. 2021 3914-3927*

Reactive power control

Aggregated BESS Dynamic Models for Active Distribution Network Studies. *Calero, F.*, +, *TSG May 2021 2077-2088*

Chopperless Fault Ride-Through Control for DC Microgrids. *Xia, Y.*, +, *TSG March 2021 965-976*

Consensus Multi-Agent Reinforcement Learning for Volt-VAR Control in Power Distribution Networks. *Gao, Y.*, +, *TSG July 2021 3594-3604*

Coordinated Optimal Volt/Var Control for Distribution Networks via D-PMUs and EV Chargers by Exploiting the Eigensystem Realization. *Mejia-Ruiz, G.E.*, +, *TSG May 2021 2425-2438*

Data-Driven Multi-Agent Deep Reinforcement Learning for Distribution System Decentralized Voltage Control With High Penetration of PVs. *Cao, D.*, +, *TSG Sept. 2021 4137-4150*

Distributed Coordinated Reactive Power Control for Voltage Regulation in Distribution Networks. *Tang, Z.*, +, *TSG Jan. 2021 312-323*

Dynamic Modeling of Battery Energy Storage and Applications in Transmission Systems. *Calero, F.*, +, *TSG Jan. 2021 589-598*

Islanding Detection Method With Load Power Factor Improvement and High Frequency Transient Suppressing. *Azzaoui, M.E.*, *TSG Sept. 2021 4176-4184*

Isochronous Architecture-Based Voltage-Active Power Droop for Multi-Inverter Systems. *Patel, S.*, +, *TSG March 2021 1088-1103*

Multi-Stage Quadratic Flexible Optimal Power Flow With a Rolling Horizon. *Zhong, C.*, +, *TSG July 2021 3128-3137*

Online Multi-Agent Reinforcement Learning for Decentralized Inverter-Based Volt-VAR Control. *Liu, H.*, +, *TSG July 2021 2980-2990*

Optimal DG Allocation and Volt-Var Dispatch for a Droop-Based Microgrid. *Gupta, Y.*, +, *TSG Jan. 2021 169-181*

Resilience for Communication Faults in Reactive Power Sharing of Microgrids. *Li, X.*, +, *TSG July 2021 2788-2799*

Risk-Averse Coordinated Operation of a Multi-Energy Microgrid Considering Voltage/Var Control and Thermal Flow: An Adaptive Stochastic Approach. *Li, Z.*, +, *TSG Sept. 2021 3914-3927*

Robust Regional Coordination of Inverter-Based Volt/Var Control via Multi-Agent Deep Reinforcement Learning. *Liu, H.*, +, *TSG Nov. 2021 5420-5433*

Two-Stage Deep Reinforcement Learning for Inverter-Based Volt-VAR Control in Active Distribution Networks. *Liu, H.*, +, *TSG May 2021 2037-2047*

Two-Stage Volt/Var Control in Active Distribution Networks With Multi-Agent Deep Reinforcement Learning Method. *Sun, X.*, +, *TSG July 2021 2903-2912*

Real-time systems

Chance Constrained Scheduling and Pricing for Multi-Service Battery Energy Storage. *Zhong, W.*, +, *TSG Nov. 2021 5030-5042*

Mitigating Smart Meter Asynchrony Error Via Multi-Objective Low Rank Matrix Recovery. *Yuan, Y.*, +, *TSG Sept. 2021 4308-4317*

On the Use of Common Information Model for Smart Grid Applications — A Conceptual Approach. *Shahid, K.*, +, *TSG Nov. 2021 5060-5072*

Online Assessment of Conservation Voltage Reduction Effects With Micro-perturbation. *Xu, J.*, +, *TSG May 2021 2224-2238*

Prioritized Replay Dueling DDQN Based Grid-Edge Control of Community Energy Storage System. *Song, H.*, +, *TSG Nov. 2021 4950-4961*

Real-Time Distributed Economic Dispatch Adapted to General Convex Cost Functions: A Secant Approximation-Based Method. *Zhong, H.*, +, *TSG May 2021 2089-2101*

Real-Time Synchrophasor Data Anomaly Detection and Classification Using Isolation Forest, KMeans, and LoOP. *Khaledian, E.*, +, *TSG May 2021 2378-2388*

Risk-Constrained Minimization of Combined Event Detection and Decision Time for Online Transient Stability Assessment. *Gonzalez, J.*, +, *TSG Sept. 2021 4564-4572*

Recurrent neural networks

Capturing Spatio-Temporal Dependencies in the Probabilistic Forecasting of Distribution Locational Marginal Prices. *Toubeau, J.*, +, *TSG May 2021 2663-2674*

Deep Learning-Based Real-Time Switching of Hybrid AC/DC Transmission Networks. *Dabbaghjamesh, M.*, +, *TSG May 2021 2331-2342*

Forecast-Based Consensus Control for DC Microgrids Using Distributed Long Short-Term Memory Deep Learning Models. *Alavi, S.A.*, +, *TSG Sept. 2021 3718-3730*

Hybrid Multitask Multi-Information Fusion Deep Learning for Household Short-Term Load Forecasting. *Jiang, L.*, +, *TSG Nov. 2021 5362-5372*

Learning-Based Simultaneous Detection and Characterization of Time Delay Attack in Cyber-Physical Systems. *Ganesh, P.*, +, *TSG July 2021 3581-3593*

Privacy Preserving Load Control of Residential Microgrid via Deep Reinforcement Learning. *Qin, Z.*, +, *TSG Sept. 2021 4079-4089*

Toward Load Identification Based on the Hilbert Transform and Sequence to Sequence Long Short-Term Memory. *Le, T.*, +, *TSG July 2021 3252-3264*

Recursive estimation

Stealthy Cyberattacks on Loads and Distributed Generation Aimed at Multi-Transmission Line Congestions in Smart Grids. *Khazaei, J.*, *TSG May 2021 2518-2528*

Reduced order systems

Scalable Designs for Reinforcement Learning-Based Wide-Area Damping Control. *Mukherjee, S.*, +, *TSG May 2021 2389-2401*

Redundancy

System Redundancy Enhancement of Secondary Frequency Control Under Latency Attacks. *Chen, C.*, +, *TSG Jan. 2021 647-658*

Targeted False Data Injection Attacks Against AC State Estimation Without Network Parameters. *Du, M.*, +, *TSG Nov. 2021 5349-5361*

Regression analysis

Missing Data Recovery in Large Power Systems Using Network Embedding. *Wu, T.*, +, *TSG Jan. 2021 680-691*

Online Learning and Distributed Control for Residential Demand Response. *Chen, X.*, +, *TSG Nov. 2021 4843-4853*

Predicting Weather-Related Failure Risk in Distribution Systems Using Bayesian Neural Network. *Du, Y.*, +, *TSG Jan. 2021 350-360*

Probabilistic Load Forecasting via Neural Basis Expansion Model Based Prediction Intervals. *Wen, H.*, +, *TSG July 2021 3648-3660*

Statistical Load Forecasting Using Optimal Quantile Regression Random Forest and Risk Assessment Index. *Aprillia, H.*, +, *TSG March 2021 1467-1480*

Reinforcement learning

Branching Dueling Q-Network-Based Online Scheduling of a Microgrid With Distributed Energy Storage Systems. *Shuai, H.*, +, *TSG Nov. 2021 5479-5482*

Relay protection

A Deep Learning-Based Cyberattack Detection System for Transmission Protective Relays. *Khaw, Y.M.*, +, *TSG May 2021 2554-2565*

Back Up Protection Scheme for High Impedance Faults Detection in Transmission Systems Based on Synchrophasor Measurements. *Vlahinic, S.*, +, *TSG March 2021 1736-1746*

Design of Setting Group-Based Overcurrent Protection Scheme for Active Distribution Networks Using MILP. *Ghotbi-Maleki, M.*, +, *TSG March 2021 1185-1193*

Voltage Stabilization Control for Microgrid With Asymmetric Membership Function-Based Wavelet Petri Fuzzy Neural Network. *Lin, F.*, +, *TSG Sept. 2021 3731-3741*

Wide-Band Current Transformers for Traveling-Waves-Based Protection Applications. *Ameli, A.*, +, *TSG Jan. 2021 845-858*

Relays

Data-Driven Probabilistic Fault Location of Electric Power Distribution Systems Incorporating Data Uncertainties. *Jiang, Y.*, *TSG Sept. 2021 4522-4534*

Reliability

An MILP-Based Planning Model of a Photovoltaic/Diesel/Battery Stand-Alone Microgrid Considering the Reliability. *Wu, X.*, +, *TSG Sept. 2021 3809-3818*

Component-Level Reliability Evaluation Model for Cyber Power Devices. *Balachandran, T.*, +, *TSG Jan. 2021 692-703*

Reliability Analyses of Wide-Area Protection System Considering Cyber-Physical System Constraints. *He, R.*, +, *TSG July 2021 3458-3467*

Reliability theory

Operational Reliability Assessment of Integrated Heat and Electricity Systems Considering the Load Uncertainties. *Ding, Y.*, +, *TSG Sept. 2021 3928-3939*

Remotely operated vehicles

Micro-Cracks Identification and Characterization on the Sheds of Composite Insulators by Fractal Dimension. *Jin, H.*, +, *TSG March 2021 1821-1824*

Renewable energy sources

A Community-Based Energy Market Design Using Decentralized Decision-Making Under Uncertainty. *Crespo-Vazquez, J.L.*, +, *TSG March 2021 1782-1793*

A Historical-Correlation-Driven Robust Optimization Approach for Microgrid Dispatch. *Qiu, H.*, +, *TSG March 2021 1135-1148*

A New Cooperative Framework for a Fair and Cost-Optimal Allocation of Resources Within a Low Voltage Electricity Community. *Hupez, M.*, +, *TSG May 2021 2201-2211*

A Novel Energy Sharing Mechanism for Smart Microgrid. *Li, S.*, +, *TSG Nov. 2021 5475-5478*

Accurate Modeling of a Profit-Driven Power to Hydrogen and Methane Plant Toward Strategic Bidding Within Multi-Type Markets. *Pan, G.*, +, *TSG Jan. 2021 338-349*

An Energy Management System With Short-Term Fluctuation Reserves and Battery Degradation for Isolated Microgrids. *Cordova, S.*, +, *TSG Nov. 2021 4668-4680*

An Energy Sharing Mechanism Achieving the Same Flexibility as Centralized Dispatch. *Chen, Y.*, +, *TSG July 2021 3379-3389*

An Operation Model for Distribution Companies Using the Flexibility of Electric Vehicle Aggregators. *Lu, X.*, +, *TSG March 2021 1507-1518*

Analysis and Validations of Modularized Distributed TL-UPQC Systems With Supervisory Remote Management System. *Abdalaal, R.M.*, +, *TSG May 2021 2638-2651*

Bi-Level Robust Optimization for Distribution System With Multiple Microgrids Considering Uncertainty Distribution Locational Marginal Price. *Wang, L.*, +, *TSG March 2021 1104-1117*

Branching Dueling Q-Network-Based Online Scheduling of a Microgrid With Distributed Energy Storage Systems. *Shuai, H.*, +, *TSG Nov. 2021 5479-5482*

Chance-Constrained Peer-to-Peer Joint Energy and Reserve Market Considering Renewable Generation Uncertainty. *Guo, Z.*, +, *TSG Jan. 2021 798-809*

Cooperative Optimization of Networked Microgrids for Supporting Grid Flexibility Services Using Model Predictive Control. *Garcia-Torres, F.*, +, *TSG May 2021 1893-1903*

Distributed Optimization for Integrated Frequency Regulation and Economic Dispatch in Microgrids. *Xu, Y.*, +, *TSG Nov. 2021 4595-4606*

Energy Management and Control of a Flywheel Storage System for Peak Shaving Applications. *Tziovani, L.*, +, *TSG Sept. 2021 4195-4207*

Enhancement of Frequency Regulation in AC Microgrid: A Fuzzy-MPC Controlled Virtual Synchronous Generator. *Long, B.*, +, *TSG July 2021 3138-3149*

Exploiting the Potentials of HVAC Systems in Transactive Energy Markets. *Nematkhah, F.*, +, *TSG Sept. 2021 4039-4048*

Forecast-Based Consensus Control for DC Microgrids Using Distributed Long Short-Term Memory Deep Learning Models. *Alavi, S.A.*, +, *TSG Sept. 2021 3718-3730*

Frequency Regulation With Heterogeneous Energy Resources: A Realization Using Distributed Control. *Anderson, T.*, +, *TSG Sept. 2021 4126-4136*

