

2021 Index

IEEE Transactions on Green Communications and Networking

Vol. 5

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

- Abawajy, J.**, *see* Zhou, Z., *TGCN June 2021 658-669*
- Abawajy, J.**, *see* Zhou, Z., *TGCN Dec. 2021 1747-1760*
- Abbas, S.**, *see* Naem, A., *TGCN June 2021 611-621*
- Abd El-Latif, A.A.**, *see* Kaur, M., *TGCN Sept. 2021 1223-1231*
- Abderrazak, J.B.**, *see* Ghdiri, O., *TGCN Dec. 2021 1918-1933*
- Abolhassani, B.**, *see* Zargari, S., *TGCN Dec. 2021 2027-2041*
- Abualhaol, L.**, *see* Mahmoud, A., *TGCN Sept. 2021 1029-1040*
- Abubakar, A.I.**, *see* Ozturk, M., *TGCN June 2021 832-845*
- Acharya, T.**, *see* Halder, J., *TGCN Sept. 2021 1451-1466*
- Acharya, T.**, *see* Bhattacharjee, D., *TGCN Sept. 2021 1165-1178*
- Adachi, F.**, *see* Xu, Y., *TGCN Sept. 2021 1514-1528*
- Adebayo, A.A.**, Rawat, D.B., and Song, M., Energy-Efficient Multivariate Privacy-Aware RF Spectrum Reservation in Wireless Virtualization for Wireless Internet of Things ; *TGCN June 2021 682-692*
- Adebisi, B.**, *see* Xu, Y., *TGCN Sept. 2021 1514-1528*
- Adil, M.**, *see* Jan, M.A., *TGCN Sept. 2021 1202-1211*
- Agarwal, S.**, *see* Gupta, N., *TGCN Sept. 2021 1319-1332*
- Agate, V.**, *see* Timilsina, A., *TGCN Sept. 2021 1138-1153*
- Agrawal, K.**, Prakriya, S., and Flanagan, M.F., Optimization of SWIPT With Battery-Assisted Energy Harvesting Full-Duplex Relays; *TGCN March 2021 243-260*
- Ahlen, A.**, *see* Seifullaev, R., *TGCN Dec. 2021 2139-2149*
- Ahmed, I.**, Shahid, M.K., Khammari, H., and Masud, M., Machine Learning Based Beam Selection With Low Complexity Hybrid Beamforming Design for 5G Massive MIMO Systems; *TGCN Dec. 2021 2160-2173*
- Ahmed, I.Z.**, Sadjadpour, H.R., and Yousefi, S., An Optimal Low-Complexity Energy-Efficient ADC Bit Allocation for Massive MIMO; *TGCN March 2021 61-71*
- Ahmed, W.**, *see* Tariq, U.U., *TGCN June 2021 803-815*
- Aijaz, A.**, *see* Shah, S.W.H., *TGCN June 2021 587-599*
- Aissa, S.**, *see* Tsoumanis, G., *TGCN March 2021 378-391*
- Aissa, S.**, *see* Bhowal, A., *TGCN Dec. 2021 1684-1696*
- Aissa, S.**, *see* Najmeddin, S., *TGCN Dec. 2021 1906-1917*
- Ajib, W.**, *see* Kusaladharna, S., *TGCN Sept. 2021 1467-1481*
- Akbar, A.**, *see* Jan, M.A., *TGCN Sept. 2021 1202-1211*
- Al Ajlouni, A.**, *see* Salameh, H.A.B., *TGCN Sept. 2021 1091-1100*
- Al-Dulaimi, A.**, *see* Prasad, R.R.V., *TGCN June 2021 569-573*
- Al-Dulaimi, A.**, *see* Venkatesha Prasad, R.R., *TGCN Sept. 2021 1011-1014*
- Al-Fuqaha, A.**, *see* Illi, E., *TGCN March 2021 261-277*
- Al-Habob, A.A.**, Dobre, O.A., and Poor, H.V., Role Assignment for Spatially-Correlated Data Aggregation Using Multi-Sink Internet of Underwater Things; *TGCN Sept. 2021 1570-1579*

- Alazab, M.**, *see* Zhou, Z., *TGCN June 2021 658-669*
- Alfattani, S.**, *see* Ghdiri, O., *TGCN Dec. 2021 1918-1933*
- Ali, H.**, *see* Tariq, U.U., *TGCN June 2021 803-815*
- Almakhles, D.J.**, *see* Yang, Z., *TGCN Sept. 2021 1051-1065*
- Aloqaily, M.**, *see* Salameh, H.A.B., *TGCN Sept. 2021 1091-1100*
- Alouini, M.**, *see* Alqahtani, D., *TGCN June 2021 895-907*
- Alouini, M.**, *see* Qin, Y., *TGCN Sept. 2021 1395-1409*
- Alouini, M.**, *see* Lou, Z., *TGCN Dec. 2021 1697-1711*
- Alqahtani, D.**, Chen, Y., Feng, W., and Alouini, M., A New Non-Linear Joint Model for RF Energy Harvesters in Wireless Networks; *TGCN June 2021 895-907*
- Anisi, M.H.**, *see* Goudarzi, S., *TGCN Dec. 2021 2076-2088*
- Anpalagan, A.**, Ejaz, W., Sharma, S.K., Costa, D.B.D., Jo, M., and Kim, J., Guest Editorial Special Issue on "Green Communication and Computing Technologies for 6G Networks" in IEEE Transactions on Green Communications and Networking; *TGCN Dec. 2021 1653-1656*
- Ansari, N.**, *see* Yao, J., *TGCN June 2021 980-989*
- Ansari, N.**, *see* Hossain, M.A., *TGCN Dec. 2021 2150-2159*
- Antonoli, R.P.**, *see* Saraiva, J.V., *TGCN March 2021 174-189*
- Appaiah, K.**, *see* Rahman, H., *TGCN March 2021 278-290*
- Aruma Baduge, G.A.**, *see* Kusaladharna, S., *TGCN Sept. 2021 1467-1481*
- Aruma Baduge, G.A.**, *see* Galappaththige, D.L., *TGCN Sept. 2021 1541-1557*
- Ashraf, M.**, Wang, Z., and Vandendorpe, L., Online Power Allocation at Energy Harvesting Transmitter for Multiple Receivers With and Without Individual Rate Constraints for OMA and NOMA Transmissions; *TGCN Sept. 2021 1594-1609*
- Ashtiani, F.**, *see* Mortazavi, S.M., *TGCN March 2021 231-242*
- Ayob, M.**, *see* Goudarzi, S., *TGCN Dec. 2021 2076-2088*
- Ayoub, F.**, *see* Illi, E., *TGCN March 2021 261-277*
- Azari, A.**, Stefanovic, C., Popovski, P., and Cavdar, C., Energy-Efficient and Reliable IoT Access Without Radio Resource Reservation; *TGCN June 2021 908-920*

B

- Badia, L.**, *see* Gindullina, E., *TGCN Sept. 2021 1529-1540*
- Baker, T.**, *see* Tong, E., *TGCN June 2021 645-657*
- Balakrishnan, A.**, De, S., and Wang, L., Network Operator Revenue Maximization in Dual Powered Green Cellular Networks; *TGCN Dec. 2021 1791-1805*
- Bani Irshaid, M.**, *see* Salameh, H.A.B., *TGCN Sept. 2021 1091-1100*
- Bao, L.**, *see* Zhao, M., *TGCN Dec. 2021 2174-2187*
- Bapatla, D.**, and Prakriya, S., Performance of a Cooperative Communication Network With Green Self-Sustaining Nodes; *TGCN March 2021 426-441*
- Bashir, A.K.**, *see* Chen, G., *TGCN Sept. 2021 1154-1164*
- Bashir, A.K.**, *see* Zhou, Z., *TGCN Dec. 2021 1747-1760*
- Batista, D.M.**, *see* Tinini, R.L., *TGCN March 2021 18-28*
- Bellal, Z.**, Nour, B., and Mastorakis, S., CoxNet: A Computation Reuse Architecture at the Edge; *TGCN June 2021 765-777*
- Berder, O.**, *see* Djidi, N.E.H., *TGCN Sept. 2021 1502-1513*
- Berenguer, P.W.**, *see* Hinrichs, M., *TGCN March 2021 4-17*
- Bhattacharjee, D.**, Acharya, T., and Chakravarty, S., Energy Efficient Data Gathering in IoT Networks With Heterogeneous Traffic for Remote Area Surveillance Applications: A Cross Layer Approach; *TGCN Sept. 2021 1165-1178*
- Bhattacharya, U.**, *see* Halder, J., *TGCN Sept. 2021 1451-1466*
- Bhowal, A.**, Aissa, S., and Kshetrimayum, R.S., RIS-Assisted Advanced Spatial Modulation Techniques for Ambient Backscattering Communications; *TGCN Dec. 2021 1684-1696*

- Bishoyi, P.K.**, and Misra, S., Enabling Green Mobile-Edge Computing for 5G-Based Healthcare Applications; *TGCN Sept. 2021 1623-1631*
- Bizon Franco de Almeida, I.**, Chaffii, M., Nimr, A., and Fettweis, G., Alternative Chirp Spread Spectrum Techniques for LPWANs; *TGCN Dec. 2021 1846-1855*
- Bober, K.L.**, see Hinrichs, M., *TGCN March 2021 4-17*
- Bouanani, F.E.**, see Illi, E., *TGCN March 2021 261-277*
- Boukerche, A.**, Wu, Q., and Sun, P., A Novel Joint Optimization Method Based on Mobile Data Collection for Wireless Rechargeable Sensor Networks; *TGCN Sept. 2021 1610-1622*
- Boukhatem, L.**, see Dinh, T.H.L., *TGCN March 2021 146-159*
- Braga, I.M.**, see Saraiva, J.V., *TGCN March 2021 174-189*
- Brasileiro, I.B.**, see Costa, L.R., *TGCN June 2021 789-802*
- Buckley, R.F.**, and Heath, R.W., System and Design for Selective OFDM SWIPT Transmission; *TGCN March 2021 335-347*
- Bulut, I.S.**, and Ilhan, H., Energy Harvesting Optimization of Uplink-NOMA System for IoT Networks Based on Channel Capacity Analysis Using the Water Cycle Algorithm; *TGCN March 2021 291-307*

C

- Camtepe, S.**, see Zhu, X., *TGCN Sept. 2021 1041-1050*
- Cao, J.**, Zhao, J., Zhu, X., Jiang, Y., and Wei, Z., Toward a Green Secure Relay System for Mission-Critical IoT: Hybrid Duplex Relay Selection and Resource Allocation in the Finite Block Length Regime; *TGCN Dec. 2021 1869-1879*
- Cao, X.**, see Xie, L., *TGCN Dec. 2021 2042-2064*
- Cavdar, C.**, see Azari, A., *TGCN June 2021 908-920*
- Chaffii, M.**, see Bizon Franco de Almeida, I., *TGCN Dec. 2021 1846-1855*
- Chai, J.**, see Feng, L., *TGCN March 2021 203-215*
- Chakraborty, A.**, see Rajavel, D., *TGCN Sept. 2021 1128-1137*
- Chakravarty, S.**, see Bhattacharjee, D., *TGCN Sept. 2021 1165-1178*
- Chambers, J.A.**, see Zhao, N., *TGCN Sept. 2021 1232-1235*
- Chatterjee, M.**, see Halder, J., *TGCN Sept. 2021 1451-1466*
- Chatzinotas, S.**, see Kaushik, A., *TGCN March 2021 119-132*
- Chatzinotas, S.**, see Gautam, S., *TGCN June 2021 884-894*
- Chatzinotas, S.**, see Papazafeiropoulos, A., *TGCN June 2021 816-831*
- Chen, B.**, see Ning, Q., *TGCN Sept. 2021 1283-1292*
- Chen, C.**, see Hsu, C., *TGCN June 2021 868-883*
- Chen, C.**, see Nguyen, T., *TGCN Dec. 2021 1880-1891*
- Chen, G.**, Wu, J., Yang, W., Bashir, A.K., Li, G., and Hammoudeh, M., Leveraging Graph Convolutional-LSTM for Energy-Efficient Caching in Blockchain-Based Green IoT; *TGCN Sept. 2021 1154-1164*
- Chen, G.**, see Cho, S., *TGCN Dec. 2021 1988-1998*
- Chen, H.**, see Chen, Q., *TGCN June 2021 934-949*
- Chen, J.**, see Xu, Y., *TGCN Dec. 2021 1734-1746*
- Chen, M.**, Sun, Y., Hu, H., Tang, L., and Fan, B., Energy-Saving and Resource-Efficient Algorithm for Virtual Network Function Placement With Network Scaling; *TGCN March 2021 29-40*
- Chen, M.**, Chu, H., and Wei, X., Flocking Control Algorithms Based on the Diffusion Model for Unmanned Aerial Vehicle Systems; *TGCN Sept. 2021 1271-1282*
- Chen, P.**, see Yang, Z., *TGCN Sept. 2021 1051-1065*
- Chen, Q.**, Meng, W., Han, S., Li, C., and Chen, H., Reinforcement Learning-Based Energy-Efficient Data Access for Airborne Users in Civil Aircrafts-Enabled SAGIN; *TGCN June 2021 934-949*
- Chen, W.**, see Zhang, T., *TGCN March 2021 552-565*
- Chen, W.**, see Han, D., *TGCN March 2021 106-118*
- Chen, X.**, see Sui, W., *TGCN March 2021 72-83*
- Chen, Y.**, see Alqahtani, D., *TGCN June 2021 895-907*
- Chen, Y.**, see Yang, Z., *TGCN Sept. 2021 1333-1344*
- Chen, Y.**, see Liu, M., *TGCN Sept. 2021 1357-1368*
- Cheng, J.**, see Hassan, M.Z., *TGCN March 2021 406-425*
- Cheng, J.**, see Hassan, M.Z., *TGCN Sept. 2021 1482-1501*
- Cheng, W.**, see Jiang, W., *TGCN Sept. 2021 1426-1437*
- Cheng, Y.**, see Yang, Z., *TGCN Sept. 2021 1051-1065*
- Chi, C.**, see Wang, W., *TGCN March 2021 216-230*

- Chin, K.**, see Ren, H., *TGCN March 2021 526-539*
- Chin, K.**, see Hiryanto, L., *TGCN Sept. 2021 1410-1425*
- Chin, K.**, see Wang, L., *TGCN Sept. 2021 1580-1593*
- Ching, C.**, see Kuo, J., *TGCN Dec. 2021 1806-1819*
- Chiu, J.**, see Kuo, Y., *TGCN Dec. 2021 1934-1946*
- Cho, S.**, Chen, G., and Coon, J.P., Cooperative Beamforming and Jamming for Secure VLC System in the Presence of Active and Passive Eavesdroppers; *TGCN Dec. 2021 1988-1998*
- Chopade, S.**, Gupta, H.P., Mishra, R., Kumari, P., and Dutta, T., An Energy-Efficient River Water Pollution Monitoring System in Internet of Things; *TGCN June 2021 693-702*
- Chu, H.**, see Chen, M., *TGCN Sept. 2021 1271-1282*
- Chu, X.**, see Liu, T., *TGCN March 2021 392-405*
- Coon, J.P.**, see Cho, S., *TGCN Dec. 2021 1988-1998*
- Costa, D.B.d.**, see Illi, E., *TGCN March 2021 261-277*
- Costa, D.B.D.**, see Anpalagan, A., *TGCN Dec. 2021 1653-1656*
- Costa, L.R.**, Brasileiro, I.B., and Drummond, A.C., Energy Efficiency in Sliceable-Transponder Enabled Elastic Optical Networks; *TGCN June 2021 789-802*
- Courtay, A.**, see Djidi, N.E.H., *TGCN Sept. 2021 1502-1513*
- Crowcroft, J.**, see Shah, S.W.H., *TGCN June 2021 587-599*
- Cui, E.**, Yang, D., Zhang, H., and Gidlund, M., Improving Power Stability of Energy Harvesting Devices With Edge Computing-Assisted Time Fair Energy Allocation; *TGCN March 2021 540-551*
- Cui, M.**, see Liu, T., *TGCN March 2021 392-405*

D

- da Costa, D.B.**, see Zhao, N., *TGCN Sept. 2021 1232-1235*
- Das, G.**, see Dutta, S., *TGCN Sept. 2021 1438-1450*
- Das, G.**, see Dutta, S., *TGCN Dec. 2021 1961-1973*
- De, S.**, see Balakrishnan, A., *TGCN Dec. 2021 1791-1805*
- Dev, K.**, Poluru, R.K., Kumar, R.L., Maddikunta, P.K.R., and Khowaja, S.A., Optimal Radius for Enhanced Lifetime in IoT Using Hybridization of Rider and Grey Wolf Optimization; *TGCN June 2021 635-644*
- Dezfouli, B.**, see Ramanna, V.K., *TGCN Dec. 2021 1833-1845*
- Dharavath, R.**, see Lipare, A., *TGCN June 2021 846-857*
- Dinh, T.H.L.**, Kaneko, M., Fukuda, E.H., and Boukhatem, L., Energy Efficient Resource Allocation Optimization in Fog Radio Access Networks With Outdated Channel Knowledge; *TGCN March 2021 146-159*
- Dini, P.**, see Piovesan, N., *TGCN March 2021 512-525*
- Djidi, N.E.H.**, Gautier, M., Courtay, A., and Berder, O., MEES-WuR: Minimum Energy Coding With Early Shutdown for Wake-Up Receivers; *TGCN Sept. 2021 1502-1513*
- Dobre, O.A.**, see Le, Q.N., *TGCN March 2021 322-334*
- Dobre, O.A.**, see Al-Habob, A.A., *TGCN Sept. 2021 1570-1579*
- Dobre, O.A.**, see Mahmoud, A., *TGCN Sept. 2021 1029-1040*
- Dong, M.**, see Zhang, C., *TGCN Sept. 2021 1345-1356*
- Dong, Y.**, see Leung, V.C.M., *TGCN Dec. 2021 1649-1652*
- Drummond, A.C.**, see Costa, L.R., *TGCN June 2021 789-802*
- Du, J.**, see Zhang, Z., *TGCN Dec. 2021 1892-1905*
- Du, X.**, see Hu, N., *TGCN June 2021 750-764*
- Du, X.**, see Lv, L., *TGCN Sept. 2021 1381-1394*
- Du, X.**, see Hu, N., *TGCN Dec. 2021 1722-1733*
- Duong, S.T.**, Pham, T.V., Nguyen, C.T., and Pham, A.T., Energy-Efficient Pre-coding Designs for Multi-User Visible Light Communication Systems With Confidential Messages; *TGCN Dec. 2021 1974-1987*
- Dutta, S.**, Roy, D., and Das, G., Protocol Design for Energy Efficient OLT in TWDM-EPON Supporting Diverse Delay Bounds; *TGCN Sept. 2021 1438-1450*
- Dutta, S.**, Roy, D., and Das, G., SLA-Aware Protocol Design for Energy-Efficient OLT Transmitter in TWDM-EPON; *TGCN Dec. 2021 1961-1973*
- Dutta, T.**, see Chopade, S., *TGCN June 2021 693-702*

E

- Edla, D.R.**, see Lipare, A., *TGCN June 2021 846-857*

Ejaz, W., see Anpalagan, A., *TGCN Dec. 2021 1653-1656*
Ekin, S., see Kasi, S.K., *TGCN Dec. 2021 1999-2015*
Elzanaty, A., see Lou, Z., *TGCN Dec. 2021 1697-1711*
Ersoy, C., see Pamuklu, T., *TGCN March 2021 84-93*
Esposito, F., see Sacco, A., *TGCN Sept. 2021 1114-1127*

F

Fadlullah, Z.M., see Tazrin, T., *TGCN Sept. 2021 1191-1201*
Fan, B., see Chen, M., *TGCN March 2021 29-40*
Fan, L., see Zhao, R., *TGCN Sept. 2021 1248-1258*
Fan, X., see Kadirvelu, S., *TGCN Dec. 2021 2065-2075*
Fang, Y., see Yang, Z., *TGCN Sept. 2021 1051-1065*
Farahmand, S., see Zargari, S., *TGCN Dec. 2021 2027-2041*
Feng, C., see Zhang, T., *TGCN Sept. 2021 1236-1247*
Feng, D., Huang, X., Jiang, W., Sun, Y., Xiao, S., He, C., and Zheng, F., Power-Spectrum Trading for Full-Duplex D2D Communications in Cellular Networks; *TGCN Dec. 2021 2016-2026*
Feng, K., see Shen, L., *TGCN Dec. 2021 2121-2138*
Feng, L., Chai, J., Zhou, F., and Li, W., Energy-Efficient Joint Optimization of Channel Assignment, Power Allocation, and Relay Selection Based on Hypergraph for Uplink mMTC Networks; *TGCN March 2021 203-215*
Feng, L., Zhou, Y., Liu, T., Que, X., Yu, P., Hong, T., and Qiu, X., Energy-Efficient Offloading for Mission-Critical IoT Services Using EVT-Embedded Intelligent Learning; *TGCN Sept. 2021 1179-1190*
Feng, W., see Alqahtani, D., *TGCN June 2021 895-907*
Fettweis, G., see Bizon Franco de Almeida, I., *TGCN Dec. 2021 1846-1855*
Figueiredo, G.B., see Tinini, R.I., *TGCN March 2021 18-28*
Flanagan, M.F., see Agrawal, K., *TGCN March 2021 243-260*
Flanagan, M.F., see Singh, K., *TGCN March 2021 160-173*
Fodor, G., see Saraiva, J.V., *TGCN March 2021 174-189*
Fouda, M.M., see Tazrin, T., *TGCN Sept. 2021 1191-1201*
Fredj, F., see Hossain, E., *TGCN Sept. 2021 1005-1010*
Freitas, W.C., see Saraiva, J.V., *TGCN March 2021 174-189*
Freund, R., see Hinrichs, M., *TGCN March 2021 4-17*
Fu, F., see Zhang, Z., *TGCN Dec. 2021 1892-1905*
Fukuda, E.H., see Dinh, T.H.L., *TGCN March 2021 146-159*

G

Gacanin, H., see Xu, Y., *TGCN Sept. 2021 1514-1528*
Gadekallu, T.R., see Naeem, A., *TGCN June 2021 611-621*
Galappaththige, D.L., Shrestha, R., and Aruma Baduge, G.A., Exploiting Cell-Free Massive MIMO for Enabling Simultaneous Wireless Information and Power Transfer; *TGCN Sept. 2021 1541-1557*
Gao, H., see Huang, Y., *TGCN June 2021 670-681*
Gao, H., see Li, Y., *TGCN Sept. 2021 1212-1222*
Gao, H., see Wang, X., *TGCN Dec. 2021 1761-1776*
Gao, X., Huang, X., Shao, Z., and Yang, Y., An Integration of Online Learning and Online Control for Green Offloading in Fog-Assisted IoT Systems; *TGCN Sept. 2021 1632-1646*
Gao, Y., see Yang, B., *TGCN March 2021 457-470*
Gao, Y., Xiao, L., Wu, F., Yang, D., and Sun, Z., Cellular-Connected UAV Trajectory Design With Connectivity Constraint: A Deep Reinforcement Learning Approach; *TGCN Sept. 2021 1369-1380*
Gao, Y., see Lu, W., *TGCN Sept. 2021 1259-1270*
Gautam, S., Lagunas, E., Chatzinotas, S., and Ottersten, B., Feasible Point Pursuit and Successive Convex Approximation for Transmit Power Minimization in SWIPT-Multigroup Multicasting Systems; *TGCN June 2021 884-894*
Gautier, M., see Djidi, N.E.H., *TGCN Sept. 2021 1502-1513*
Gharavi, H., see Ye, J., *TGCN June 2021 990-1002*
Ghdiri, O., Jaafar, W., Alfattani, S., Abderrazak, J.B., and Yanikomeroglu, H., Offline and Online UAV-Enabled Data Collection in Time-Constrained IoT Networks; *TGCN Dec. 2021 1918-1933*
Gidlund, M., see Cui, E., *TGCN March 2021 540-551*
Gidlund, M., see Nazar, A.W., *TGCN June 2021 574-586*

Gindullina, E., Badia, L., and Gunduz, D., Age-of-Information With Information Source Diversity in an Energy Harvesting System; *TGCN Sept. 2021 1529-1540*
Gong, F., see Liu, M., *TGCN Sept. 2021 1357-1368*
Gong, Y., see Lu, W., *TGCN Sept. 2021 1259-1270*
Goudarzi, S., Anisi, M.H., Soleymani, S.A., Ayob, M., and Zeadally, S., An IoT-Based Prediction Technique for Efficient Energy Consumption in Buildings; *TGCN Dec. 2021 2076-2088*
Gu, F., see Xu, Y., *TGCN Dec. 2021 1734-1746*
Gui, G., see Xu, Y., *TGCN Sept. 2021 1514-1528*
Gui, J., see Xiang, X., *TGCN June 2021 714-726*
Guizani, M., see Prasad, R.R.V., *TGCN June 2021 569-573*
Guizani, M., see Venkatesha Prasad, R.R., *TGCN Sept. 2021 1011-1014*
Guizani, M., see Lv, L., *TGCN Sept. 2021 1381-1394*
Guizani, M., see Hu, N., *TGCN Dec. 2021 1722-1733*
Guizani, N., see Hu, N., *TGCN June 2021 750-764*
Gulliver, T.A., see Ho, D.H., *TGCN March 2021 190-202*
Gunduz, D., see Gindullina, E., *TGCN Sept. 2021 1529-1540*
Guo, C., Xu, K., Shen, G., and Zukerman, M., Temperature-Aware Virtual Data Center Embedding to Avoid Hot Spots in Data Centers; *TGCN March 2021 497-511*
Guo, L., see Guo, T., *TGCN June 2021 737-749*
Guo, M., and Gursoy, M.C., Statistical Learning Based Joint Antenna Selection and User Scheduling for Single-Cell Massive MIMO Systems; *TGCN March 2021 471-483*
Guo, T., Yu, K., Srivastava, G., Wei, W., Guo, L., and Xiong, N.N., Latent Discriminative Low-Rank Projection for Visual Dimension Reduction in Green Internet of Things; *TGCN June 2021 737-749*
Gupta, B.B., see Kaur, M., *TGCN Sept. 2021 1223-1231*
Gupta, H.P., see Chopade, S., *TGCN June 2021 693-702*
Gupta, N., Agarwal, S., and Mishra, D., Trajectory Design for Throughput Maximization in UAV-Assisted Communication System; *TGCN Sept. 2021 1319-1332*
Gupta, R., Patel, M.M., Tanwar, S., Kumar, N., and Zeadally, S., Blockchain-Based Data Dissemination Scheme for 5G-Enabled Software-Defined UAV Networks; *TGCN Dec. 2021 1712-1721*
Gursoy, M.C., see Guo, M., *TGCN March 2021 471-483*

H

Haas, H., see Nguyen, T., *TGCN Dec. 2021 1880-1891*
Halder, J., Acharya, T., Chatterjee, M., and Bhattacharya, U., E-S-RSM-RSA: A Novel Energy and Spectrum Efficient Regenerator Aware Multipath Based Survivable RSA in Offline EON; *TGCN Sept. 2021 1451-1466*
Hamedani, K., Liu, L., and Yi, Y., Energy Efficient MIMO-OFDM Spectrum Sensing Using Deep Stacked Spiking Delayed Feedback Reservoir Computing; *TGCN March 2021 484-496*
Hammoudeh, M., see Chen, G., *TGCN Sept. 2021 1154-1164*
Han, D., Chen, W., and Liu, J., Energy-Efficient UAV Communications Under Stochastic Trajectory: A Markov Decision Process Approach; *TGCN March 2021 106-118*
Han, G., see Xu, Z., *TGCN Sept. 2021 1077-1090*
Han, H., see Lu, W., *TGCN Sept. 2021 1259-1270*
Han, S., see Chen, Q., *TGCN June 2021 934-949*
Han, Z., see Wang, H., *TGCN March 2021 41-60*
Han, Z., see Kang, Y., *TGCN Dec. 2021 1947-1960*
Hao, K., see Tian, X., *TGCN Dec. 2021 2089-2103*
Hardy, J., see Tariq, U.U., *TGCN June 2021 803-815*
Hasegawa, M., see Peper, F., *TGCN Dec. 2021 1856-1868*
Hashmi, U.S., see Kasi, S.K., *TGCN Dec. 2021 1999-2015*
Hassan, M.Z., Hossain, M.J., Cheng, J., and Leung, V.C.M., Statistical-QoS Guarantee for IoT Network Driven by Laser-Powered UAV Relay and RF Backscatter Communications; *TGCN March 2021 406-425*
Hassan, M.Z., Hossain, M.J., Cheng, J., and Leung, V.C.M., Device-Clustering and Rate-Splitting Enabled Device-to-Device Cooperation Framework in Fog Radio Access Network; *TGCN Sept. 2021 1482-1501*
Hassan, S.A., see Nazar, A.W., *TGCN June 2021 574-586*

- He, C.**, see Feng, D., *TGCN Dec. 2021 2016-2026*
- He, Z.**, see Zhao, M., *TGCN Dec. 2021 2174-2187*
- Heath, R.W.**, see Buckley, R.F., *TGCN March 2021 335-347*
- Hekmati, A.**, see Teymouri, P., *TGCN June 2021 950-963*
- Hellwig, P.**, see Hinrichs, M., *TGCN March 2021 4-17*
- Hilt, J.**, see Hinrichs, M., *TGCN March 2021 4-17*
- Hinrichs, M.**, Berenguer, P.W., Hilt, J., Hellwig, P., Schulz, D., Paraskevopoulos, A., Bober, K.L., Freund, R., and Jungnickel, V., A Physical Layer for Low Power Optical Wireless Communications; *TGCN March 2021 4-17*
- Hiryanto, L.**, Soh, S., Chin, K., and Lazarescu, M., Green Multi-Stage Upgrade for Bundled-Link SDNs With Budget and Delay Constraints; *TGCN Sept. 2021 1410-1425*
- Ho, D.H.**, and Gulliver, T.A., Uplink Power Allocation for Throughput and Energy Efficiency Over Nakagami- m Fading Channels; *TGCN March 2021 190-202*
- Honda, K.**, see Peper, F., *TGCN Dec. 2021 1856-1868*
- Hong, T.**, see Feng, L., *TGCN Sept. 2021 1179-1190*
- Hong, Y.P.**, see Kuo, Y., *TGCN Dec. 2021 1934-1946*
- Hossain, E.**, and Fredj, F., Editorial Energy Efficiency of Machine-Learning-Based Designs for Future Wireless Systems and Networks; *TGCN Sept. 2021 1005-1010*
- Hossain, M.A.**, and Ansari, N., Energy Aware Latency Minimization for Network Slicing Enabled Edge Computing; *TGCN Dec. 2021 2150-2159*
- Hossain, M.J.**, see Hassan, M.Z., *TGCN March 2021 406-425*
- Hossain, M.J.**, see Hassan, M.Z., *TGCN Sept. 2021 1482-1501*
- Hou, Y.**, Zitoun, L., and Veque, V., Fluid-Based Energy Efficiency Analysis of JT-CoMP Scheme in Femto Cellular Networks; *TGCN March 2021 133-145*
- Hsu, C.**, Tsai, C., Li, F.Y., Chen, C., and Tseng, Y., Receiver-Initiated Data Collection in Wake-Up Radio Enabled mIoT Networks: Achieving Collision-Free Transmissions by Hashing and Partitioning; *TGCN June 2021 868-883*
- Hu, H.**, see Chen, M., *TGCN March 2021 29-40*
- Hu, N.**, Tian, Z., Du, X., Guizani, N., and Zhu, Z., Deep-Green: A Dispersed Energy-Efficiency Computing Paradigm for Green Industrial IoT; *TGCN June 2021 750-764*
- Hu, N.**, Tian, Z., Du, X., and Guizani, M., An Energy-Efficient In-Network Computing Paradigm for 6G; *TGCN Dec. 2021 1722-1733*
- Hu, Y.**, see Wang, J., *TGCN Sept. 2021 1293-1305*
- Hua, S.**, Zhou, Y., Yang, K., Shi, Y., and Wang, K., Reconfigurable Intelligent Surface for Green Edge Inference ; *TGCN June 2021 964-979*
- Huang, H.**, see Kuo, J., *TGCN Dec. 2021 1806-1819*
- Huang, K.**, see Shiraishi, J., *TGCN March 2021 362-377*
- Huang, X.**, see Gao, X., *TGCN Sept. 2021 1632-1646*
- Huang, X.**, see Feng, D., *TGCN Dec. 2021 2016-2026*
- Huang, Y.**, Xu, H., Gao, H., Ma, X., and Hussain, W., SSUR: An Approach to Optimizing Virtual Machine Allocation Strategy Based on User Requirements for Cloud Data Center; *TGCN June 2021 670-681*
- Huang, Y.**, see Meng, Y., *TGCN June 2021 703-713*
- Hung, S.**, see Shen, L., *TGCN Dec. 2021 2121-2138*
- Hussain, S.**, see Ozturk, M., *TGCN June 2021 832-845*
- Hussain, W.**, see Huang, Y., *TGCN June 2021 670-681*
- I**
- I, C.**, AI as an Essential Element of a Green 6G; *TGCN March 2021 1-3*
- Ilhan, H.**, see Bulut, I.S., *TGCN March 2021 291-307*
- Illi, E.**, Bouanani, F.E., Sofotasios, P.C., Muhaidat, S., Costa, D.B.d., Ayoub, F., and Al-Fuqaha, A., Analysis of Asymmetric Dual-Hop Energy Harvesting-Based Wireless Communication Systems in Mixed Fading Environments ; *TGCN March 2021 261-277*
- Imran, A.**, see Kasi, S.K., *TGCN Dec. 2021 1999-2015*
- Imran, M.A.**, see Ozturk, M., *TGCN June 2021 832-845*
- Islim, M.S.**, see Nguyen, T., *TGCN Dec. 2021 1880-1891*
- J**
- Jaafar, W.**, see Ghdiri, O., *TGCN Dec. 2021 1918-1933*
- Jafarizadeh, M.**, and Zheng, R., Optimal Design of LEMoNet for Environmental Monitoring of Data Centers; *TGCN Dec. 2021 1820-1832*
- Jaiswal, A.**, Kumar, S., Kaiwartya, O., Kashyap, P.K., Kanjo, E., Kumar, N., and Song, H., Quantum Learning-Enabled Green Communication for Next-Generation Wireless Systems; *TGCN Sept. 2021 1015-1028*
- Jan, M.A.**, Khan, F., Mastorakis, S., Adil, M., Akbar, A., and Stergiou, N., LightIoT: Lightweight and Secure Communication for Energy-Efficient IoT in Health Informatics; *TGCN Sept. 2021 1202-1211*
- Javad-Kalbasi, M.**, and Valaee, S., Centralized and Distributed Algorithms for Energy and Spectrum Efficient User Association in Small Cell Networks; *TGCN Dec. 2021 1781-1790*
- Javed, A.R.**, see Naem, A., *TGCN June 2021 611-621*
- Ji, F.**, see Wen, M., *TGCN June 2021 600-610*
- Jia, L.**, see Xu, Y., *TGCN Dec. 2021 1734-1746*
- Jia, Z.**, see Yu, H., *TGCN Sept. 2021 1101-1113*
- Jiang, W.**, Liao, K., Yan, Y., Cheng, W., Zhang, L., and Wang, J., Modeling and Analysis of Latency Distribution in the 40-100Gbps Dual-Mode Energy Efficient Ethernet; *TGCN Sept. 2021 1426-1437*
- Jiang, W.**, see Feng, D., *TGCN Dec. 2021 2016-2026*
- Jiang, Y.**, see Cao, J., *TGCN Dec. 2021 1869-1879*
- Jiang, Z.**, see Sui, W., *TGCN March 2021 72-83*
- Jiao, J.**, Ni, Z., Wu, S., Wang, Y., and Zhang, Q., Energy Efficient Network Coding HARQ Transmission Scheme for S-IoT; *TGCN March 2021 308-321*
- Jo, M.**, see Anpalagan, A., *TGCN Dec. 2021 1653-1656*
- Jolfaei, A.**, see Zhu, X., *TGCN Sept. 2021 1041-1050*
- Jung, H.**, see Nazar, A.W., *TGCN June 2021 574-586*
- Jungnickel, V.**, see Hinrichs, M., *TGCN March 2021 4-17*
- K**
- Kadirvelu, S.**, Leon-Salas, W.D., Fan, X., Kim, J., Peleato, B., Mohammadi, S., and Vijayalakshmi, B., A Circuit for Simultaneous Reception of Data and Power Using a Solar Cell; *TGCN Dec. 2021 2065-2075*
- Kaiwartya, O.**, see Jaiswal, A., *TGCN Sept. 2021 1015-1028*
- Kaneko, M.**, see Dinh, T.H.L., *TGCN March 2021 146-159*
- Kang, Y.**, Liu, S., Zhang, H., Han, Z., Osher, S., and Poor, H.V., Task Selection and Collision-Free Route Planning for Mobile Crowdsensing Using Multi-Population Mean-Field Games; *TGCN Dec. 2021 1947-1960*
- Kanjo, E.**, see Jaiswal, A., *TGCN Sept. 2021 1015-1028*
- Karakostas, G.**, see Teymouri, P., *TGCN June 2021 950-963*
- Kashyap, N.**, see Rahman, H., *TGCN March 2021 278-290*
- Kashyap, P.K.**, see Jaiswal, A., *TGCN Sept. 2021 1015-1028*
- Kasi, S.K.**, Hashmi, U.S., Nabeel, M., Ekin, S., and Imran, A., Analysis of Area Spectral & Energy Efficiency in a CoMP-Enabled User-Centric Cloud RAN; *TGCN Dec. 2021 1999-2015*
- Kaur, M.**, Singh, D., Kumar, V., Gupta, B.B., Abd El-Latif, A.A., Secure and Energy Efficient-Based E-Health Care Framework for Green Internet of Things; *TGCN Sept. 2021 1223-1231*
- Kaushik, A.**, Vlachos, E., Tsinos, C., Thompson, J., and Chatzinotas, S., Joint Bit Allocation and Hybrid Beamforming Optimization for Energy Efficient Millimeter Wave MIMO Systems; *TGCN March 2021 119-132*
- Kazim, M.**, see Tariq, U.U., *TGCN June 2021 803-815*
- Khamesi, A.R.**, see Timilsina, A., *TGCN Sept. 2021 1138-1153*
- Khammari, H.**, see Ahmed, I., *TGCN Dec. 2021 2160-2173*
- Khan, F.**, see Jan, M.A., *TGCN Sept. 2021 1202-1211*
- Khan, W.U.**, see Li, X., *TGCN Sept. 2021 1066-1076*
- Khosravi, M.R.**, and Samadi, S., BL-ALM: A Blind Scalable Edge-Guided Reconstruction Filter for Smart Environmental Monitoring Through Green IoMT-UAV Networks ; *TGCN June 2021 727-736*
- Khowaja, S.A.**, see Dev, K., *TGCN June 2021 635-644*
- Kim, B.**, see Wang, H., *TGCN March 2021 41-60*
- Kim, J.**, see Anpalagan, A., *TGCN Dec. 2021 1653-1656*
- Kim, J.**, see Kadirvelu, S., *TGCN Dec. 2021 2065-2075*
- Kim, K.J.**, see Wen, M., *TGCN June 2021 600-610*
- Kishk, M.A.**, see Qin, Y., *TGCN Sept. 2021 1395-1409*
- Klein, A.**, see Ortiz, A., *TGCN March 2021 442-456*
- Knorn, S.**, see Seifullaev, R., *TGCN Dec. 2021 2139-2149*

- Kourtessis, P.**, *see* Papazafeiropoulos, A., *TGCN June 2021 816-831*
- Kouvelas, N.**, and Prasad, R.V., Efficient Allocation of Harvested Energy at the Edge by Building a Tangible Micro-Grid—The Texas Case; *TGCN March 2021 94-105*
- Kshetrimayum, R.S.**, *see* Bhowal, A., *TGCN Dec. 2021 1684-1696*
- Ku, M.**, *see* Singh, K., *TGCN March 2021 160-173*
- Kumar, N.**, *see* Jaiswal, A., *TGCN Sept. 2021 1015-1028*
- Kumar, N.**, *see* Gupta, R., *TGCN Dec. 2021 1712-1721*
- Kumar, R.L.**, *see* Dev, K., *TGCN June 2021 635-644*
- Kumar, S.**, *see* Jaiswal, A., *TGCN Sept. 2021 1015-1028*
- Kumar, V.**, *see* Kaur, M., *TGCN Sept. 2021 1223-1231*
- Kumari, P.**, *see* Chopade, S., *TGCN June 2021 693-702*
- Kuo, J.**, Ching, C., Huang, H., and Liu, Y., Energy-Efficient Topology Construction via Power Allocation for Decentralized Learning via Smart Devices With Edge Computing; *TGCN Dec. 2021 1806-1819*
- Kuo, Y.**, Chiu, J., Sheu, J., and Hong, Y.P., UAV Deployment and IoT Device Association for Energy-Efficient Data-Gathering in Fixed-Wing Multi-UAV Networks; *TGCN Dec. 2021 1934-1946*
- Kusaladharma, S.**, Zhu, W., Ajib, W., and Aruma Baduge, G.A., Rate and Energy Efficiency Improvements of Massive MIMO-Based Stochastic Cellular Networks With NOMA; *TGCN Sept. 2021 1467-1481*

L

- Lagunas, E.**, *see* Gautam, S., *TGCN June 2021 884-894*
- Lai, S.**, *see* Zhao, R., *TGCN Sept. 2021 1248-1258*
- Lazarescu, M.**, *see* Hiryanto, L., *TGCN Sept. 2021 1410-1425*
- Le, Q.N.**, Yadav, A., Nguyen, N., Dobre, O.A., and Zhao, R., Full-Duplex Non-Orthogonal Multiple Access Cooperative Overlay Spectrum-Sharing Networks With SWIPT; *TGCN March 2021 322-334*
- Lei, J.**, *see* Zhang, T., *TGCN Sept. 2021 1236-1247*
- Leibnitz, K.**, *see* Peper, F., *TGCN Dec. 2021 1856-1868*
- Leon-Salas, W.D.**, *see* Kadirvelu, S., *TGCN Dec. 2021 2065-2075*
- Leung, V.C.M.**, *see* Hassan, M.Z., *TGCN March 2021 406-425*
- Leung, V.C.M.**, *see* Hassan, M.Z., *TGCN Sept. 2021 1482-1501*
- Leung, V.C.M.**, Dong, Y., and Pan, H., Editorial Recent Techniques of Green Information and Communications Technologies; *TGCN Dec. 2021 1649-1652*
- Li, A.**, *see* Peper, F., *TGCN Dec. 2021 1856-1868*
- Li, B.**, *see* Wang, J., *TGCN Sept. 2021 1293-1305*
- Li, C.**, *see* Chen, Q., *TGCN June 2021 934-949*
- Li, C.**, *see* Tian, X., *TGCN Dec. 2021 2089-2103*
- Li, D.**, *see* Li, X., *TGCN Sept. 2021 1066-1076*
- Li, D.**, *see* Zhao, R., *TGCN Sept. 2021 1248-1258*
- Li, F.**, *see* Zhou, Z., *TGCN June 2021 658-669*
- Li, F.Y.**, *see* Hsu, C., *TGCN June 2021 868-883*
- Li, G.**, *see* Chen, G., *TGCN Sept. 2021 1154-1164*
- Li, L.**, *see* Li, X., *TGCN Sept. 2021 1066-1076*
- Li, S.**, *see* Nie, L., *TGCN June 2021 778-788*
- Li, T.**, Xiao, Y., and Song, L., Integrating Future Smart Home Operation Platform With Demand Side Management via Deep Reinforcement Learning ; *TGCN June 2021 921-933*
- Li, W.**, *see* Feng, L., *TGCN March 2021 203-215*
- Li, W.**, *see* Zhao, M., *TGCN Dec. 2021 2174-2187*
- Li, X.**, Zheng, Y., Khan, W.U., Zeng, M., Li, D., Ragesh, G.K., and Li, L., Physical Layer Security of Cognitive Ambient Backscatter Communications for Green Internet-of-Things; *TGCN Sept. 2021 1066-1076*
- Li, Y.**, Yin, Y., Xu, W., Lin, H., Wan, J., and Gao, H., Energy-Efficient Scans by Weaving Indexes Into the Storage Layout in Computing Platforms for Internet of Things; *TGCN Sept. 2021 1212-1222*
- Li, Y.**, *see* Wang, T., *TGCN Dec. 2021 1669-1683*
- Liang, C.**, *see* Liu, Z., *TGCN Sept. 2021 1306-1318*
- Liao, K.**, *see* Jiang, W., *TGCN Sept. 2021 1426-1437*
- Lin, H.**, *see* Li, Y., *TGCN Sept. 2021 1212-1222*
- Lin, J.C.**, *see* Naeem, A., *TGCN June 2021 611-621*
- Lin, S.**, *see* Wen, M., *TGCN June 2021 600-610*

- Lipare, A.**, Edla, D.R., and Dharavath, R., Fuzzy Rule Generation Using Modified PSO for Clustering in Wireless Sensor Networks; *TGCN June 2021 846-857*
- Liu, D.**, *see* Xu, Y., *TGCN Dec. 2021 1734-1746*
- Liu, D.**, *see* Zhao, M., *TGCN Dec. 2021 2174-2187*
- Liu, H.**, *see* Yang, Z., *TGCN Sept. 2021 1333-1344*
- Liu, J.**, *see* Han, D., *TGCN March 2021 106-118*
- Liu, J.**, *see* Tong, E., *TGCN June 2021 645-657*
- Liu, L.**, *see* Hamedani, K., *TGCN March 2021 484-496*
- Liu, L.**, *see* Tariq, U.U., *TGCN June 2021 803-815*
- Liu, L.**, *see* Xu, Z., *TGCN Sept. 2021 1077-1090*
- Liu, M.**, Qu, N., Shang, B., Chen, Y., and Gong, F., Energy and Spectrum Efficient Blind Equalization With Unknown Constellation for Air-to-Ground Multipath UAV Communications; *TGCN Sept. 2021 1357-1368*
- Liu, S.**, *see* Kang, Y., *TGCN Dec. 2021 1947-1960*
- Liu, S.**, *see* Ramanna, V.K., *TGCN Dec. 2021 1833-1845*
- Liu, T.**, Cui, M., Zhang, G., Wu, Q., Chu, X., and Zhang, J., 3D Trajectory and Transmit Power Optimization for UAV-Enabled Multi-Link Relaying Systems; *TGCN March 2021 392-405*
- Liu, T.**, *see* Feng, L., *TGCN Sept. 2021 1179-1190*
- Liu, Y.**, *see* Zhang, T., *TGCN Sept. 2021 1236-1247*
- Liu, Y.**, *see* Kuo, J., *TGCN Dec. 2021 1806-1819*
- Liu, Z.**, *see* Tong, E., *TGCN June 2021 645-657*
- Liu, Z.**, Tan, X., Wen, M., Wang, S., and Liang, C., An Energy-Efficient Selection Mechanism of Relay and Edge Computing in UAV-Assisted Cellular Networks; *TGCN Sept. 2021 1306-1318*
- Liu, Z.**, *see* Lu, W., *TGCN Sept. 2021 1259-1270*
- Lopez-Perez, D.**, *see* Piovesan, N., *TGCN March 2021 512-525*
- Lou, Z.**, Elzanaty, A., and Alouini, M., Green Tethered UAVs for EMF-Aware Cellular Networks; *TGCN Dec. 2021 1697-1711*
- Lu, W.**, Si, P., Gao, Y., Han, H., Liu, Z., Wu, Y., and Gong, Y., Trajectory and Resource Optimization in OFDM-Based UAV-Powered IoT Network ; *TGCN Sept. 2021 1259-1270*
- Lu, Y.**, and Mow, W.H., SER Analysis for SWIPT-Enabled Differential Decode-and-Forward Relay Networks; *TGCN March 2021 348-361*
- Lu, Y.**, *see* Wang, W., *TGCN March 2021 216-230*
- Luo, J.**, *see* Zhao, M., *TGCN Dec. 2021 2174-2187*
- Lv, L.**, Zheng, C., Zhang, L., Shan, C., Tian, Z., Du, X., and Guizani, M., Contract and Lyapunov Optimization-Based Load Scheduling and Energy Management for UAV Charging Stations; *TGCN Sept. 2021 1381-1394*

M

- Ma, X.**, *see* Huang, Y., *TGCN June 2021 670-681*
- Maddikunta, P.K.R.**, *see* Dev, K., *TGCN June 2021 635-644*
- Mahmood, A.**, *see* Nazar, A.W., *TGCN June 2021 574-586*
- Mahmoud, A.**, Muhaidat, S., Sofotasios, P.C., Abualhaol, I., Dobre, O.A., and Yanikomeroglu, H., Intelligent Reflecting Surfaces Assisted UAV Communications for IoT Networks: Performance Analysis; *TGCN Sept. 2021 1029-1040*
- Marchetto, G.**, *see* Sacco, A., *TGCN Sept. 2021 1114-1127*
- Martinez-Garcia, M.**, *see* Xu, Z., *TGCN Sept. 2021 1077-1090*
- Mastorakis, S.**, *see* Bellal, Z., *TGCN June 2021 765-777*
- Mastorakis, S.**, *see* Jan, M.A., *TGCN Sept. 2021 1202-1211*
- Masud, M.**, *see* Ahmed, I., *TGCN Dec. 2021 2160-2173*
- Meng, W.**, *see* Chen, Q., *TGCN June 2021 934-949*
- Meng, Y.**, Zhang, Z., and Huang, Y., Cache- and Energy Harvesting-Enabled D2D Cellular Network: Modeling, Analysis and Optimization; *TGCN June 2021 703-713*
- Menon, V.G.**, *see* Prasad, R.R.V., *TGCN June 2021 569-573*
- Menon, V.G.**, *see* Venkatesha Prasad, R.R., *TGCN Sept. 2021 1011-1014*
- Meo, M.**, For a Sustainable Future of Communications and Networking; *TGCN June 2021 566-568*
- Mian, A.N.**, *see* Shah, S.W.H., *TGCN June 2021 587-599*
- Miao, J.**, *see* Zhang, Z., *TGCN Dec. 2021 1892-1905*
- Miozzo, M.**, *see* Piovesan, N., *TGCN March 2021 512-525*
- Mirmohseni, M.**, *see* Mortazavi, S.M., *TGCN March 2021 231-242*

Mishra, D., see Gupta, N., *TGCN Sept. 2021 1319-1332*
Mishra, R., see Chopade, S., *TGCN June 2021 693-702*
Misra, S., see Bishoyi, P.K., *TGCN Sept. 2021 1623-1631*
Misra, S., see Rajavel, D., *TGCN Sept. 2021 1128-1137*
Mohammadi, S., see Kadirvelu, S., *TGCN Dec. 2021 2065-2075*
Mortazavi, S.M., Ashtiani, F., and Mirmohseni, M., Optimal Energy Sharing for Cooperative Relaying in a Random Access Network With Energy Harvesting Nodes; *TGCN March 2021 231-242*
Mow, W.H., see Lu, Y., *TGCN March 2021 348-361*
Muhaidat, S., see Illi, E., *TGCN March 2021 261-277*
Muhaidat, S., see Mahmoud, A., *TGCN Sept. 2021 1029-1040*
Mukherjee, B., see Tinini, R.I., *TGCN March 2021 18-28*
Mukhopadhyay, S.C., see Thomas, D., *TGCN June 2021 622-634*
Mumtaz, S., see Prasad, R.R.V., *TGCN June 2021 569-573*
Mumtaz, S., see Venkatesha Prasad, R.R., *TGCN Sept. 2021 1011-1014*

N

Nabeel, M., see Kasi, S.K., *TGCN Dec. 2021 1999-2015*
Nadas, J.P.B., see Ozturk, M., *TGCN June 2021 832-845*
Naeem, A., Javed, A.R., Rizwan, M., Abbas, S., Lin, J.C., and Gadekallu, T.R., DARE-SEP: A Hybrid Approach of Distance Aware Residual Energy-Efficient SEP for WSN; *TGCN June 2021 611-621*
Najmeddin, S., Aissa, S., and Tahar, S., Energy-Efficient Resource Allocation in Multi-UAV Networks With NOMA; *TGCN Dec. 2021 1906-1917*
Nallanathan, A., see Zhang, T., *TGCN Sept. 2021 1236-1247*
Nasser, N., see Tazrin, T., *TGCN Sept. 2021 1191-1201*
Nazar, A.W., Hassan, S.A., Jung, H., Mahmood, A., and Gidlund, M., BER Analysis of a Backscatter Communication System With Non-Orthogonal Multiple Access ; *TGCN June 2021 574-586*
Ngo, H.Q., see Papazafeiropoulos, A., *TGCN June 2021 816-831*
Nguyen, C.T., see Duong, S.T., *TGCN Dec. 2021 1974-1987*
Nguyen, N., see Le, Q.N., *TGCN March 2021 322-334*
Nguyen, T., Islim, M.S., Chen, C., and Haas, H., iDim: Practical Implementation of Index Modulation for LiFi Dimming; *TGCN Dec. 2021 1880-1891*
Ni, Q., see Su, B., *TGCN June 2021 858-867*
Ni, Z., see Jiao, J., *TGCN March 2021 308-321*
Nie, L., Sun, W., Wang, S., Ning, Z., Rodrigues, J.J.P.C., Wu, Y., and Li, S., Intrusion Detection in Green Internet of Things: A Deep Deterministic Policy Gradient-Based Algorithm; *TGCN June 2021 778-788*
Niemegeers, I., see Prasad, R.V., *TGCN Sept. 2021 1558-1569*
Nimr, A., see Bizon Franco de Almeida, I., *TGCN Dec. 2021 1846-1855*
Ning, Q., Yang, T., Chen, B., Zhou, X., Zhao, C., and Yang, X., Cooperative Transmission of Wireless Information and Energy in Anti-Eavesdropping UAV Relay Network; *TGCN Sept. 2021 1283-1292*
Ning, Y., see Yang, Z., *TGCN Sept. 2021 1333-1344*
Ning, Z., see Nie, L., *TGCN June 2021 778-788*
Niu, W., see Tong, E., *TGCN June 2021 645-657*
Niyato, D., see Zhu, K., *TGCN Dec. 2021 1657-1668*
Nour, B., see Bellal, Z., *TGCN June 2021 765-777*

O

Ohtsuki, T., see Xu, Y., *TGCN Sept. 2021 1514-1528*
Oikonomou, K., see Tsoumanis, G., *TGCN March 2021 378-391*
Orgun, M.A., see Thomas, D., *TGCN June 2021 622-634*
Ortiz, A., Weber, T., and Klein, A., Multi-Agent Reinforcement Learning for Energy Harvesting Two-Hop Communications With a Partially Observable System State; *TGCN March 2021 442-456*
Osher, S., see Kang, Y., *TGCN Dec. 2021 1947-1960*
Ota, K., see Zhang, C., *TGCN Sept. 2021 1345-1356*
Ottersten, B., see Gautam, S., *TGCN June 2021 884-894*
Ozturk, M., Abubakar, A.I., Nadas, J.P.B., Rais, R.N.B., Hussain, S., and Imran, M.A., Energy Optimization in Ultra-Dense Radio Access Networks via Traffic-Aware Cell Switching; *TGCN June 2021 832-845*

P

Pamuklu, T., and Ersoy, C., GROVE: A Cost-Efficient Green Radio Over Ethernet Architecture for Next Generation Radio Access Networks; *TGCN March 2021 84-93*
Pan, H., see Leung, V.C.M., *TGCN Dec. 2021 1649-1652*
Papazafeiropoulos, A., Ngo, H.Q., Kourtessis, P., Chatzinotas, S., and Senior, J.M., Towards Optimal Energy Efficiency in Cell-Free Massive MIMO Systems; *TGCN June 2021 816-831*
Paraskevopoulos, A., see Hinrichs, M., *TGCN March 2021 4-17*
Patel, M.M., see Gupta, R., *TGCN Dec. 2021 1712-1721*
Peleato, B., see Kadirvelu, S., *TGCN Dec. 2021 2065-2075*
Peper, F., Leibnitz, K., Tanaka, C., Honda, K., Hasegawa, M., Theofilis, K., Li, A., and Wakamiya, N., High-Density Resource-Restricted Pulse-Based IoT Networks; *TGCN Dec. 2021 1856-1868*
Pervaiz, H., see Su, B., *TGCN June 2021 858-867*
Pham, A.T., see Duong, S.T., *TGCN Dec. 2021 1974-1987*
Pham, T.V., see Duong, S.T., *TGCN Dec. 2021 1974-1987*
Pillai, S.R.B., see Rahman, H., *TGCN March 2021 278-290*
Piovesan, N., Lopez-Perez, D., Miozzo, M., and Dini, P., Joint Load Control and Energy Sharing for Renewable Powered Small Base Stations: A Machine Learning Approach; *TGCN March 2021 512-525*
Poluru, R.K., see Dev, K., *TGCN June 2021 635-644*
Poor, H.V., see Al-Habob, A.A., *TGCN Sept. 2021 1570-1579*
Poor, H.V., see Kang, Y., *TGCN Dec. 2021 1947-1960*
Popovski, P., see Shiraishi, J., *TGCN March 2021 362-377*
Popovski, P., see Azari, A., *TGCN June 2021 908-920*
Prakriya, S., see Agrawal, K., *TGCN March 2021 243-260*
Prakriya, S., see Bapatla, D., *TGCN March 2021 426-441*
Prasad, R.R.V., Mumtaz, S., Menon, V.G., Al-Dulaimi, A., and Guizani, M., Guest Editorial Special Issue on Green Internet of Things: Challenges and Future Opportunities—Part I; *TGCN June 2021 569-573*
Prasad, R.V., see Kouvelas, N., *TGCN March 2021 94-105*
Prasad, R.V., Rao, V.S., Sarkar, C., and Niemegeers, I., ReNEW: A Practical Module for Reliable Routing in Networks of Energy-Harvesting Wireless Sensors; *TGCN Sept. 2021 1558-1569*

Q

Qadir, J., see Shah, S.W.H., *TGCN June 2021 587-599*
Qin, Y., Kishk, M.A., and Alouini, M., On the Influence of Charging Stations Spatial Distribution on Aerial Wireless Networks; *TGCN Sept. 2021 1395-1409*
Qiu, X., see Feng, L., *TGCN Sept. 2021 1179-1190*
Qu, N., see Liu, M., *TGCN Sept. 2021 1357-1368*
Que, X., see Feng, L., *TGCN Sept. 2021 1179-1190*

R

Ragesh, G.K., see Li, X., *TGCN Sept. 2021 1066-1076*
Rahman, H., Vinayachandran, A., Pillai, S.R.B., Appaiah, K., Vaze, R., and Kashyap, N., Deadline Constrained Packet Scheduling in the Presence of an Energy Harvesting Jammer; *TGCN March 2021 278-290*
Rais, R.N.B., see Ozturk, M., *TGCN June 2021 832-845*
Rajavel, D., Chakraborty, A., and Misra, S., QoS-Aware Sensor Virtualization for Provisioning Green Sensors-as-a-Service; *TGCN Sept. 2021 1128-1137*
Ramanna, V.K., Sheth, J., Liu, S., and Dezfouli, B., Towards Understanding and Enhancing Association and Long Sleep in Low-Power WiFi IoT Systems; *TGCN Dec. 2021 1833-1845*
Rao, V.S., see Prasad, R.V., *TGCN Sept. 2021 1558-1569*
Rawat, D.B., see Adebayo, A.A., *TGCN June 2021 682-692*
Ren, H., and Chin, K., A Reinforcement Learning Approach to Optimize Energy Usage in RF-Charging Sensor Networks; *TGCN March 2021 526-539*
Rizwan, M., see Naeem, A., *TGCN June 2021 611-621*
Rodrigues, J.J.P.C., see Nie, L., *TGCN June 2021 778-788*
Roy, D., see Dutta, S., *TGCN Sept. 2021 1438-1450*
Roy, D., see Dutta, S., *TGCN Dec. 2021 1961-1973*