Incentive Based Demand Response Program for Power System Flexibility Enhancement. *Mohandes, B.*, +, *TSG May 2021 2212-2223*

Interval Distribution Power Flow With Relative-Distance-Measure Arithmetic. *Ngo, V.*, +, *TSG Sept. 2021 3858-3867*

MILP-Based Fault Diagnosis Model in Active Power Distribution Networks. *Wang, C.*, +, *TSG Sept. 2021 3847-3857*

MPC-Controlled Virtual Synchronous Generator to Enhance Frequency and Voltage Dynamic Performance in Islanded Microgrids. *Long, B.*, +, *TSG March 2021 953-964*

Optimal Policy Characterization Enhanced Actor-Critic Approach for Electric Vehicle Charging Scheduling in a Power Distribution Network. *Jin, J.*, +, *TSG March 2021 1416-1428*

Primary Frequency Control in Isolated Microgrids Using Thermostatically Controllable Loads. *Mendieta, W.*, +, *TSG Jan. 2021 93-105*

Resident Behavior Detection Model for Environment Responsive Demand Response. *Baek, K.*, +, *TSG Sept. 2021 3980-3989*

Risk-Averse Coordinated Operation of a Multi-Energy Microgrid Considering Voltage/Var Control and Thermal Flow: An Adaptive Stochastic Approach. *Li, Z.*, +, *TSG Sept. 2021 3914-3927*

Scenario Reduction for Stochastic Day-Ahead Scheduling: A Mixed Auto-encoder Based Time-Series Clustering Approach. *Liang, J.*, +, *TSG May 2021 2652-2662*

Transaction-Oriented Dynamic Power Flow Tracing for Distribution Networks—Definition and Implementation in GIS Environment. *Vega-Fuentes, E.*, +, *TSG March 2021 1303-1313*

Transactive Energy Supported Economic Operation for Multi-Energy Complementary Microgrids. *Yang, Z.*, +, *TSG Jan. 2021 4-17*

Resource allocation

Combined Impact of Demand Response Aggregators and Carbon Taxation on Emissions Reduction in Electric Power Systems. *Algarni, A.S.*, +, *TSG March 2021 1825-1827*

Defense Strategy Against Load Redistribution Attacks on Power Systems Considering Insider Threats. *Liu, Z.*, +, *TSG March 2021 1529-1540*

Resilience-Motivated Distribution System Restoration Considering Electricity-Water-Gas Interdependency. *Li, J.*, +, *TSG Nov. 2021 4799-4812*

Response surface methodology

An Iterative Response-Surface-Based Approach for Chance-Constrained AC Optimal Power Flow Considering Dependent Uncertainty. *Xu, Y.*, +, *TSG May 2021 2696-2707*

Retailing

A Nested Transactive Energy Market Model to Trade Demand-Side Flexibility of Residential Consumers. *Nizami, M.S.H.*, +, *TSG Jan. 2021 479-490*

A Reinforcement Learning-Based Decision System for Electricity Pricing Plan Selection by Smart Grid End Users. *Lu, T.*, +, *TSG May 2021 2176-2187*

Electricity Consumer Characteristics Identification: A Federated Learning Approach. *Wang, Y.*, +, *TSG July 2021 3637-3647*

Privacy-Preserving Distributed Clustering for Electrical Load Profiling. *Jia, M.*, +, *TSG March 2021 1429-1444*

Risk analysis

Distributionally Robust Microgrid Formation Approach for Service Restoration Under Random Contingency. *Cai, S.*, +, *TSG Nov. 2021 4926-4937*

Predicting Weather-Related Failure Risk in Distribution Systems Using Bayesian Neural Network. *Du, Y.*, +, *TSG Jan. 2021 350-360*

Risk Trading in Energy Communities. *Vespermann, N.*, +, *TSG March 2021 1249-1263*

Risk management

Artificial Neural Network-Based Stealth Attack on Battery Energy Storage Systems. *Pasetti, M.*, +, *TSG Nov. 2021 5310-5321*

Cyber-Vulnerability Analysis for Real-Time Power Market Operation. *Zhang, Q.*, +, *TSG July 2021 3527-3537*

Predicting Weather-Related Failure Risk in Distribution Systems Using Bayesian Neural Network. *Du, Y.*, +, *TSG Jan. 2021 350-360*

Probabilistic Forecasting of Regional Net-Load With Conditional Extremes and Gridded NWP. *Browell, J.*, +, *TSG Nov. 2021 5011-5019*

Statistical Load Forecasting Using Optimal Quantile Regression Random Forest and Risk Assessment Index. *Aprillia, H.*, +, *TSG March 2021 1467-1480*

Road traffic

Distributed Expansion Planning of Electric Vehicle Dynamic Wireless Charging System in Coupled Power-Traffic Networks. *Xia, F.*, +, *TSG July 2021 3326-3338*

Stochastic Scheduling of Mobile Energy Storage in Coupled Distribution and Transportation Networks for Conversion Capacity Enhancement. *Liu, X.*, +, *TSG Jan. 2021 117-130*

Robust control

A Cyber Attack Mitigation Scheme for Series Compensated DFIG-Based Wind Parks. *Ghafouri, M.*, +, *TSG Nov. 2021 5221-5232*

A Decentralized Approach for Voltage Control by Multiple Distributed Energy Resources. *Fusco, G.*, +, *TSG July 2021 3115-3127*

A Robust State Estimation Method Based on SOCP for Integrated Electricity-Heat System. *Chen, Y.*, +, *TSG Jan. 2021 810-820*

Aggregate Operation Model for Numerous Small-Capacity Distributed Energy Resources Considering Uncertainty. *Yi, Z.*, +, *TSG Sept. 2021 4208-4224*

Distributed Predictive Control Strategy for Frequency Restoration of Microgrids Considering Optimal Dispatch. *F, A.N.*, +, *TSG July 2021 2748-2759*

Distributed Robust Frequency Restoration and Active Power Sharing for Autonomous Microgrids With Event-Triggered Strategy. *Zhao, D.*, +, *TSG Sept. 2021 3819-3834*

Distributionally Robust Optimal Power Flow in Multi-Microgrids With Decomposition and Guaranteed Convergence. *Huang, W.*, +, *TSG Jan. 2021 43-55*

Disturbance Observer and Tube-Based Model Predictive Controlled Electric Vehicles for Frequency Regulation of an Isolated Power Grid. *Oshnoei, A.*, +, *TSG Sept. 2021 4351-4362*

Dynamic Event-Based Model Predictive Load Frequency Control for Power Systems Under Cyber Attacks. *Liu, Y.*, +, *TSG Jan. 2021 715-725*

Efficient Robust Scheduling of Integrated Electricity and Heat Systems: A Direct Constraint Tightening Approach. *Jiang, Y.*, +, *TSG July 2021 3016-3029*

Nonlinear Multiple Models Adaptive Secondary Voltage Control of Microgrids. *Ma, Z.*, +, *TSG Jan. 2021 227-238*

Region of Attraction Estimation for DC Microgrids With Constant Power Loads Using Potential Theory. *Chang, F.*, +, *TSG Sept. 2021 3793-3808*

Robust Hierarchical Control Mechanism for Aggregated Thermostatically Controlled Loads. *Gong, X.*, +, *TSG Jan. 2021 453-467*

Robust Hybrid Control for Demand Side Management in Islanded Microgrids. *Albea, C.*, +, *TSG Nov. 2021 4865-4875*

Robust Load Frequency Control of Power Systems Against Random Time-Delay Attacks. *Xiahou, K.S.*, +, *TSG Jan. 2021 909-911*

Robust Secondary Frequency Control for Virtual Synchronous Machine-Based Microgrid Cluster Using Equivalent Modeling. *Hu, W.*, +, *TSG July 2021 2879-2889*

S

Safety

Deep-Reinforcement-Learning-Based Capacity Scheduling for PV-Battery Storage System. *Huang, B.*, +, *TSG May 2021 2272-2283*

Sampling methods

An Iterative Response-Surface-Based Approach for Chance-Constrained AC Optimal Power Flow Considering Dependent Uncertainty. *Xu, Y.*, +, *TSG May 2021 2696-2707*

Deep Learning Method With Manual Post-Processing for Identification of Spectral Patterns of Waveform Distortion in PV Installations. *de Oliveira, R.A.*, +, *TSG Nov. 2021 5444-5456*

Satellite communication

Starlink Space Network-Enhanced Cyber-Physical Power System. *Duan, T.*, +, *TSG July 2021 3673-3675*

SCADA systems

Data-Driven Probabilistic Fault Location of Electric Power Distribution Systems Incorporating Data Uncertainties. *Jiang, Y.*, *TSG Sept. 2021 4522-4534*

Detection of Cyber-Attacks of Power Systems Through Benford's Law. *Milano, F.*, +, *TSG May 2021 2741-2744*

Detection of Stealthy Cyber-Physical Line Disconnection Attacks in Smart Grid. *James Ranjith Kumar, R.*, +, *TSG Sept. 2021 4484-4493*

Scheduling

A Nested Transactive Energy Market Model to Trade Demand-Side Flexibility of Residential Consumers. *Nizami, M.S.H.*, +, *TSG Jan. 2021 479-490*

Automated Control of Transactive HVACs in Energy Distribution Systems. *Liu, B.*, +, *TSG May 2021 2462-2471*

Data-Driven Distributionally Robust Hierarchical Coordination for Home Energy Management. *Saberi, H.*, +, *TSG Sept. 2021 4090-4101*

Deep Reinforcement Learning for Continuous Electric Vehicles Charging Control With Dynamic User Behaviors. *Yan, L.*, +, *TSG Nov. 2021 5124-5134*

Efficient Robust Scheduling of Integrated Electricity and Heat Systems: A Direct Constraint Tightening Approach. *Jiang, Y.*, +, *TSG July 2021 3016-3029*

Incentives to Manipulate Demand Response Baselines With Uncertain Event Schedules. *Ellman, D.*, +, *TSG March 2021 1358-1369*

Inducing Human Behavior to Maximize Operation Performance at PEV Charging Station. *Zeng, T.*, +, *TSG July 2021 3353-3363*

Mixed-Stage Energy Management for Decentralized Microgrid Cluster Based on Enhanced Tube Model Predictive Control. *Xie, P.*, +, *TSG Sept. 2021 3780-3792*

Mobility-Aware Charging Scheduling for Shared On-Demand Electric Vehicle Fleet Using Deep Reinforcement Learning. *Liang, Y.*, +, *TSG March 2021 1380-1393*

Online Scheduling of a Residential Microgrid via Monte-Carlo Tree Search and a Learned Model. *Shuai, H.*, +, *TSG March 2021 1073-1087*

Optimal Energy Management of Microgrids Using Quantum Teaching Learning Based Algorithm. *Raghav, L.P.*, +, *TSG Nov. 2021 4834-4842*

Price-Maker Bidding and Offering Strategies for Networked Microgrids in Day-Ahead Electricity Markets. *Hu, B.*, +, *TSG Nov. 2021 5201-5211*

Stochastic Scheduling of Mobile Energy Storage in Coupled Distribution and Transportation Networks for Conversion Capacity Enhancement. *Liu, X.*, +, *TSG Jan. 2021 117-130*

Search problems

Imitation and Transfer Q-Learning-Based Parameter Identification for Composite Load Modeling. *Xie, J.*, +, *TSG March 2021 1674-1684*

Optimal Energy Management of Microgrids Using Quantum Teaching Learning Based Algorithm. *Raghav, L.P.*, +, *TSG Nov. 2021 4834-4842*

Optimal Energy-Hub Planning Based on Dimension Reduction and Variable-Sized Unimodal Searching. *Zhao, N.*, +, *TSG March 2021 1481-1495*

System Redundancy Enhancement of Secondary Frequency Control Under Latency Attacks. *Chen, C.*, +, *TSG Jan. 2021 647-658*

Unsupervised Congestion Status Identification Using LMP Data. *Zheng, K.*, +, *TSG Jan. 2021 726-736*

Secondary cells

Design Framework for Privacy-Aware Demand-Side Management With Realistic Energy Storage Model. *Avula, R.R.*, +, *TSG July 2021 3503-3513*

Distributed State of Charge-Based Droop Control Algorithm for Reducing Power Losses in Multi-Port Converter-Enabled Solar DC Nano-Grids. *Samende, C.*, +, *TSG Nov. 2021 4584-4594*

Dynamic Modeling of Battery Energy Storage and Applications in Transmission Systems. *Calero, F.*, +, *TSG Jan. 2021 589-598*

Minimizing Energy Storage Utilization in a Stand-Alone DC Microgrid Using Photovoltaic Flexible Power Control. *Yan, H.W.*, +, *TSG Sept. 2021 3755-3764*