S

- Sacco, A.**, Esposito, F., and Marchetto, G., Resource Inference for Sustainable and Responsive Task Offloading in Challenged Edge Networks; *TGCN Sept. 2021 1114-1127*
- Sadjadpour, H.R.**, see Ahmed, I.Z., *TGCN March 2021 61-71*
- Salameh, H.A.B.**, Bani Irshaid, M., Al Ajlouni, A., and Aloqaily, M., Energy-Efficient Cross-Layer Spectrum Sharing in CR Green IoT Networks; *TGCN Sept. 2021 1091-1100*
- Samadi, S.**, see Khosravi, M.R., *TGCN June 2021 727-736*
- Saraiva, J.V.**, Antonioli, R.P., Fodor, G., Braga, I.M., Freitas, W.C., Silva, Y.C.B., Silva, C.F.M.e., Energy Efficiency Maximization Under Minimum Rate Constraints in Multi-Cell MIMO Systems With Finite Buffers ; *TGCN March 2021 174-189*
- Sari, H.**, see Xu, Y., *TGCN Sept. 2021 1514-1528*
- Sarkar, C.**, see Prasad, R.V., *TGCN Sept. 2021 1558-1569*
- Schmeink, A.**, see Wang, J., *TGCN Sept. 2021 1293-1305*
- Schulz, D.**, see Hinrichs, M., *TGCN March 2021 4-17*
- Seifullaev, R.**, Knorn, S., and Ahlen, A., Event-Triggered Transmission Policies for Harvesting Powered Sensors With Time-Varying Models; *TGCN Dec. 2021 2139-2149*
- Senior, J.M.**, see Papazafeiropoulos, A., *TGCN June 2021 816-831*
- Shah, S.W.H.**, Mian, A.N., Aijaz, A., Qadir, J., and Crowcroft, J., Energy-Efficient MAC for Cellular IoT: State-of-the-Art, Challenges, and Standardization; *TGCN June 2021 587-599*
- Shahid, M.K.**, see Ahmed, I., *TGCN Dec. 2021 2160-2173*
- Shan, C.**, see Lv, L., *TGCN Sept. 2021 1381-1394*
- Shang, B.**, see Liu, M., *TGCN Sept. 2021 1357-1368*
- Shankaran, R.**, see Thomas, D., *TGCN June 2021 622-634*
- Shao, Z.**, see Gao, X., *TGCN Sept. 2021 1632-1646*
- Sharma, S.K.**, see Anpalagan, A., *TGCN Dec. 2021 1653-1656*
- Shen, G.**, see Guo, C., *TGCN March 2021 497-511*
- Shen, L.**, Hung, S., and Feng, K., Hybrid Energy Resource Allocation for Simultaneous Wireless Information and Power Transfer for Green Communications ; *TGCN Dec. 2021 2121-2138*
- Sheth, J.**, see Ramanna, V.K., *TGCN Dec. 2021 1833-1845*
- Sheu, J.**, see Kuo, Y., *TGCN Dec. 2021 1934-1946*
- Shi, Y.**, see Hua, S., *TGCN June 2021 964-979*
- Shiraishi, J.**, Yomo, H., Huang, K., Stefanovic, C., and Popovski, P., Content-Based Wake-Up for Top- k Query in Wireless Sensor Networks; *TGCN March 2021 362-377*
- Shojafar, M.**, see Zhou, Z., *TGCN June 2021 658-669*
- Shojafar, M.**, see Zhou, Z., *TGCN Dec. 2021 1747-1760*
- Shrestha, R.**, see Galappaththige, D.L., *TGCN Sept. 2021 1541-1557*
- Si, P.**, see Lu, W., *TGCN Sept. 2021 1259-1270*
- Silva, C.F.M.e.**, see Saraiva, J.V., *TGCN March 2021 174-189*
- Silva, Y.C.B.**, see Saraiva, J.V., *TGCN March 2021 174-189*
- Silvestri, S.**, see Timilsina, A., *TGCN Sept. 2021 1138-1153*
- Singh, D.**, see Kaur, M., *TGCN Sept. 2021 1223-1231*
- Singh, K.**, Ku, M., and Flanagan, M.F., Energy-Efficient Precoder Design for Downlink Multi-User MISO Networks With Finite Blocklength Codes; *TGCN March 2021 160-173*
- So, D.K.C.**, Tang, J., Wei, Y., and Yang, K., Guest Editorial Special Issue on Selected Papers From IEEE Globecom 2020; *TGCN Dec. 2021 1777-1780*
- Sofotasios, P.C.**, see Illi, E., *TGCN March 2021 261-277*
- Sofotasios, P.C.**, see Mahmoud, A., *TGCN Sept. 2021 1029-1040*
- Soh, S.**, see Hiryanto, L., *TGCN Sept. 2021 1410-1425*
- Soh, S.**, see Wang, L., *TGCN Sept. 2021 1580-1593*
- Soleymani, S.A.**, see Goudarzi, S., *TGCN Dec. 2021 2076-2088*
- Song, H.**, see Jaiswal, A., *TGCN Sept. 2021 1015-1028*
- Song, L.**, see Li, T., *TGCN June 2021 921-933*
- Song, M.**, see Adebayo, A.A., *TGCN June 2021 682-692*
- Srivastava, G.**, see Guo, T., *TGCN June 2021 737-749*
- Stavarakakis, I.**, see Tsoumanis, G., *TGCN March 2021 378-391*
- Stefanovic, C.**, see Shiraishi, J., *TGCN March 2021 362-377*
- Stefanovic, C.**, see Azari, A., *TGCN June 2021 908-920*
- Stergiou, N.**, see Jan, M.A., *TGCN Sept. 2021 1202-1211*

+ Check author entry for coauthors

- Su, B.**, Ni, Q., Yu, W., and Pervaiz, H., Optimizing Computation Efficiency for NOMA-Assisted Mobile Edge Computing With User Cooperation; *TGCN June 2021 858-867*
- Sui, W.**, Chen, X., Zhang, S., Jiang, Z., and Xu, S., Energy-Efficient Resource Allocation With Flexible Frame Structure for Hybrid eMBB and URLLC Services; *TGCN March 2021 72-83*
- Sun, P.**, see Boukerche, A., *TGCN Sept. 2021 1610-1622*
- Sun, W.**, see Nie, L., *TGCN June 2021 778-788*
- Sun, Y.**, see Chen, M., *TGCN March 2021 29-40*
- Sun, Y.**, see Feng, D., *TGCN Dec. 2021 2016-2026*
- Sun, Z.**, see Gao, Y., *TGCN Sept. 2021 1369-1380*

T

- Tahar, S.**, see Najmeddin, S., *TGCN Dec. 2021 1906-1917*
- Tan, X.**, see Liu, Z., *TGCN Sept. 2021 1306-1318*
- Tanaka, C.**, see Peper, F., *TGCN Dec. 2021 1856-1868*
- Tang, J.**, see Zhao, N., *TGCN Sept. 2021 1232-1235*
- Tang, J.**, see So, D.K.C., *TGCN Dec. 2021 1777-1780*
- Tang, L.**, see Chen, M., *TGCN March 2021 29-40*
- Tanwar, S.**, see Gupta, R., *TGCN Dec. 2021 1712-1721*
- Tariq, U.U.**, Ali, H., Liu, L., Hardy, J., Kazim, M., and Ahmed, W., Energy-Aware Scheduling of Streaming Applications on Edge-Devices in IoT-Based Healthcare; *TGCN June 2021 803-815*
- Tazrin, T.**, Fouda, M.M., Fadlullah, Z.M., and Nasser, N., UV-CDS: An Energy-Efficient Scheduling of UAVs for Premises Sterilization; *TGCN Sept. 2021 1191-1201*
- Tellambura, C.**, see Zargari, S., *TGCN Dec. 2021 2027-2041*
- Teymoori, P.**, Hekmati, A., Todd, T.D., Zhao, D., and Karakostas, G., Preemptive Mobile Computation Offloading With Hard Deadlines and Concurrent Local Execution ; *TGCN June 2021 950-963*
- Theofilis, K.**, see Peper, F., *TGCN Dec. 2021 1856-1868*
- Thomas, D.**, Shankaran, R., Orgun, M.A., and Mukhopadhyay, S.C., SEC²: A Secure and Energy Efficient Barrier Coverage Scheduling for WSN-Based IoT Applications; *TGCN June 2021 622-634*
- Thompson, J.**, see Kaushik, A., *TGCN March 2021 119-132*
- Tian, X.**, Zhang, B., Li, C., and Hao, K., Throughput-Optimal Broadcast for Time-Varying Directed Acyclic Wireless Multi-Hop Networks With Energy Harvesting Constraints; *TGCN Dec. 2021 2089-2103*
- Tian, Y.**, see Tong, E., *TGCN June 2021 645-657*
- Tian, Z.**, see Hu, N., *TGCN June 2021 750-764*
- Tian, Z.**, see Lv, L., *TGCN Sept. 2021 1381-1394*
- Tian, Z.**, see Hu, N., *TGCN Dec. 2021 1722-1733*
- Timilsina, A.**, Khamesi, A.R., Agate, V., and Silvestri, S., A Reinforcement Learning Approach for User Preference-Aware Energy Sharing Systems; *TGCN Sept. 2021 1138-1153*
- Tinini, R.I.**, Batista, D.M., Figueiredo, G.B., Tornatore, M., and Mukherjee, B., Energy-Efficient vBBU Migration and Wavelength Reassignment in Cloud-Fog RAN; *TGCN March 2021 18-28*
- Todd, T.D.**, see Teymoori, P., *TGCN June 2021 950-963*
- Tong, E.**, Niu, W., Tian, Y., Liu, J., Baker, T., Verma, S., and Liu, Z., A Hierarchical Energy-Efficient Service Selection Approach With QoS Constraints for Internet of Things; *TGCN June 2021 645-657*
- Tornatore, M.**, see Tinini, R.I., *TGCN March 2021 18-28*
- Tsai, C.**, see Hsu, C., *TGCN June 2021 868-883*
- Tseng, Y.**, see Hsu, C., *TGCN June 2021 868-883*
- Tsinos, C.**, see Kaushik, A., *TGCN March 2021 119-132*
- Tsoumanis, G.**, Oikonomou, K., Aissa, S., and Stavarakakis, I., Energy and Distance Optimization in Rechargeable Wireless Sensor Networks; *TGCN March 2021 378-391*

V

- Valaee, S.**, see Javad-Kalbasi, M., *TGCN Dec. 2021 1781-1790*
- Vandendorpe, L.**, see Ashraf, M., *TGCN Sept. 2021 1594-1609*
- Vaze, R.**, see Rahman, H., *TGCN March 2021 278-290*

Venkatesha Prasad, R.R., Mumtaz, S., Menon, V.G., Al-Dulaimi, A., and Guizani, M., Special Issue on Green Internet of Things: Challenges and Future Opportunities—Part II; *TGCN Sept. 2021 1011-1014*
Veque, V., see Hou, Y., *TGCN March 2021 133-145*
Verma, S., see Tong, E., *TGCN June 2021 645-657*
Vijayalakshmi, B., see Kadirvelu, S., *TGCN Dec. 2021 2065-2075*
Vinayachandran, A., see Rahman, H., *TGCN March 2021 278-290*
Vlachos, E., see Kaushik, A., *TGCN March 2021 119-132*
Vosoughi, A., see Yazdani, H., *TGCN Dec. 2021 2104-2120*

W

Wakamiya, N., see Peper, F., *TGCN Dec. 2021 1856-1868*
Wan, J., see Li, Y., *TGCN Sept. 2021 1212-1222*
Wang, G., see Wang, J., *TGCN Sept. 2021 1293-1305*
Wang, H., see Yang, B., *TGCN March 2021 457-470*
Wang, H., Kim, B., Xie, J., and Han, Z., Energy Drain of the Object Detection Processing Pipeline for Mobile Devices: Analysis and Implications; *TGCN March 2021 41-60*
Wang, J., see Jiang, W., *TGCN Sept. 2021 1426-1437*
Wang, J., Li, B., Wang, G., Hu, Y., and Schmeink, A., Robust Design for UAV-Enabled Multiuser Relaying System With SWIPT ; *TGCN Sept. 2021 1293-1305*
Wang, K., see Hua, S., *TGCN June 2021 964-979*
Wang, L., Chin, K., and Soh, S., Link Schedulers for Green Wireless Networks With Energy Sharing; *TGCN Sept. 2021 1580-1593*
Wang, L., see Balakrishnan, A., *TGCN Dec. 2021 1791-1805*
Wang, R., see Yang, B., *TGCN March 2021 457-470*
Wang, S., see Nie, L., *TGCN June 2021 778-788*
Wang, S., see Liu, Z., *TGCN Sept. 2021 1306-1318*
Wang, T., Li, Y., and Wu, Y., Energy-Efficient UAV Assisted Secure Relay Transmission via Cooperative Computation Offloading; *TGCN Dec. 2021 1669-1683*
Wang, W., Lu, Y., and Chi, C., Secrecy Energy Efficiency in Cognitive Radio Networks With Untrusted Secondary Users; *TGCN March 2021 216-230*
Wang, X., see Zhao, N., *TGCN Sept. 2021 1232-1235*
Wang, X., see Yu, H., *TGCN Sept. 2021 1101-1113*
Wang, X., see Xu, Y., *TGCN Dec. 2021 1734-1746*
Wang, X., Weng, Y., and Gao, H., A Low-Latency and Energy-Efficient Multi-metric Routing Protocol Based on Network Connectivity in VANET Communication; *TGCN Dec. 2021 1761-1776*
Wang, Y., see Jiao, J., *TGCN March 2021 308-321*
Wang, Z., see Ashraf, M., *TGCN Sept. 2021 1594-1609*
Wang, Z., see Xu, Z., *TGCN Sept. 2021 1077-1090*
Weber, T., see Ortiz, A., *TGCN March 2021 442-456*
Wei, W., see Guo, T., *TGCN June 2021 737-749*
Wei, X., see Chen, M., *TGCN Sept. 2021 1271-1282*
Wei, Y., see So, D.K.C., *TGCN Dec. 2021 1777-1780*
Wei, Z., see Cao, J., *TGCN Dec. 2021 1869-1879*
Wen, M., Lin, S., Kim, K.J., and Ji, F., Cyclic Delay Diversity With Index Modulation for Green Internet of Things; *TGCN June 2021 600-610*
Wen, M., see Liu, Z., *TGCN Sept. 2021 1306-1318*
Wen, S., see Zhu, X., *TGCN Sept. 2021 1041-1050*
Weng, Y., see Wang, X., *TGCN Dec. 2021 1761-1776*
Wu, D., see Yang, B., *TGCN March 2021 457-470*
Wu, F., see Gao, Y., *TGCN Sept. 2021 1369-1380*
Wu, J., see Chen, G., *TGCN Sept. 2021 1154-1164*
Wu, Q., see Liu, T., *TGCN March 2021 392-405*
Wu, Q., see Boukerche, A., *TGCN Sept. 2021 1610-1622*
Wu, S., see Jiao, J., *TGCN March 2021 308-321*
Wu, T., see Zhang, Z., *TGCN Dec. 2021 1892-1905*
Wu, Y., see Nie, L., *TGCN June 2021 778-788*
Wu, Y., see Lu, W., *TGCN Sept. 2021 1259-1270*
Wu, Y., see Wang, T., *TGCN Dec. 2021 1669-1683*

X

Xia, J., see Zhao, R., *TGCN Sept. 2021 1248-1258*
Xiang, X., Gui, J., and Xiong, N.N., An Integral Data Gathering Framework for Supervisory Control and Data Acquisition Systems in Green IoT; *TGCN June 2021 714-726*
Xiang, Y., see Zhu, X., *TGCN Sept. 2021 1041-1050*
Xiao, L., see Gao, Y., *TGCN Sept. 2021 1369-1380*
Xiao, S., see Feng, D., *TGCN Dec. 2021 2016-2026*
Xiao, Y., see Li, T., *TGCN June 2021 921-933*
Xie, J., see Wang, H., *TGCN March 2021 41-60*
Xie, L., Cao, X., Xu, J., and Zhang, R., UAV-Enabled Wireless Power Transfer: A Tutorial Overview; *TGCN Dec. 2021 2042-2064*
Xiong, N.N., see Guo, T., *TGCN June 2021 737-749*
Xiong, N.N., see Xiang, X., *TGCN June 2021 714-726*
Xu, H., see Huang, Y., *TGCN June 2021 670-681*
Xu, J., see Xie, L., *TGCN Dec. 2021 2042-2064*
Xu, K., see Guo, C., *TGCN March 2021 497-511*
Xu, L., see Zhu, K., *TGCN Dec. 2021 1657-1668*
Xu, S., see Sui, W., *TGCN March 2021 72-83*
Xu, W., see Li, Y., *TGCN Sept. 2021 1212-1222*
Xu, Y., Gui, G., Ohtsuki, T., Gacanin, H., Adebisi, B., Sari, H., and Adachi, F., Robust Resource Allocation for Two-Tier HetNets: An Interference-Efficiency Perspective; *TGCN Sept. 2021 1514-1528*
Xu, Y., Chen, J., Gu, F., Yao, K., Jia, L., Liu, D., and Wang, X., Energy-Efficient Channel Access and Data Offloading Against Dynamic Jamming Attacks; *TGCN Dec. 2021 1734-1746*
Xu, Y., see Xu, Y., *TGCN Dec. 2021 1734-1746*
Xu, Z., Han, G., Liu, L., Martinez-Garcia, M., and Wang, Z., Multi-Energy Scheduling of an Industrial Integrated Energy System by Reinforcement Learning-Based Differential Evolution; *TGCN Sept. 2021 1077-1090*

Y

Yadav, A., see Le, Q.N., *TGCN March 2021 322-334*
Yan, Y., see Jiang, W., *TGCN Sept. 2021 1426-1437*
Yang, B., Wu, D., Wang, H., Gao, Y., and Wang, R., Two-Layer Stackelberg Game-Based Offloading Strategy for Mobile Edge Computing Enhanced FiWi Access Networks; *TGCN March 2021 457-470*
Yang, D., see Cui, E., *TGCN March 2021 540-551*
Yang, D., see Gao, Y., *TGCN Sept. 2021 1369-1380*
Yang, K., see Hua, S., *TGCN June 2021 964-979*
Yang, K., see So, D.K.C., *TGCN Dec. 2021 1777-1780*
Yang, T., see Ning, Q., *TGCN Sept. 2021 1283-1292*
Yang, W., see Chen, G., *TGCN Sept. 2021 1154-1164*
Yang, X., see Ning, Q., *TGCN Sept. 2021 1283-1292*
Yang, Y., see Gao, X., *TGCN Sept. 2021 1632-1646*
Yang, Z., Liu, H., Chen, Y., Zhu, X., Ning, Y., and Zhu, W., UEE-RPL: A UAV-Based Energy Efficient Routing for Internet of Things; *TGCN Sept. 2021 1333-1344*
Yang, Z., Fang, Y., Cheng, Y., Chen, P., and Almakhlles, D.J., Protograph LDPC-Coded BICM-ID With Irregular Mapping: An Emerging Transmission Technique for Massive Internet of Things; *TGCN Sept. 2021 1051-1065*
Yanikomeroglu, H., see Mahmoud, A., *TGCN Sept. 2021 1029-1040*
Yanikomeroglu, H., see Ghdiri, O., *TGCN Dec. 2021 1918-1933*
Yao, J., and Ansari, N., Wireless Power and Energy Harvesting Control in IoD by Deep Reinforcement Learning; *TGCN June 2021 980-989*
Yao, K., see Xu, Y., *TGCN Dec. 2021 1734-1746*
Yazdani, H., and Vosoughi, A., Steady-State Rate-Optimal Power Adaptation in Energy Harvesting Opportunistic Cognitive Radios With Spectrum Sensing and Channel Estimation Errors; *TGCN Dec. 2021 2104-2120*
Ye, J., and Gharavi, H., Deep Reinforcement Learning-Assisted Energy Harvesting Wireless Networks; *TGCN June 2021 990-1002*
Yi, Y., see Hamedani, K., *TGCN March 2021 484-496*
Yin, Y., see Li, Y., *TGCN Sept. 2021 1212-1222*
Yomo, H., see Shirraishi, J., *TGCN March 2021 362-377*
Yousefi, S., see Ahmed, I.Z., *TGCN March 2021 61-71*

- Yu, F.R.**, see Zhang, Z., *TGCN Dec. 2021 1892-1905*
Yu, H., Zhou, Z., Jia, Z., Zhao, X., Zhang, L., and Wang, X., Multi-Timescale Multi-Dimension Resource Allocation for NOMA-Edge Computing-Based Power IoT With Massive Connectivity; *TGCN Sept. 2021 1101-1113*
Yu, K., see Guo, T., *TGCN June 2021 737-749*
Yu, P., see Feng, L., *TGCN Sept. 2021 1179-1190*
Yu, W., see Su, B., *TGCN June 2021 858-867*

Z

- Zargari, S.**, Farahmand, S., Abolhassani, B., and Tellambura, C., Robust Active and Passive Beamformer Design for IRS-Aided Downlink MISO PS-SWIPT With a Nonlinear Energy Harvesting Model; *TGCN Dec. 2021 2027-2041*
Zeadally, S., see Goudarzi, S., *TGCN Dec. 2021 2076-2088*
Zeadally, S., see Gupta, R., *TGCN Dec. 2021 1712-1721*
Zeng, M., see Li, X., *TGCN Sept. 2021 1066-1076*
Zhang, B., see Tian, X., *TGCN Dec. 2021 2089-2103*
Zhang, C., Dong, M., and Ota, K., Heterogeneous Mobile Networking for Lightweight UAV Assisted Emergency Communication; *TGCN Sept. 2021 1345-1356*
Zhang, G., see Liu, T., *TGCN March 2021 392-405*
Zhang, H., see Cui, E., *TGCN March 2021 540-551*
Zhang, H., see Kang, Y., *TGCN Dec. 2021 1947-1960*
Zhang, J., see Liu, T., *TGCN March 2021 392-405*
Zhang, L., see Jiang, W., *TGCN Sept. 2021 1426-1437*
Zhang, L., see Lv, L., *TGCN Sept. 2021 1381-1394*
Zhang, L., see Yu, H., *TGCN Sept. 2021 1101-1113*
Zhang, Q., see Jiao, J., *TGCN March 2021 308-321*
Zhang, Q., see Zhang, Z., *TGCN Dec. 2021 1892-1905*
Zhang, R., see Xie, L., *TGCN Dec. 2021 2042-2064*
Zhang, S., see Sui, W., *TGCN March 2021 72-83*
Zhang, T., and Chen, W., Computation Offloading in Heterogeneous Mobile Edge Computing With Energy Harvesting; *TGCN March 2021 552-565*
Zhang, T., Lei, J., Liu, Y., Feng, C., and Nallanathan, A., Trajectory Optimization for UAV Emergency Communication With Limited User Equipment Energy: A Safe-DQN Approach; *TGCN Sept. 2021 1236-1247*
Zhang, Z., see Meng, Y., *TGCN June 2021 703-713*
Zhang, Z., Zhang, Q., Miao, J., Yu, F.R., Fu, F., Du, J., and Wu, T., Energy-Efficient Secure Video Streaming in UAV-Enabled Wireless Networks: A Safe-DQN Approach; *TGCN Dec. 2021 1892-1905*
Zhao, C., see Ning, Q., *TGCN Sept. 2021 1283-1292*
Zhao, D., see Teymouri, P., *TGCN June 2021 950-963*
Zhao, J., see Cao, J., *TGCN Dec. 2021 1869-1879*
Zhao, M., Li, W., Bao, L., Luo, J., He, Z., and Liu, D., Fairness-Aware Task Scheduling and Resource Allocation in UAV-Enabled Mobile Edge Computing Networks; *TGCN Dec. 2021 2174-2187*
Zhao, N., da Costa, D.B., Tang, J., Wang, X., and Chambers, J.A., Special Issue on Unmanned Aerial Vehicle (UAV)-Enabled Green Communications and Networking; *TGCN Sept. 2021 1232-1235*
Zhao, R., see Le, Q.N., *TGCN March 2021 322-334*
Zhao, R., Xia, J., Zhao, Z., Lai, S., Fan, L., and Li, D., Green MEC Networks Design Under UAV Attack: A Deep Reinforcement Learning Approach; *TGCN Sept. 2021 1248-1258*
Zhao, X., see Yu, H., *TGCN Sept. 2021 1101-1113*
Zhao, Z., see Zhao, R., *TGCN Sept. 2021 1248-1258*
Zheng, C., see Lv, L., *TGCN Sept. 2021 1381-1394*
Zheng, F., see Feng, D., *TGCN Dec. 2021 2016-2026*
Zheng, R., see Jafarizadeh, M., *TGCN Dec. 2021 1820-1832*
Zheng, Y., see Li, X., *TGCN Sept. 2021 1066-1076*
Zhou, F., see Feng, L., *TGCN March 2021 203-215*
Zhou, X., see Ning, Q., *TGCN Sept. 2021 1283-1292*
Zhou, Y., see Hua, S., *TGCN June 2021 964-979*
Zhou, Y., see Feng, L., *TGCN Sept. 2021 1179-1190*
Zhou, Z., Shojafar, M., Alazab, M., Abawajy, J., and Li, F., AFED-EF: An Energy-Efficient VM Allocation Algorithm for IoT Applications in a Cloud Data Center; *TGCN June 2021 658-669*
Zhou, Z., see Yu, H., *TGCN Sept. 2021 1101-1113*

- Zhou, Z.**, Shojafar, M., Abawajy, J., and Bashir, A.K., IADE: An Improved Differential Evolution Algorithm to Preserve Sustainability in a 6G Network; *TGCN Dec. 2021 1747-1760*
Zhu, K., Xu, L., and Niyato, D., Distributed Resource Allocation in RF-Powered Cognitive Ambient Backscatter Networks; *TGCN Dec. 2021 1657-1668*
Zhu, W., see Kusaladharma, S., *TGCN Sept. 2021 1467-1481*
Zhu, W., see Yang, Z., *TGCN Sept. 2021 1333-1344*
Zhu, X., see Yang, Z., *TGCN Sept. 2021 1333-1344*
Zhu, X., Wen, S., Jolfaei, A., Camtepe, S., and Xiang, Y., Synthesized Corpora to Evaluate Fuzzing for Green Internet of Things Programs; *TGCN Sept. 2021 1041-1050*
Zhu, X., see Cao, J., *TGCN Dec. 2021 1869-1879*
Zhu, Z., see Hu, N., *TGCN June 2021 750-764*
Zitoun, L., see Hou, Y., *TGCN March 2021 133-145*
Zukerman, M., see Guo, C., *TGCN March 2021 497-511*

Subject Index

Numeric

5G mobile communication

- A Low-Latency and Energy-Efficient Multimetric Routing Protocol Based on Network Connectivity in VANET Communication. Wang, X., +, *TGCN Dec. 2021 1761-1776*
 Blockchain-Based Data Dissemination Scheme for 5G-Enabled Softwarized UAV Networks. Gupta, R., +, *TGCN Dec. 2021 1712-1721*
 Energy Aware Latency Minimization for Network Slicing Enabled Edge Computing. Hossain, M.A., +, *TGCN Dec. 2021 2150-2159*
 Energy Efficient Resource Allocation Optimization in Fog Radio Access Networks With Outdated Channel Knowledge. Dinh, T.H.L., +, *TGCN March 2021 146-159*
 Energy Harvesting Optimization of Uplink-NOMA System for IoT Networks Based on Channel Capacity Analysis Using the Water Cycle Algorithm. Bulut, I.S., +, *TGCN March 2021 291-307*
 Energy-Efficient Precoder Design for Downlink Multi-User MISO Networks With Finite Blocklength Codes. Singh, K., +, *TGCN March 2021 160-173*
 Energy-Efficient Resource Allocation With Flexible Frame Structure for Hybrid eMBB and URLLC Services. Sui, W., +, *TGCN March 2021 72-83*
 Energy-Efficient UAV Assisted Secure Relay Transmission via Cooperative Computation Offloading. Wang, T., +, *TGCN Dec. 2021 1669-1683*
 Fluid-Based Energy Efficiency Analysis of JT-CoMP Scheme in Femto Cellular Networks. Hou, Y., +, *TGCN March 2021 133-145*
 Green Tethered UAVs for EMF-Aware Cellular Networks. Lou, Z., +, *TGCN Dec. 2021 1697-1711*
 Intelligent Reflecting Surfaces Assisted UAV Communications for IoT Networks: Performance Analysis. Mahmoud, A., +, *TGCN Sept. 2021 1029-1040*
 Robust Resource Allocation for Two-Tier HetNets: An Interference-Efficiency Perspective. Xu, Y., +, *TGCN Sept. 2021 1514-1528*
 Special Issue on Unmanned Aerial Vehicle (UAV)-Enabled Green Communications and Networking. Zhao, N., +, *TGCN Sept. 2021 1232-1235*
- ### 6G mobile communication
- An Energy-Efficient In-Network Computing Paradigm for 6G. Hu, N., +, *TGCN Dec. 2021 1722-1733*
 Energy-Efficient UAV Assisted Secure Relay Transmission via Cooperative Computation Offloading. Wang, T., +, *TGCN Dec. 2021 1669-1683*
 Guest Editorial Special Issue on "Green Communication and Computing Technologies for 6G Networks" in IEEE Transactions on Green Communications and Networking. Anpalagan, A., +, *TGCN Dec. 2021 1653-1656*
 IADE: An Improved Differential Evolution Algorithm to Preserve Sustainability in a 6G Network. Zhou, Z., +, *TGCN Dec. 2021 1747-1760*

A

Access protocols

- Content-Based Wake-Up for Top- k Query in Wireless Sensor Networks. *Shiraishi, J.*, +, *TGCN March 2021 362-377*
- Energy Efficient Data Gathering in IoT Networks With Heterogeneous Traffic for Remote Area Surveillance Applications: A Cross Layer Approach. *Bhattacharjee, D.*, +, *TGCN Sept. 2021 1165-1178*
- Energy-Efficient Cross-Layer Spectrum Sharing in CR Green IoT Networks. *Salameh, H.A.B.*, +, *TGCN Sept. 2021 1091-1100*
- Energy-Efficient MAC for Cellular IoT: State-of-the-Art, Challenges, and Standardization. *Shah, S.W.H.*, +, *TGCN June 2021 587-599*
- Optimal Energy Sharing for Cooperative Relaying in a Random Access Network With Energy Harvesting Nodes. *Mortazavi, S.M.*, +, *TGCN March 2021 231-242*

Ad hoc networks

- Reinforcement Learning-Based Energy-Efficient Data Access for Airborne Users in Civil Aircrafts-Enabled SAGIN. *Chen, Q.*, +, *TGCN June 2021 934-949*

Adaptive modulation

- Energy Efficiency in Sliceable-Transponder Enabled Elastic Optical Networks. *Costa, L.R.*, +, *TGCN June 2021 789-802*

Adaptive optics

- A Circuit for Simultaneous Reception of Data and Power Using a Solar Cell. *Kadirvelu, S.*, +, *TGCN Dec. 2021 2065-2075*

Aerospace communication

- Trajectory and Resource Optimization in OFDM-Based UAV-Powered IoT Network. *Lu, W.*, +, *TGCN Sept. 2021 1259-1270*

Aerospace computing

- Reinforcement Learning-Based Energy-Efficient Data Access for Airborne Users in Civil Aircrafts-Enabled SAGIN. *Chen, Q.*, +, *TGCN June 2021 934-949*

Aerospace control

- Heterogeneous Mobile Networking for Lightweight UAV Assisted Emergency Communication. *Zhang, C.*, +, *TGCN Sept. 2021 1345-1356*

Aerospace robotics

- On the Influence of Charging Stations Spatial Distribution on Aerial Wireless Networks. *Qin, Y.*, +, *TGCN Sept. 2021 1395-1409*

Aircraft communication

- Energy and Spectrum Efficient Blind Equalization With Unknown Constellation for Air-to-Ground Multipath UAV Communications. *Liu, M.*, +, *TGCN Sept. 2021 1357-1368*
- Heterogeneous Mobile Networking for Lightweight UAV Assisted Emergency Communication. *Zhang, C.*, +, *TGCN Sept. 2021 1345-1356*
- Reinforcement Learning-Based Energy-Efficient Data Access for Airborne Users in Civil Aircrafts-Enabled SAGIN. *Chen, Q.*, +, *TGCN June 2021 934-949*

Aircraft control

- Flocking Control Algorithms Based on the Diffusion Model for Unmanned Aerial Vehicle Systems. *Chen, M.*, +, *TGCN Sept. 2021 1271-1282*
- Trajectory Design for Throughput Maximization in UAV-Assisted Communication System. *Gupta, N.*, +, *TGCN Sept. 2021 1319-1332*
- Trajectory Optimization for UAV Emergency Communication With Limited User Equipment Energy: A Safe-DQN Approach. *Zhang, T.*, +, *TGCN Sept. 2021 1236-1247*

Amplifiers

- A Physical Layer for Low Power Optical Wireless Communications. *Hinrichs, M.*, +, *TGCN March 2021 4-17*

Amplify and forward communication

- Analysis of Asymmetric Dual-Hop Energy Harvesting-Based Wireless Communication Systems in Mixed Fading Environments. *Illi, E.*, +, *TGCN March 2021 261-277*
- Optimization of SWIPT With Battery-Assisted Energy Harvesting Full-Duplex Relays. *Agrawal, K.*, +, *TGCN March 2021 243-260*

Amplitude shift keying

- A Physical Layer for Low Power Optical Wireless Communications. *Hinrichs, M.*, +, *TGCN March 2021 4-17*
- MEES-WuR: Minimum Energy Coding With Early Shutdown for Wake-Up Receivers. *Djidi, N.E.H.*, +, *TGCN Sept. 2021 1502-1513*

Analog-digital conversion

- An Optimal Low-Complexity Energy-Efficient ADC Bit Allocation for Massive MIMO. *Ahmed, I.Z.*, +, *TGCN March 2021 61-71*
- Joint Bit Allocation and Hybrid Beamforming Optimization for Energy Efficient Millimeter Wave MIMO Systems. *Kaushik, A.*, +, *TGCN March 2021 119-132*

Analytical models

- Network Operator Revenue Maximization in Dual Powered Green Cellular Networks. *Balakrishnan, A.*, +, *TGCN Dec. 2021 1791-1805*
- Optimal Design of LEMoNet for Environmental Monitoring of Data Centers. *Jafarzadeh, M.*, +, *TGCN Dec. 2021 1820-1832*

Ant colony optimization

- Role Assignment for Spatially-Correlated Data Aggregation Using Multi-Sink Internet of Underwater Things. *Al-Habob, A.A.*, +, *TGCN Sept. 2021 1570-1579*

Antenna arrays

- Optimizing Computation Efficiency for NOMA-Assisted Mobile Edge Computing With User Cooperation. *Su, B.*, +, *TGCN June 2021 858-867*
- Secrecy Energy Efficiency in Cognitive Radio Networks With Untrusted Secondary Users. *Wang, W.*, +, *TGCN March 2021 216-230*
- Statistical Learning Based Joint Antenna Selection and User Scheduling for Single-Cell Massive MIMO Systems. *Guo, M.*, +, *TGCN March 2021 471-483*
- Towards Optimal Energy Efficiency in Cell-Free Massive MIMO Systems. *Papazafeiropoulos, A.*, +, *TGCN June 2021 816-831*

Antennas

- Machine Learning Based Beam Selection With Low Complexity Hybrid Beamforming Design for 5G Massive MIMO Systems. *Ahmed, I.*, +, *TGCN Dec. 2021 2160-2173*
- RIS-Assisted Advanced Spatial Modulation Techniques for Ambient Backscattering Communications. *Bhowal, A.*, +, *TGCN Dec. 2021 1684-1696*

Approximation theory

- Energy-Efficient Precoder Design for Downlink Multi-User MISO Networks With Finite Blocklength Codes. *Singh, K.*, +, *TGCN March 2021 160-173*
- Full-Duplex Non-Orthogonal Multiple Access Cooperative Overlay Spectrum-Sharing Networks With SWIPT. *Le, Q.N.*, +, *TGCN March 2021 322-334*
- Link Schedulers for Green Wireless Networks With Energy Sharing. *Wang, L.*, +, *TGCN Sept. 2021 1580-1593*
- Secrecy Energy Efficiency in Cognitive Radio Networks With Untrusted Secondary Users. *Wang, W.*, +, *TGCN March 2021 216-230*

Array signal processing

- Cooperative Beamforming and Jamming for Secure VLC System in the Presence of Active and Passive Eavesdroppers. *Cho, S.*, +, *TGCN Dec. 2021 1988-1998*
- Energy Efficient Resource Allocation Optimization in Fog Radio Access Networks With Outdated Channel Knowledge. *Dinh, T.H.L.*, +, *TGCN March 2021 146-159*
- Joint Bit Allocation and Hybrid Beamforming Optimization for Energy Efficient Millimeter Wave MIMO Systems. *Kaushik, A.*, +, *TGCN March 2021 119-132*
- Machine Learning Based Beam Selection With Low Complexity Hybrid Beamforming Design for 5G Massive MIMO Systems. *Ahmed, I.*, +, *TGCN Dec. 2021 2160-2173*
- Optimizing Computation Efficiency for NOMA-Assisted Mobile Edge Computing With User Cooperation. *Su, B.*, +, *TGCN June 2021 858-867*
- Reconfigurable Intelligent Surface for Green Edge Inference. *Hua, S.*, +, *TGCN June 2021 964-979*
- Robust Active and Passive Beamformer Design for IRS-Aided Downlink MISO PS-SWIPT With a Nonlinear Energy Harvesting Model. *Zargari, S.*, +, *TGCN Dec. 2021 2027-2041*
- Robust Design for UAV-Enabled Multiuser Relaying System With SWIPT. *Wang, J.*, +, *TGCN Sept. 2021 1293-1305*
- Secrecy Energy Efficiency in Cognitive Radio Networks With Untrusted Secondary Users. *Wang, W.*, +, *TGCN March 2021 216-230*

Artificial intelligence

An IoT-Based Prediction Technique for Efficient Energy Consumption in Buildings. *Goudarzi, S.*, +, *TGCN Dec. 2021 2076-2088*

IADE: An Improved Differential Evolution Algorithm to Preserve Sustainability in a 6G Network. *Zhou, Z.*, +, *TGCN Dec. 2021 1747-1760*

Augmented reality

Energy Drain of the Object Detection Processing Pipeline for Mobile Devices: Analysis and Implications. *Wang, H.*, +, *TGCN March 2021 41-60*

Automatic repeat request

Energy Efficient Network Coding HARQ Transmission Scheme for S-IO. *Jiao, J.*, +, *TGCN March 2021 308-321*

Autonomous aerial vehicles

3D Trajectory and Transmit Power Optimization for UAV-Enabled Multi-Link Relaying Systems. *Liu, T.*, +, *TGCN March 2021 392-405*

An Energy-Efficient Selection Mechanism of Relay and Edge Computing in UAV-Assisted Cellular Networks. *Liu, Z.*, +, *TGCN Sept. 2021 1306-1318*

An Integral Data Gathering Framework for Supervisory Control and Data Acquisition Systems in Green IoT. *Xiang, X.*, +, *TGCN June 2021 714-726*

BL-ALM: A Blind Scalable Edge-Guided Reconstruction Filter for Smart Environmental Monitoring Through Green IoMT-UAV Networks. *Khosravi, M.R.*, +, *TGCN June 2021 727-736*

Cellular-Connected UAV Trajectory Design With Connectivity Constraint: A Deep Reinforcement Learning Approach. *Gao, Y.*, +, *TGCN Sept. 2021 1369-1380*

Contract and Lyapunov Optimization-Based Load Scheduling and Energy Management for UAV Charging Stations. *Lv, L.*, +, *TGCN Sept. 2021 1381-1394*

Cooperative Transmission of Wireless Information and Energy in Anti-Eavesdropping UAV Relay Network. *Ning, Q.*, +, *TGCN Sept. 2021 1283-1292*

Energy and Spectrum Efficient Blind Equalization With Unknown Constellation for Air-to-Ground Multipath UAV Communications. *Liu, M.*, +, *TGCN Sept. 2021 1357-1368*

Energy-Efficient UAV Communications Under Stochastic Trajectory: A Markov Decision Process Approach. *Han, D.*, +, *TGCN March 2021 106-118*

Flocking Control Algorithms Based on the Diffusion Model for Unmanned Aerial Vehicle Systems. *Chen, M.*, +, *TGCN Sept. 2021 1271-1282*

Green MEC Networks Design Under UAV Attack: A Deep Reinforcement Learning Approach. *Zhao, R.*, +, *TGCN Sept. 2021 1248-1258*

Heterogeneous Mobile Networking for Lightweight UAV Assisted Emergency Communication. *Zhang, C.*, +, *TGCN Sept. 2021 1345-1356*

Intelligent Reflecting Surfaces Assisted UAV Communications for IoT Networks: Performance Analysis. *Mahmoud, A.*, +, *TGCN Sept. 2021 1029-1040*

On the Influence of Charging Stations Spatial Distribution on Aerial Wireless Networks. *Qin, Y.*, +, *TGCN Sept. 2021 1395-1409*

Resource Inference for Sustainable and Responsive Task Offloading in Challenged Edge Networks. *Sacco, A.*, +, *TGCN Sept. 2021 1114-1127*

Robust Design for UAV-Enabled Multiuser Relaying System With SWIPT. *Wang, J.*, +, *TGCN Sept. 2021 1293-1305*

Statistical-QoS Guarantee for IoT Network Driven by Laser-Powered UAV Relay and RF Backscatter Communications. *Hassan, M.Z.*, +, *TGCN March 2021 406-425*

Trajectory and Resource Optimization in OFDM-Based UAV-Powered IoT Network. *Lu, W.*, +, *TGCN Sept. 2021 1259-1270*

Trajectory Design for Throughput Maximization in UAV-Assisted Communication System. *Gupta, N.*, +, *TGCN Sept. 2021 1319-1332*

Trajectory Optimization for UAV Emergency Communication With Limited User Equipment Energy: A Safe-DQN Approach. *Zhang, T.*, +, *TGCN Sept. 2021 1236-1247*

UEE-RPL: A UAV-Based Energy Efficient Routing for Internet of Things. *Yang, Z.*, +, *TGCN Sept. 2021 1333-1344*

UV-CDS: An Energy-Efficient Scheduling of UAVs for Premises Sterilization. *Tazrin, T.*, +, *TGCN Sept. 2021 1191-1201*

B**Backscatter**

BER Analysis of a Backscatter Communication System With Non-Orthogonal Multiple Access. *Nazar, A.W.*, +, *TGCN June 2021 574-586*

Distributed Resource Allocation in RF-Powered Cognitive Ambient Backscatter Networks. *Zhu, K.*, +, *TGCN Dec. 2021 1657-1668*

Physical Layer Security of Cognitive Ambient Backscatter Communications for Green Internet-of-Things. *Li, X.*, +, *TGCN Sept. 2021 1066-1076*

RIS-Assisted Advanced Spatial Modulation Techniques for Ambient Backscattering Communications. *Bhowal, A.*, +, *TGCN Dec. 2021 1684-1696*

Statistical-QoS Guarantee for IoT Network Driven by Laser-Powered UAV Relay and RF Backscatter Communications. *Hassan, M.Z.*, +, *TGCN March 2021 406-425*

Bandwidth allocation

Green MEC Networks Design Under UAV Attack: A Deep Reinforcement Learning Approach. *Zhao, R.*, +, *TGCN Sept. 2021 1248-1258*

Protocol Design for Energy Efficient OLT in TWDM-EPON Supporting Diverse Delay Bounds. *Dutta, S.*, +, *TGCN Sept. 2021 1438-1450*

Base stations

Analysis of Area Spectral & Energy Efficiency in a CoMP-Enabled User-Centric Cloud RAN. *Kasi, S.K.*, +, *TGCN Dec. 2021 1999-2015*

Centralized and Distributed Algorithms for Energy and Spectrum Efficient User Association in Small Cell Networks. *Javad-Kalbasi, M.*, +, *TGCN Dec. 2021 1781-1790*

Batteries

Event-Triggered Transmission Policies for Harvesting Powered Sensors With Time-Varying Models. *Seifullaev, R.*, +, *TGCN Dec. 2021 2139-2149*

Steady-State Rate-Optimal Power Adaptation in Energy Harvesting Opportunistic Cognitive Radios With Spectrum Sensing and Channel Estimation Errors. *Yazdani, H.*, +, *TGCN Dec. 2021 2104-2120*

Battery powered vehicles

Contract and Lyapunov Optimization-Based Load Scheduling and Energy Management for UAV Charging Stations. *Lv, L.*, +, *TGCN Sept. 2021 1381-1394*

Biological system modeling

An IoT-Based Prediction Technique for Efficient Energy Consumption in Buildings. *Goudarzi, S.*, +, *TGCN Dec. 2021 2076-2088*

Blind equalizers

Energy and Spectrum Efficient Blind Equalization With Unknown Constellation for Air-to-Ground Multipath UAV Communications. *Liu, M.*, +, *TGCN Sept. 2021 1357-1368*

Blockchains

Blockchain-Based Data Dissemination Scheme for 5G-Enabled Softwarized UAV Networks. *Gupta, R.*, +, *TGCN Dec. 2021 1712-1721*

Blood

LightIoT: Lightweight and Secure Communication for Energy-Efficient IoT in Health Informatics. *Jan, M.A.*, +, *TGCN Sept. 2021 1202-1211*

Body area networks

Enabling Green Mobile-Edge Computing for 5G-Based Healthcare Applications. *Bishoyi, P.K.*, +, *TGCN Sept. 2021 1623-1631*

Brightness

iDim: Practical Implementation of Index Modulation for LiFi Dimming. *Nguyen, T.*, +, *TGCN Dec. 2021 1880-1891*

Broadband networks

Energy-Efficient Resource Allocation With Flexible Frame Structure for Hybrid eMBB and URLLC Services. *Sui, W.*, +, *TGCN March 2021 72-83*

Building management systems

Efficient Allocation of Harvested Energy at the Edge by Building a Tangible Micro-Grid—The Texas Case. *Kouvelas, N.*, +, *TGCN March 2021 94-105*

C**Cache storage**

Cache- and Energy Harvesting-Enabled D2D Cellular Network: Modeling, Analysis and Optimization. *Meng, Y.*, +, *TGCN June 2021 703-713*

Leveraging Graph Convolutional-LSTM for Energy-Efficient Caching in Blockchain-Based Green IoT. *Chen, G.*, +, *TGCN Sept. 2021 1154-1164*

Capacitive sensors

Event-Triggered Transmission Policies for Harvesting Powered Sensors With Time-Varying Models. *Seifullaei, R.*, +, *TGCN Dec. 2021 2139-2149*

Carrier sense multiple access

Content-Based Wake-Up for Top- k Query in Wireless Sensor Networks. *Shiraishi, J.*, +, *TGCN March 2021 362-377*

Cascading style sheets

Alternative Chirp Spread Spectrum Techniques for LPWANs. *Bizon Franco de Almeida, I.*, +, *TGCN Dec. 2021 1846-1855*

Cellular networks

Green Tethered UAVs for EMF-Aware Cellular Networks. *Lou, Z.*, +, *TGCN Dec. 2021 1697-1711*

Network Operator Revenue Maximization in Dual Powered Green Cellular Networks. *Balakrishnan, A.*, +, *TGCN Dec. 2021 1791-1805*

Cellular radio

An Energy-Efficient Selection Mechanism of Relay and Edge Computing in UAV-Assisted Cellular Networks. *Liu, Z.*, +, *TGCN Sept. 2021 1306-1318*

Cache- and Energy Harvesting-Enabled D2D Cellular Network: Modeling, Analysis and Optimization. *Meng, Y.*, +, *TGCN June 2021 703-713*

Cellular-Connected UAV Trajectory Design With Connectivity Constraint: A Deep Reinforcement Learning Approach. *Gao, Y.*, +, *TGCN Sept. 2021 1369-1380*

Computation Offloading in Heterogeneous Mobile Edge Computing With Energy Harvesting. *Zhang, T.*, +, *TGCN March 2021 552-565*

Deep Reinforcement Learning-Assisted Energy Harvesting Wireless Networks. *Ye, J.*, +, *TGCN June 2021 990-1002*

Energy Efficiency Maximization Under Minimum Rate Constraints in Multi-Cell MIMO Systems With Finite Buffers. *Saraiva, J.V.*, +, *TGCN March 2021 174-189*

Energy Optimization in Ultra-Dense Radio Access Networks via Traffic-Aware Cell Switching. *Ozturk, M.*, +, *TGCN June 2021 832-845*

Energy-Efficient and Reliable IoT Access Without Radio Resource Reservation. *Azari, A.*, +, *TGCN June 2021 908-920*

Energy-Efficient Joint Optimization of Channel Assignment, Power Allocation, and Relay Selection Based on Hypergraph for Uplink mMTC Networks. *Feng, L.*, +, *TGCN March 2021 203-215*

Energy-Efficient MAC for Cellular IoT: State-of-the-Art, Challenges, and Standardization. *Shah, S.W.H.*, +, *TGCN June 2021 587-599*

Energy-Efficient Offloading for Mission-Critical IoT Services Using EVT-Embedded Intelligent Learning. *Feng, L.*, +, *TGCN Sept. 2021 1179-1190*

Energy-Efficient Precoder Design for Downlink Multi-User MISO Networks With Finite Blocklength Codes. *Singh, K.*, +, *TGCN March 2021 160-173*

Joint Load Control and Energy Sharing for Renewable Powered Small Base Stations: A Machine Learning Approach. *Piovesan, N.*, +, *TGCN March 2021 512-525*

Multi-Timescale Multi-Dimension Resource Allocation for NOMA-Edge Computing-Based Power IoT With Massive Connectivity. *Yu, H.*, +, *TGCN Sept. 2021 1101-1113*

On the Influence of Charging Stations Spatial Distribution on Aerial Wireless Networks. *Qin, Y.*, +, *TGCN Sept. 2021 1395-1409*

Optimizing Computation Efficiency for NOMA-Assisted Mobile Edge Computing With User Cooperation. *Su, B.*, +, *TGCN June 2021 858-867*

Rate and Energy Efficiency Improvements of Massive MIMO-Based Stochastic Cellular Networks With NOMA. *Kusaladharma, S.*, +, *TGCN Sept. 2021 1467-1481*

Reconfigurable Intelligent Surface for Green Edge Inference. *Hua, S.*, +, *TGCN June 2021 964-979*

Statistical Learning Based Joint Antenna Selection and User Scheduling for Single-Cell Massive MIMO Systems. *Guo, M.*, +, *TGCN March 2021 471-483*

Uplink Power Allocation for Throughput and Energy Efficiency Over Nakagami- m Fading Channels. *Ho, D.H.*, +, *TGCN March 2021 190-202*

Channel allocation

Energy-Efficient Joint Optimization of Channel Assignment, Power Allocation, and Relay Selection Based on Hypergraph for Uplink mMTC Networks. *Feng, L.*, +, *TGCN March 2021 203-215*

Channel capacity

Analysis of Asymmetric Dual-Hop Energy Harvesting-Based Wireless Communication Systems in Mixed Fading Environments. *Illi, E.*, +, *TGCN March 2021 261-277*

Energy Harvesting Optimization of Uplink-NOMA System for IoT Networks Based on Channel Capacity Analysis Using the Water Cycle Algorithm. *Bulut, I.S.*, +, *TGCN March 2021 291-307*

Intelligent Reflecting Surfaces Assisted UAV Communications for IoT Networks: Performance Analysis. *Mahmoud, A.*, +, *TGCN Sept. 2021 1029-1040*

Channel coding

Energy-Efficient Precoder Design for Downlink Multi-User MISO Networks With Finite Blocklength Codes. *Singh, K.*, +, *TGCN March 2021 160-173*

MEES-WuR: Minimum Energy Coding With Early Shutdown for Wake-Up Receivers. *Djidi, N.E.H.*, +, *TGCN Sept. 2021 1502-1513*

Channel estimation

Alternative Chirp Spread Spectrum Techniques for LPWANs. *Bizon Franco de Almeida, I.*, +, *TGCN Dec. 2021 1846-1855*

Cyclic Delay Diversity With Index Modulation for Green Internet of Things. *Wen, M.*, +, *TGCN June 2021 600-610*

Multi-Agent Reinforcement Learning for Energy Harvesting Two-Hop Communications With a Partially Observable System State. *Ortiz, A.*, +, *TGCN March 2021 442-456*

Statistical Learning Based Joint Antenna Selection and User Scheduling for Single-Cell Massive MIMO Systems. *Guo, M.*, +, *TGCN March 2021 471-483*

Steady-State Rate-Optimal Power Adaptation in Energy Harvesting Opportunistic Cognitive Radios With Spectrum Sensing and Channel Estimation Errors. *Yazdani, H.*, +, *TGCN Dec. 2021 2104-2120*

Chaos

Secure and Energy Efficient-Based E-Health Care Framework for Green Internet of Things. *Kaur, M.*, +, *TGCN Sept. 2021 1223-1231*

Chirp

Alternative Chirp Spread Spectrum Techniques for LPWANs. *Bizon Franco de Almeida, I.*, +, *TGCN Dec. 2021 1846-1855*

Cloud computing

CoxNet: A Computation Reuse Architecture at the Edge. *Bellal, Z.*, +, *TGCN June 2021 765-777*

AFED-EF: An Energy-Efficient VM Allocation Algorithm for IoT Applications in a Cloud Data Center. *Zhou, Z.*, +, *TGCN June 2021 658-669*

An Energy-Efficient In-Network Computing Paradigm for 6G. *Hu, N.*, +, *TGCN Dec. 2021 1722-1733*

Analysis of Area Spectral & Energy Efficiency in a CoMP-Enabled User-Centric Cloud RAN. *Kasi, S.K.*, +, *TGCN Dec. 2021 1999-2015*

Computation Offloading in Heterogeneous Mobile Edge Computing With Energy Harvesting. *Zhang, T.*, +, *TGCN March 2021 552-565*

Deep-Green: A Dispersed Energy-Efficiency Computing Paradigm for Green Industrial IoT. *Hu, N.*, +, *TGCN June 2021 750-764*

Enabling Green Mobile-Edge Computing for 5G-Based Healthcare Applications. *Bishoyi, P.K.*, +, *TGCN Sept. 2021 1623-1631*

Energy-Aware Scheduling of Streaming Applications on Edge-Devices in IoT-Based Healthcare. *Tariq, U.U.*, +, *TGCN June 2021 803-815*

Energy-Saving and Resource-Efficient Algorithm for Virtual Network Function Placement With Network Scaling. *Chen, M.*, +, *TGCN March 2021 29-40*

GROVE: A Cost-Efficient Green Radio Over Ethernet Architecture for Next Generation Radio Access Networks. *Pamuklu, T.*, +, *TGCN March 2021 84-93*

IADE: An Improved Differential Evolution Algorithm to Preserve Sustainability in a 6G Network. *Zhou, Z.*, +, *TGCN Dec. 2021 1747-1760*

QoS-Aware Sensor Virtualization for Provisioning Green Sensors-as-a-Service. *Rajavel, D.*, +, *TGCN Sept. 2021 1128-1137*

Resource Inference for Sustainable and Responsive Task Offloading in Challenged Edge Networks. *Sacco, A.*, +, *TGCN Sept. 2021 1114-1127*

SSUR: An Approach to Optimizing Virtual Machine Allocation Strategy Based on User Requirements for Cloud Data Center. *Huang, Y.*, +, *TGCN June 2021 670-681*

Two-Layer Stackelberg Game-Based Offloading Strategy for Mobile Edge Computing Enhanced FiWi Access Networks. *Yang, B., +, TGCN March 2021 457-470*

Clustering algorithms

Blockchain-Based Data Dissemination Scheme for 5G-Enabled Software-Defined UAV Networks. *Gupta, R., +, TGCN Dec. 2021 1712-1721*

Codes

Blockchain-Based Data Dissemination Scheme for 5G-Enabled Software-Defined UAV Networks. *Gupta, R., +, TGCN Dec. 2021 1712-1721*

Cognitive radio

Energy Efficient MIMO-OFDM Spectrum Sensing Using Deep Stacked Spiking Delayed Feedback Reservoir Computing. *Hamedani, K., +, TGCN March 2021 484-496*

Energy-Efficient Cross-Layer Spectrum Sharing in CR Green IoT Networks. *Salameh, H.A.B., +, TGCN Sept. 2021 1091-1100*

Full-Duplex Non-Orthogonal Multiple Access Cooperative Overlay Spectrum-Sharing Networks With SWIPT. *Le, Q.N., +, TGCN March 2021 322-334*

Physical Layer Security of Cognitive Ambient Backscatter Communications for Green Internet-of-Things. *Li, X., +, TGCN Sept. 2021 1066-1076*

Secrecy Energy Efficiency in Cognitive Radio Networks With Untrusted Secondary Users. *Wang, W., +, TGCN March 2021 216-230*

Collision avoidance

Flocking Control Algorithms Based on the Diffusion Model for Unmanned Aerial Vehicle Systems. *Chen, M., +, TGCN Sept. 2021 1271-1282*

Combinatorial mathematics

Reconfigurable Intelligent Surface for Green Edge Inference. *Hua, S., +, TGCN June 2021 964-979*

Statistical Learning Based Joint Antenna Selection and User Scheduling for Single-Cell Massive MIMO Systems. *Guo, M., +, TGCN March 2021 471-483*

Communication complexity

Secrecy Energy Efficiency in Cognitive Radio Networks With Untrusted Secondary Users. *Wang, W., +, TGCN March 2021 216-230*

Communication system security

Energy-Efficient Secure Video Streaming in UAV-Enabled Wireless Networks: A Safe-DQN Approach. *Zhang, Z., +, TGCN Dec. 2021 1892-1905*

Computational complexity

An Optimal Low-Complexity Energy-Efficient ADC Bit Allocation for Massive MIMO. *Ahmed, I.Z., +, TGCN March 2021 61-71*

Cyclic Delay Diversity With Index Modulation for Green Internet of Things. *Wen, M., +, TGCN June 2021 600-610*

Deadline Constrained Packet Scheduling in the Presence of an Energy Harvesting Jammer. *Rahman, H., +, TGCN March 2021 278-290*

Energy Efficient MIMO-OFDM Spectrum Sensing Using Deep Stacked Spiking Delayed Feedback Reservoir Computing. *Hamedani, K., +, TGCN March 2021 484-496*

Energy-Efficient Joint Optimization of Channel Assignment, Power Allocation, and Relay Selection Based on Hypergraph for Uplink mMTC Networks. *Feng, L., +, TGCN March 2021 203-215*

Energy-Efficient Resource Allocation With Flexible Frame Structure for Hybrid eMBB and URLLC Services. *Sui, W., +, TGCN March 2021 72-83*

Preemptive Mobile Computation Offloading With Hard Deadlines and Concurrent Local Execution. *Teymoori, P., +, TGCN June 2021 950-963*

Robust Design for UAV-Enabled Multiuser Relaying System With SWIPT. *Wang, J., +, TGCN Sept. 2021 1293-1305*

Statistical-QoS Guarantee for IoT Network Driven by Laser-Powered UAV Relay and RF Backscatter Communications. *Hassan, M.Z., +, TGCN March 2021 406-425*

Computational modeling

An Energy-Efficient In-Network Computing Paradigm for 6G. *Hu, N., +, TGCN Dec. 2021 1722-1733*

An IoT-Based Prediction Technique for Efficient Energy Consumption in Buildings. *Goudarzi, S., +, TGCN Dec. 2021 2076-2088*

Energy-Efficient Channel Access and Data Offloading Against Dynamic Jamming Attacks. *Xu, Y., +, TGCN Dec. 2021 1734-1746*

Computer architecture

Analysis of Area Spectral & Energy Efficiency in a CoMP-Enabled User-Centric Cloud RAN. *Kasi, S.K., +, TGCN Dec. 2021 1999-2015*

Two-Layer Stackelberg Game-Based Offloading Strategy for Mobile Edge Computing Enhanced FiWi Access Networks. *Yang, B., +, TGCN March 2021 457-470*

Computer centers

AFED-EF: An Energy-Efficient VM Allocation Algorithm for IoT Applications in a Cloud Data Center. *Zhou, Z., +, TGCN June 2021 658-669*

Enabling Green Mobile-Edge Computing for 5G-Based Healthcare Applications. *Bishoyi, P.K., +, TGCN Sept. 2021 1623-1631*

SSUR: An Approach to Optimizing Virtual Machine Allocation Strategy Based on User Requirements for Cloud Data Center. *Huang, Y., +, TGCN June 2021 670-681*

Temperature-Aware Virtual Data Center Embedding to Avoid Hot Spots in Data Centers. *Guo, C., +, TGCN March 2021 497-511*

Computer network performance evaluation

Energy Efficient Network Coding HARQ Transmission Scheme for S-IoT. *Jiao, J., +, TGCN March 2021 308-321*

Computer network security

SEC²: A Secure and Energy Efficient Barrier Coverage Scheduling for WSN-Based IoT Applications. *Thomas, D., +, TGCN June 2021 622-634*

Intrusion Detection in Green Internet of Things: A Deep Deterministic Policy Gradient-Based Algorithm. *Nie, L., +, TGCN June 2021 778-788*

LightIoT: Lightweight and Secure Communication for Energy-Efficient IoT in Health Informatics. *Jan, M.A., +, TGCN Sept. 2021 1202-1211*

Physical Layer Security of Cognitive Ambient Backscatter Communications for Green Internet-of-Things. *Li, X., +, TGCN Sept. 2021 1066-1076*

Concave programming

An Energy-Efficient Selection Mechanism of Relay and Edge Computing in UAV-Assisted Cellular Networks. *Liu, Z., +, TGCN Sept. 2021 1306-1318*

Energy Efficiency Maximization Under Minimum Rate Constraints in Multi-Cell MIMO Systems With Finite Buffers. *Saraiva, J.V., +, TGCN March 2021 174-189*

Energy-Efficient Precoder Design for Downlink Multi-User MISO Networks With Finite Blocklength Codes. *Singh, K., +, TGCN March 2021 160-173*