Power Loss Minimization of Off-Grid Solar DC Nano-Grids—Part I: Centralized Control Algorithm. *Samende, C.*, +, *TSG Nov. 2021 4715-4725*

Security of data

- A Cyber-Physical Anomaly Detection for Wide-Area Protection Using Machine Learning. *Singh, V.K., +, TSG July 2021 3514-3526*
- A Deep Learning-Based Cyberattack Detection System for Transmission Protective Relays. *Khaw, Y.M., +, TSG May 2021 2554-2565*
- A Detection Mechanism Against Load-Redistribution Attacks in Smart Grids. *Kaviani, R., +, TSG Jan. 2021 704-714*
- A FDI Attack-Resilient Distributed Secondary Control Strategy for Islanded Microgrids. *Chen, Y., +, TSG May 2021 1929-1938*
- An Optimization-Based Approach to Recover the Detected Attacked Grid Variables After False Data Injection Attack. *Jorjani, M., +, TSG Nov. 2021 5322-5334*
- Analysis of IoT-Based Load Altering Attacks Against Power Grids Using the Theory of Second-Order Dynamical Systems. *Lakshminarayana, S., +, TSG Sept. 2021 4415-4425*
- Artificial Neural Network-Based Stealth Attack on Battery Energy Storage Systems. *Pasetti, M., +, TSG Nov. 2021 5310-5321*
- Contract-Based Incentive Mechanisms for Honeypot Defense in Advanced Metering Infrastructure. *Tian, W., +, TSG Sept. 2021 4259-4268*
- Countering FDI Attacks on DERs Coordinated Control System Using FMI-Compatible Cosimulation. *Jafarigiv, D., +, TSG March 2021 1640-1650*
- Cyber-Vulnerability Analysis for Real-Time Power Market Operation. *Zhang, Q., +, TSG July 2021 3527-3537*
- Cyberattacks Against Event-Based Analysis in Micro-PMUs: Attack Models and Counter Measures. *Kamal, M., +, TSG March 2021 1577-1588*
- Data-Driven False Data Injection Attacks Against Power Grids: A Random Matrix Approach. *Lakshminarayana, S., +, TSG Jan. 2021 635-646*
- Defense Strategy Against Load Redistribution Attacks on Power Systems Considering Insider Threats. *Liu, Z., +, TSG March 2021 1529-1540*
- Detecting False Data Injection Attacks in Smart Grids: A Semi-Supervised Deep Learning Approach. *Zhang, Y., +, TSG Jan. 2021 623-634*
- Detection of Synchronophasor False Data Injection Attack Using Feature Interactive Network. *Qiu, W., +, TSG Jan. 2021 659-670*
- Distributed Privacy-Preserving Active Power Sharing and Frequency Regulation in Microgrids. *Fan, B., +, TSG July 2021 3665-3668*
- False Data Injection Attacks Against State-of-Charge Estimation of Battery Energy Storage Systems in Smart Distribution Networks. *Zhuang, P., +, TSG May 2021 2566-2577*
- False Data Injection Attacks Against Synchronization Systems in Microgrids. *Mohamed, A.S., +, TSG Sept. 2021 4471-4483*
- Leveraging Network Topology Optimization to Strengthen Power Grid Resilience Against Cyber-Physical Attacks. *Liu, Z., +, TSG March 2021 1552-1564*
- Observer-Based Resilient Integrated Distributed Control Against Cyberattacks on Sensors and Actuators in Islanded AC Microgrids. *Shi, M., +, TSG May 2021 1953-1963*
- Optimal PMU Restoration for Power System Observability Recovery After Massive Attacks. *Edib, S.N., +, TSG March 2021 1565-1576*
- Perturbation-Based Diagnosis of False Data Injection Attack Using Distributed Energy Resources. *Jhala, K., +, TSG March 2021 1589-1601*
- Privacy-Preserving Distributed Average Observers in Distribution Systems With Grid-Forming Inverters. *Du, Y., +, TSG Nov. 2021 5000-5010*
- Protection Against False Data Injection Attacks Considering Degrees of Freedom in Attack Vectors. *Sreeram, T.S., +, TSG Nov. 2021 5258-5267*
- Push-Sum-Enabled Resilient Microgrid Control. *Babahajiani, P., +, TSG July 2021 3661-3664*
- Resilience Against Data Manipulation in Distributed Synchronophasor-Based Mode Estimation. *Rajabi, A., +, TSG July 2021 3538-3547*
- Source Authentication of Distribution Synchronophasors for Cybersecurity of Microgrids. *Cui, Y., +, TSG Sept. 2021 4577-4580*
- Stealthy Black-Box Attacks on Deep Learning Non-Intrusive Load Monitoring Models. *Wang, J., +, TSG July 2021 3479-3492*
- Stealthy Cyberattacks on Loads and Distributed Generation Aimed at Multi-Transmission Line Congestions in Smart Grids. *Khazaei, J., TSG May 2021 2518-2528*

- Synchronophasor Data Under GPS Spoofing: Attack Detection and Mitigation Using Residuals. *Chauhan, S.V.S., +, TSG July 2021 3415-3424*
- Targeted False Data Injection Attacks Against AC State Estimation Without Network Parameters. *Du, M., +, TSG Nov. 2021 5349-5361*
- Vulnerability Assessment of Deep Reinforcement Learning Models for Power System Topology Optimization. *Zheng, Y., +, TSG July 2021 3613-3623*

Semiconductor device reliability

- Component-Level Reliability Evaluation Model for Cyber Power Devices. *Balachandran, T., +, TSG Jan. 2021 692-703*

Semiconductor switches

- On the Impact of Fault Ride-Through on Transient Stability of Autonomous Microgrids: Nonlinear Analysis and Solution. *Eskandari, M., +, TSG March 2021 999-1010*

Sensitivity analysis

- Component-Level Reliability Evaluation Model for Cyber Power Devices. *Balachandran, T., +, TSG Jan. 2021 692-703*
- Dynamic Security Control in Heat and Electricity Integrated Energy System With an Equivalent Heating Network Model. *Zhang, S., +, TSG Nov. 2021 4788-4798*
- Iteration-Based Linearized Distribution-Level Locational Marginal Price for Three-Phase Unbalanced Distribution Systems. *Cai, M., +, TSG Nov. 2021 4886-4896*
- Perturbation-Based Diagnosis of False Data Injection Attack Using Distributed Energy Resources. *Jhala, K., +, TSG March 2021 1589-1601*

Sensors

- MILP-Based Fault Diagnosis Model in Active Power Distribution Networks. *Wang, C., +, TSG Sept. 2021 3847-3857*
- Observer-Based Resilient Integrated Distributed Control Against Cyberattacks on Sensors and Actuators in Islanded AC Microgrids. *Shi, M., +, TSG May 2021 1953-1963*
- Perturbation-Based Diagnosis of False Data Injection Attack Using Distributed Energy Resources. *Jhala, K., +, TSG March 2021 1589-1601*
- Synchronous Waveform Measurements to Locate Transient Events and Incipient Faults in Power Distribution Networks. *Izadi, M., +, TSG Sept. 2021 4295-4307*

Ships

- Solid-State Technologies for Flexible and Efficient Marine DC Microgrids. *Kim, S., +, TSG July 2021 2860-2868*

Short-circuit currents

- A Harmonic Time-Current-Voltage Directional Relay for Optimal Protection Coordination of Inverter-Based Islanded Microgrids. *El-Sayed, W.T., +, TSG May 2021 1904-1917*

Signal classification

- Power System Disturbance Classification With Online Event-Driven Neuro-morphic Computing. *Mahapatra, K., +, TSG May 2021 2343-2354*

Signal denoising

- A Novel Event Detection and Classification Scheme Using Wide-Area Frequency Measurements. *Shaw, P., +, TSG May 2021 2320-2330*

Signal processing

- Perturbation-Based Diagnosis of False Data Injection Attack Using Distributed Energy Resources. *Jhala, K., +, TSG March 2021 1589-1601*

Singular value decomposition

- A Regularized Tensor Completion Approach for PMU Data Recovery. *Ghasemkhani, A., +, TSG March 2021 1519-1528*

Smart charging

- Hierarchical Coupled Driving-and-Charging Model of Electric Vehicles, Stations and Grid Operators. *Sohet, B., +, TSG Nov. 2021 5146-5157*

Smart cities

- Benefits of Home Energy Storage Utilization: An Australian Case Study of Demand Charge Practices in Residential Sector. *Kong, W., +, TSG July 2021 3086-3096*
- Two Secure and Efficient Lightweight Data Aggregation Schemes for Smart Grid. *Qian, J., +, TSG May 2021 2625-2637*

Smart grids

- Continuous Group-Wise Double Auction for Prosumers in Distribution-Level Markets. *Yu, A., +, TSG Nov. 2021 4822-4833*

Correction to “Integrating EV Charging Stations as Smart Loads for Demand Response Provisions in Distribution Systems” [Mar 18 1096-1106]. *Hafez, O., +, TSG March 2021 1829*

Correction to “Queuing Analysis-Based PEV Load Modeling Considering Battery Charging Behavior and Their Impact on Distribution System Operation” [Jan 18 261-273]. *Hafez, O., +, TSG March 2021 1830*

On the Use of Common Information Model for Smart Grid Applications — A Conceptual Approach. *Shahid, K., +, TSG Nov. 2021 5060-5072*

Smart meters

A Data-Driven Storage Control Framework for Dynamic Pricing. *Wu, J., +, TSG Jan. 2021 737-750*

A Microgrid Energy Management System Based on Non-Intrusive Load Monitoring via Multitask Learning. *Cimen, H., +, TSG March 2021 977-987*

A Novel Energy Trading Framework Using Adapted Blockchain Technology. *Hamouda, M.R., +, TSG May 2021 2165-2175*

A Privacy-Aware Reconfigurable Authenticated Key Exchange Scheme for Secure Communication in Smart Grids. *Gope, P., +, TSG Nov. 2021 5335-5348*

A Privacy-Preserving Homomorphic Scheme With Multiple Dimensions and Fault Tolerance for Metering Data Aggregation in Smart Grid. *Mohammadi, A., +, TSG Nov. 2021 5212-5220*

A Queuing Network Analysis of a Hierarchical Communication Architecture for Advanced Metering Infrastructure. *Choi, J.S., +, TSG Sept. 2021 4318-4326*

A Reinforcement Learning-Based Decision System for Electricity Pricing Plan Selection by Smart Grid End Users. *Lu, T., +, TSG May 2021 2176-2187*

Conditional Multivariate Elliptical Copulas to Model Residential Load Profiles From Smart Meter Data. *Duque, E.M.S., +, TSG Sept. 2021 4280-4294*

Contract-Based Incentive Mechanisms for Honeypot Defense in Advanced Metering Infrastructure. *Tian, W., +, TSG Sept. 2021 4259-4268*

Correction to “Application of Smart Meters in High-Impedance Fault Detection on Distribution Systems” [May 19 3465-3473]. *Chakraborty, S., +, TSG March 2021 1828*

Countering FDI Attacks on DERs Coordinated Control System Using FMI-Compatible Cosimulation. *Jafarigiv, D., +, TSG March 2021 1640-1650*

Data-Driven Probabilistic Fault Location of Electric Power Distribution Systems Incorporating Data Uncertainties. *Jiang, Y., TSG Sept. 2021 4522-4534*

Develop Load Shape Dictionary Through Efficient Clustering Based on Elastic Dissimilarity Measure. *Liang, H., +, TSG Jan. 2021 442-452*

Electricity Consumer Characteristics Identification: A Federated Learning Approach. *Wang, Y., +, TSG July 2021 3637-3647*

Enhancing the Spatio-Temporal Observability of Grid-Edge Resources in Distribution Grids. *Lin, S., +, TSG Nov. 2021 5434-5443*

Enriching Load Data Using Micro-PMUs and Smart Meters. *Bu, F., +, TSG Nov. 2021 5084-5094*

Ensuring Distribution Network Integrity Using Dynamic Operating Limits for Prosumers. *Petrou, K., +, TSG Sept. 2021 3877-3888*

Intrusion Detection for Cybersecurity of Smart Meters. *Sun, C., +, TSG Jan. 2021 612-622*

Mitigating Smart Meter Asynchrony Error Via Multi-Objective Low Rank Matrix Recovery. *Yuan, Y., +, TSG Sept. 2021 4308-4317*

Online Detection of Inter-Turn Winding Faults in Single-Phase Distribution Transformers Using Smart Meter Data. *Ashok, K., +, TSG Nov. 2021 5073-5083*