Optimizing Computation Efficiency for NOMA-Assisted Mobile Edge Computing With User Cooperation. *Su, B., +, TGCN June 2021 858-867*

Reconfigurable Intelligent Surface for Green Edge Inference. *Hua, S., +, TGCN June 2021 964-979*

Trajectory Design for Throughput Maximization in UAV-Assisted Communication System. *Gupta, N., +, TGCN Sept. 2021 1319-1332*

Uplink Power Allocation for Throughput and Energy Efficiency Over Nakagami-*m* Fading Channels. *Ho, D.H., +, TGCN March 2021 190-202*

Control engineering computing

Heterogeneous Mobile Networking for Lightweight UAV Assisted Emergency Communication. *Zhang, C., +, TGCN Sept. 2021 1345-1356*

Robust Design for UAV-Enabled Multiuser Relaying System With SWIPT. *Wang, J., +, TGCN Sept. 2021 1293-1305*

Control system synthesis

Robust Design for UAV-Enabled Multiuser Relaying System With SWIPT. *Wang, J., +, TGCN Sept. 2021 1293-1305*

Convergence

IADE: An Improved Differential Evolution Algorithm to Preserve Sustainability in a 6G Network. *Zhou, Z., +, TGCN Dec. 2021 1747-1760*

Convex programming

An Energy-Efficient Selection Mechanism of Relay and Edge Computing in UAV-Assisted Cellular Networks. *Liu, Z., +, TGCN Sept. 2021 1306-1318*

Energy Efficiency Maximization Under Minimum Rate Constraints in Multi-Cell MIMO Systems With Finite Buffers. *Saraiva, J.V., +, TGCN March 2021 174-189*

Energy-Efficient Precoder Design for Downlink Multi-User MISO Networks With Finite Blocklength Codes. *Singh, K., +, TGCN March 2021 160-173*

Feasible Point Pursuit and Successive Convex Approximation for Transmit Power Minimization in SWIPT-Multigroup Multicasting Systems. *Gautam, S., +, TGCN June 2021 884-894*

Optimizing Computation Efficiency for NOMA-Assisted Mobile Edge Computing With User Cooperation. *Su, B.*, +, *TGCN June 2021 858-867*
 Reconfigurable Intelligent Surface for Green Edge Inference. *Hua, S.*, +, *TGCN June 2021 964-979*

Secrecy Energy Efficiency in Cognitive Radio Networks With Untrusted Secondary Users. *Wang, W.*, +, *TGCN March 2021 216-230*

Trajectory and Resource Optimization in OFDM-Based UAV-Powered IoT Network. *Lu, W.*, +, *TGCN Sept. 2021 1259-1270*

Convolutional neural nets

Energy Drain of the Object Detection Processing Pipeline for Mobile Devices: Analysis and Implications. *Wang, H.*, +, *TGCN March 2021 41-60*

Cooling

Temperature-Aware Virtual Data Center Embedding to Avoid Hot Spots in Data Centers. *Guo, C.*, +, *TGCN March 2021 497-511*

Cooperative communication

Cache- and Energy Harvesting-Enabled D2D Cellular Network: Modeling, Analysis and Optimization. *Meng, Y.*, +, *TGCN June 2021 703-713*

Device-Clustering and Rate-Splitting Enabled Device-to-Device Cooperation Framework in Fog Radio Access Network. *Hassan, M.Z.*, +, *TGCN Sept. 2021 1482-1501*

Fluid-Based Energy Efficiency Analysis of JT-CoMP Scheme in Femto Cellular Networks. *Hou, Y.*, +, *TGCN March 2021 133-145*

Full-Duplex Non-Orthogonal Multiple Access Cooperative Overlay Spectrum-Sharing Networks With SWIPT. *Le, Q.N.*, +, *TGCN March 2021 322-334*

Optimal Energy Sharing for Cooperative Relaying in a Random Access Network With Energy Harvesting Nodes. *Mortazavi, S.M.*, +, *TGCN March 2021 231-242*

Performance of a Cooperative Communication Network With Green Self-Sustaining Nodes. *Bapatla, D.*, +, *TGCN March 2021 426-441*

Cost reduction

Contract and Lyapunov Optimization-Based Load Scheduling and Energy Management for UAV Charging Stations. *Li, L.*, +, *TGCN Sept. 2021 1381-1394*

Multi-Energy Scheduling of an Industrial Integrated Energy System by Reinforcement Learning-Based Differential Evolution. *Xu, Z.*, +, *TGCN Sept. 2021 1077-1090*

Covariance matrices

Robust Active and Passive Beamformer Design for IRS-Aided Downlink MISO PS-SWIPT With a Nonlinear Energy Harvesting Model. *Zargari, S.*, +, *TGCN Dec. 2021 2027-2041*

Crowdsensing

Task Selection and Collision-Free Route Planning for Mobile Crowdsensing Using Multi-Population Mean-Field Games. *Kang, Y.*, +, *TGCN Dec. 2021 1947-1960*

Cryptography

Receiver-Initiated Data Collection in Wake-Up Radio Enabled mIoT Networks: Achieving Collision-Free Transmissions by Hashing and Partitioning. *Hsu, C.*, +, *TGCN June 2021 868-883*

Secure and Energy Efficient-Based E-Health Care Framework for Green Internet of Things. *Kaur, M.*, +, *TGCN Sept. 2021 1223-1231*

D

Data aggregation

Role Assignment for Spatially-Correlated Data Aggregation Using Multi-Sink Internet of Underwater Things. *Al-Habob, A.A.*, +, *TGCN Sept. 2021 1570-1579*

Data centers

An Energy-Efficient In-Network Computing Paradigm for 6G. *Hu, N.*, +, *TGCN Dec. 2021 1722-1733*

IADE: An Improved Differential Evolution Algorithm to Preserve Sustainability in a 6G Network. *Zhou, Z.*, +, *TGCN Dec. 2021 1747-1760*

Data collection

Offline and Online UAV-Enabled Data Collection in Time-Constrained IoT Networks. *Ghdiri, O.*, +, *TGCN Dec. 2021 1918-1933*

Data communication

Reinforcement Learning-Based Energy-Efficient Data Access for Airborne Users in Civil Aircrafts-Enabled SAGIN. *Chen, Q.*, +, *TGCN June 2021 934-949*

Steady-State Rate-Optimal Power Adaptation in Energy Harvesting Opportunistic Cognitive Radios With Spectrum Sensing and Channel Estimation Errors. *Yazdani, H.*, +, *TGCN Dec. 2021 2104-2120*

Data compression

An Energy-Efficient River Water Pollution Monitoring System in Internet of Things. *Chopade, S.*, +, *TGCN June 2021 693-702*

Data handling

Receiver-Initiated Data Collection in Wake-Up Radio Enabled mIoT Networks: Achieving Collision-Free Transmissions by Hashing and Partitioning. *Hsu, C.*, +, *TGCN June 2021 868-883*

Data models

An IoT-Based Prediction Technique for Efficient Energy Consumption in Buildings. *Goudarzi, S.*, +, *TGCN Dec. 2021 2076-2088*

Energy-Efficient Channel Access and Data Offloading Against Dynamic Jamming Attacks. *Xu, Y.*, +, *TGCN Dec. 2021 1734-1746*

Energy-Efficient Topology Construction via Power Allocation for Decentralized Learning via Smart Devices With Edge Computing. *Kuo, J.*, +, *TGCN Dec. 2021 1806-1819*

Event-Triggered Transmission Policies for Harvesting Powered Sensors With Time-Varying Models. *Seifullaei, R.*, +, *TGCN Dec. 2021 2139-2149*

Data privacy

Energy-Efficient Multivariate Privacy-Aware RF Spectrum Reservation in Wireless Virtualization for Wireless Internet of Things. *Adebayo, A.A.*, +, *TGCN June 2021 682-692*

Intrusion Detection in Green Internet of Things: A Deep Deterministic Policy Gradient-Based Algorithm. *Nie, L.*, +, *TGCN June 2021 778-788*

LightIoT: Lightweight and Secure Communication for Energy-Efficient IoT in Health Informatics. *Jan, M.A.*, +, *TGCN Sept. 2021 1202-1211*

Decision making

An Integration of Online Learning and Online Control for Green Offloading in Fog-Assisted IoT Systems. *Gao, X.*, +, *TGCN Sept. 2021 1632-1646*

Quantum Learning-Enabled Green Communication for Next-Generation Wireless Systems. *Jaiswal, A.*, +, *TGCN Sept. 2021 1015-1028*

Trajectory Optimization for UAV Emergency Communication With Limited User Equipment Energy: A Safe-DQN Approach. *Zhang, T.*, +, *TGCN Sept. 2021 1236-1247*

Decode and forward communication

Optimization of SWIPT With Battery-Assisted Energy Harvesting Full-Duplex Relays. *Agrawal, K.*, +, *TGCN March 2021 243-260*

SER Analysis for SWIPT-Enabled Differential Decode-and-Forward Relay Networks. *Lu, Y.*, +, *TGCN March 2021 348-361*

Decoding

Feasible Point Pursuit and Successive Convex Approximation for Transmit Power Minimization in SWIPT-Multigroup Multicasting Systems. *Gautam, S.*, +, *TGCN June 2021 884-894*

Deep learning (artificial intelligence)

An Energy-Efficient River Water Pollution Monitoring System in Internet of Things. *Chopade, S.*, +, *TGCN June 2021 693-702*

Cellular-Connected UAV Trajectory Design With Connectivity Constraint: A Deep Reinforcement Learning Approach. *Gao, Y.*, +, *TGCN Sept. 2021 1369-1380*

Deep Reinforcement Learning-Assisted Energy Harvesting Wireless Networks. *Ye, J.*, +, *TGCN June 2021 990-1002*

Energy Drain of the Object Detection Processing Pipeline for Mobile Devices: Analysis and Implications. *Wang, H.*, +, *TGCN March 2021 41-60*

Green MEC Networks Design Under UAV Attack: A Deep Reinforcement Learning Approach. *Zhao, R.*, +, *TGCN Sept. 2021 1248-1258*

Intrusion Detection in Green Internet of Things: A Deep Deterministic Policy Gradient-Based Algorithm. *Nie, L.*, +, *TGCN June 2021 778-788*

Delay tolerant networks

Heterogeneous Mobile Networking for Lightweight UAV Assisted Emergency Communication. *Zhang, C.*, +, *TGCN Sept. 2021 1345-1356*

Delays

SLA-Aware Protocol Design for Energy-Efficient OLT Transmitter in TWDM-EPON. *Dutta, S.*, +, *TGCN Dec. 2021 1961-1973*

Towards Understanding and Enhancing Association and Long Sleep in Low-Power WiFi IoT Systems. *Ramanna, V.K.*, +, *TGCN Dec. 2021 1833-1845*

Demand side management

Contract and Lyapunov Optimization-Based Load Scheduling and Energy Management for UAV Charging Stations. *Ly, L.*, +, *TGCN Sept. 2021 1381-1394*

Efficient Allocation of Harvested Energy at the Edge by Building a Tangible Micro-Grid—The Texas Case. *Kouvelas, N.*, +, *TGCN March 2021 94-105*

Integrating Future Smart Home Operation Platform With Demand Side Management via Deep Reinforcement Learning. *Li, T.*, +, *TGCN June 2021 921-933*

Demodulation

iDim: Practical Implementation of Index Modulation for LiFi Dimming. *Nguyen, T.*, +, *TGCN Dec. 2021 1880-1891*

Device-to-device communication

Power-Spectrum Trading for Full-Duplex D2D Communications in Cellular Networks. *Feng, D.*, +, *TGCN Dec. 2021 2016-2026*

Digital-analog conversion

Joint Bit Allocation and Hybrid Beamforming Optimization for Energy Efficient Millimeter Wave MIMO Systems. *Kaushik, A.*, +, *TGCN March 2021 119-132*

Directed graphs

Energy-Aware Scheduling of Streaming Applications on Edge-Devices in IoT-Based Healthcare. *Tariq, U.U.*, +, *TGCN June 2021 803-815*

Disasters

Heterogeneous Mobile Networking for Lightweight UAV Assisted Emergency Communication. *Zhang, C.*, +, *TGCN Sept. 2021 1345-1356*

Trajectory Optimization for UAV Emergency Communication With Limited User Equipment Energy: A Safe-DQN Approach. *Zhang, T.*, +, *TGCN Sept. 2021 1236-1247*

Diseases

UV-CDS: An Energy-Efficient Scheduling of UAVs for Premises Sterilization. *Tazrin, T.*, +, *TGCN Sept. 2021 1191-1201*

Distributed algorithms

Centralized and Distributed Algorithms for Energy and Spectrum Efficient User Association in Small Cell Networks. *Javad-Kalbasi, M.*, +, *TGCN Dec. 2021 1781-1790*

Link Schedulers for Green Wireless Networks With Energy Sharing. *Wang, L.*, +, *TGCN Sept. 2021 1580-1593*

Distributed computing

Distributed Resource Allocation in RF-Powered Cognitive Ambient Backscatter Networks. *Zhu, K.*, +, *TGCN Dec. 2021 1657-1668*

Distributed power generation

Efficient Allocation of Harvested Energy at the Edge by Building a Tangible Micro-Grid—The Texas Case. *Kouvelas, N.*, +, *TGCN March 2021 94-105*

Distributed processing

Device-Clustering and Rate-Splitting Enabled Device-to-Device Cooperation Framework in Fog Radio Access Network. *Hassan, M.Z.*, +, *TGCN Sept. 2021 1482-1501*

Improving Power Stability of Energy Harvesting Devices With Edge Computing-Assisted Time Fair Energy Allocation. *Cui, E.*, +, *TGCN March 2021 540-551*

Diversity reception

Age-of-Information With Information Source Diversity in an Energy Harvesting System. *Gindullina, E.*, +, *TGCN Sept. 2021 1529-1540*

Analysis of Asymmetric Dual-Hop Energy Harvesting-Based Wireless Communication Systems in Mixed Fading Environments. *Illi, E.*, +, *TGCN March 2021 261-277*

Cyclic Delay Diversity With Index Modulation for Green Internet of Things. *Wen, M.*, +, *TGCN June 2021 600-610*

Downlink

Hybrid Energy Resource Allocation for Simultaneous Wireless Information and Power Transfer for Green Communications. *Shen, L.*, +, *TGCN Dec. 2021 2121-2138*

Machine Learning Based Beam Selection With Low Complexity Hybrid Beamforming Design for 5G Massive MIMO Systems. *Ahmed, I.*, +, *TGCN Dec. 2021 2160-2173*

E**Edge computing**

Energy-Efficient Channel Access and Data Offloading Against Dynamic Jamming Attacks. *Xu, Y.*, +, *TGCN Dec. 2021 1734-1746*

Two-Layer Stackelberg Game-Based Offloading Strategy for Mobile Edge Computing Enhanced FiWi Access Networks. *Yang, B.*, +, *TGCN March 2021 457-470*

Educational institutions

UV-CDS: An Energy-Efficient Scheduling of UAVs for Premises Sterilization. *Tazrin, T.*, +, *TGCN Sept. 2021 1191-1201*

Electrocardiography

LightIoT: Lightweight and Secure Communication for Energy-Efficient IoT in Health Informatics. *Jan, M.A.*, +, *TGCN Sept. 2021 1202-1211*

Electromagnetic wave reflection

BER Analysis of a Backscatter Communication System With Non-Orthogonal Multiple Access. *Nazar, A.W.*, +, *TGCN June 2021 574-586*

Embedded systems

Energy-Aware Scheduling of Streaming Applications on Edge-Devices in IoT-Based Healthcare. *Tariq, U.U.*, +, *TGCN June 2021 803-815*

Emergency services

Energy Efficient Network Coding HARQ Transmission Scheme for S-IoT. *Jiao, J.*, +, *TGCN March 2021 308-321*

Trajectory Optimization for UAV Emergency Communication With Limited User Equipment Energy: A Safe-DQN Approach. *Zhang, T.*, +, *TGCN Sept. 2021 1236-1247*

Encoding

High-Density Resource-Restricted Pulse-Based IoT Networks. *Peper, F.*, +, *TGCN Dec. 2021 1856-1868*

Energy conservation

SEC²: A Secure and Energy Efficient Barrier Coverage Scheduling for WSN-Based IoT Applications. *Thomas, D.*, +, *TGCN June 2021 622-634*

A Hierarchical Energy-Efficient Service Selection Approach With QoS Constraints for Internet of Things. *Tong, E.*, +, *TGCN June 2021 645-657*

A Novel Joint Optimization Method Based on Mobile Data Collection for Wireless Rechargeable Sensor Networks. *Boukerche, A.*, +, *TGCN Sept. 2021 1610-1622*

A Reinforcement Learning Approach to Optimize Energy Usage in RF-Charging Sensor Networks. *Ren, H.*, +, *TGCN March 2021 526-539*

AFED-EF: An Energy-Efficient VM Allocation Algorithm for IoT Applications in a Cloud Data Center. *Zhou, Z.*, +, *TGCN June 2021 658-669*

An Energy-Efficient Selection Mechanism of Relay and Edge Computing in UAV-Assisted Cellular Networks. *Liu, Z.*, +, *TGCN Sept. 2021 1306-1318*

DARE-SEP: A Hybrid Approach of Distance Aware Residual Energy-Efficient SEP for WSN. *Naeem, A.*, +, *TGCN June 2021 611-621*

Deep Reinforcement Learning-Assisted Energy Harvesting Wireless Networks. *Ye, J.*, +, *TGCN June 2021 990-1002*

Deep-Green: A Dispersed Energy-Efficiency Computing Paradigm for Green Industrial IoT. *Hu, N.*, +, *TGCN June 2021 750-764*

E-S-RSM-RSA: A Novel Energy and Spectrum Efficient Regenerator Aware Multipath Based Survivable RSA in Offline EON. *Halder, J.*, +, *TGCN Sept. 2021 1451-1466*

Enabling Green Mobile-Edge Computing for 5G-Based Healthcare Applications. *Bishoyi, P.K.*, +, *TGCN Sept. 2021 1623-1631*

Energy Efficiency in Sliceable-Transponder Enabled Elastic Optical Networks. *Costa, L.R.*, +, *TGCN June 2021 789-802*

Energy Efficiency Maximization Under Minimum Rate Constraints in Multi-Cell MIMO Systems With Finite Buffers. *Saraiva, J.V.*, +, *TGCN March 2021 174-189*

Energy Efficient Data Gathering in IoT Networks With Heterogeneous Traffic for Remote Area Surveillance Applications: A Cross Layer Approach. *Bhattacharjee, D.*, +, *TGCN Sept. 2021 1165-1178*

- Energy Efficient Resource Allocation Optimization in Fog Radio Access Networks With Outdated Channel Knowledge. *Dinh, T.H.L.*, +, *TGCN March 2021 146-159*
- Energy Optimization in Ultra-Dense Radio Access Networks via Traffic-Aware Cell Switching. *Ozturk, M.*, +, *TGCN June 2021 832-845*
- Energy-Efficient Cross-Layer Spectrum Sharing in CR Green IoT Networks. *Salameh, H.A.B.*, +, *TGCN Sept. 2021 1091-1100*
- Energy-Efficient Joint Optimization of Channel Assignment, Power Allocation, and Relay Selection Based on Hypergraph for Uplink mMTC Networks. *Feng, L.*, +, *TGCN March 2021 203-215*
- Energy-Efficient MAC for Cellular IoT: State-of-the-Art, Challenges, and Standardization. *Shah, S.W.H.*, +, *TGCN June 2021 587-599*
- Energy-Efficient Multivariate Privacy-Aware RF Spectrum Reservation in Wireless Virtualization for Wireless Internet of Things. *Adebayo, A.A.*, +, *TGCN June 2021 682-692*
- Energy-Efficient Precoder Design for Downlink Multi-User MISO Networks With Finite Blocklength Codes. *Singh, K.*, +, *TGCN March 2021 160-173*
- Energy-Efficient Resource Allocation With Flexible Frame Structure for Hybrid eMBB and URLLC Services. *Sui, W.*, +, *TGCN March 2021 72-83*
- Energy-Efficient Scans by Weaving Indexes Into the Storage Layout in Computing Platforms for Internet of Things. *Li, Y.*, +, *TGCN Sept. 2021 1212-1222*
- Energy-Efficient Topology Construction via Power Allocation for Decentralized Learning via Smart Devices With Edge Computing. *Kuo, J.*, +, *TGCN Dec. 2021 1806-1819*
- Fluid-Based Energy Efficiency Analysis of JT-CoMP Scheme in Femto Cellular Networks. *Hou, Y.*, +, *TGCN March 2021 133-145*
- Fuzzy Rule Generation Using Modified PSO for Clustering in Wireless Sensor Networks. *Lipare, A.*, +, *TGCN June 2021 846-857*
- GROVE: A Cost-Efficient Green Radio Over Ethernet Architecture for Next Generation Radio Access Networks. *Pamuklu, T.*, +, *TGCN March 2021 84-93*
- Joint Bit Allocation and Hybrid Beamforming Optimization for Energy Efficient Millimeter Wave MIMO Systems. *Kaushik, A.*, +, *TGCN March 2021 119-132*
- Joint Load Control and Energy Sharing for Renewable Powered Small Base Stations: A Machine Learning Approach. *Piovesan, N.*, +, *TGCN March 2021 512-525*
- MEES-WuR: Minimum Energy Coding With Early Shutdown for Wake-Up Receivers. *Djidi, N.E.H.*, +, *TGCN Sept. 2021 1502-1513*
- Modeling and Analysis of Latency Distribution in the 40-100Gbps Dual-Mode Energy Efficient Ethernet. *Jiang, W.*, +, *TGCN Sept. 2021 1426-1437*
- Multi-Energy Scheduling of an Industrial Integrated Energy System by Reinforcement Learning-Based Differential Evolution. *Xu, Z.*, +, *TGCN Sept. 2021 1077-1090*
- Optimal Radius for Enhanced Lifetime in IoT Using Hybridization of Rider and Grey Wolf Optimization. *Dev, K.*, +, *TGCN June 2021 635-644*
- Optimizing Computation Efficiency for NOMA-Assisted Mobile Edge Computing With User Cooperation. *Su, B.*, +, *TGCN June 2021 858-867*
- Preemptive Mobile Computation Offloading With Hard Deadlines and Concurrent Local Execution. *Teymoori, P.*, +, *TGCN June 2021 950-963*
- Protocol Design for Energy Efficient OLT in TWDM-EPON Supporting Diverse Delay Bounds. *Dutta, S.*, +, *TGCN Sept. 2021 1438-1450*
- Quantum Learning-Enabled Green Communication for Next-Generation Wireless Systems. *Jaiswal, A.*, +, *TGCN Sept. 2021 1015-1028*
- Reinforcement Learning-Based Energy-Efficient Data Access for Airborne Users in Civil Aircrafts-Enabled SAGIN. *Chen, Q.*, +, *TGCN June 2021 934-949*
- Secrecy Energy Efficiency in Cognitive Radio Networks With Untrusted Secondary Users. *Wang, W.*, +, *TGCN March 2021 216-230*
- Secure and Energy Efficient-Based E-Health Care Framework for Green Internet of Things. *Kaur, M.*, +, *TGCN Sept. 2021 1223-1231*
- Statistical Learning Based Joint Antenna Selection and User Scheduling for Single-Cell Massive MIMO Systems. *Guo, M.*, +, *TGCN March 2021 471-483*
- Towards Optimal Energy Efficiency in Cell-Free Massive MIMO Systems. *Papazafeiropoulos, A.*, +, *TGCN June 2021 816-831*
- Trajectory Optimization for UAV Emergency Communication With Limited User Equipment Energy: A Safe-DQN Approach. *Zhang, T.*, +, *TGCN Sept. 2021 1236-1247*
- UV-CDS: An Energy-Efficient Scheduling of UAVs for Premises Sterilization. *Tazrin, T.*, +, *TGCN Sept. 2021 1191-1201*
- Energy consumption**
- AFED-EF: An Energy-Efficient VM Allocation Algorithm for IoT Applications in a Cloud Data Center. *Zhou, Z.*, +, *TGCN June 2021 658-669*
- An Energy-Efficient In-Network Computing Paradigm for 6G. *Hu, N.*, +, *TGCN Dec. 2021 1722-1733*
- An Energy-Efficient River Water Pollution Monitoring System in Internet of Things. *Chopade, S.*, +, *TGCN June 2021 693-702*
- An Integral Data Gathering Framework for Supervisory Control and Data Acquisition Systems in Green IoT. *Xiang, X.*, +, *TGCN June 2021 714-726*
- An IoT-Based Prediction Technique for Efficient Energy Consumption in Buildings. *Goudarzi, S.*, +, *TGCN Dec. 2021 2076-2088*
- Energy Drain of the Object Detection Processing Pipeline for Mobile Devices: Analysis and Implications. *Wang, H.*, +, *TGCN March 2021 41-60*
- Fairness-Aware Task Scheduling and Resource Allocation in UAV-Enabled Mobile Edge Computing Networks. *Zhao, M.*, +, *TGCN Dec. 2021 2174-2187*
- Fuzzy Rule Generation Using Modified PSO for Clustering in Wireless Sensor Networks. *Lipare, A.*, +, *TGCN June 2021 846-857*
- Guest Editorial Special Issue on Selected Papers From IEEE Globecom 2020. *So, D.K.C.*, +, *TGCN Dec. 2021 1777-1780*
- Multi-Agent Reinforcement Learning for Energy Harvesting Two-Hop Communications With a Partially Observable System State. *Ortiz, A.*, +, *TGCN March 2021 442-456*
- Multi-Energy Scheduling of an Industrial Integrated Energy System by Reinforcement Learning-Based Differential Evolution. *Xu, Z.*, +, *TGCN Sept. 2021 1077-1090*
- QoS-Aware Sensor Virtualization for Provisioning Green Sensors-as-a-Service. *Rajavel, D.*, +, *TGCN Sept. 2021 1128-1137*
- Reinforcement Learning-Based Energy-Efficient Data Access for Airborne Users in Civil Aircrafts-Enabled SAGIN. *Chen, Q.*, +, *TGCN June 2021 934-949*
- Role Assignment for Spatially-Correlated Data Aggregation Using Multi-Sink Internet of Underwater Things. *Al-Habob, A.A.*, +, *TGCN Sept. 2021 1570-1579*
- Task Selection and Collision-Free Route Planning for Mobile Crowdsensing Using Multi-Population Mean-Field Games. *Kang, Y.*, +, *TGCN Dec. 2021 1947-1960*
- Towards Understanding and Enhancing Association and Long Sleep in Low-Power WiFi IoT Systems. *Ramanna, V.K.*, +, *TGCN Dec. 2021 1833-1845*
- UV-CDS: An Energy-Efficient Scheduling of UAVs for Premises Sterilization. *Tazrin, T.*, +, *TGCN Sept. 2021 1191-1201*
- Energy efficiency**
- An Energy-Efficient In-Network Computing Paradigm for 6G. *Hu, N.*, +, *TGCN Dec. 2021 1722-1733*
- Analysis of Area Spectral & Energy Efficiency in a CoMP-Enabled User-Centric Cloud RAN. *Kasi, S.K.*, +, *TGCN Dec. 2021 1999-2015*
- Energy-Efficient Channel Access and Data Offloading Against Dynamic Jamming Attacks. *Xu, Y.*, +, *TGCN Dec. 2021 1734-1746*
- Guest Editorial Special Issue on "Green Communication and Computing Technologies for 6G Networks" in IEEE Transactions on Green Communications and Networking. *Anpalagan, A.*, +, *TGCN Dec. 2021 1653-1656*
- Guest Editorial Special Issue on Green Internet of Things: Challenges and Future Opportunities—Part I. *Prasad, R.R.V.*, +, *TGCN June 2021 569-573*
- Towards Understanding and Enhancing Association and Long Sleep in Low-Power WiFi IoT Systems. *Ramanna, V.K.*, +, *TGCN Dec. 2021 1833-1845*
- Energy harvesting**
- A New Non-Linear Joint Model for RF Energy Harvesters in Wireless Networks. *Alqahtani, D.*, +, *TGCN June 2021 895-907*