Online Smart Meter Measurement Error Estimation Based on EKF and LMRLS Method. *Kong, X., +, TSG Sept. 2021 4269-4279*

Phase Identification of Single-Phase Customers and PV Panels via Smart Meter Data. *Heidari-Akhijahani, A., +, TSG Sept. 2021 4543-4552*

Privacy Preserving in Non-Intrusive Load Monitoring: A Differential Privacy Perspective. *Wang, H., +, TSG May 2021 2529-2543*

Stealthy Black-Box Attacks on Deep Learning Non-Intrusive Load Monitoring Models. *Wang, J., +, TSG July 2021 3479-3492*

TraceGAN: Synthesizing Appliance Power Signatures Using Generative Adversarial Networks. *Harell, A., +, TSG Sept. 2021 4553-4563*

Two-Stage Decoupled Estimation Approach of Aggregated Baseline Load Under High Penetration of Behind-the-Meter PV System. *Li, K., +, TSG Nov. 2021 4876-4885*

Smart power grids

A Cyber-Physical Anomaly Detection for Wide-Area Protection Using Machine Learning. *Singh, V.K., +, TSG July 2021 3514-3526*

A Data-Driven Storage Control Framework for Dynamic Pricing. *Wu, J., +, TSG Jan. 2021 737-750*

A Detection Mechanism Against Load-Redistribution Attacks in Smart Grids. *Kaviani, R., +, TSG Jan. 2021 704-714*

A Model-Free Voltage Control Approach to Mitigate Motor Stalling and FIDVR for Smart Grids. *Park, B., +, TSG Jan. 2021 67-78*

A New Method for Peer Matching and Negotiation of Prosumers in Peer-to-Peer Energy Markets. *Khorasany, M., +, TSG May 2021 2472-2483*

A Novel Energy Sharing Mechanism for Smart Microgrid. *Li, S., +, TSG Nov. 2021 5475-5478*

A Novel Energy Trading Framework Using Adapted Blockchain Technology. *Hamouda, M.R., +, TSG May 2021 2165-2175*

A Privacy-Aware Reconfigurable Authenticated Key Exchange Scheme for Secure Communication in Smart Grids. *Gope, P., +, TSG Nov. 2021 5335-5348*

A Privacy-Preserving Homomorphic Scheme With Multiple Dimensions and Fault Tolerance for Metering Data Aggregation in Smart Grid. *Mohammadi, A., +, TSG Nov. 2021 5212-5220*

A Queuing Network Analysis of a Hierarchical Communication Architecture for Advanced Metering Infrastructure. *Choi, J.S., +, TSG Sept. 2021 4318-4326*

A Reinforcement Learning-Based Decision System for Electricity Pricing Plan Selection by Smart Grid End Users. *Lu, T., +, TSG May 2021 2176-2187*

A Scalable Privacy-Preserving Multi-Agent Deep Reinforcement Learning Approach for Large-Scale Peer-to-Peer Transactive Energy Trading. *Ye, Y., +, TSG Nov. 2021 5185-5200*

Active Distribution Grids Providing Voltage Support: The Swiss Case. *Karagiannopoulos, S., +, TSG Jan. 2021 268-278*

An Identity Based Authentication Protocol for Smart Grid Environment Using Physical Uncloneable Function. *Badar, H.M.S., +, TSG Sept. 2021 4426-4434*

Analysis and Validations of Modularized Distributed TL-UPQC Systems With Supervisory Remote Management System. *Abdalaal, R.M., +, TSG May 2021 2638-2651*

Benefits of Home Energy Storage Utilization: An Australian Case Study of Demand Charge Practices in Residential Sector. *Kong, W., +, TSG July 2021 3086-3096*

Combined Impact of Demand Response Aggregators and Carbon Taxation on Emissions Reduction in Electric Power Systems. *Algarni, A.S., +, TSG March 2021 1825-1827*

Component-Level Reliability Evaluation Model for Cyber Power Devices. *Balachandran, T., +, TSG Jan. 2021 692-703*

Data-Driven Copy-Paste Imputation for Energy Time Series. *Weber, M., +, TSG Nov. 2021 5409-5419*

Data-Driven False Data Injection Attacks Against Power Grids: A Random Matrix Approach. *Lakshminarayana, S., +, TSG Jan. 2021 635-646*

Deep Reinforcement Learning for Demand Response in Distribution Networks. *Bahrami, S., +, TSG March 2021 1496-1506*

Design Framework for Privacy-Aware Demand-Side Management With Realistic Energy Storage Model. *Avula, R.R., +, TSG July 2021 3503-3513*

Detecting False Data Injection Attacks in Smart Grids: A Semi-Supervised Deep Learning Approach. *Zhang, Y., +, TSG Jan. 2021 623-634*

Detection of Stealthy Cyber-Physical Line Disconnection Attacks in Smart Grid. *James Ranjith Kumar, R., +, TSG Sept. 2021 4484-4493*

Distributed Energy Trading in Smart Grid Over Directed Communication Network. *Ullah, M.H., +, TSG July 2021 3669-3672*

Dynamic State Estimation of Smart Distribution Grids Using Compressed Measurements. *Mohammadrezae, R., +, TSG Sept. 2021 4535-4542*

- Exploiting Power-to-Heat Assets in District Heating Networks to Regulate Electric Power Network. *Khatibi, M.*, +, *TSG May 2021 2048-2059*
- Fast Islanding Detection of Nested Grids Including Multiple Resources Based on Phase Criteria. *Zamani, R.*, +, *TSG Nov. 2021 4962-4970*
- Fractional Dynamics of PMU Data. *Shalalfeh, L.*, +, *TSG May 2021 2578-2588*
- Incentive Design for Flexibility Provisions From Residential Energy Hubs in Smart Grid. *Alharbi, W.*, +, *TSG May 2021 2113-2124*
- Intrusion Detection for Cybersecurity of Smart Meters. *Sun, C.*, +, *TSG Jan. 2021 612-622*
- Joint Optimization of Wind Turbine Micrositing and Cabling in an Offshore Wind Farm. *Tao, S.*, +, *TSG Jan. 2021 834-844*
- Learning-Based Simultaneous Detection and Characterization of Time Delay Attack in Cyber-Physical Systems. *Ganesh, P.*, +, *TSG July 2021 3581-3593*
- Mitigating Smart Meter Asynchrony Error Via Multi-Objective Low Rank Matrix Recovery. *Yuan, Y.*, +, *TSG Sept. 2021 4308-4317*
- Model-Free Lossless Data Compression for Real-Time Low-Latency Transmission in Smart Grids. *Yan, L.*, +, *TSG May 2021 2601-2610*
- Modeling of Time-Delayed Distributed Cyber-Physical Power Systems for Small-Signal Stability Analysis. *Xu, L.*, +, *TSG July 2021 3425-3437*
- Networked Microgrids for Grid Resilience, Robustness, and Efficiency: A Review. *Chen, B.*, +, *TSG Jan. 2021 18-32*
- Peer-to-Peer Energy Trading in Transactive Markets Considering Physical Network Constraints. *Ullah, M.H.*, +, *TSG July 2021 3390-3403*
- Perturbation-Based Diagnosis of False Data Injection Attack Using Distributed Energy Resources. *Jhala, K.*, +, *TSG March 2021 1589-1601*
- Push-Based Distributed Economic Dispatch in Smart Grids Over Time-Varying Unbalanced Directed Graphs. *Wang, Z.*, +, *TSG July 2021 3185-3199*
- Real-Time Coupling of Geographically Distributed Research Infrastructures: Taxonomy, Overview, and Real-World Smart Grid Applications. *Syed, M.H.*, +, *TSG March 2021 1747-1760*
- Robust Electricity Theft Detection Against Data Poisoning Attacks in Smart Grids. *Takiddin, A.*, +, *TSG May 2021 2675-2684*
- Robust Secondary Frequency Control for Virtual Synchronous Machine-Based Microgrid Cluster Using Equivalent Modeling. *Hu, W.*, +, *TSG July 2021 2879-2889*
- RTCE: Real-Time Co-Emulation Framework for EMT-Based Power System and Communication Network on FPGA-MPSoc Hardware Architecture. *Duan, T.*, +, *TSG May 2021 2544-2553*
- Self-Assessment of Health Conditions of Electrical Assets and Grid Components: A Contribution to Smart Grids. *Montanari, G.C.*, +, *TSG March 2021 1206-1214*
- Statistical Load Forecasting Using Optimal Quantile Regression Random Forest and Risk Assessment Index. *Aprillia, H.*, +, *TSG March 2021 1467-1480*
- Stealthy Black-Box Attacks on Deep Learning Non-Intrusive Load Monitoring Models. *Wang, J.*, +, *TSG July 2021 3479-3492*
- Stealthy Cyberattacks on Loads and Distributed Generation Aimed at Multi-Transmission Line Congestions in Smart Grids. *Khazaei, J.*, *TSG May 2021 2518-2528*
- Step Towards Energy-Water Smart Microgrids; Buildings Thermal Energy and Water Demand Management Embedded in Economic Dispatch. *Moa-zeni, F.*, +, *TSG Sept. 2021 3680-3691*
- The Utilization of Shared Energy Storage in Energy Systems: A Comprehensive Review. *Dai, R.*, +, *TSG July 2021 3163-3174*
- Transactive Energy Market Mechanism With Loss Implication. *Azizi, A.*, +, *TSG March 2021 1215-1223*
- Two Secure and Efficient Lightweight Data Aggregation Schemes for Smart Grid. *Qian, J.*, +, *TSG May 2021 2625-2637*
- Software agents**
- A New Method for Peer Matching and Negotiation of Prosumers in Peer-to-Peer Energy Markets. *Khorasany, M.*, +, *TSG May 2021 2472-2483*
- Solar cell arrays**
- Capturing Spatio-Temporal Dependencies in the Probabilistic Forecasting of Distribution Locational Marginal Prices. *Toubeau, J.*, +, *TSG May 2021 2663-2674*
- Distributed State of Charge-Based Droop Control Algorithm for Reducing Power Losses in Multi-Port Converter-Enabled Solar DC Nano-Grids. *Samende, C.*, +, *TSG Nov. 2021 4584-4594*
- Phase Identification of Single-Phase Customers and PV Panels via Smart Meter Data. *Heidari-Akhijahani, A.*, +, *TSG Sept. 2021 4543-4552*
- State Estimation for Situational Awareness of Active Distribution System With Photovoltaic Power Plants. *Fang, Z.*, +, *TSG Jan. 2021 239-250*
- Solar power**
- Association Rule Mining for Localizing Solar Power in Different Distribution Grid Feeders. *Saleem, B.*, +, *TSG May 2021 2589-2600*
- Development of an Encoding Method on a Co-Simulation Platform for Mitigating the Impact of Unreliable Communication. *Xie, F.*, +, *TSG May 2021 2496-2507*
- Evaluating and Selecting Renewable Energy Sources for a Microgrid: A Bi-Capacity-Based Multi-Criteria Decision Making Approach. *Zhang, L.*, +, *TSG March 2021 921-931*
- Optimal HVAC Control for Demand Response via Chance-Constrained Two-Stage Stochastic Program. *Mansy, H.*, +, *TSG May 2021 2188-2200*
- Primary Frequency Control in Isolated Microgrids Using Thermostatically Controllable Loads. *Mendieta, W.*, +, *TSG Jan. 2021 93-105*
- Solar power stations**
- Distribution Feeder-Scale Fast Frequency Response via Optimal Coordination of Net-Load Resources—Part II: Large-Scale Demonstration. *Lundstrom, B.*, +, *TSG March 2021 1445-1454*
- Ensuring Distribution Network Integrity Using Dynamic Operating Limits for Prosumers. *Petrou, K.*, +, *TSG Sept. 2021 3877-3888*
- Space heating**
- Step Towards Energy-Water Smart Microgrids; Buildings Thermal Energy and Water Demand Management Embedded in Economic Dispatch. *Moa-zeni, F.*, +, *TSG Sept. 2021 3680-3691*
- Strategic Participation of Residential Thermal Demand Response in Energy and Capacity Markets. *Anwar, M.B.*, +, *TSG July 2021 3070-3085*
- Spatiotemporal phenomena**
- Data-Driven Approach for Analyzing Spatiotemporal Price Elasticities of EV Public Charging Demands Based on Conditional Random Fields. *Bao, Z.*, +, *TSG Sept. 2021 4363-4376*
- Missing Data Recovery in Large Power Systems Using Network Embedding. *Wu, T.*, +, *TSG Jan. 2021 680-691*
- Spatial-Temporal Data Analysis-Based Event Detection in Weakly Damped Power Systems. *Zhu, L.*, +, *TSG Nov. 2021 5472-5474*
- Spectral analysis**
- Brown Measure Based Spectral Distribution Analysis for Spatial-Temporal Localization of Cascading Events in Power Grids. *Yang, F.*, +, *TSG March 2021 1805-1820*
- Stability**
- Decentralized Optimal Stabilization of Active Loads in Islanded Microgrids. *Dissanayake, A.M.*, +, *TSG March 2021 932-942*
- Distributed Optimization for Integrated Frequency Regulation and Economic Dispatch in Microgrids. *Xu, Y.*, +, *TSG Nov. 2021 4595-4606*
- Nonlinear Multiple Models Adaptive Secondary Voltage Control of Microgrids. *Ma, Z.*, +, *TSG Jan. 2021 227-238*
- Region of Attraction Estimation for DC Microgrids With Constant Power Loads Using Potential Theory. *Chang, F.*, +, *TSG Sept. 2021 3793-3808*
- Stability criteria**
- A Converter-Based Power System Stabilizer for Stability Enhancement of Droop-Controlled Islanded Microgrids. *Guo, K.*, +, *TSG Nov. 2021 4616-4626*
- Transient Voltage Stability of Paralleled Synchronous and Virtual Synchronous Generators With Induction Motor Loads. *Cheng, H.*, +, *TSG Nov. 2021 4983-4999*
- State estimation**
- A New AC False Data Injection Attack Method Without Network Information. *Jiao, R.*, +, *TSG Nov. 2021 5280-5289*
- A Robust State Estimation Method Based on SOCP for Integrated Electricity-Heat System. *Chen, Y.*, +, *TSG Jan. 2021 810-820*
- Distributed Multi-Area State Estimation for Power Systems With Switching Communication Graphs. *Wang, J.*, +, *TSG Jan. 2021 787-797*