- A Reinforcement Learning Approach to Optimize Energy Usage in RF-Charging Sensor Networks. *Ren, H.*, +, *TGCN March 2021 526-539*
- Age-of-Information With Information Source Diversity in an Energy Harvesting System. *Gindullina, E.*, +, *TGCN Sept. 2021 1529-1540*
- Analysis of Asymmetric Dual-Hop Energy Harvesting-Based Wireless Communication Systems in Mixed Fading Environments. *Illi, E.*, +, *TGCN March 2021 261-277*
- Cache- and Energy Harvesting-Enabled D2D Cellular Network: Modeling, Analysis and Optimization. *Meng, Y.*, +, *TGCN June 2021 703-713*
- Computation Offloading in Heterogeneous Mobile Edge Computing With Energy Harvesting. *Zhang, T.*, +, *TGCN March 2021 552-565*
- Deadline Constrained Packet Scheduling in the Presence of an Energy Harvesting Jammer. *Rahman, H.*, +, *TGCN March 2021 278-290*
- Deep Reinforcement Learning-Assisted Energy Harvesting Wireless Networks. *Ye, J.*, +, *TGCN June 2021 990-1002*
- Distributed Resource Allocation in RF-Powered Cognitive Ambient Backscatter Networks. *Zhu, K.*, +, *TGCN Dec. 2021 1657-1668*
- Efficient Allocation of Harvested Energy at the Edge by Building a Tangible Micro-Grid—The Texas Case. *Kouvelas, N.*, +, *TGCN March 2021 94-105*
- Energy Harvesting Optimization of Uplink-NOMA System for IoT Networks Based on Channel Capacity Analysis Using the Water Cycle Algorithm. *Bulut, I.S.*, +, *TGCN March 2021 291-307*
- Exploiting Cell-Free Massive MIMO for Enabling Simultaneous Wireless Information and Power Transfer. *Galappaththige, D.L.*, +, *TGCN Sept. 2021 1541-1557*
- Feasible Point Pursuit and Successive Convex Approximation for Transmit Power Minimization in SWIPT-Multigroup Multicasting Systems. *Gautam, S.*, +, *TGCN June 2021 884-894*
- Full-Duplex Non-Orthogonal Multiple Access Cooperative Overlay Spectrum-Sharing Networks With SWIPT. *Le, Q.N.*, +, *TGCN March 2021 322-334*
- Improving Power Stability of Energy Harvesting Devices With Edge Computing-Assisted Time Fair Energy Allocation. *Cui, E.*, +, *TGCN March 2021 540-551*
- Link Schedulers for Green Wireless Networks With Energy Sharing. *Wang, L.*, +, *TGCN Sept. 2021 1580-1593*
- Multi-Agent Reinforcement Learning for Energy Harvesting Two-Hop Communications With a Partially Observable System State. *Ortiz, A.*, +, *TGCN March 2021 442-456*
- Online Power Allocation at Energy Harvesting Transmitter for Multiple Receivers With and Without Individual Rate Constraints for OMA and NOMA Transmissions. *Ashraf, M.*, +, *TGCN Sept. 2021 1594-1609*
- Optimal Energy Sharing for Cooperative Relaying in a Random Access Network With Energy Harvesting Nodes. *Mortazavi, S.M.*, +, *TGCN March 2021 231-242*
- Optimization of SWIPT With Battery-Assisted Energy Harvesting Full-Duplex Relays. *Agrawal, K.*, +, *TGCN March 2021 243-260*
- Optimizing Computation Efficiency for NOMA-Assisted Mobile Edge Computing With User Cooperation. *Su, B.*, +, *TGCN June 2021 858-867*
- Performance of a Cooperative Communication Network With Green Self-Sustaining Nodes. *Bapatla, D.*, +, *TGCN March 2021 426-441*
- ReNEW: A Practical Module for Reliable Routing in Networks of Energy-Harvesting Wireless Sensors. *Prasad, R.V.*, +, *TGCN Sept. 2021 1558-1569*
- Robust Active and Passive Beamformer Design for IRS-Aided Downlink MISO PS-SWIPT With a Nonlinear Energy Harvesting Model. *Zargari, S.*, +, *TGCN Dec. 2021 2027-2041*
- Steady-State Rate-Optimal Power Adaptation in Energy Harvesting Opportunistic Cognitive Radios With Spectrum Sensing and Channel Estimation Errors. *Yazdani, H.*, +, *TGCN Dec. 2021 2104-2120*
- System and Design for Selective OFDM SWIPT Transmission. *Buckley, R.F.*, +, *TGCN March 2021 335-347*
- Throughput-Optimal Broadcast for Time-Varying Directed Acyclic Wireless Multi-Hop Networks With Energy Harvesting Constraints. *Tian, X.*, +, *TGCN Dec. 2021 2089-2103*
- Wireless Power and Energy Harvesting Control in IoD by Deep Reinforcement Learning. *Yao, J.*, +, *TGCN June 2021 980-989*
- Energy management**
Guest Editorial Special Issue on Selected Papers From IEEE Globecom 2020. *So, D.K.C.*, +, *TGCN Dec. 2021 1777-1780*
- Energy management systems**
Contract and Lyapunov Optimization-Based Load Scheduling and Energy Management for UAV Charging Stations. *Lu, L.*, +, *TGCN Sept. 2021 1381-1394*
Integrating Future Smart Home Operation Platform With Demand Side Management via Deep Reinforcement Learning. *Li, T.*, +, *TGCN June 2021 921-933*
- Energy measurement**
Event-Triggered Transmission Policies for Harvesting Powered Sensors With Time-Varying Models. *Seifullaev, R.*, +, *TGCN Dec. 2021 2139-2149*
- Energy storage**
Multi-Energy Scheduling of an Industrial Integrated Energy System by Reinforcement Learning-Based Differential Evolution. *Xu, Z.*, +, *TGCN Sept. 2021 1077-1090*
- Environmental monitoring (geophysics)**
An Energy-Efficient River Water Pollution Monitoring System in Internet of Things. *Chopade, S.*, +, *TGCN June 2021 693-702*
BL-ALM: A Blind Scalable Edge-Guided Reconstruction Filter for Smart Environmental Monitoring Through Green IoMT-UAV Networks. *Khosravi, M.R.*, +, *TGCN June 2021 727-736*
- Environmental science computing**
An Energy-Efficient River Water Pollution Monitoring System in Internet of Things. *Chopade, S.*, +, *TGCN June 2021 693-702*
- Epidemics**
UV-CDS: An Energy-Efficient Scheduling of UAVs for Premises Sterilization. *Tazrin, T.*, +, *TGCN Sept. 2021 1191-1201*
- EPON**
SLA-Aware Protocol Design for Energy-Efficient OLT Transmitter in TWDM-EPON. *Dutta, S.*, +, *TGCN Dec. 2021 1961-1973*
- Error statistics**
Analysis of Asymmetric Dual-Hop Energy Harvesting-Based Wireless Communication Systems in Mixed Fading Environments. *Illi, E.*, +, *TGCN March 2021 261-277*
BER Analysis of a Backscatter Communication System With Non-Orthogonal Multiple Access. *Nazar, A.W.*, +, *TGCN June 2021 574-586*
Cyclic Delay Diversity With Index Modulation for Green Internet of Things. *Wen, M.*, +, *TGCN June 2021 600-610*
Energy-Efficient Precoder Design for Downlink Multi-User MISO Networks With Finite Blocklength Codes. *Singh, K.*, +, *TGCN March 2021 160-173*
Intelligent Reflecting Surfaces Assisted UAV Communications for IoT Networks: Performance Analysis. *Mahmoud, A.*, +, *TGCN Sept. 2021 1029-1040*
- Evolutionary computation**
Multi-Energy Scheduling of an Industrial Integrated Energy System by Reinforcement Learning-Based Differential Evolution. *Xu, Z.*, +, *TGCN Sept. 2021 1077-1090*
Optimal Radius for Enhanced Lifetime in IoT Using Hybridization of Rider and Grey Wolf Optimization. *Dev, K.*, +, *TGCN June 2021 635-644*

F

Face recognition

Latent Discriminative Low-Rank Projection for Visual Dimension Reduction in Green Internet of Things. *Guo, T.*, +, *TGCN June 2021 737-749*

Fading channels

Energy and Spectrum Efficient Blind Equalization With Unknown Constellation for Air-to-Ground Multipath UAV Communications. *Liu, M.*, +, *TGCN Sept. 2021 1357-1368*

Feature extraction

Intrusion Detection in Green Internet of Things: A Deep Deterministic Policy Gradient-Based Algorithm. *Nie, L.*, +, *TGCN June 2021 778-788*
Latent Discriminative Low-Rank Projection for Visual Dimension Reduction in Green Internet of Things. *Guo, T.*, +, *TGCN June 2021 737-749*

Femtocellular radio

Fluid-Based Energy Efficiency Analysis of JT-CoMP Scheme in Femto Cellular Networks. *Hou, Y.*, +, *TGCN March 2021 133-145*

Robust Resource Allocation for Two-Tier HetNets: An Interference-Efficiency Perspective. *Xu, Y.*, +, *TGCN Sept. 2021 1514-1528*

Filtering theory

Energy-Efficient Multivariate Privacy-Aware RF Spectrum Reservation in Wireless Virtualization for Wireless Internet of Things. *Adebayo, A.A.*, +, *TGCN June 2021 682-692*

Focusing

UAV-Enabled Wireless Power Transfer: A Tutorial Overview. *Xie, L.*, +, *TGCN Dec. 2021 2042-2064*

Free-space optical communication

A Physical Layer for Low Power Optical Wireless Communications. *Hinrichs, M.*, +, *TGCN March 2021 4-17*

Statistical-QoS Guarantee for IoT Network Driven by Laser-Powered UAV Relay and RF Backscatter Communications. *Hassan, M.Z.*, +, *TGCN March 2021 406-425*

Function approximation

A Reinforcement Learning Approach to Optimize Energy Usage in RF-Charging Sensor Networks. *Ren, H.*, +, *TGCN March 2021 526-539*

Fuzzy logic

A Low-Latency and Energy-Efficient Multimetric Routing Protocol Based on Network Connectivity in VANET Communication. *Wang, X.*, +, *TGCN Dec. 2021 1761-1776*

Fuzzy Rule Generation Using Modified PSO for Clustering in Wireless Sensor Networks. *Lipare, A.*, +, *TGCN June 2021 846-857*

Fuzzy set theory

Fuzzy Rule Generation Using Modified PSO for Clustering in Wireless Sensor Networks. *Lipare, A.*, +, *TGCN June 2021 846-857*

Synthesized Corpora to Evaluate Fuzzing for Green Internet of Things Programs. *Zhu, X.*, +, *TGCN Sept. 2021 1041-1050*

Fuzzy systems

Fuzzy Rule Generation Using Modified PSO for Clustering in Wireless Sensor Networks. *Lipare, A.*, +, *TGCN June 2021 846-857*

G**Game theory**

An Energy-Efficient River Water Pollution Monitoring System in Internet of Things. *Chopade, S.*, +, *TGCN June 2021 693-702*

Computation Offloading in Heterogeneous Mobile Edge Computing With Energy Harvesting. *Zhang, T.*, +, *TGCN March 2021 552-565*

Deadline Constrained Packet Scheduling in the Presence of an Energy Harvesting Jammer. *Rahman, H.*, +, *TGCN March 2021 278-290*

Enabling Green Mobile-Edge Computing for 5G-Based Healthcare Applications. *Bishoyi, P.K.*, +, *TGCN Sept. 2021 1623-1631*

Energy-Efficient Channel Access and Data Offloading Against Dynamic Jamming Attacks. *Xu, Y.*, +, *TGCN Dec. 2021 1734-1746*

Energy-Efficient Joint Optimization of Channel Assignment, Power Allocation, and Relay Selection Based on Hypergraph for Uplink mMTC Networks. *Feng, L.*, +, *TGCN March 2021 203-215*

Multi-Agent Reinforcement Learning for Energy Harvesting Two-Hop Communications With a Partially Observable System State. *Ortiz, A.*, +, *TGCN March 2021 442-456*

Optimal Energy Sharing for Cooperative Relaying in a Random Access Network With Energy Harvesting Nodes. *Mortazavi, S.M.*, +, *TGCN March 2021 231-242*

QoS-Aware Sensor Virtualization for Provisioning Green Sensors-as-a-Service. *Rajavel, D.*, +, *TGCN Sept. 2021 1128-1137*

Task Selection and Collision-Free Route Planning for Mobile Crowdsensing Using Multi-Population Mean-Field Games. *Kang, Y.*, +, *TGCN Dec. 2021 1947-1960*

Games

Distributed Resource Allocation in RF-Powered Cognitive Ambient Backscatter Networks. *Zhu, K.*, +, *TGCN Dec. 2021 1657-1668*

Two-Layer Stackelberg Game-Based Offloading Strategy for Mobile Edge Computing Enhanced FiWi Access Networks. *Yang, B.*, +, *TGCN March 2021 457-470*

Gaussian noise

Deadline Constrained Packet Scheduling in the Presence of an Energy Harvesting Jammer. *Rahman, H.*, +, *TGCN March 2021 278-290*

Genetic algorithms

E-S-RSM-RSA: A Novel Energy and Spectrum Efficient Regenerator Aware Multipath Based Survivable RSA in Offline EON. *Halder, J.*, +, *TGCN Sept. 2021 1451-1466*

Energy Harvesting Optimization of Uplink-NOMA System for IoT Networks Based on Channel Capacity Analysis Using the Water Cycle Algorithm. *Bulut, I.S.*, +, *TGCN March 2021 291-307*

Secure and Energy Efficient-Based E-Health Care Framework for Green Internet of Things. *Kaur, M.*, +, *TGCN Sept. 2021 1223-1231*

UV-CDS: An Energy-Efficient Scheduling of UAVs for Premises Sterilization. *Tazrin, T.*, +, *TGCN Sept. 2021 1191-1201*

Geophysical image processing

BL-ALM: A Blind Scalable Edge-Guided Reconstruction Filter for Smart Environmental Monitoring Through Green IoMT-UAV Networks. *Khosravi, M.R.*, +, *TGCN June 2021 727-736*

Gradient methods

Intrusion Detection in Green Internet of Things: A Deep Deterministic Policy Gradient-Based Algorithm. *Nie, L.*, +, *TGCN June 2021 778-788*

Statistical Learning Based Joint Antenna Selection and User Scheduling for Single-Cell Massive MIMO Systems. *Guo, M.*, +, *TGCN March 2021 471-483*

Graph theory

SEC²: A Secure and Energy Efficient Barrier Coverage Scheduling for WSN-Based IoT Applications. *Thomas, D.*, +, *TGCN June 2021 622-634*

Energy-Efficient Joint Optimization of Channel Assignment, Power Allocation, and Relay Selection Based on Hypergraph for Uplink mMTC Networks. *Feng, L.*, +, *TGCN March 2021 203-215*

Latent Discriminative Low-Rank Projection for Visual Dimension Reduction in Green Internet of Things. *Guo, T.*, +, *TGCN June 2021 737-749*

Greedy algorithms

Green Multi-Stage Upgrade for Bundled-Link SDNs With Budget and Delay Constraints. *Hiryanto, L.*, +, *TGCN Sept. 2021 1410-1425*

Green computing

An Energy-Efficient In-Network Computing Paradigm for 6G. *Hu, N.*, +, *TGCN Dec. 2021 1722-1733*

Energy-Efficient Cross-Layer Spectrum Sharing in CR Green IoT Networks. *Salameh, H.A.B.*, +, *TGCN Sept. 2021 1091-1100*

GROVE: A Cost-Efficient Green Radio Over Ethernet Architecture for Next Generation Radio Access Networks. *Pamuklu, T.*, +, *TGCN March 2021 84-93*

Guest Editorial Special Issue on "Green Communication and Computing Technologies for 6G Networks" in IEEE Transactions on Green Communications and Networking. *Anpalagan, A.*, +, *TGCN Dec. 2021 1653-1656*

Intrusion Detection in Green Internet of Things: A Deep Deterministic Policy Gradient-Based Algorithm. *Nie, L.*, +, *TGCN June 2021 778-788*

Physical Layer Security of Cognitive Ambient Backscatter Communications for Green Internet-of-Things. *Li, X.*, +, *TGCN Sept. 2021 1066-1076*

Synthesized Corpora to Evaluate Fuzzing for Green Internet of Things Programs. *Zhu, X.*, +, *TGCN Sept. 2021 1041-1050*

Green products

Guest Editorial Special Issue on Green Internet of Things: Challenges and Future Opportunities—Part I. *Prasad, R.R.V.*, +, *TGCN June 2021 569-573*

Hybrid Energy Resource Allocation for Simultaneous Wireless Information and Power Transfer for Green Communications. *Shen, L.*, +, *TGCN Dec. 2021 2121-2138*

Network Operator Revenue Maximization in Dual Powered Green Cellular Networks. *Balakrishnan, A.*, +, *TGCN Dec. 2021 1791-1805*

Special Issue on Green Internet of Things: Challenges and Future Opportunities—Part II. *Venkatesha Prasad, R.R.*, +, *TGCN Sept. 2021 1011-1014*

Special Issue on Unmanned Aerial Vehicle (UAV)-Enabled Green Communications and Networking. *Zhao, N.*, +, *TGCN Sept. 2021 1232-1235*

Ground support systems

Reinforcement Learning-Based Energy-Efficient Data Access for Airborne Users in Civil Aircrafts-Enabled SAGIN. *Chen, Q.*, +, *TGCN June 2021 934-949*

H**Hardware**

High-Density Resource-Restricted Pulse-Based IoT Networks. *Peper, F.*, +, *TGCN Dec. 2021 1856-1868*

Health care

Enabling Green Mobile-Edge Computing for 5G-Based Healthcare Applications. *Bishoyi, P.K.*, +, *TGCN Sept. 2021 1623-1631*

Energy-Aware Scheduling of Streaming Applications on Edge-Devices in IoT-Based Healthcare. *Tariq, U.U.*, +, *TGCN June 2021 803-815*

LightIoT: Lightweight and Secure Communication for Energy-Efficient IoT in Health Informatics. *Jan, M.A.*, +, *TGCN Sept. 2021 1202-1211*

Secure and Energy Efficient-Based E-Health Care Framework for Green Internet of Things. *Kaur, M.*, +, *TGCN Sept. 2021 1223-1231*

Hybrid power systems

Hybrid Energy Resource Allocation for Simultaneous Wireless Information and Power Transfer for Green Communications. *Shen, L.*, +, *TGCN Dec. 2021 2121-2138*

Hydrological techniques

An Energy-Efficient River Water Pollution Monitoring System in Internet of Things. *Chopade, S.*, +, *TGCN June 2021 693-702*

I**IEEE 802.3 Standard**

SLA-Aware Protocol Design for Energy-Efficient OLT Transmitter in TWDM-EPON. *Dutta, S.*, +, *TGCN Dec. 2021 1961-1973*

Image classification

Latent Discriminative Low-Rank Projection for Visual Dimension Reduction in Green Internet of Things. *Guo, T.*, +, *TGCN June 2021 737-749*

Image reconstruction

BL-ALM: A Blind Scalable Edge-Guided Reconstruction Filter for Smart Environmental Monitoring Through Green IoMT-UAV Networks. *Khosravi, M.R.*, +, *TGCN June 2021 727-736*

Image representation

Latent Discriminative Low-Rank Projection for Visual Dimension Reduction in Green Internet of Things. *Guo, T.*, +, *TGCN June 2021 737-749*

Image sequences

BL-ALM: A Blind Scalable Edge-Guided Reconstruction Filter for Smart Environmental Monitoring Through Green IoMT-UAV Networks. *Khosravi, M.R.*, +, *TGCN June 2021 727-736*

Indexes

iDim: Practical Implementation of Index Modulation for LiFi Dimming. *Nguyen, T.*, +, *TGCN Dec. 2021 1880-1891*

Inductive charging

Hybrid Energy Resource Allocation for Simultaneous Wireless Information and Power Transfer for Green Communications. *Shen, L.*, +, *TGCN Dec. 2021 2121-2138*

Industrial control

Deep-Green: A Dispersed Energy-Efficiency Computing Paradigm for Green Industrial IoT. *Hu, N.*, +, *TGCN June 2021 750-764*

Industrial power systems

Multi-Energy Scheduling of an Industrial Integrated Energy System by Reinforcement Learning-Based Differential Evolution. *Xu, Z.*, +, *TGCN Sept. 2021 1077-1090*

Integer programming

An Energy-Efficient Selection Mechanism of Relay and Edge Computing in UAV-Assisted Cellular Networks. *Liu, Z.*, +, *TGCN Sept. 2021 1306-1318*

E-S-RSM-RSA: A Novel Energy and Spectrum Efficient Regenerator Aware Multipath Based Survivable RSA in Offline EON. *Halder, J.*, +, *TGCN Sept. 2021 1451-1466*

Energy Efficiency in Sliceable-Transponder Enabled Elastic Optical Networks. *Costa, L.R.*, +, *TGCN June 2021 789-802*

Energy Efficient Data Gathering in IoT Networks With Heterogeneous Traffic for Remote Area Surveillance Applications: A Cross Layer Approach. *Bhattacharjee, D.*, +, *TGCN Sept. 2021 1165-1178*

Energy-Efficient Joint Optimization of Channel Assignment, Power Allocation, and Relay Selection Based on Hypergraph for Uplink mMTC Networks. *Feng, L.*, +, *TGCN March 2021 203-215*

Energy-Efficient vBBU Migration and Wavelength Reassignment in Cloud-Fog RAN. *Tinini, R.I.*, +, *TGCN March 2021 18-28*

Energy-Saving and Resource-Efficient Algorithm for Virtual Network Function Placement With Network Scaling. *Chen, M.*, +, *TGCN March 2021 29-40*

Green Multi-Stage Upgrade for Bundled-Link SDNs With Budget and Delay Constraints. *Hiryanto, L.*, +, *TGCN Sept. 2021 1410-1425*

GROVE: A Cost-Efficient Green Radio Over Ethernet Architecture for Next Generation Radio Access Networks. *Pamuklu, T.*, +, *TGCN March 2021 84-93*

Link Schedulers for Green Wireless Networks With Energy Sharing. *Wang, L.*, +, *TGCN Sept. 2021 1580-1593*

Robust Resource Allocation for Two-Tier HetNets: An Interference-Efficiency Perspective. *Xu, Y.*, +, *TGCN Sept. 2021 1514-1528*

Temperature-Aware Virtual Data Center Embedding to Avoid Hot Spots in Data Centers. *Guo, C.*, +, *TGCN March 2021 497-511*

Integrated circuit modeling

Robust Active and Passive Beamformer Design for IRS-Aided Downlink MISO PS-SWIPT With a Nonlinear Energy Harvesting Model. *Zargari, S.*, +, *TGCN Dec. 2021 2027-2041*

Intercell interference

Fluid-Based Energy Efficiency Analysis of JT-CoMP Scheme in Femto Cellular Networks. *Hou, Y.*, +, *TGCN March 2021 133-145*

Interference

Cooperative Beamforming and Jamming for Secure VLC System in the Presence of Active and Passive Eavesdroppers. *Cho, S.*, +, *TGCN Dec. 2021 1988-1998*

Machine Learning Based Beam Selection With Low Complexity Hybrid Beamforming Design for 5G Massive MIMO Systems. *Ahmed, I.*, +, *TGCN Dec. 2021 2160-2173*

Power-Spectrum Trading for Full-Duplex D2D Communications in Cellular Networks. *Feng, D.*, +, *TGCN Dec. 2021 2016-2026*

Towards Understanding and Enhancing Association and Long Sleep in Low-Power WiFi IoT Systems. *Ramanna, V.K.*, +, *TGCN Dec. 2021 1833-1845*

Interference suppression

BER Analysis of a Backscatter Communication System With Non-Orthogonal Multiple Access. *Nazar, A.W.*, +, *TGCN June 2021 574-586*

Device-Clustering and Rate-Splitting Enabled Device-to-Device Cooperation Framework in Fog Radio Access Network. *Hassan, M.Z.*, +, *TGCN Sept. 2021 1482-1501*

Rate and Energy Efficiency Improvements of Massive MIMO-Based Stochastic Cellular Networks With NOMA. *Kusaladharma, S.*, +, *TGCN Sept. 2021 1467-1481*

Interleaved codes

Protograph LDPC-Coded BICM-ID With Irregular Mapping: An Emerging Transmission Technique for Massive Internet of Things. *Yang, Z.*, +, *TGCN Sept. 2021 1051-1065*

Internet

Intrusion Detection in Green Internet of Things: A Deep Deterministic Policy Gradient-Based Algorithm. *Nie, L.*, +, *TGCN June 2021 778-788*

Internet of Things

SEC²: A Secure and Energy Efficient Barrier Coverage Scheduling for WSN-Based IoT Applications. *Thomas, D.*, +, *TGCN June 2021 622-634*

A Hierarchical Energy-Efficient Service Selection Approach With QoS Constraints for Internet of Things. *Tong, E.*, +, *TGCN June 2021 645-657*

AFED-EF: An Energy-Efficient VM Allocation Algorithm for IoT Applications in a Cloud Data Center. *Zhou, Z.*, +, *TGCN June 2021 658-669*

Age-of-Information With Information Source Diversity in an Energy Harvesting System. *Gindullina, E.*, +, *TGCN Sept. 2021 1529-1540*

An Energy-Efficient River Water Pollution Monitoring System in Internet of Things. *Chopade, S.*, +, *TGCN June 2021 693-702*

- An Integral Data Gathering Framework for Supervisory Control and Data Acquisition Systems in Green IoT. *Xiang, X.*, +, *TGCN June 2021 714-726*
- An Integration of Online Learning and Online Control for Green Offloading in Fog-Assisted IoT Systems. *Gao, X.*, +, *TGCN Sept. 2021 1632-1646*
- BER Analysis of a Backscatter Communication System With Non-Orthogonal Multiple Access. *Nazar, A.W.*, +, *TGCN June 2021 574-586*
- BL-ALM: A Blind Scalable Edge-Guided Reconstruction Filter for Smart Environmental Monitoring Through Green IoMT-UAV Networks. *Khosravi, M.R.*, +, *TGCN June 2021 727-736*
- Cyclic Delay Diversity With Index Modulation for Green Internet of Things. *Wen, M.*, +, *TGCN June 2021 600-610*
- Deep-Green: A Dispersed Energy-Efficiency Computing Paradigm for Green Industrial IoT. *Hu, N.*, +, *TGCN June 2021 750-764*
- Energy Efficient Data Gathering in IoT Networks With Heterogeneous Traffic for Remote Area Surveillance Applications: A Cross Layer Approach. *Bhattacharjee, D.*, +, *TGCN Sept. 2021 1165-1178*
- Energy Efficient Network Coding HARQ Transmission Scheme for S-IoT. *Jiao, J.*, +, *TGCN March 2021 308-321*
- Energy Harvesting Optimization of Uplink-NOMA System for IoT Networks Based on Channel Capacity Analysis Using the Water Cycle Algorithm. *Bulut, I.S.*, +, *TGCN March 2021 291-307*
- Energy-Aware Scheduling of Streaming Applications on Edge-Devices in IoT-Based Healthcare. *Tariq, U.U.*, +, *TGCN June 2021 803-815*
- Energy-Efficient and Reliable IoT Access Without Radio Resource Reservation. *Azari, A.*, +, *TGCN June 2021 908-920*
- Energy-Efficient Cross-Layer Spectrum Sharing in CR Green IoT Networks. *Salameh, H.A.B.*, +, *TGCN Sept. 2021 1091-1100*
- Energy-Efficient Joint Optimization of Channel Assignment, Power Allocation, and Relay Selection Based on Hypergraph for Uplink mMTC Networks. *Feng, L.*, +, *TGCN March 2021 203-215*
- Energy-Efficient MAC for Cellular IoT: State-of-the-Art, Challenges, and Standardization. *Shah, S.W.H.*, +, *TGCN June 2021 587-599*
- Energy-Efficient Multivariate Privacy-Aware RF Spectrum Reservation in Wireless Virtualization for Wireless Internet of Things. *Adebayo, A.A.*, +, *TGCN June 2021 682-692*
- Energy-Efficient Offloading for Mission-Critical IoT Services Using EVT-Embedded Intelligent Learning. *Feng, L.*, +, *TGCN Sept. 2021 1179-1190*
- Energy-Efficient Scans by Weaving Indexes Into the Storage Layout in Computing Platforms for Internet of Things. *Li, Y.*, +, *TGCN Sept. 2021 1212-1222*
- Guest Editorial Special Issue on “Green Communication and Computing Technologies for 6G Networks” in IEEE Transactions on Green Communications and Networking. *Anpalagan, A.*, +, *TGCN Dec. 2021 1653-1656*
- Guest Editorial Special Issue on Green Internet of Things: Challenges and Future Opportunities—Part I. *Prasad, R.R.V.*, +, *TGCN June 2021 569-573*
- High-Density Resource-Restricted Pulse-Based IoT Networks. *Peper, F.*, +, *TGCN Dec. 2021 1856-1868*
- Intelligent Reflecting Surfaces Assisted UAV Communications for IoT Networks: Performance Analysis. *Mahmoud, A.*, +, *TGCN Sept. 2021 1029-1040*
- Intrusion Detection in Green Internet of Things: A Deep Deterministic Policy Gradient-Based Algorithm. *Nie, L.*, +, *TGCN June 2021 778-788*
- Latent Discriminative Low-Rank Projection for Visual Dimension Reduction in Green Internet of Things. *Guo, T.*, +, *TGCN June 2021 737-749*
- Leveraging Graph Convolutional-LSTM for Energy-Efficient Caching in Blockchain-Based Green IoT. *Chen, G.*, +, *TGCN Sept. 2021 1154-1164*
- LightIoT: Lightweight and Secure Communication for Energy-Efficient IoT in Health Informatics. *Jan, M.A.*, +, *TGCN Sept. 2021 1202-1211*
- Multi-Energy Scheduling of an Industrial Integrated Energy System by Reinforcement Learning-Based Differential Evolution. *Xu, Z.*, +, *TGCN Sept. 2021 1077-1090*
- Multi-Timescale Multi-Dimension Resource Allocation for NOMA-Edge Computing-Based Power IoT With Massive Connectivity. *Yu, H.*, +, *TGCN Sept. 2021 1101-1113*
- Offline and Online UAV-Enabled Data Collection in Time-Constrained IoT Networks. *Ghdiri, O.*, +, *TGCN Dec. 2021 1918-1933*
- Optimal Design of LEMoNet for Environmental Monitoring of Data Centers. *Jafarizadeh, M.*, +, *TGCN Dec. 2021 1820-1832*
- Optimal Radius for Enhanced Lifetime in IoT Using Hybridization of Rider and Grey Wolf Optimization. *Dev, K.*, +, *TGCN June 2021 635-644*
- Physical Layer Security of Cognitive Ambient Backscatter Communications for Green Internet-of-Things. *Li, X.*, +, *TGCN Sept. 2021 1066-1076*
- Protograph LDPC-Coded BICM-ID With Irregular Mapping: An Emerging Transmission Technique for Massive Internet of Things. *Yang, Z.*, +, *TGCN Sept. 2021 1051-1065*
- QoS-Aware Sensor Virtualization for Provisioning Green Sensors-as-a-Service. *Rajavel, D.*, +, *TGCN Sept. 2021 1128-1137*
- Receiver-Initiated Data Collection in Wake-Up Radio Enabled mIoT Networks: Achieving Collision-Free Transmissions by Hashing and Partitioning. *Hsu, C.*, +, *TGCN June 2021 868-883*
- ReNEW: A Practical Module for Reliable Routing in Networks of Energy-Harvesting Wireless Sensors. *Prasad, R.V.*, +, *TGCN Sept. 2021 1558-1569*
- Resource Inference for Sustainable and Responsive Task Offloading in Challenged Edge Networks. *Sacco, A.*, +, *TGCN Sept. 2021 1114-1127*
- Role Assignment for Spatially-Correlated Data Aggregation Using Multi-Sink Internet of Underwater Things. *Al-Habob, A.A.*, +, *TGCN Sept. 2021 1570-1579*
- Secure and Energy Efficient-Based E-Health Care Framework for Green Internet of Things. *Kaur, M.*, +, *TGCN Sept. 2021 1223-1231*
- Special Issue on Green Internet of Things: Challenges and Future Opportunities—Part II. *Venkatesha Prasad, R.R.*, +, *TGCN Sept. 2021 1011-1014*
- Statistical-QoS Guarantee for IoT Network Driven by Laser-Powered UAV Relay and RF Backscatter Communications. *Hassan, M.Z.*, +, *TGCN March 2021 406-425*
- Synthesized Corpora to Evaluate Fuzzing for Green Internet of Things Programs. *Zhu, X.*, +, *TGCN Sept. 2021 1041-1050*
- Towards Understanding and Enhancing Association and Long Sleep in Low-Power WiFi IoT Systems. *Ramanna, V.K.*, +, *TGCN Dec. 2021 1833-1845*
- Trajectory and Resource Optimization in OFDM-Based UAV-Powered IoT Network. *Lu, W.*, +, *TGCN Sept. 2021 1259-1270*
- UAV Deployment and IoT Device Association for Energy-Efficient Data-Gathering in Fixed-Wing Multi-UAV Networks. *Kuo, Y.*, +, *TGCN Dec. 2021 1934-1946*
- UEE-RPL: A UAV-Based Energy Efficient Routing for Internet of Things. *Yang, Z.*, +, *TGCN Sept. 2021 1333-1344*
- Internetworking**
- LightIoT: Lightweight and Secure Communication for Energy-Efficient IoT in Health Informatics. *Jan, M.A.*, +, *TGCN Sept. 2021 1202-1211*
- Investment**
- Multi-Energy Scheduling of an Industrial Integrated Energy System by Reinforcement Learning-Based Differential Evolution. *Xu, Z.*, +, *TGCN Sept. 2021 1077-1090*
- IP networks**
- Towards Understanding and Enhancing Association and Long Sleep in Low-Power WiFi IoT Systems. *Ramanna, V.K.*, +, *TGCN Dec. 2021 1833-1845*
- Iterative decoding**
- Protograph LDPC-Coded BICM-ID With Irregular Mapping: An Emerging Transmission Technique for Massive Internet of Things. *Yang, Z.*, +, *TGCN Sept. 2021 1051-1065*
- Iterative methods**
- 3D Trajectory and Transmit Power Optimization for UAV-Enabled Multi-Link Relaying Systems. *Liu, T.*, +, *TGCN March 2021 392-405*
- A New Non-Linear Joint Model for RF Energy Harvesters in Wireless Networks. *Alqahtani, D.*, +, *TGCN June 2021 895-907*
- An Energy-Efficient Selection Mechanism of Relay and Edge Computing in UAV-Assisted Cellular Networks. *Liu, Z.*, +, *TGCN Sept. 2021 1306-1318*
- Computation Offloading in Heterogeneous Mobile Edge Computing With Energy Harvesting. *Zhang, T.*, +, *TGCN March 2021 552-565*
- Deadline Constrained Packet Scheduling in the Presence of an Energy Harvesting Jammer. *Rahman, H.*, +, *TGCN March 2021 278-290*
- Energy Efficiency Maximization Under Minimum Rate Constraints in Multi-Cell MIMO Systems With Finite Buffers. *Saraiva, J.V.*, +, *TGCN March 2021 174-189*