- Joint Topology Identification and State Estimation in Unobservable Distribution Grids. *Karimi, H.S.*, +, *TSG Nov. 2021 5299-5309*
- Protection Against False Data Injection Attacks Considering Degrees of Freedom in Attack Vectors. *Sreeram, T.S.*, +, *TSG Nov. 2021 5258-5267*
- Spoofing Resilient State Estimation for the Power Grid Using an Extended Kalman Filter. *Chauhan, S.V.S.*, +, *TSG July 2021 3404-3414*
- State feedback**
- A Decentralized Approach for Voltage Control by Multiple Distributed Energy Resources. *Fusco, G.*, +, *TSG July 2021 3115-3127*
- Linear Quadratic Regulator Based Smooth Transition Between Microgrid Operation Modes. *Ganjan-Aboukheili, M.*, +, *TSG Nov. 2021 4854-4864*
- State of charge**
- Prioritized Replay Dueling DDQN Based Grid-Edge Control of Community Energy Storage System. *Song, H.*, +, *TSG Nov. 2021 4950-4961*
- State-space methods**
- A Compensated Distributed-Parameter Line Decoupling Approach for Real Time Applications. *Ahmed, B.*, +, *TSG March 2021 1761-1771*
- A Novel Distributed Control Method for Interlinking Converters in an Islanded Hybrid AC/DC Microgrid. *Chang, J.*, +, *TSG Sept. 2021 3765-3779*
- Static VAR compensators**
- Data-Driven Multi-Agent Deep Reinforcement Learning for Distribution System Decentralized Voltage Control With High Penetration of PVs. *Cao, D.*, +, *TSG Sept. 2021 4137-4150*
- Statistical analysis**
- A Cluster-Based Model for Charging a Single-Depot Fleet of Electric Vehicles. *Sepetanc, K.*, +, *TSG July 2021 3339-3352*
- An Iterative Response-Surface-Based Approach for Chance-Constrained AC Optimal Power Flow Considering Dependent Uncertainty. *Xu, Y.*, +, *TSG May 2021 2696-2707*
- Anomaly Detection, Localization and Classification Using Drifting Synchronophasor Data Streams. *Ahmed, A.*, +, *TSG July 2021 3570-3580*
- Brown Measure Based Spectral Distribution Analysis for Spatial-Temporal Localization of Cascading Events in Power Grids. *Yang, F.*, +, *TSG March 2021 1805-1820*
- Data-Driven Probabilistic Fault Location of Electric Power Distribution Systems Incorporating Data Uncertainties. *Jiang, Y.*, *TSG Sept. 2021 4522-4534*
- FeederGAN: Synthetic Feeder Generation via Deep Graph Adversarial Nets. *Liang, M.*, +, *TSG March 2021 1163-1173*
- Online Detection of Inter-Turn Winding Faults in Single-Phase Distribution Transformers Using Smart Meter Data. *Ashok, K.*, +, *TSG Nov. 2021 5073-5083*
- Risk-Constrained Minimization of Combined Event Detection and Decision Time for Online Transient Stability Assessment. *Gonzalez, J.*, +, *TSG Sept. 2021 4564-4572*
- Statistical distributions**
- An Adaptive Distributionally Robust Model for Three-Phase Distribution Network Reconfiguration. *Zheng, W.*, +, *TSG March 2021 1224-1237*
- Conditional Multivariate Elliptical Copulas to Model Residential Load Profiles From Smart Meter Data. *Duque, E.M.S.*, +, *TSG Sept. 2021 4280-4294*
- Data-Driven Distributionally Robust Co-Optimization of P2P Energy Trading and Network Operation for Interconnected Microgrids. *Li, J.*, +, *TSG Nov. 2021 5172-5184*
- Data-Driven Distributionally Robust Hierarchical Coordination for Home Energy Management. *Saberi, H.*, +, *TSG Sept. 2021 4090-4101*
- Probabilistic Forecasting of Regional Net-Load With Conditional Extremes and Gridded NWP. *Browell, J.*, +, *TSG Nov. 2021 5011-5019*
- Statistics**
- Guaranteed Phase & Topology Identification in Three Phase Distribution Grids. *Bariya, M.*, +, *TSG July 2021 3605-3612*
- Stochastic games**
- Data-Driven Stochastic Game With Social Attributes for Peer-to-Peer Energy Sharing. *Chen, L.*, +, *TSG Nov. 2021 5158-5171*
- Stochastic processes**
- A Demand Response-Based Solution to Overloading in Underdeveloped Distribution Networks. *Jibran, M.*, +, *TSG Sept. 2021 4059-4067*
- A Hierarchical Data-Driven Wind Farm Power Optimization Approach Using Stochastic Projected Simplex Method. *Xu, Z.*, +, *TSG July 2021 3560-3569*
- A Mean-Field Voltage Control Approach for Active Distribution Networks With Uncertainties. *Wei, B.*, +, *TSG March 2021 1455-1466*
- An Iterative Response-Surface-Based Approach for Chance-Constrained AC Optimal Power Flow Considering Dependent Uncertainty. *Xu, Y.*, +, *TSG May 2021 2696-2707*
- Coordinated Control of Air-Conditioning Loads for System Frequency Regulation. *Jiang, T.*, +, *TSG Jan. 2021 548-560*
- Correction to "Queuing Analysis-Based PEV Load Modeling Considering Battery Charging Behavior and Their Impact on Distribution System Operation" [Jan 18 261-273]. *Hafez, O.*, +, *TSG March 2021 1830*
- Data-Driven Distributionally Robust Co-Optimization of P2P Energy Trading and Network Operation for Interconnected Microgrids. *Li, J.*, +, *TSG Nov. 2021 5172-5184*
- Forecast-Based Consensus Control for DC Microgrids Using Distributed Long Short-Term Memory Deep Learning Models. *Alavi, S.A.*, +, *TSG Sept. 2021 3718-3730*
- Multistage Stochastic Optimization for Microgrid Operation Under Islanding Uncertainty. *Lee, J.*, +, *TSG Jan. 2021 56-66*
- Online Learning and Distributed Control for Residential Demand Response. *Chen, X.*, +, *TSG Nov. 2021 4843-4853*
- Optimal Energy Management of Microgrids Using Quantum Teaching Learning Based Algorithm. *Raghav, L.P.*, +, *TSG Nov. 2021 4834-4842*
- Power System Resilience Enhancement in Typhoons Using a Three-Stage Day-Ahead Unit Commitment. *Ding, T.*, +, *TSG May 2021 2153-2164*
- Reserve Model of Energy Storage in Day-Ahead Joint Energy and Reserve Markets: A Stochastic UC Solution. *Tang, Z.*, +, *TSG Jan. 2021 372-382*
- Scenario Reduction for Stochastic Day-Ahead Scheduling: A Mixed Auto-encoder Based Time-Series Clustering Approach. *Liang, J.*, +, *TSG May 2021 2652-2662*
- Statistical Load Forecasting Using Optimal Quantile Regression Random Forest and Risk Assessment Index. *Aprillia, H.*, +, *TSG March 2021 1467-1480*
- Stochastic Scheduling of Mobile Energy Storage in Coupled Distribution and Transportation Networks for Conversion Capacity Enhancement. *Liu, X.*, +, *TSG Jan. 2021 117-130*
- Uncertainty-Aware Deployment of Mobile Energy Storage Systems for Distribution Grid Resilience. *Nazemi, M.*, +, *TSG July 2021 3200-3214*
- Stochastic programming**
- An Adaptive Distributionally Robust Model for Three-Phase Distribution Network Reconfiguration. *Zheng, W.*, +, *TSG March 2021 1224-1237*
- Data-Driven Distributionally Robust Co-Optimization of P2P Energy Trading and Network Operation for Interconnected Microgrids. *Li, J.*, +, *TSG Nov. 2021 5172-5184*
- Demand Response for Industrial Micro-Grid Considering Photovoltaic Power Uncertainty and Battery Operational Cost. *Huang, C.*, +, *TSG July 2021 3043-3055*
- Incentives to Manipulate Demand Response Baselines With Uncertain Event Schedules. *Ellman, D.*, +, *TSG March 2021 1358-1369*
- Integrated Transmission and Distribution System Expansion Planning Under Uncertainty. *Munoz-Delgado, G.*, +, *TSG Sept. 2021 4113-4125*
- Multistage Stochastic Optimization for Microgrid Operation Under Islanding Uncertainty. *Lee, J.*, +, *TSG Jan. 2021 56-66*
- Online Learning and Distributed Control for Residential Demand Response. *Chen, X.*, +, *TSG Nov. 2021 4843-4853*
- Optimal Energy-Hub Planning Based on Dimension Reduction and Variable-Sized Unimodal Searching. *Zhao, N.*, +, *TSG March 2021 1481-1495*
- Optimal HVAC Control for Demand Response via Chance-Constrained Two-Stage Stochastic Program. *Mansy, H.*, +, *TSG May 2021 2188-2200*
- Optimal Policy Characterization Enhanced Actor-Critic Approach for Electric Vehicle Charging Scheduling in a Power Distribution Network. *Jin, J.*, +, *TSG March 2021 1416-1428*
- Reactive Power Management for Networked Microgrid Resilience in Extreme Conditions. *Shaker, A.*, +, *TSG Sept. 2021 3940-3953*

Reserve Model of Energy Storage in Day-Ahead Joint Energy and Reserve Markets: A Stochastic UC Solution. *Tang, Z.*, +, *TSG Jan. 2021 372-382*

Risk-Averse Optimal Energy and Reserve Scheduling for Virtual Power Plants Incorporating Demand Response Programs. *Vahedipour-Dahraie, M.*, +, *TSG March 2021 1405-1415*

Robust Regional Coordination of Inverter-Based Volt/Var Control via Multi-Agent Deep Reinforcement Learning. *Liu, H.*, +, *TSG Nov. 2021 5420-5433*

Stochastic Scheduling of Mobile Energy Storage in Coupled Distribution and Transportation Networks for Conversion Capacity Enhancement. *Liu, X.*, +, *TSG Jan. 2021 117-130*

Transactive Energy Supported Economic Operation for Multi-Energy Complementary Microgrids. *Yang, Z.*, +, *TSG Jan. 2021 4-17*

Storms

Power System Resilience Enhancement in Typhoons Using a Three-Stage Day-Ahead Unit Commitment. *Ding, T.*, +, *TSG May 2021 2153-2164*

Structural engineering computing

Automated Control of Transactive HVACs in Energy Distribution Systems. *Liu, B.*, +, *TSG May 2021 2462-2471*

Substation protection

A Cyber-Physical Anomaly Detection for Wide-Area Protection Using Machine Learning. *Singh, V.K.*, +, *TSG July 2021 3514-3526*

Reliability Analyses of Wide-Area Protection System Considering Cyber-Physical System Constraints. *He, R.*, +, *TSG July 2021 3458-3467*