- Energy-Efficient Joint Optimization of Channel Assignment, Power Allocation, and Relay Selection Based on Hypergraph for Uplink mMTC Networks. *Feng, L.*, +, *TGCN March 2021 203-215*
- Energy-Efficient Precoder Design for Downlink Multi-User MISO Networks With Finite Blocklength Codes. *Singh, K.*, +, *TGCN March 2021 160-173*
- Fairness-Aware Task Scheduling and Resource Allocation in UAV-Enabled Mobile Edge Computing Networks. *Zhao, M.*, +, *TGCN Dec. 2021 2174-2187*
- Full-Duplex Non-Orthogonal Multiple Access Cooperative Overlay Spectrum-Sharing Networks With SWIPT. *Le, Q.N.*, +, *TGCN March 2021 322-334*
- Improving Power Stability of Energy Harvesting Devices With Edge Computing-Assisted Time Fair Energy Allocation. *Cui, E.*, +, *TGCN March 2021 540-551*
- Latent Discriminative Low-Rank Projection for Visual Dimension Reduction in Green Internet of Things. *Guo, T.*, +, *TGCN June 2021 737-749*
- Statistical-QoS Guarantee for IoT Network Driven by Laser-Powered UAV Relay and RF Backscatter Communications. *Hassan, M.Z.*, +, *TGCN March 2021 406-425*
- Trajectory Design for Throughput Maximization in UAV-Assisted Communication System. *Gupta, N.*, +, *TGCN Sept. 2021 1319-1332*
- Uplink Power Allocation for Throughput and Energy Efficiency Over Nakagami- m Fading Channels. *Ho, D.H.*, +, *TGCN March 2021 190-202*

J

Jamming

- Cooperative Beamforming and Jamming for Secure VLC System in the Presence of Active and Passive Eavesdroppers. *Cho, S.*, +, *TGCN Dec. 2021 1988-1998*
- Deadline Constrained Packet Scheduling in the Presence of an Energy Harvesting Jammer. *Rahman, H.*, +, *TGCN March 2021 278-290*
- Energy-Efficient Channel Access and Data Offloading Against Dynamic Jamming Attacks. *Xu, Y.*, +, *TGCN Dec. 2021 1734-1746*
- Energy-Efficient UAV Assisted Secure Relay Transmission via Cooperative Computation Offloading. *Wang, T.*, +, *TGCN Dec. 2021 1669-1683*

K

Kalman filters

- Multi-Agent Reinforcement Learning for Energy Harvesting Two-Hop Communications With a Partially Observable System State. *Ortiz, A.*, +, *TGCN March 2021 442-456*

L

Laser power transmission

- Statistical-QoS Guarantee for IoT Network Driven by Laser-Powered UAV Relay and RF Backscatter Communications. *Hassan, M.Z.*, +, *TGCN March 2021 406-425*

Learning (artificial intelligence)

- A Reinforcement Learning Approach for User Preference-Aware Energy Sharing Systems. *Timilsina, A.*, +, *TGCN Sept. 2021 1138-1153*
- A Reinforcement Learning Approach to Optimize Energy Usage in RF-Charging Sensor Networks. *Ren, H.*, +, *TGCN March 2021 526-539*
- An Integration of Online Learning and Online Control for Green Offloading in Fog-Assisted IoT Systems. *Gao, X.*, +, *TGCN Sept. 2021 1632-1646*
- Energy Efficient MIMO-OFDM Spectrum Sensing Using Deep Stacked Spiking Delayed Feedback Reservoir Computing. *Hamedani, K.*, +, *TGCN March 2021 484-496*
- Energy Optimization in Ultra-Dense Radio Access Networks via Traffic-Aware Cell Switching. *Ozturk, M.*, +, *TGCN June 2021 832-845*
- Energy-Efficient Offloading for Mission-Critical IoT Services Using EVT-Embedded Intelligent Learning. *Feng, L.*, +, *TGCN Sept. 2021 1179-1190*

- Integrating Future Smart Home Operation Platform With Demand Side Management via Deep Reinforcement Learning. *Li, T.*, +, *TGCN June 2021 921-933*
- Joint Load Control and Energy Sharing for Renewable Powered Small Base Stations: A Machine Learning Approach. *Piovesan, N.*, +, *TGCN March 2021 512-525*
- Latent Discriminative Low-Rank Projection for Visual Dimension Reduction in Green Internet of Things. *Guo, T.*, +, *TGCN June 2021 737-749*
- Multi-Agent Reinforcement Learning for Energy Harvesting Two-Hop Communications With a Partially Observable System State. *Ortiz, A.*, +, *TGCN March 2021 442-456*
- Multi-Energy Scheduling of an Industrial Integrated Energy System by Reinforcement Learning-Based Differential Evolution. *Xu, Z.*, +, *TGCN Sept. 2021 1077-1090*
- Quantum Learning-Enabled Green Communication for Next-Generation Wireless Systems. *Jaiswal, A.*, +, *TGCN Sept. 2021 1015-1028*
- Reinforcement Learning-Based Energy-Efficient Data Access for Airborne Users in Civil Aircrafts-Enabled SAGIN. *Chen, Q.*, +, *TGCN June 2021 934-949*
- Statistical Learning Based Joint Antenna Selection and User Scheduling for Single-Cell Massive MIMO Systems. *Guo, M.*, +, *TGCN March 2021 471-483*
- Wireless Power and Energy Harvesting Control in IoD by Deep Reinforcement Learning. *Yao, J.*, +, *TGCN June 2021 980-989*

Least mean squares methods

- Statistical Learning Based Joint Antenna Selection and User Scheduling for Single-Cell Massive MIMO Systems. *Guo, M.*, +, *TGCN March 2021 471-483*

Light emitting diodes

- A Circuit for Simultaneous Reception of Data and Power Using a Solar Cell. *Kadirvelu, S.*, +, *TGCN Dec. 2021 2065-2075*
- Energy-Efficient Precoding Designs for Multi-User Visible Light Communication Systems With Confidential Messages. *Duong, S.T.*, +, *TGCN Dec. 2021 1974-1987*

Light fidelity

- iDim: Practical Implementation of Index Modulation for LiFi Dimming. *Nguyen, T.*, +, *TGCN Dec. 2021 1880-1891*

Lighting

- Energy-Efficient Precoding Designs for Multi-User Visible Light Communication Systems With Confidential Messages. *Duong, S.T.*, +, *TGCN Dec. 2021 1974-1987*

Linear programming

- E-S-RSM-RSA: A Novel Energy and Spectrum Efficient Regenerator Aware Multipath Based Survivable RSA in Offline EON. *Halder, J.*, +, *TGCN Sept. 2021 1451-1466*
- Energy Efficiency in Sliceable-Transponder Enabled Elastic Optical Networks. *Costa, L.R.*, +, *TGCN June 2021 789-802*
- Energy Efficient Data Gathering in IoT Networks With Heterogeneous Traffic for Remote Area Surveillance Applications: A Cross Layer Approach. *Bhattacharjee, D.*, +, *TGCN Sept. 2021 1165-1178*
- Energy-Aware Scheduling of Streaming Applications on Edge-Devices in IoT-Based Healthcare. *Tariq, U.U.*, +, *TGCN June 2021 803-815*
- Energy-Efficient Resource Allocation With Flexible Frame Structure for Hybrid eMBB and URLLC Services. *Sui, W.*, +, *TGCN March 2021 72-83*
- Energy-Efficient UAV Communications Under Stochastic Trajectory: A Markov Decision Process Approach. *Han, D.*, +, *TGCN March 2021 106-118*
- Energy-Efficient vBBU Migration and Wavelength Reassignment in Cloud-Fog RAN. *Timini, R.I.*, +, *TGCN March 2021 18-28*
- Green Multi-Stage Upgrade for Bundled-Link SDNs With Budget and Delay Constraints. *Hiryanto, L.*, +, *TGCN Sept. 2021 1410-1425*
- GROVE: A Cost-Efficient Green Radio Over Ethernet Architecture for Next Generation Radio Access Networks. *Pamuklu, T.*, +, *TGCN March 2021 84-93*
- Link Schedulers for Green Wireless Networks With Energy Sharing. *Wang, L.*, +, *TGCN Sept. 2021 1580-1593*
- Temperature-Aware Virtual Data Center Embedding to Avoid Hot Spots in Data Centers. *Guo, C.*, +, *TGCN March 2021 497-511*

Load modeling

An IoT-Based Prediction Technique for Efficient Energy Consumption in Buildings. *Goudarzi, S.*, +, *TGCN Dec. 2021 2076-2088*

Local area networks

Modeling and Analysis of Latency Distribution in the 40-100Gbps Dual-Mode Energy Efficient Ethernet. *Jiang, W.*, +, *TGCN Sept. 2021 1426-1437*

Protocol Design for Energy Efficient OLT in TWDM-EPON Supporting Diverse Delay Bounds. *Dutta, S.*, +, *TGCN Sept. 2021 1438-1450*

Logic gates

Optimal Design of LEMoNet for Environmental Monitoring of Data Centers. *Jafarizadeh, M.*, +, *TGCN Dec. 2021 1820-1832*

SLA-Aware Protocol Design for Energy-Efficient OLT Transmitter in TWDM-EPON. *Dutta, S.*, +, *TGCN Dec. 2021 1961-1973*

Lyapunov methods

Contract and Lyapunov Optimization-Based Load Scheduling and Energy Management for UAV Charging Stations. *Ly, L.*, +, *TGCN Sept. 2021 1381-1394*

Online Power Allocation at Energy Harvesting Transmitter for Multiple Receivers With and Without Individual Rate Constraints for OMA and NOMA Transmissions. *Ashraf, M.*, +, *TGCN Sept. 2021 1594-1609*

M**Machine learning**

Machine Learning Based Beam Selection With Low Complexity Hybrid Beamforming Design for 5G Massive MIMO Systems. *Ahmed, I.*, +, *TGCN Dec. 2021 2160-2173*

Markov processes

A Reinforcement Learning Approach to Optimize Energy Usage in RF-Charging Sensor Networks. *Ren, H.*, +, *TGCN March 2021 526-539*

Age-of-Information With Information Source Diversity in an Energy Harvesting System. *Gindullina, E.*, +, *TGCN Sept. 2021 1529-1540*

An Integration of Online Learning and Online Control for Green Offloading in Fog-Assisted IoT Systems. *Gao, X.*, +, *TGCN Sept. 2021 1632-1646*

Energy-Efficient UAV Communications Under Stochastic Trajectory: A Markov Decision Process Approach. *Han, D.*, +, *TGCN March 2021 106-118*

Integrating Future Smart Home Operation Platform With Demand Side Management via Deep Reinforcement Learning. *Li, T.*, +, *TGCN June 2021 921-933*

Multi-Agent Reinforcement Learning for Energy Harvesting Two-Hop Communications With a Partially Observable System State. *Ortiz, A.*, +, *TGCN March 2021 442-456*

Performance of a Cooperative Communication Network With Green Self-Sustaining Nodes. *Bapatla, D.*, +, *TGCN March 2021 426-441*

Preemptive Mobile Computation Offloading With Hard Deadlines and Concurrent Local Execution. *Teymoori, P.*, +, *TGCN June 2021 950-963*

Quantum Learning-Enabled Green Communication for Next-Generation Wireless Systems. *Jaiswal, A.*, +, *TGCN Sept. 2021 1015-1028*

ReNEW: A Practical Module for Reliable Routing in Networks of Energy-Harvesting Wireless Sensors. *Prasad, R.V.*, +, *TGCN Sept. 2021 1558-1569*

Trajectory Optimization for UAV Emergency Communication With Limited User Equipment Energy: A Safe-DQN Approach. *Zhang, T.*, +, *TGCN Sept. 2021 1236-1247*

Wireless Power and Energy Harvesting Control in IoD by Deep Reinforcement Learning. *Yao, J.*, +, *TGCN June 2021 980-989*

Massive MIMO

Machine Learning Based Beam Selection With Low Complexity Hybrid Beamforming Design for 5G Massive MIMO Systems. *Ahmed, I.*, +, *TGCN Dec. 2021 2160-2173*

Matched filters

Rate and Energy Efficiency Improvements of Massive MIMO-Based Stochastic Cellular Networks With NOMA. *Kusaladharna, S.*, +, *TGCN Sept. 2021 1467-1481*

Mathematical programming

Energy Efficiency Maximization Under Minimum Rate Constraints in Multi-Cell MIMO Systems With Finite Buffers. *Saraiva, J.V.*, +, *TGCN March 2021 174-189*

Feasible Point Pursuit and Successive Convex Approximation for Transmit Power Minimization in SWIPT-Multigroup Multicasting Systems. *Gautam, S.*, +, *TGCN June 2021 884-894*

Matrix algebra

Reconfigurable Intelligent Surface for Green Edge Inference. *Hua, S.*, +, *TGCN June 2021 964-979*

Matrix decomposition

Joint Bit Allocation and Hybrid Beamforming Optimization for Energy Efficient Millimeter Wave MIMO Systems. *Kaushik, A.*, +, *TGCN March 2021 119-132*

Maximum likelihood detection

SER Analysis for SWIPT-Enabled Differential Decode-and-Forward Relay Networks. *Lu, Y.*, +, *TGCN March 2021 348-361*

Maximum likelihood estimation

Alternative Chirp Spread Spectrum Techniques for LPWANS. *Bizon Franco de Almeida, I.*, +, *TGCN Dec. 2021 1846-1855*

Mean square error methods

An Optimal Low-Complexity Energy-Efficient ADC Bit Allocation for Massive MIMO. *Ahmed, I.Z.*, +, *TGCN March 2021 61-71*

BL-ALM: A Blind Scalable Edge-Guided Reconstruction Filter for Smart Environmental Monitoring Through Green IoMT-UAV Networks. *Khosravi, M.R.*, +, *TGCN June 2021 727-736*

Energy and Spectrum Efficient Blind Equalization With Unknown Constellation for Air-to-Ground Multipath UAV Communications. *Liu, M.*, +, *TGCN Sept. 2021 1357-1368*

Measurement

A Low-Latency and Energy-Efficient Multimetric Routing Protocol Based on Network Connectivity in VANET Communication. *Wang, X.*, +, *TGCN Dec. 2021 1761-1776*

Medical image processing

Secure and Energy Efficient-Based E-Health Care Framework for Green Internet of Things. *Kaur, M.*, +, *TGCN Sept. 2021 1223-1231*

Medical information systems

LightIoT: Lightweight and Secure Communication for Energy-Efficient IoT in Health Informatics. *Jan, M.A.*, +, *TGCN Sept. 2021 1202-1211*

Meetings

Guest Editorial Special Issue on Selected Papers From IEEE Globecom 2020. *So, D.K.C.*, +, *TGCN Dec. 2021 1777-1780*

Millimeter wave communication

Joint Bit Allocation and Hybrid Beamforming Optimization for Energy Efficient Millimeter Wave MIMO Systems. *Kaushik, A.*, +, *TGCN March 2021 119-132*

MIMO communication

An Optimal Low-Complexity Energy-Efficient ADC Bit Allocation for Massive MIMO. *Ahmed, I.Z.*, +, *TGCN March 2021 61-71*

Cyclic Delay Diversity With Index Modulation for Green Internet of Things. *Wen, M.*, +, *TGCN June 2021 600-610*

Energy Efficiency Maximization Under Minimum Rate Constraints in Multi-Cell MIMO Systems With Finite Buffers. *Saraiva, J.V.*, +, *TGCN March 2021 174-189*

Energy Efficient MIMO-OFDM Spectrum Sensing Using Deep Stacked Spiking Delayed Feedback Reservoir Computing. *Hamedani, K.*, +, *TGCN March 2021 484-496*

Exploiting Cell-Free Massive MIMO for Enabling Simultaneous Wireless Information and Power Transfer. *Galappathige, D.L.*, +, *TGCN Sept. 2021 1541-1557*

Joint Bit Allocation and Hybrid Beamforming Optimization for Energy Efficient Millimeter Wave MIMO Systems. *Kaushik, A.*, +, *TGCN March 2021 119-132*

Optimizing Computation Efficiency for NOMA-Assisted Mobile Edge Computing With User Cooperation. *Su, B.*, +, *TGCN June 2021 858-867*

Rate and Energy Efficiency Improvements of Massive MIMO-Based Stochastic Cellular Networks With NOMA. *Kusaladharna, S.*, +, *TGCN Sept. 2021 1467-1481*

- RIS-Assisted Advanced Spatial Modulation Techniques for Ambient Backscattering Communications. *Bhowal, A.*, +, *TGCN Dec. 2021 1684-1696*
- Statistical Learning Based Joint Antenna Selection and User Scheduling for Single-Cell Massive MIMO Systems. *Guo, M.*, +, *TGCN March 2021 471-483*
- Towards Optimal Energy Efficiency in Cell-Free Massive MIMO Systems. *Papazafeiropoulos, A.*, +, *TGCN June 2021 816-831*
- Minimization**
- Energy Aware Latency Minimization for Network Slicing Enabled Edge Computing. *Hossain, M.A.*, +, *TGCN Dec. 2021 2150-2159*
- Feasible Point Pursuit and Successive Convex Approximation for Transmit Power Minimization in SWIPT-Multigroup Multicasting Systems. *Gautam, S.*, +, *TGCN June 2021 884-894*
- Reconfigurable Intelligent Surface for Green Edge Inference. *Hua, S.*, +, *TGCN June 2021 964-979*
- System and Design for Selective OFDM SWIPT Transmission. *Buckley, R.F.*, +, *TGCN March 2021 335-347*
- Wireless Power and Energy Harvesting Control in IoD by Deep Reinforcement Learning. *Yao, J.*, +, *TGCN June 2021 980-989*
- MISO communication**
- Energy-Efficient Precoder Design for Downlink Multi-User MISO Networks With Finite Blocklength Codes. *Singh, K.*, +, *TGCN March 2021 160-173*
- Energy-Efficient Precoding Designs for Multi-User Visible Light Communication Systems With Confidential Messages. *Duong, S.T.*, +, *TGCN Dec. 2021 1974-1987*
- Robust Active and Passive Beamformer Design for IRS-Aided Downlink MISO PS-SWIPT With a Nonlinear Energy Harvesting Model. *Zargari, S.*, +, *TGCN Dec. 2021 2027-2041*
- Secrecy Energy Efficiency in Cognitive Radio Networks With Untrusted Secondary Users. *Wang, W.*, +, *TGCN March 2021 216-230*
- Mobile computing**
- CoxNet: A Computation Reuse Architecture at the Edge. *Bellal, Z.*, +, *TGCN June 2021 765-777*
- Computation Offloading in Heterogeneous Mobile Edge Computing With Energy Harvesting. *Zhang, T.*, +, *TGCN March 2021 552-565*
- Enabling Green Mobile-Edge Computing for 5G-Based Healthcare Applications. *Bishoyi, P.K.*, +, *TGCN Sept. 2021 1623-1631*
- Energy Drain of the Object Detection Processing Pipeline for Mobile Devices: Analysis and Implications. *Wang, H.*, +, *TGCN March 2021 41-60*
- Energy Efficient Resource Allocation Optimization in Fog Radio Access Networks With Outdated Channel Knowledge. *Dinh, T.H.L.*, +, *TGCN March 2021 146-159*
- Energy-Efficient Offloading for Mission-Critical IoT Services Using EVT-Embedded Intelligent Learning. *Feng, L.*, +, *TGCN Sept. 2021 1179-1190*
- Green MEC Networks Design Under UAV Attack: A Deep Reinforcement Learning Approach. *Zhao, R.*, +, *TGCN Sept. 2021 1248-1258*
- Optimizing Computation Efficiency for NOMA-Assisted Mobile Edge Computing With User Cooperation. *Su, B.*, +, *TGCN June 2021 858-867*
- Preemptive Mobile Computation Offloading With Hard Deadlines and Concurrent Local Execution. *Teymoori, P.*, +, *TGCN June 2021 950-963*
- Resource Inference for Sustainable and Responsive Task Offloading in Challenged Edge Networks. *Sacco, A.*, +, *TGCN Sept. 2021 1114-1127*
- Mobile radio**
- A Novel Joint Optimization Method Based on Mobile Data Collection for Wireless Rechargeable Sensor Networks. *Boukerche, A.*, +, *TGCN Sept. 2021 1610-1622*
- Device-Clustering and Rate-Splitting Enabled Device-to-Device Cooperation Framework in Fog Radio Access Network. *Hassan, M.Z.*, +, *TGCN Sept. 2021 1482-1501*
- Heterogeneous Mobile Networking for Lightweight UAV Assisted Emergency Communication. *Zhang, C.*, +, *TGCN Sept. 2021 1345-1356*
- Mobile robots**
- Flocking Control Algorithms Based on the Diffusion Model for Unmanned Aerial Vehicle Systems. *Chen, M.*, +, *TGCN Sept. 2021 1271-1282*
- Heterogeneous Mobile Networking for Lightweight UAV Assisted Emergency Communication. *Zhang, C.*, +, *TGCN Sept. 2021 1345-1356*
- On the Influence of Charging Stations Spatial Distribution on Aerial Wireless Networks. *Qin, Y.*, +, *TGCN Sept. 2021 1395-1409*
- Trajectory Design for Throughput Maximization in UAV-Assisted Communication System. *Gupta, N.*, +, *TGCN Sept. 2021 1319-1332*
- Modulation**
- Alternative Chirp Spread Spectrum Techniques for LPWANS. *Bizon Franco de Almeida, I.*, +, *TGCN Dec. 2021 1846-1855*
- iDim: Practical Implementation of Index Modulation for LiFi Dimming. *Nguyen, T.*, +, *TGCN Dec. 2021 1880-1891*
- RIS-Assisted Advanced Spatial Modulation Techniques for Ambient Backscattering Communications. *Bhowal, A.*, +, *TGCN Dec. 2021 1684-1696*
- Modulation coding**
- Protograph LDPC-Coded BICM-ID With Irregular Mapping: An Emerging Transmission Technique for Massive Internet of Things. *Yang, Z.*, +, *TGCN Sept. 2021 1051-1065*
- Monte Carlo methods**
- Analysis of Asymmetric Dual-Hop Energy Harvesting-Based Wireless Communication Systems in Mixed Fading Environments. *Illi, E.*, +, *TGCN March 2021 261-277*
- Fluid-Based Energy Efficiency Analysis of JT-CoMP Scheme in Femto Cellular Networks. *Hou, Y.*, +, *TGCN March 2021 133-145*
- MEES-WuR: Minimum Energy Coding With Early Shutdown for Wake-Up Receivers. *Djidi, N.E.H.*, +, *TGCN Sept. 2021 1502-1513*
- Optimization of SWIPT With Battery-Assisted Energy Harvesting Full-Duplex Relays. *Agrawal, K.*, +, *TGCN March 2021 243-260*
- Performance of a Cooperative Communication Network With Green Self-Sustaining Nodes. *Bapatla, D.*, +, *TGCN March 2021 426-441*
- SER Analysis for SWIPT-Enabled Differential Decode-and-Forward Relay Networks. *Lu, Y.*, +, *TGCN March 2021 348-361*
- System and Design for Selective OFDM SWIPT Transmission. *Buckley, R.F.*, +, *TGCN March 2021 335-347*
- Moving average processes**
- Energy-Efficient Multivariate Privacy-Aware RF Spectrum Reservation in Wireless Virtualization for Wireless Internet of Things. *Adebayo, A.A.*, +, *TGCN June 2021 682-692*
- Multi-access systems**
- Energy-Efficient Joint Optimization of Channel Assignment, Power Allocation, and Relay Selection Based on Hypergraph for Uplink mMTC Networks. *Feng, L.*, +, *TGCN March 2021 203-215*
- Energy-Efficient Precoder Design for Downlink Multi-User MISO Networks With Finite Blocklength Codes. *Singh, K.*, +, *TGCN March 2021 160-173*
- Optimizing Computation Efficiency for NOMA-Assisted Mobile Edge Computing With User Cooperation. *Su, B.*, +, *TGCN June 2021 858-867*
- Multi-agent systems**
- Multi-Agent Reinforcement Learning for Energy Harvesting Two-Hop Communications With a Partially Observable System State. *Ortiz, A.*, +, *TGCN March 2021 442-456*
- Multi-robot systems**
- Flocking Control Algorithms Based on the Diffusion Model for Unmanned Aerial Vehicle Systems. *Chen, M.*, +, *TGCN Sept. 2021 1271-1282*
- On the Influence of Charging Stations Spatial Distribution on Aerial Wireless Networks. *Qin, Y.*, +, *TGCN Sept. 2021 1395-1409*
- Multicast communication**
- Feasible Point Pursuit and Successive Convex Approximation for Transmit Power Minimization in SWIPT-Multigroup Multicasting Systems. *Gautam, S.*, +, *TGCN June 2021 884-894*
- Multimedia computing**
- BL-ALM: A Blind Scalable Edge-Guided Reconstruction Filter for Smart Environmental Monitoring Through Green IoMT-UAV Networks. *Khosravi, M.R.*, +, *TGCN June 2021 727-736*
- Multipath channels**
- E-S-RSM-RSA: A Novel Energy and Spectrum Efficient Regenerator Aware Multipath Based Survivable RSA in Offline EON. *Halder, J.*, +, *TGCN Sept. 2021 1451-1466*

Energy and Spectrum Efficient Blind Equalization With Unknown Constellation for Air-to-Ground Multipath UAV Communications. *Liu, M.*, +, *TGCN Sept. 2021 1357-1368*

Multiprocessing systems

Energy-Aware Scheduling of Streaming Applications on Edge-Devices in IoT-Based Healthcare. *Tariq, U.U.*, +, *TGCN June 2021 803-815*

N

Nakagami channels

Analysis of Asymmetric Dual-Hop Energy Harvesting-Based Wireless Communication Systems in Mixed Fading Environments. *Illi, E.*, +, *TGCN March 2021 261-277*

BER Analysis of a Backscatter Communication System With Non-Orthogonal Multiple Access. *Nazar, A.W.*, +, *TGCN June 2021 574-586*

Uplink Power Allocation for Throughput and Energy Efficiency Over Nakagami- m Fading Channels. *Ho, D.H.*, +, *TGCN March 2021 190-202*

Network coding

Energy Efficient Network Coding HARQ Transmission Scheme for S-IoT. *Jiao, J.*, +, *TGCN March 2021 308-321*

Network topology

Throughput-Optimal Broadcast for Time-Varying Directed Acyclic Wireless Multi-Hop Networks With Energy Harvesting Constraints. *Tian, X.*, +, *TGCN Dec. 2021 2089-2103*

Network-on-chip

Energy-Aware Scheduling of Streaming Applications on Edge-Devices in IoT-Based Healthcare. *Tariq, U.U.*, +, *TGCN June 2021 803-815*

Neural networks

Integrating Future Smart Home Operation Platform With Demand Side Management via Deep Reinforcement Learning. *Li, T.*, +, *TGCN June 2021 921-933*

Next generation networks

Energy-Efficient Multivariate Privacy-Aware RF Spectrum Reservation in Wireless Virtualization for Wireless Internet of Things. *Adebayo, A.A.*, +, *TGCN June 2021 682-692*

Energy-Efficient vBBU Migration and Wavelength Reassignment in Cloud-Fog RAN. *Tinini, R.I.*, +, *TGCN March 2021 18-28*

Quantum Learning-Enabled Green Communication for Next-Generation Wireless Systems. *Jaiswal, A.*, +, *TGCN Sept. 2021 1015-1028*

NOMA

Energy Aware Latency Minimization for Network Slicing Enabled Edge Computing. *Hossain, M.A.*, +, *TGCN Dec. 2021 2150-2159*

Energy-Efficient Resource Allocation in Multi-UAV Networks With NOMA. *Najmeddin, S.*, +, *TGCN Dec. 2021 1906-1917*

Energy-Efficient UAV Assisted Secure Relay Transmission via Cooperative Computation Offloading. *Wang, T.*, +, *TGCN Dec. 2021 1669-1683*

Nonhomogeneous media

A Low-Latency and Energy-Efficient Multimetric Routing Protocol Based on Network Connectivity in VANET Communication. *Wang, X.*, +, *TGCN Dec. 2021 1761-1776*

Nonlinear programming

An Energy-Efficient Selection Mechanism of Relay and Edge Computing in UAV-Assisted Cellular Networks. *Liu, Z.*, +, *TGCN Sept. 2021 1306-1318*

Energy Efficient Data Gathering in IoT Networks With Heterogeneous Traffic for Remote Area Surveillance Applications: A Cross Layer Approach. *Bhattacharjee, D.*, +, *TGCN Sept. 2021 1165-1178*