Substations

A Deep Learning-Based Cyberattack Detection System for Transmission Protective Relays. *Khaw, Y.M.*, +, *TSG May 2021 2554-2565*

Countering FDI Attacks on DERs Coordinated Control System Using FMI-Compatible Cosimulation. *Jafarigiv, D.*, +, *TSG March 2021 1640-1650*

Data-Driven Probabilistic Fault Location of Electric Power Distribution Systems Incorporating Data Uncertainties. *Jiang, Y.*, *TSG Sept. 2021 4522-4534*

Leveraging Two-Stage Adaptive Robust Optimization for Power Flexibility Aggregation. *Chen, X.*, +, *TSG Sept. 2021 3954-3965*

Subsynchronous resonance

A Cyber Attack Mitigation Scheme for Series Compensated DFIG-Based Wind Parks. *Ghafouri, M.*, +, *TSG Nov. 2021 5221-5232*

Supervised learning

Deep Reinforcement Learning for Continuous Electric Vehicles Charging Control With Dynamic User Behaviors. *Yan, L.*, +, *TSG Nov. 2021 5124-5134*

Detecting False Data Injection Attacks in Smart Grids: A Semi-Supervised Deep Learning Approach. *Zhang, Y.*, +, *TSG Jan. 2021 623-634*

Power System Disturbance Classification With Online Event-Driven Neuro-morphic Computing. *Mahapatra, K.*, +, *TSG May 2021 2343-2354*

Supply and demand

Risk-Averse Optimal Energy and Reserve Scheduling for Virtual Power Plants Incorporating Demand Response Programs. *Vahedipour-Dahraie, M.*, +, *TSG March 2021 1405-1415*

Selling Demand Response Using Options. *Muthirayan, D.*, +, *TSG Jan. 2021 279-288*

Support vector machines

Cyber Spoofing Detection for Grid Distributed Synchrophasor Using Dynamic Dual-Kernel SVM. *Qiu, W.*, +, *TSG May 2021 2732-2735*

Intrusion Detection for Cybersecurity of Smart Meters. *Sun, C.*, +, *TSG Jan. 2021 612-622*

Switching systems (control)

Resilient Control and Analysis for DC Microgrid System Under DoS and Impulsive FDI Attacks. *Liu, X.*, +, *TSG Sept. 2021 3742-3754*

Synchronization

A FDI Attack-Resilient Distributed Secondary Control Strategy for Islanded Microgrids. *Chen, Y.*, +, *TSG May 2021 1929-1938*

Mitigating Smart Meter Asynchrony Error Via Multi-Objective Low Rank Matrix Recovery. *Yuan, Y.*, +, *TSG Sept. 2021 4308-4317*

SCCO: A State-Caching-Based Coagulation Platform for Cyber-Physical Power System Evaluation. *Wang, Q.*, +, *TSG March 2021 1615-1625*

Time-Synchronization Attack Detection in Unbalanced Three-Phase Systems. *Delcourt, M.*, +, *TSG Sept. 2021 4460-4470*

Synchronous generators

A Converter-Based Power System Stabilizer for Stability Enhancement of Droop-Controlled Islanded Microgrids. *Guo, K.*, +, *TSG Nov. 2021 4616-4626*

A Two-Stage Protection Method for Detection and Mitigation of Coordinated EVSE Switching Attacks. *Kabir, M.E.*, +, *TSG Sept. 2021 4377-4388*

Characteristics of Parallel Inverters Applying Virtual Synchronous Generator Control. *Chen, M.*, +, *TSG Nov. 2021 4690-4701*

Distributed Power Sharing Control for Islanded Single-/Three-Phase Microgrids With Admissible Voltage and Energy Storage Constraints. *Zhou, J.*, +, *TSG July 2021 2760-2775*

Enhancement of Frequency Regulation in AC Microgrid: A Fuzzy-MPC Controlled Virtual Synchronous Generator. *Long, B.*, +, *TSG July 2021 3138-3149*

Frequency Restoration and Oscillation Damping of Distributed VSGs in Microgrid With Low Bandwidth Communication. *Shi, M.*, +, *TSG March 2021 1011-1021*

MPC-Controlled Virtual Synchronous Generator to Enhance Frequency and Voltage Dynamic Performance in Islanded Microgrids. *Long, B.*, +, *TSG March 2021 953-964*

Robust Secondary Frequency Control for Virtual Synchronous Machine-Based Microgrid Cluster Using Equivalent Modeling. *Hu, W.*, +, *TSG July 2021 2879-2889*

Transient Stability and Current Injection Design of Paralleled Current-Controlled VSCs and Virtual Synchronous Generators. *Shen, C.*, +, *TSG March 2021 1118-1134*

Transient Voltage Stability of Paralleled Synchronous and Virtual Synchronous Generators With Induction Motor Loads. *Cheng, H.*, +, *TSG Nov. 2021 4983-4999*

Synchronous machines

Robust Secondary Frequency Control for Virtual Synchronous Machine-Based Microgrid Cluster Using Equivalent Modeling. *Hu, W.*, +, *TSG July 2021 2879-2889*

System-on-chip

RTCE: Real-Time Co-Emulation Framework for EMT-Based Power System and Communication Network on FPGA-MPSoC Hardware Architecture. *Duan, T.*, +, *TSG May 2021 2544-2553*

T

Tanks (containers)

Step Towards Energy-Water Smart Microgrids; Buildings Thermal Energy and Water Demand Management Embedded in Economic Dispatch. *Moazeni, F.*, +, *TSG Sept. 2021 3680-3691*

Tariffs

A Nested Transactive Energy Market Model to Trade Demand-Side Flexibility of Residential Consumers. *Nizami, M.S.H.*, +, *TSG Jan. 2021 479-490*

Benefits of Home Energy Storage Utilization: An Australian Case Study of Demand Charge Practices in Residential Sector. *Kong, W.*, +, *TSG July 2021 3086-3096*

Develop Load Shape Dictionary Through Efficient Clustering Based on Elastic Dissimilarity Measure. *Liang, H.*, +, *TSG Jan. 2021 442-452*

Taxation

Combined Impact of Demand Response Aggregators and Carbon Taxation on Emissions Reduction in Electric Power Systems. *Algarni, A.S.*, +, *TSG March 2021 1825-1827*

Telecommunication control

System Redundancy Enhancement of Secondary Frequency Control Under Latency Attacks. *Chen, C.*, +, *TSG Jan. 2021 647-658*

Telecommunication links

Resilience for Communication Faults in Reactive Power Sharing of Microgrids. *Li, X.*, +, *TSG July 2021 2788-2799*

Telecommunication network reliability

Component-Level Reliability Evaluation Model for Cyber Power Devices. *Balachandran, T.*, +, *TSG Jan. 2021 692-703*

Telecommunication network routing

Intrusion Detection for Cybersecurity of Smart Meters. *Sun, C.*, +, *TSG Jan. 2021 612-622*

Telecommunication network topology

Impact of Communication Packet Delivery Ratio on Reliability of Optimal Load Tracking and Allocation in DC Microgrids. *Nazari, M.H.*, +, *TSG July 2021 2812-2821*

Telecommunication power management

Evaluating the Dispatchable Capacity of Base Station Backup Batteries in Distribution Networks. *Yong, P.*, +, *TSG Sept. 2021 3966-3979*

Telecommunication power supplies

Evaluating the Dispatchable Capacity of Base Station Backup Batteries in Distribution Networks. *Yong, P.*, +, *TSG Sept. 2021 3966-3979*

System Redundancy Enhancement of Secondary Frequency Control Under Latency Attacks. *Chen, C.*, +, *TSG Jan. 2021 647-658*

Telecommunication security

A Privacy-Aware Reconfigurable Authenticated Key Exchange Scheme for Secure Communication in Smart Grids. *Gope, P.*, +, *TSG Nov. 2021 5335-5348*

A Privacy-Preserving Homomorphic Scheme With Multiple Dimensions and Fault Tolerance for Metering Data Aggregation in Smart Grid. *Mohammadali, A.*, +, *TSG Nov. 2021 5212-5220*

Artificial Neural Network-Based Stealth Attack on Battery Energy Storage Systems. *Pasetti, M.*, +, *TSG Nov. 2021 5310-5321*

Blockchain Based Secure Data Aggregation and Distributed Power Dispatching for Microgrids. *Luo, X.*, +, *TSG Nov. 2021 5268-5279*

Signcryption Based Authenticated and Key Exchange Protocol for EI-Based V2G Environment. *Ahmed, S.*, +, *TSG Nov. 2021 5290-5298*

Telecommunication traffic

Evaluating the Dispatchable Capacity of Base Station Backup Batteries in Distribution Networks. *Yong, P.*, +, *TSG Sept. 2021 3966-3979*

Temperature control

Optimal HVAC System Operation Using Online Learning of Interconnected Neural Networks. *Jang, Y.*, +, *TSG July 2021 3030-3042*

Robust Hierarchical Control Mechanism for Aggregated Thermostatically Controlled Loads. *Gong, X.*, +, *TSG Jan. 2021 453-467*

Step Towards Energy-Water Smart Microgrids; Buildings Thermal Energy and Water Demand Management Embedded in Economic Dispatch. *Moazeni, F.*, +, *TSG Sept. 2021 3680-3691*

Tendering

Bargaining Game-Based Profit Allocation of Virtual Power Plant in Frequency Regulation Market Considering Battery Cycle Life. *Chen, W.*, +, *TSG July 2021 2913-2928*

Constructing Demand-Side Bidding Curves Based on a Decoupled Full-Cycle Process. *Ruan, G.*, +, *TSG Jan. 2021 502-511*

Tensors

A Regularized Tensor Completion Approach for PMU Data Recovery. *Ghasemkhani, A.*, +, *TSG March 2021 1519-1528*

Brown Measure Based Spectral Distribution Analysis for Spatial-Temporal Localization of Cascading Events in Power Grids. *Yang, F.*, +, *TSG March 2021 1805-1820*

Thermal comfort

Optimal HVAC Control for Demand Response via Chance-Constrained Two-Stage Stochastic Program. *Mansy, H.*, +, *TSG May 2021 2188-2200*

Thermal power stations

Data-Driven Risk Preference Analysis in Day-Ahead Electricity Market. *Zhao, H.*, +, *TSG May 2021 2508-2517*

Thermostats

Domain Randomization for Demand Response of an Electric Water Heater. *Peirelinck, T.*, +, *TSG March 2021 1370-1379*

Optimal HVAC Control for Demand Response via Chance-Constrained Two-Stage Stochastic Program. *Mansy, H.*, +, *TSG May 2021 2188-2200*

Primary Frequency Control in Isolated Microgrids Using Thermostatically Controllable Loads. *Mendieta, W.*, +, *TSG Jan. 2021 93-105*

Robust Hierarchical Control Mechanism for Aggregated Thermostatically Controlled Loads. *Gong, X.*, +, *TSG Jan. 2021 453-467*

Thyristor applications

A Cyber Attack Mitigation Scheme for Series Compensated DFIG-Based Wind Parks. *Ghafouri, M.*, +, *TSG Nov. 2021 5221-5232*

Time series

A Novel Closed-Loop Clustering Algorithm for Hierarchical Load Forecasting. *Zhang, C.*, +, *TSG Jan. 2021 432-441*

Conditional Multivariate Elliptical Copulas to Model Residential Load Profiles From Smart Meter Data. *Duque, E.M.S.*, +, *TSG Sept. 2021 4280-4294*

Data-Driven Copy-Paste Imputation for Energy Time Series. *Weber, M.*, +, *TSG Nov. 2021 5409-5419*

Deep Learning-Based Real-Time Switching of Hybrid AC/DC Transmission Networks. *Dabbaghjamesh, M.*, +, *TSG May 2021 2331-2342*

Ensuring Distribution Network Integrity Using Dynamic Operating Limits for Prosumers. *Petrou, K.*, +, *TSG Sept. 2021 3877-3888*

Model-Free Lossless Data Compression for Real-Time Low-Latency Transmission in Smart Grids. *Yan, L.*, +, *TSG May 2021 2601-2610*

Provision of Primary Frequency Response as Ancillary Service From Active Distribution Networks to the Transmission System. *Kontis, E.O.*, +, *TSG Nov. 2021 4971-4982*

Scenario Reduction for Stochastic Day-Ahead Scheduling: A Mixed Auto-encoder Based Time-Series Clustering Approach. *Liang, J.*, +, *TSG May 2021 2652-2662*

Spatial-Temporal Data Analysis-Based Event Detection in Weakly Damped Power Systems. *Zhu, L.*, +, *TSG Nov. 2021 5472-5474*

Time Series Classification for Locating Forced Oscillation Sources. *Meng, Y.*, +, *TSG March 2021 1712-1721*

Time-domain analysis

A Cyber Attack Mitigation Scheme for Series Compensated DFIG-Based Wind Parks. *Ghafouri, M.*, +, *TSG Nov. 2021 5221-5232*

Direct-Quadrature Sequence Models for Energy-Function Based Transient Stability Analysis of Unbalanced Inverter-Based Microgrids. *Roos, M.*, +, *TSG Sept. 2021 3692-3704*

Dual Inertia-Emulation Control for Interlinking Converters in Grid-Tying Applications. *Pantagua, J.*, +, *TSG Sept. 2021 3868-3876*

Fast Steady-State Computation of Electrical Networks Involving Nonlinear and Photovoltaic Components. *Ramirez, A.*, +, *TSG July 2021 3107-3114*

Modeling of DC Distribution System Based on High Frequency Transient Components. *Jia, K.*, +, *TSG Jan. 2021 671-679*

On the Impact of Fault Ride-Through on Transient Stability of Autonomous Microgrids: Nonlinear Analysis and Solution. *Eskandari, M.*, +, *TSG March 2021 999-1010*

Stability Analysis of Microgrid Islanding Transients Based on Interconnected Dissipative Subsystems. *Roos, M.H.*, +, *TSG Nov. 2021 4655-4667*

Synchronous Waveform Measurements to Locate Transient Events and Incipient Faults in Power Distribution Networks. *Izadi, M.*, +, *TSG Sept. 2021 4295-4307*

Time-frequency analysis

Time-Frequency Mask Estimation Based on Deep Neural Network for Flexible Load Disaggregation in Buildings. *Song, J.*, +, *TSG July 2021 3242-3251*

Time-varying systems

Distributed Multi-Area State Estimation for Power Systems With Switching Communication Graphs. *Wang, J.*, +, *TSG Jan. 2021 787-797*

Push-Sum-Enabled Resilient Microgrid Control. *Babahajiani, P.*, +, *TSG July 2021 3661-3664*

Topology

On the Use of Common Information Model for Smart Grid Applications — A Conceptual Approach. *Shahid, K.*, +, *TSG Nov. 2021 5060-5072*

Transaction processing

An Architecture and Performance Evaluation of Blockchain-Based Peer-to-Peer Energy Trading. *Abdella, J.*, +, *TSG July 2021 3364-3378*

Transactive energy

Continuous Group-Wise Double Auction for Prosumers in Distribution-Level Markets. *Yu, A.*, +, *TSG Nov. 2021 4822-4833*

Transfer functions

Online Assessment of Conservation Voltage Reduction Effects With Micro-perturbation. *Xu, J.*, +, *TSG May 2021 2224-2238*

Transformer windings

Online Detection of Inter-Turn Winding Faults in Single-Phase Distribution Transformers Using Smart Meter Data. *Ashok, K.*, +, *TSG Nov. 2021 5073-5083*

Transient analysis

Transient Voltage Stability of Paralleled Synchronous and Virtual Synchronous Generators With Induction Motor Loads. *Cheng, H.*, +, *TSG Nov. 2021 4983-4999*

Transient response

A Compensated Distributed-Parameter Line Decoupling Approach for Real Time Applications. *Ahmed, B.*, +, *TSG March 2021 1761-1771*

Transmission networks

Detection of Cyber-Attacks of Power Systems Through Benford's Law. *Milano, F.*, +, *TSG May 2021 2741-2744*

Transport control

Adaptive Congestion Control for Electric Vehicle Charging in the Smart Grid. *Zishan, A.A.*, +, *TSG May 2021 2439-2449*

Transportation

Distribution System Resilience in Ice Storms by Optimal Routing of Mobile Devices on Congested Roads. *Yan, M.*, +, *TSG March 2021 1314-1328*

Stochastic Scheduling of Mobile Energy Storage in Coupled Distribution and Transportation Networks for Conversion Capacity Enhancement. *Liu, X.*, +, *TSG Jan. 2021 117-130*

Tree searching

Online Scheduling of a Residential Microgrid via Monte-Carlo Tree Search and a Learned Model. *Shuai, H.*, +, *TSG March 2021 1073-1087*

Turbogenerators

Diesel Generator Model Parameterization for Microgrid Simulation Using Hybrid Box-Constrained Levenberg-Marquardt Algorithm. *Long, Q.*, +, *TSG March 2021 943-952*

U**Uncertain systems**

Efficient Robust Scheduling of Integrated Electricity and Heat Systems: A Direct Constraint Tightening Approach. *Jiang, Y.*, +, *TSG July 2021 3016-3029*

Robust Hierarchical Control Mechanism for Aggregated Thermostatically Controlled Loads. *Gong, X.*, +, *TSG Jan. 2021 453-467*

Uncertainty

Branching Dueling Q-Network-Based Online Scheduling of a Microgrid With Distributed Energy Storage Systems. *Shuai, H.*, +, *TSG Nov. 2021 5479-5482*

Chance Constrained Scheduling and Pricing for Multi-Service Battery Energy Storage. *Zhong, W.*, +, *TSG Nov. 2021 5030-5042*

Prioritized Replay Dueling DDQN Based Grid-Edge Control of Community Energy Storage System. *Song, H.*, +, *TSG Nov. 2021 4950-4961*

Uninterruptible power supplies

A Demand Response-Based Solution to Overloading in Underdeveloped Distribution Networks. *Jibrán, M.*, +, *TSG Sept. 2021 4059-4067*

Evaluating the Dispatchable Capacity of Base Station Backup Batteries in Distribution Networks. *Yong, P.*, +, *TSG Sept. 2021 3966-3979*

Unsupervised learning

Data-Driven Dynamic Models of Active Distribution Networks Using Unsupervised Learning Techniques on Field Measurements. *Mitrentsis, G.*, +, *TSG July 2021 2952-2965*

Power System Disturbance Classification With Online Event-Driven Neuro-morphic Computing. *Mahapatra, K.*, +, *TSG May 2021 2343-2354*

Real-Time Synchrophasor Data Anomaly Detection and Classification Using Isolation Forest, KMeans, and LoOP. *Khaledian, E.*, +, *TSG May 2021 2378-2388*

Unsupervised Congestion Status Identification Using LMP Data. *Zheng, K.*, +, *TSG Jan. 2021 726-736*

Unsupervised Event Detection, Clustering, and Use Case Exposition in Micro-PMU Measurements. *Aligholian, A.*, +, *TSG July 2021 3624-3636*

V**Variable length codes**

Model-Free Lossless Data Compression for Real-Time Low-Latency Transmission in Smart Grids. *Yan, L.*, +, *TSG May 2021 2601-2610*

Vehicle-to-grid

Adaptive Congestion Control for Electric Vehicle Charging in the Smart Grid. *Zishan, A.A.*, +, *TSG May 2021 2439-2449*

Integrating Battery Aging in the Optimization for Bidirectional Charging of Electric Vehicles. *Schwenk, K.*, +, *TSG Nov. 2021 5135-5145*

Signcryption Based Authenticated and Key Exchange Protocol for EI-Based V2G Environment. *Ahmed, S.*, +, *TSG Nov. 2021 5290-5298*

Ventilation

Multi-Agent Deep Reinforcement Learning for HVAC Control in Commercial Buildings. *Yu, L.*, +, *TSG Jan. 2021 407-419*

Virtual power plants

Aggregate Flexibility of Virtual Power Plants With Temporal Coupling Constraints. *Wang, S.*, +, *TSG Nov. 2021 5043-5051*

Risk-Averse Optimal Energy and Reserve Scheduling for Virtual Power Plants Incorporating Demand Response Programs. *Vahedipour-Dahraie, M.*, +, *TSG March 2021 1405-1415*

Virtual private networks

Aggregated Model of Data Network for the Provision of Demand Response in Generation and Transmission Expansion Planning. *Chen, M.*, +, *TSG Jan. 2021 512-523*

Voltage control

A Cascaded Distributed Control Framework in DC Microgrids. *Zhou, J.*, +, *TSG Jan. 2021 205-214*

A Decentralized Approach for Voltage Control by Multiple Distributed Energy Resources. *Fusco, G.*, +, *TSG July 2021 3115-3127*

A Grid-Friendly Sustainable Neighborhood Energy Trading Mechanism for MV-LV Network. *Liu, A.*, +, *TSG May 2021 2239-2248*

A Mean-Field Voltage Control Approach for Active Distribution Networks With Uncertainties. *Wei, B.*, +, *TSG March 2021 1455-1466*

A Model-Free Voltage Control Approach to Mitigate Motor Stalling and FIDVR for Smart Grids. *Park, B.*, +, *TSG Jan. 2021 67-78*

A Scalable Control Design for Grid-Forming Inverters in Microgrids. *Watson, J.D.*, +, *TSG Nov. 2021 4726-4739*

A Self-Organizing Multi-Agent System for Distributed Voltage Regulation. *Faiya, B.A.*, +, *TSG Sept. 2021 4102-4112*

A Three-Layer Stochastic Energy Management Approach for Electric Bus Transit Centers With PV and Energy Storage Systems. *Liu, Y.*, +, *TSG March 2021 1346-1357*

A Two-Layer Control Scheme Based on $P - V$ Droop Characteristic for Accurate Power Sharing and Voltage Regulation in DC Microgrids. *Baharizadeh, M.*, +, *TSG July 2021 2776-2787*

A Unified Distributed Cooperative Control of DC Microgrids Using Consensus Protocol. *Li, Y.*, +, *TSG May 2021 1880-1892*

Adaptive Master-Slave Control Strategy for Medium Voltage DC Distribution Systems Based on a Novel Nonlinear Droop Controller. *Xie, X.*, +, *TSG Nov. 2021 4765-4777*

Aggregated BESS Dynamic Models for Active Distribution Network Studies. *Calero, F.*, +, *TSG May 2021 2077-2088*

Aggregation of Voltage-Controlled Devices During Distribution Network Reduction. *Pecenak, Z.K.*, +, *TSG Jan. 2021 33-42*

An Asynchronous Forward-Backward-Splitting Power Flow Algorithm of Coupled Transmission and Active Distribution Systems. *Tang, K.*, +, *TSG Nov. 2021 5457-5471*

Buffered-Microgrid Structure for Future Power Networks; a Seamless Microgrid Control. *Nasser, N.*, +, *TSG Jan. 2021 131-140*

Chopperless Fault Ride-Through Control for DC Microgrids. *Xia, Y.*, +, *TSG March 2021 965-976*

Consensus Multi-Agent Reinforcement Learning for Volt-VAR Control in Power Distribution Networks. *Gao, Y.*, +, *TSG July 2021 3594-3604*

Cooperative P2P Energy Trading in Active Distribution Networks: An MILP-Based Nash Bargaining Solution. *Zhong, W.*, +, *TSG March 2021 1264-1276*

- Coordinated Optimal Volt/Var Control for Distribution Networks via D-PMUs and EV Chargers by Exploiting the Eigensystem Realization. *Mejia-Ruiz, G.E.*, +, *TSG May 2021 2425-2438*
- Current Injection Power Flow Analysis and Optimal Generation Dispatch for Bipolar DC Microgrids. *Lee, J.*, +, *TSG May 2021 1918-1928*
- Data-Driven Multi-Agent Deep Reinforcement Learning for Distribution System Decentralized Voltage Control With High Penetration of PVs. *Cao, D.*, +, *TSG Sept. 2021 4137-4150*
- Deep Reinforcement Learning Based Volt-VAR Optimization in Smart Distribution Systems. *Zhang, Y.*, +, *TSG Jan. 2021 361-371*
- Distributed Control of Multi-Energy Storage Systems for Voltage Regulation in Distribution Networks: A Back-and-Forth Communication Framework. *Yu, P.*, +, *TSG May 2021 1964-1977*
- Distributed Control Strategy for Low-Voltage Three-Phase Four-Wire Microgrids: Consensus Power-Based Control. *Ferreira, D.M.*, +, *TSG July 2021 3215-3231*
- Distributed Coordinated Reactive Power Control for Voltage Regulation in Distribution Networks. *Tang, Z.*, +, *TSG Jan. 2021 312-323*
- Distributed Dynamic Clustering Algorithm for Formation of Heterogeneous Virtual Power Plants Based on Power Requirements. *Zhang, R.*, +, *TSG Jan. 2021 192-204*
- Distributed Optimal Conservation Voltage Reduction in Integrated Primary-Secondary Distribution Systems. *Zhang, Q.*, +, *TSG Sept. 2021 3889-3900*
- Distributed Power Sharing Control for Islanded Single-/Three-Phase Microgrids With Admissible Voltage and Energy Storage Constraints. *Zhou, J.*, +, *TSG July 2021 2760-2775*
- Dynamic Modeling of Battery Energy Storage and Applications in Transmission Systems. *Calero, F.*, +, *TSG Jan. 2021 589-598*
- Frequency Regulation in Isolated Microgrids Through Optimal Droop Gain and Voltage Control. *Alghamdi, B.*, +, *TSG March 2021 988-998*
- Hierarchical Voltage Control Strategy in Distribution Networks Considering Customized Charging Navigation of Electric Vehicles. *Sun, X.*, +, *TSG Nov. 2021 4752-4764*
- Isochronous Architecture-Based Voltage-Active Power Droop for Multi-Inverter Systems. *Patel, S.*, +, *TSG March 2021 1088-1103*
- Minimizing Energy Storage Utilization in a Stand-Alone DC Microgrid Using Photovoltaic Flexible Power Control. *Yan, H.W.*, +, *TSG Sept. 2021 3755-3764*
- MPC-Controlled Virtual Synchronous Generator to Enhance Frequency and Voltage Dynamic Performance in Islanded Microgrids. *Long, B.*, +, *TSG March 2021 953-964*
- Multi-Round Double Auction-Enabled Peer-to-Peer Energy Exchange in Active Distribution Networks. *Haggi, H.*, +, *TSG Sept. 2021 4403-4414*
- Multi-Stage Voltage Support Optimization for Microgrids With Multiple Distributed Generation Units. *Liu, X.*, +, *TSG Jan. 2021 141-156*
- Nonlinear Multiple Models Adaptive Secondary Voltage Control of Microgrids. *Ma, Z.*, +, *TSG Jan. 2021 227-238*
- On the Use of Common Information Model for Smart Grid Applications — A Conceptual Approach. *Shahid, K.*, +, *TSG Nov. 2021 5060-5072*
- Online Assessment of Conservation Voltage Reduction Effects With Micro-perturbation. *Xu, J.*, +, *TSG May 2021 2224-2238*
- Online Multi-Agent Reinforcement Learning for Decentralized Inverter-Based Volt-VAR Control. *Liu, H.*, +, *TSG July 2021 2980-2990*
- Optimal DG Allocation and Volt-Var Dispatch for a Droop-Based Microgrid. *Gupta, Y.*, +, *TSG Jan. 2021 169-181*
- Optimal Restoration of Active Distribution Systems With Voltage Control and Closed-Loop Operation. *Vargas, R.*, +, *TSG May 2021 2295-2306*
- Provision of Primary Frequency Response as Ancillary Service From Active Distribution Networks to the Transmission System. *Kontis, E.O.*, +, *TSG Nov. 2021 4971-4982*
- Real-Time Control of Battery Energy Storage Systems to Provide Ancillary Services Considering Voltage-Dependent Capability of DC-AC Converters. *Yuan, Z.*, +, *TSG Sept. 2021 4164-4175*
- Resilient Control and Analysis for DC Microgrid System Under DoS and Impulsive FDI Attacks. *Liu, X.*, +, *TSG Sept. 2021 3742-3754*
- Risk-Averse Coordinated Operation of a Multi-Energy Microgrid Considering Voltage/Var Control and Thermal Flow: An Adaptive Stochastic Approach. *Li, Z.*, +, *TSG Sept. 2021 3914-3927*
- Robust Regional Coordination of Inverter-Based Volt/Var Control via Multi-Agent Deep Reinforcement Learning. *Liu, H.*, +, *TSG Nov. 2021 5420-5433*
- Solid-State Technologies for Flexible and Efficient Marine DC Microgrids. *Kim, S.*, +, *TSG July 2021 2860-2868*
- Stability Analysis of Low-Voltage Distribution Feeders Operated as Islanded Microgrids. *Wang, B.*, +, *TSG Nov. 2021 4681-4689*
- Synchronization of Low Voltage Grids Fed by Smart and Conventional Transformers. *Giacomuzzi, S.*, +, *TSG July 2021 2941-2951*
- Transient Stability and Current Injection Design of Paralleled Current-Controlled VSCs and Virtual Synchronous Generators. *Shen, C.*, +, *TSG March 2021 1118-1134*
- Transient Voltage Stability of Paralleled Synchronous and Virtual Synchronous Generators With Induction Motor Loads. *Cheng, H.*, +, *TSG Nov. 2021 4983-4999*
- Two-Stage Deep Reinforcement Learning for Inverter-Based Volt-VAR Control in Active Distribution Networks. *Liu, H.*, +, *TSG May 2021 2037-2047*
- Two-Stage Volt/Var Control in Active Distribution Networks With Multi-Agent Deep Reinforcement Learning Method. *Sun, X.*, +, *TSG July 2021 2903-2912*
- Voltage Stabilization Control for Microgrid With Asymmetric Membership Function-Based Wavelet Petri Fuzzy Neural Network. *Lin, F.*, +, *TSG Sept. 2021 3731-3741*
- Voltage-Based Distributed Optimal Control for Generation Cost Minimization and Bounded Bus Voltage Regulation in DC Microgrids. *Peng, J.*, +, *TSG Jan. 2021 106-116*
- Voltage distribution**
- Phase Identification of Single-Phase Customers and PV Panels via Smart Meter Data. *Heidari-Akhijahani, A.*, +, *TSG Sept. 2021 4543-4552*
- Voltage measurement**
- A Deep Learning-Based Cyberattack Detection System for Transmission Protective Relays. *Khaw, Y.M.*, +, *TSG May 2021 2554-2565*
- Aggregation of Voltage-Controlled Devices During Distribution Network Reduction. *Pecenak, Z.K.*, +, *TSG Jan. 2021 33-42*
- Distributed Optimal Conservation Voltage Reduction in Integrated Primary-Secondary Distribution Systems. *Zhang, Q.*, +, *TSG Sept. 2021 3889-3900*
- Fault Location Method for Three-Terminal Lines in Distribution Network Based on Line Voltage Measured by μ MPMU. *Yun, Z.*, +, *TSG Nov. 2021 5095-5112*
- Guaranteed Phase & Topology Identification in Three Phase Distribution Grids. *Bariya, M.*, +, *TSG July 2021 3605-3612*
- Mitigating Smart Meter Asynchrony Error Via Multi-Objective Low Rank Matrix Recovery. *Yuan, Y.*, +, *TSG Sept. 2021 4308-4317*
- Synchronous Waveform Measurements to Locate Transient Events and Incipient Faults in Power Distribution Networks. *Izadi, M.*, +, *TSG Sept. 2021 4295-4307*
- Voltage measurement**
- Correction to “Application of Smart Meters in High-Impedance Fault Detection on Distribution Systems” [May 19 3465-3473]. *Chakraborty, S.*, +, *TSG March 2021 1828*
- Voltage regulators**
- A Cascaded Distributed Control Framework in DC Microgrids. *Zhou, J.*, +, *TSG Jan. 2021 205-214*
- A Model-Free Voltage Control Approach to Mitigate Motor Stalling and FIDVR for Smart Grids. *Park, B.*, +, *TSG Jan. 2021 67-78*
- A Two-Layer Control Scheme Based on $P - V$ Droop Characteristic for Accurate Power Sharing and Voltage Regulation in DC Microgrids. *Baharizadeh, M.*, +, *TSG July 2021 2776-2787*
- A Unified Distributed Cooperative Control of DC Microgrids Using Consensus Protocol. *Li, Y.*, +, *TSG May 2021 1880-1892*
- Consensus Multi-Agent Reinforcement Learning for Volt-VAR Control in Power Distribution Networks. *Gao, Y.*, +, *TSG July 2021 3594-3604*
- Deep Reinforcement Learning Based Volt-VAR Optimization in Smart Distribution Systems. *Zhang, Y.*, +, *TSG Jan. 2021 361-371*

Dynamic Modeling of Battery Energy Storage and Applications in Transmission Systems. *Calero, F.*, +, *TSG Jan. 2021 589-598*

Fast Probabilistic Hosting Capacity Analysis for Active Distribution Systems. *Taheri, S.*, +, *TSG May 2021 2000-2012*

Multi-Stage Voltage Support Optimization for Microgrids With Multiple Distributed Generation Units. *Liu, X.*, +, *TSG Jan. 2021 141-156*

Optimal Restoration of Active Distribution Systems With Voltage Control and Closed-Loop Operation. *Vargas, R.*, +, *TSG May 2021 2295-2306*

Solid-State Technologies for Flexible and Efficient Marine DC Microgrids. *Kim, S.*, +, *TSG July 2021 2860-2868*

Voltage-source converters

A Converter-Based Power System Stabilizer for Stability Enhancement of Droop-Controlled Islanded Microgrids. *Guo, K.*, +, *TSG Nov. 2021 4616-4626*

Transient Stability and Current Injection Design of Paralleled Current-Controlled VSCs and Virtual Synchronous Generators. *Shen, C.*, +, *TSG March 2021 1118-1134*

W

Wakes

A Hierarchical Data-Driven Wind Farm Power Optimization Approach Using Stochastic Projected Simplex Method. *Xu, Z.*, +, *TSG July 2021 3560-3569*

Water pumps

Resilience-Motivated Distribution System Restoration Considering Electricity-Water-Gas Interdependency. *Li, J.*, +, *TSG Nov. 2021 4799-4812*

Step Towards Energy-Water Smart Microgrids; Buildings Thermal Energy and Water Demand Management Embedded in Economic Dispatch. *Moa-zeni, F.*, +, *TSG Sept. 2021 3680-3691*

Water supply

Resilience-Motivated Distribution System Restoration Considering Electricity-Water-Gas Interdependency. *Li, J.*, +, *TSG Nov. 2021 4799-4812*

Step Towards Energy-Water Smart Microgrids; Buildings Thermal Energy and Water Demand Management Embedded in Economic Dispatch. *Moa-zeni, F.*, +, *TSG Sept. 2021 3680-3691*

Weather forecasting

Probabilistic Forecasting of Regional Net-Load With Conditional Extremes and Gridded NWP. *Browell, J.*, +, *TSG Nov. 2021 5011-5019*

Wide area networks

System Redundancy Enhancement of Secondary Frequency Control Under Latency Attacks. *Chen, C.*, +, *TSG Jan. 2021 647-658*

Wind power

Coordinated Control of Air-Conditioning Loads for System Frequency Regulation. *Jiang, T.*, +, *TSG Jan. 2021 548-560*

Enhanced Wind Generation Forecast Using Robust Ensemble Learning. *Su, H.*, +, *TSG Jan. 2021 912-915*

Evaluating and Selecting Renewable Energy Sources for a Microgrid: A Bi-Capacity-Based Multi-Criteria Decision Making Approach. *Zhang, L.*, +, *TSG March 2021 921-931*

Wind power plants

A Cyber Attack Mitigation Scheme for Series Compensated DFIG-Based Wind Parks. *Ghafouri, M.*, +, *TSG Nov. 2021 5221-5232*

A Hierarchical Data-Driven Wind Farm Power Optimization Approach Using Stochastic Projected Simplex Method. *Xu, Z.*, +, *TSG July 2021 3560-3569*

Bargaining Game-Based Profit Allocation of Virtual Power Plant in Frequency Regulation Market Considering Battery Cycle Life. *Chen, W.*, +, *TSG July 2021 2913-2928*

Bayesian Learning-Based Multi-Objective Distribution Power Network Reconfiguration. *Zhong, T.*, +, *TSG March 2021 1174-1184*

Enhanced Wind Generation Forecast Using Robust Ensemble Learning. *Su, H.*, +, *TSG Jan. 2021 912-915*

Faulty Feeder Detection Based on Fundamental Component Shift and Multiple-Transient-Feature Fusion in Distribution Networks. *Wei, X.*, +, *TSG March 2021 1699-1711*

Joint Optimization of Wind Turbine Micrositing and Cabling in an Offshore Wind Farm. *Tao, S.*, +, *TSG Jan. 2021 834-844*

Primary Frequency Control in Isolated Microgrids Using Thermostatically Controllable Loads. *Mendieta, W.*, +, *TSG Jan. 2021 93-105*

Wind turbines

A Hierarchical Data-Driven Wind Farm Power Optimization Approach Using Stochastic Projected Simplex Method. *Xu, Z.*, +, *TSG July 2021 3560-3569*

Joint Optimization of Wind Turbine Micrositing and Cabling in an Offshore Wind Farm. *Tao, S.*, +, *TSG Jan. 2021 834-844*

Wireless LAN

System Redundancy Enhancement of Secondary Frequency Control Under Latency Attacks. *Chen, C.*, +, *TSG Jan. 2021 647-658*