Robust Resource Allocation for Two-Tier HetNets: An Interference-Efficiency Perspective. *Xu, Y.*, +, *TGCN Sept. 2021 1514-1528*

Nonorthogonal multiple access

BER Analysis of a Backscatter Communication System With Non-Orthogonal Multiple Access. *Nazar, A.W.*, +, *TGCN June 2021 574-586*

Full-Duplex Non-Orthogonal Multiple Access Cooperative Overlay Spectrum-Sharing Networks With SWIPT. *Le, Q.N.*, +, *TGCN March 2021 322-334*

Online Power Allocation at Energy Harvesting Transmitter for Multiple Receivers With and Without Individual Rate Constraints for OMA and NOMA Transmissions. *Ashraf, M.*, +, *TGCN Sept. 2021 1594-1609*

O

Object detection

Energy Drain of the Object Detection Processing Pipeline for Mobile Devices: Analysis and Implications. *Wang, H.*, +, *TGCN March 2021 41-60*

OFDM

A New Non-Linear Joint Model for RF Energy Harvesters in Wireless Networks. *Alqahtani, D.*, +, *TGCN June 2021 895-907*

Cyclic Delay Diversity With Index Modulation for Green Internet of Things. *Wen, M.*, +, *TGCN June 2021 600-610*

Energy Efficient MIMO-OFDM Spectrum Sensing Using Deep Stacked Spiking Delayed Feedback Reservoir Computing. *Hamedani, K.*, +, *TGCN March 2021 484-496*

iDim: Practical Implementation of Index Modulation for LiFi Dimming. *Nguyen, T.*, +, *TGCN Dec. 2021 1880-1891*

Robust Resource Allocation for Two-Tier HetNets: An Interference-Efficiency Perspective. *Xu, Y.*, +, *TGCN Sept. 2021 1514-1528*

System and Design for Selective OFDM SWIPT Transmission. *Buckley, R.F.*, +, *TGCN March 2021 335-347*

Trajectory and Resource Optimization in OFDM-Based UAV-Powered IoT Network. *Lu, W.*, +, *TGCN Sept. 2021 1259-1270*

Optical fiber LAN

Protocol Design for Energy Efficient OLT in TWDM-EPON Supporting Diverse Delay Bounds. *Dutta, S.*, +, *TGCN Sept. 2021 1438-1450*

Optical fiber networks

E-S-RSM-RSA: A Novel Energy and Spectrum Efficient Regenerator Aware Multipath Based Survivable RSA in Offline EON. *Halder, J.*, +, *TGCN Sept. 2021 1451-1466*

Energy Efficiency in Sliceable-Transponder Enabled Elastic Optical Networks. *Costa, L.R.*, +, *TGCN June 2021 789-802*

Energy-Efficient vBBU Migration and Wavelength Reassignment in Cloud-Fog RAN. *Tinini, R.I.*, +, *TGCN March 2021 18-28*

Optical fibers

Two-Layer Stackelberg Game-Based Offloading Strategy for Mobile Edge Computing Enhanced FiWi Access Networks. *Yang, B.*, +, *TGCN March 2021 457-470*

Optical interconnections

Two-Layer Stackelberg Game-Based Offloading Strategy for Mobile Edge Computing Enhanced FiWi Access Networks. *Yang, B.*, +, *TGCN March 2021 457-470*

Optical links

A Physical Layer for Low Power Optical Wireless Communications. *Hinrichs, M.*, +, *TGCN March 2021 4-17*

Optical modulation

A Physical Layer for Low Power Optical Wireless Communications. *Hinrichs, M.*, +, *TGCN March 2021 4-17*

Optical network units

SLA-Aware Protocol Design for Energy-Efficient OLT Transmitter in TWDM-EPON. *Dutta, S.*, +, *TGCN Dec. 2021 1961-1973*

Optical pulses

Energy-Efficient Precoding Designs for Multi-User Visible Light Communication Systems With Confidential Messages. *Duong, S.T.*, +, *TGCN Dec. 2021 1974-1987*

Optical receivers

A Circuit for Simultaneous Reception of Data and Power Using a Solar Cell. *Kadirvelu, S.*, +, *TGCN Dec. 2021 2065-2075*

Optical sensors

A Circuit for Simultaneous Reception of Data and Power Using a Solar Cell. *Kadirvelu, S.*, +, *TGCN Dec. 2021 2065-2075*

Optical transmitters

A Circuit for Simultaneous Reception of Data and Power Using a Solar Cell. *Kadirvelu, S.*, +, *TGCN Dec. 2021 2065-2075*

A Physical Layer for Low Power Optical Wireless Communications. *Hinrichs, M.*, +, *TGCN March 2021 4-17*

Energy-Efficient Precoding Designs for Multi-User Visible Light Communication Systems With Confidential Messages. *Duong, S.T.*, +, *TGCN Dec. 2021 1974-1987*

iDim: Practical Implementation of Index Modulation for LiFi Dimming. *Nguyen, T., +, TGCN Dec. 2021 1880-1891*

Optimal control

Trajectory Design for Throughput Maximization in UAV-Assisted Communication System. *Gupta, N., +, TGCN Sept. 2021 1319-1332*

Optimization

3D Trajectory and Transmit Power Optimization for UAV-Enabled Multi-Link Relaying Systems. *Liu, T., +, TGCN March 2021 392-405*

A Novel Joint Optimization Method Based on Mobile Data Collection for Wireless Rechargeable Sensor Networks. *Boukerche, A., +, TGCN Sept. 2021 1610-1622*

A Reinforcement Learning Approach for User Preference-Aware Energy Sharing Systems. *Timilsina, A., +, TGCN Sept. 2021 1138-1153*

An Energy-Efficient Selection Mechanism of Relay and Edge Computing in UAV-Assisted Cellular Networks. *Liu, Z., +, TGCN Sept. 2021 1306-1318*

An Integration of Online Learning and Online Control for Green Offloading in Fog-Assisted IoT Systems. *Gao, X., +, TGCN Sept. 2021 1632-1646*

An Optimal Low-Complexity Energy-Efficient ADC Bit Allocation for Massive MIMO. *Ahmed, I.Z., +, TGCN March 2021 61-71*

Cache- and Energy Harvesting-Enabled D2D Cellular Network: Modeling, Analysis and Optimization. *Meng, Y., +, TGCN June 2021 703-713*

Cellular-Connected UAV Trajectory Design With Connectivity Constraint: A Deep Reinforcement Learning Approach. *Gao, Y., +, TGCN Sept. 2021 1369-1380*

Computation Offloading in Heterogeneous Mobile Edge Computing With Energy Harvesting. *Zhang, T., +, TGCN March 2021 552-565*

Contract and Lyapunov Optimization-Based Load Scheduling and Energy Management for UAV Charging Stations. *Ly, L., +, TGCN Sept. 2021 1381-1394*

Deep-Green: A Dispersed Energy-Efficiency Computing Paradigm for Green Industrial IoT. *Hu, N., +, TGCN June 2021 750-764*

Device-Clustering and Rate-Splitting Enabled Device-to-Device Cooperation Framework in Fog Radio Access Network. *Hassan, M.Z., +, TGCN Sept. 2021 1482-1501*

Enabling Green Mobile-Edge Computing for 5G-Based Healthcare Applications. *Bishoyi, P.K., +, TGCN Sept. 2021 1623-1631*

Energy and Distance Optimization in Rechargeable Wireless Sensor Networks. *Tsoumanis, G., +, TGCN March 2021 378-391*

Energy Efficient Network Coding HARQ Transmission Scheme for S-IoT. *Jiao, J., +, TGCN March 2021 308-321*

Energy Efficient Resource Allocation Optimization in Fog Radio Access Networks With Outdated Channel Knowledge. *Dinh, T.H.L., +, TGCN March 2021 146-159*

Energy-Efficient Channel Access and Data Offloading Against Dynamic Jamming Attacks. *Xu, Y., +, TGCN Dec. 2021 1734-1746*

Energy-Efficient Offloading for Mission-Critical IoT Services Using EVT-Embedded Intelligent Learning. *Feng, L., +, TGCN Sept. 2021 1179-1190*

Energy-Efficient Resource Allocation in Multi-UAV Networks With NOMA. *Najmeddin, S., +, TGCN Dec. 2021 1906-1917*

Energy-Efficient UAV Assisted Secure Relay Transmission via Cooperative Computation Offloading. *Wang, T., +, TGCN Dec. 2021 1669-1683*

Full-Duplex Non-Orthogonal Multiple Access Cooperative Overlay Spectrum-Sharing Networks With SWIPT. *Le, Q.N., +, TGCN March 2021 322-334*

Green MEC Networks Design Under UAV Attack: A Deep Reinforcement Learning Approach. *Zhao, R., +, TGCN Sept. 2021 1248-1258*

Green Tethered UAVs for EMF-Aware Cellular Networks. *Lou, Z., +, TGCN Dec. 2021 1697-1711*

Heterogeneous Mobile Networking for Lightweight UAV Assisted Emergency Communication. *Zhang, C., +, TGCN Sept. 2021 1345-1356*

IADe: An Improved Differential Evolution Algorithm to Preserve Sustainability in a 6G Network. *Zhou, Z., +, TGCN Dec. 2021 1747-1760*

Improving Power Stability of Energy Harvesting Devices With Edge Computing-Assisted Time Fair Energy Allocation. *Cui, E., +, TGCN March 2021 540-551*

Joint Bit Allocation and Hybrid Beamforming Optimization for Energy Efficient Millimeter Wave MIMO Systems. *Kaushik, A., +, TGCN March 2021 119-132*

Latent Discriminative Low-Rank Projection for Visual Dimension Reduction in Green Internet of Things. *Guo, T., +, TGCN June 2021 737-749*

Multi-Energy Scheduling of an Industrial Integrated Energy System by Reinforcement Learning-Based Differential Evolution. *Xu, Z., +, TGCN Sept. 2021 1077-1090*

Multi-Timescale Multi-Dimension Resource Allocation for NOMA-Edge Computing-Based Power IoT With Massive Connectivity. *Yu, H., +, TGCN Sept. 2021 1101-1113*

Offline and Online UAV-Enabled Data Collection in Time-Constrained IoT Networks. *Ghdiri, O., +, TGCN Dec. 2021 1918-1933*

Online Power Allocation at Energy Harvesting Transmitter for Multiple Receivers With and Without Individual Rate Constraints for OMA and NOMA Transmissions. *Ashraf, M., +, TGCN Sept. 2021 1594-1609*

Optimal Energy Sharing for Cooperative Relaying in a Random Access Network With Energy Harvesting Nodes. *Mortazavi, S.M., +, TGCN March 2021 231-242*

Optimizing Computation Efficiency for NOMA-Assisted Mobile Edge Computing With User Cooperation. *Su, B., +, TGCN June 2021 858-867*

Quantum Learning-Enabled Green Communication for Next-Generation Wireless Systems. *Jaiswal, A., +, TGCN Sept. 2021 1015-1028*

Reconfigurable Intelligent Surface for Green Edge Inference. *Hua, S., +, TGCN June 2021 964-979*

Reinforcement Learning-Based Energy-Efficient Data Access for Airborne Users in Civil Aircrafts-Enabled SAGIN. *Chen, Q., +, TGCN June 2021 934-949*

Robust Active and Passive Beamformer Design for IRS-Aided Downlink MISO PS-SWIPT With a Nonlinear Energy Harvesting Model. *Zargari, S., +, TGCN Dec. 2021 2027-2041*

Robust Design for UAV-Enabled Multiuser Relaying System With SWIPT. *Wang, J., +, TGCN Sept. 2021 1293-1305*

Statistical-QoS Guarantee for IoT Network Driven by Laser-Powered UAV Relay and RF Backscatter Communications. *Hassan, M.Z., +, TGCN March 2021 406-425*

Towards Optimal Energy Efficiency in Cell-Free Massive MIMO Systems. *Papazafeiropoulos, A., +, TGCN June 2021 816-831*

Trajectory Optimization for UAV Emergency Communication With Limited User Equipment Energy: A Safe-DQN Approach. *Zhang, T., +, TGCN Sept. 2021 1236-1247*

Uplink Power Allocation for Throughput and Energy Efficiency Over Nakagami- m Fading Channels. *Ho, D.H., +, TGCN March 2021 190-202*

Overlay networks

Full-Duplex Non-Orthogonal Multiple Access Cooperative Overlay Spectrum-Sharing Networks With SWIPT. *Le, Q.N., +, TGCN March 2021 322-334*

P

Parity check codes

Protograph LDPC-Coded BICM-ID With Irregular Mapping: An Emerging Transmission Technique for Massive Internet of Things. *Yang, Z., +, TGCN Sept. 2021 1051-1065*

Particle swarm optimization

Energy Harvesting Optimization of Uplink-NOMA System for IoT Networks Based on Channel Capacity Analysis Using the Water Cycle Algorithm. *Bulut, I.S., +, TGCN March 2021 291-307*

Fuzzy Rule Generation Using Modified PSO for Clustering in Wireless Sensor Networks. *Lipare, A., +, TGCN June 2021 846-857*

Passive optical networks

Energy-Efficient vBBU Migration and Wavelength Reassignment in Cloud-Fog RAN. *Tinini, R.I., +, TGCN March 2021 18-28*

Protocol Design for Energy Efficient OLT in TWDM-EPON Supporting Diverse Delay Bounds. *Dutta, S., +, TGCN Sept. 2021 1438-1450*

Path planning

Trajectory Design for Throughput Maximization in UAV-Assisted Communication System. *Gupta, N., +, TGCN Sept. 2021 1319-1332*

Patient monitoring

LightIoT: Lightweight and Secure Communication for Energy-Efficient IoT in Health Informatics. *Jan, M.A.*, +, *TGCN Sept. 2021 1202-1211*

Pattern clustering

SEC²: A Secure and Energy Efficient Barrier Coverage Scheduling for WSN-Based IoT Applications. *Thomas, D.*, +, *TGCN June 2021 622-634*

Energy-Efficient Joint Optimization of Channel Assignment, Power Allocation, and Relay Selection Based on Hypergraph for Uplink mMTC Networks. *Feng, L.*, +, *TGCN March 2021 203-215*

Fuzzy Rule Generation Using Modified PSO for Clustering in Wireless Sensor Networks. *Lipare, A.*, +, *TGCN June 2021 846-857*

Optimal Radius for Enhanced Lifetime in IoT Using Hybridization of Rider and Grey Wolf Optimization. *Dev, K.*, +, *TGCN June 2021 635-644*

Performance evaluation

Energy-Efficient Topology Construction via Power Allocation for Decentralized Learning via Smart Devices With Edge Computing. *Kuo, J.*, +, *TGCN Dec. 2021 1806-1819*

Photovoltaic cells

A Circuit for Simultaneous Reception of Data and Power Using a Solar Cell. *Kadirvelu, S.*, +, *TGCN Dec. 2021 2065-2075*

Physical layer security

Toward a Green Secure Relay System for Mission-Critical IoT: Hybrid Duplex Relay Selection and Resource Allocation in the Finite Block Length Regime. *Cao, J.*, +, *TGCN Dec. 2021 1869-1879*

Polynomials

Statistical-QoS Guarantee for IoT Network Driven by Laser-Powered UAV Relay and RF Backscatter Communications. *Hassan, M.Z.*, +, *TGCN March 2021 406-425*

Power aware computing

A Hierarchical Energy-Efficient Service Selection Approach With QoS Constraints for Internet of Things. *Tong, E.*, +, *TGCN June 2021 645-657*

AFED-EF: An Energy-Efficient VM Allocation Algorithm for IoT Applications in a Cloud Data Center. *Zhou, Z.*, +, *TGCN June 2021 658-669*

Deep-Green: A Dispersed Energy-Efficiency Computing Paradigm for Green Industrial IoT. *Hu, N.*, +, *TGCN June 2021 750-764*

Enabling Green Mobile-Edge Computing for 5G-Based Healthcare Applications. *Bishoyi, P.K.*, +, *TGCN Sept. 2021 1623-1631*

Energy Drain of the Object Detection Processing Pipeline for Mobile Devices: Analysis and Implications. *Wang, H.*, +, *TGCN March 2021 41-60*

Energy-Aware Scheduling of Streaming Applications on Edge-Devices in IoT-Based Healthcare. *Tariq, U.U.*, +, *TGCN June 2021 803-815*

GROVE: A Cost-Efficient Green Radio Over Ethernet Architecture for Next Generation Radio Access Networks. *Pamuklu, T.*, +, *TGCN March 2021 84-93*

Modeling and Analysis of Latency Distribution in the 40-100Gbps Dual-Mode Energy Efficient Ethernet. *Jiang, W.*, +, *TGCN Sept. 2021 1426-1437*

Preemptive Mobile Computation Offloading With Hard Deadlines and Concurrent Local Execution. *Teymoori, P.*, +, *TGCN June 2021 950-963*

Temperature-Aware Virtual Data Center Embedding to Avoid Hot Spots in Data Centers. *Guo, C.*, +, *TGCN March 2021 497-511*

Power consumption

E-S-RSM-RSA: A Novel Energy and Spectrum Efficient Regenerator Aware Multipath Based Survivable RSA in Offline EON. *Halder, J.*, +, *TGCN Sept. 2021 1451-1466*

Energy-Efficient and Reliable IoT Access Without Radio Resource Reservation. *Azari, A.*, +, *TGCN June 2021 908-920*

Fluid-Based Energy Efficiency Analysis of JT-CoMP Scheme in Femto Cellular Networks. *Hou, Y.*, +, *TGCN March 2021 133-145*

Modeling and Analysis of Latency Distribution in the 40-100Gbps Dual-Mode Energy Efficient Ethernet. *Jiang, W.*, +, *TGCN Sept. 2021 1426-1437*

Receiver-Initiated Data Collection in Wake-Up Radio Enabled mIoT Networks: Achieving Collision-Free Transmissions by Hashing and Partitioning. *Hsu, C.*, +, *TGCN June 2021 868-883*

Reconfigurable Intelligent Surface for Green Edge Inference. *Hua, S.*, +, *TGCN June 2021 964-979*

Power control

Exploiting Cell-Free Massive MIMO for Enabling Simultaneous Wireless Information and Power Transfer. *Galappaththige, D.L.*, +, *TGCN Sept. 2021 1541-1557*

Quantum Learning-Enabled Green Communication for Next-Generation Wireless Systems. *Jaiswal, A.*, +, *TGCN Sept. 2021 1015-1028*

Wireless Power and Energy Harvesting Control in IoD by Deep Reinforcement Learning. *Yao, J.*, +, *TGCN June 2021 980-989*

Power demand

Centralized and Distributed Algorithms for Energy and Spectrum Efficient User Association in Small Cell Networks. *Javad-Kalbasi, M.*, +, *TGCN Dec. 2021 1781-1790*

Energy-Efficient Topology Construction via Power Allocation for Decentralized Learning via Smart Devices With Edge Computing. *Kuo, J.*, +, *TGCN Dec. 2021 1806-1819*

Network Operator Revenue Maximization in Dual Powered Green Cellular Networks. *Balakrishnan, A.*, +, *TGCN Dec. 2021 1791-1805*

Power engineering computing

A Reinforcement Learning Approach for User Preference-Aware Energy Sharing Systems. *Timilsina, A.*, +, *TGCN Sept. 2021 1138-1153*

A Reinforcement Learning Approach to Optimize Energy Usage in RF-Charging Sensor Networks. *Ren, H.*, +, *TGCN March 2021 526-539*

Improving Power Stability of Energy Harvesting Devices With Edge Computing-Assisted Time Fair Energy Allocation. *Cui, E.*, +, *TGCN March 2021 540-551*

Integrating Future Smart Home Operation Platform With Demand Side Management via Deep Reinforcement Learning. *Li, T.*, +, *TGCN June 2021 921-933*

Multi-Energy Scheduling of an Industrial Integrated Energy System by Reinforcement Learning-Based Differential Evolution. *Xu, Z.*, +, *TGCN Sept. 2021 1077-1090*

Power generation economics

Efficient Allocation of Harvested Energy at the Edge by Building a Tangible Micro-Grid—The Texas Case. *Kouvelas, N.*, +, *TGCN March 2021 94-105*

Multi-Energy Scheduling of an Industrial Integrated Energy System by Reinforcement Learning-Based Differential Evolution. *Xu, Z.*, +, *TGCN Sept. 2021 1077-1090*

Power grids

Contract and Lyapunov Optimization-Based Load Scheduling and Energy Management for UAV Charging Stations. *Lv, L.*, +, *TGCN Sept. 2021 1381-1394*

Multi-Energy Scheduling of an Industrial Integrated Energy System by Reinforcement Learning-Based Differential Evolution. *Xu, Z.*, +, *TGCN Sept. 2021 1077-1090*

Power markets

A Reinforcement Learning Approach for User Preference-Aware Energy Sharing Systems. *Timilsina, A.*, +, *TGCN Sept. 2021 1138-1153*

Contract and Lyapunov Optimization-Based Load Scheduling and Energy Management for UAV Charging Stations. *Lv, L.*, +, *TGCN Sept. 2021 1381-1394*

Multi-Energy Scheduling of an Industrial Integrated Energy System by Reinforcement Learning-Based Differential Evolution. *Xu, Z.*, +, *TGCN Sept. 2021 1077-1090*

Power system stability

Improving Power Stability of Energy Harvesting Devices With Edge Computing-Assisted Time Fair Energy Allocation. *Cui, E.*, +, *TGCN March 2021 540-551*

Precoding

Energy-Efficient Precoder Design for Downlink Multi-User MISO Networks With Finite Blocklength Codes. *Singh, K.*, +, *TGCN March 2021 160-173*

Energy-Efficient Precoding Designs for Multi-User Visible Light Communication Systems With Confidential Messages. *Duong, S.T.*, +, *TGCN Dec. 2021 1974-1987*

Feasible Point Pursuit and Successive Convex Approximation for Transmit Power Minimization in SWIPT-Multigroup Multicasting Systems. *Gautam, S.*, +, *TGCN June 2021 884-894*

Joint Bit Allocation and Hybrid Beamforming Optimization for Energy Efficient Millimeter Wave MIMO Systems. *Kaushik, A.*, +, *TGCN March 2021 119-132*

Rate and Energy Efficiency Improvements of Massive MIMO-Based Stochastic Cellular Networks With NOMA. *Kusaladharma, S.*, +, *TGCN Sept. 2021 1467-1481*

Predictive models

An IoT-Based Prediction Technique for Efficient Energy Consumption in Buildings. *Goudarzi, S.*, +, *TGCN Dec. 2021 2076-2088*

Pricing

Multi-Energy Scheduling of an Industrial Integrated Energy System by Reinforcement Learning-Based Differential Evolution. *Xu, Z.*, +, *TGCN Sept. 2021 1077-1090*

Probability

Cache- and Energy Harvesting-Enabled D2D Cellular Network: Modeling, Analysis and Optimization. *Meng, Y.*, +, *TGCN June 2021 703-713*

Energy Efficient MIMO-OFDM Spectrum Sensing Using Deep Stacked Spiking Delayed Feedback Reservoir Computing. *Hamedani, K.*, +, *TGCN March 2021 484-496*

Energy-Efficient Cross-Layer Spectrum Sharing in CR Green IoT Networks. *Salameh, H.A.B.*, +, *TGCN Sept. 2021 1091-1100*

Full-Duplex Non-Orthogonal Multiple Access Cooperative Overlay Spectrum-Sharing Networks With SWIPT. *Le, Q.N.*, +, *TGCN March 2021 322-334*

Intelligent Reflecting Surfaces Assisted UAV Communications for IoT Networks: Performance Analysis. *Mahmoud, A.*, +, *TGCN Sept. 2021 1029-1040*

Optimization of SWIPT With Battery-Assisted Energy Harvesting Full-Duplex Relays. *Agrawal, K.*, +, *TGCN March 2021 243-260*

Physical Layer Security of Cognitive Ambient Backscatter Communications for Green Internet-of-Things. *Li, X.*, +, *TGCN Sept. 2021 1066-1076*

Preemptive Mobile Computation Offloading With Hard Deadlines and Concurrent Local Execution. *Teymoori, P.*, +, *TGCN June 2021 950-963*

Rate and Energy Efficiency Improvements of Massive MIMO-Based Stochastic Cellular Networks With NOMA. *Kusaladharma, S.*, +, *TGCN Sept. 2021 1467-1481*

Uplink Power Allocation for Throughput and Energy Efficiency Over Nakagami- m Fading Channels. *Ho, D.H.*, +, *TGCN March 2021 190-202*

Processor scheduling

Fairness-Aware Task Scheduling and Resource Allocation in UAV-Enabled Mobile Edge Computing Networks. *Zhao, M.*, +, *TGCN Dec. 2021 2174-2187*

Product life cycle management

Multi-Energy Scheduling of an Industrial Integrated Energy System by Reinforcement Learning-Based Differential Evolution. *Xu, Z.*, +, *TGCN Sept. 2021 1077-1090*

Production engineering computing

Deep-Green: A Dispersed Energy-Efficiency Computing Paradigm for Green Industrial IoT. *Hu, N.*, +, *TGCN June 2021 750-764*

Multi-Energy Scheduling of an Industrial Integrated Energy System by Reinforcement Learning-Based Differential Evolution. *Xu, Z.*, +, *TGCN Sept. 2021 1077-1090*

Program debugging

Synthesized Corpora to Evaluate Fuzzing for Green Internet of Things Programs. *Zhu, X.*, +, *TGCN Sept. 2021 1041-1050*

Program diagnostics

Synthesized Corpora to Evaluate Fuzzing for Green Internet of Things Programs. *Zhu, X.*, +, *TGCN Sept. 2021 1041-1050*

Program testing

Synthesized Corpora to Evaluate Fuzzing for Green Internet of Things Programs. *Zhu, X.*, +, *TGCN Sept. 2021 1041-1050*

Protocols

Analysis of Asymmetric Dual-Hop Energy Harvesting-Based Wireless Communication Systems in Mixed Fading Environments. *Illli, E.*, +, *TGCN March 2021 261-277*

DARE-SEP: A Hybrid Approach of Distance Aware Residual Energy-Efficient SEP for WSN. *Naeem, A.*, +, *TGCN June 2021 611-621*

Deep-Green: A Dispersed Energy-Efficiency Computing Paradigm for Green Industrial IoT. *Hu, N.*, +, *TGCN June 2021 750-764*

Energy-Efficient and Reliable IoT Access Without Radio Resource Reservation. *Azari, A.*, +, *TGCN June 2021 908-920*

High-Density Resource-Restricted Pulse-Based IoT Networks. *Peper, F.*, +, *TGCN Dec. 2021 1856-1868*

Optimization of SWIPT With Battery-Assisted Energy Harvesting Full-Duplex Relays. *Agrawal, K.*, +, *TGCN March 2021 243-260*

Protocol Design for Energy Efficient OLT in TWDM-EPON Supporting Diverse Delay Bounds. *Dutta, S.*, +, *TGCN Sept. 2021 1438-1450*

SER Analysis for SWIPT-Enabled Differential Decode-and-Forward Relay Networks. *Lu, Y.*, +, *TGCN March 2021 348-361*

SLA-Aware Protocol Design for Energy-Efficient OLT Transmitter in TWDM-EPON. *Dutta, S.*, +, *TGCN Dec. 2021 1961-1973*

UEE-RPL: A UAV-Based Energy Efficient Routing for Internet of Things. *Yang, Z.*, +, *TGCN Sept. 2021 1333-1344*

Q

Quadrature amplitude modulation

Energy and Spectrum Efficient Blind Equalization With Unknown Constellation for Air-to-Ground Multipath UAV Communications. *Liu, M.*, +, *TGCN Sept. 2021 1357-1368*

Quality of service

CoxNet: A Computation Reuse Architecture at the Edge. *Bellal, Z.*, +, *TGCN June 2021 765-777*

SEC²: A Secure and Energy Efficient Barrier Coverage Scheduling for WSN-Based IoT Applications. *Thomas, D.*, +, *TGCN June 2021 622-634*

A Hierarchical Energy-Efficient Service Selection Approach With QoS Constraints for Internet of Things. *Tong, E.*, +, *TGCN June 2021 645-657*

AFED-EF: An Energy-Efficient VM Allocation Algorithm for IoT Applications in a Cloud Data Center. *Zhou, Z.*, +, *TGCN June 2021 658-669*

Cache- and Energy Harvesting-Enabled D2D Cellular Network: Modeling, Analysis and Optimization. *Meng, Y.*, +, *TGCN June 2021 703-713*

Energy Optimization in Ultra-Dense Radio Access Networks via Traffic-Aware Cell Switching. *Ozturk, M.*, +, *TGCN June 2021 832-845*

Energy-Efficient Multivariate Privacy-Aware RF Spectrum Reservation in Wireless Virtualization for Wireless Internet of Things. *Adebayo, A.A.*, +, *TGCN June 2021 682-692*

Energy-Efficient Offloading for Mission-Critical IoT Services Using EVT-Embedded Intelligent Learning. *Feng, L.*, +, *TGCN Sept. 2021 1179-1190*

Energy-Efficient Resource Allocation in Multi-UAV Networks With NOMA. *Najmeddin, S.*, +, *TGCN Dec. 2021 1906-1917*

Energy-Efficient Resource Allocation With Flexible Frame Structure for Hybrid eMBB and URLLC Services. *Sui, W.*, +, *TGCN March 2021 72-83*

Feasible Point Pursuit and Successive Convex Approximation for Transmit Power Minimization in SWIPT-Multigroup Multicasting Systems. *Gautam, S.*, +, *TGCN June 2021 884-894*

Green Tethered UAVs for EMF-Aware Cellular Networks. *Lou, Z.*, +, *TGCN Dec. 2021 1697-1711*

Leveraging Graph Convolutional-LSTM for Energy-Efficient Caching in Blockchain-Based Green IoT. *Chen, G.*, +, *TGCN Sept. 2021 1154-1164*

Network Operator Revenue Maximization in Dual Powered Green Cellular Networks. *Balakrishnan, A.*, +, *TGCN Dec. 2021 1791-1805*

Online Power Allocation at Energy Harvesting Transmitter for Multiple Receivers With and Without Individual Rate Constraints for OMA and NOMA Transmissions. *Ashraf, M.*, +, *TGCN Sept. 2021 1594-1609*

Optimal Energy Sharing for Cooperative Relaying in a Random Access Network With Energy Harvesting Nodes. *Mortazavi, S.M.*, +, *TGCN March 2021 231-242*

Protocol Design for Energy Efficient OLT in TWDM-EPON Supporting Diverse Delay Bounds. *Dutta, S.*, +, *TGCN Sept. 2021 1438-1450*

QoS-Aware Sensor Virtualization for Provisioning Green Sensors-as-a-Service. *Rajavel, D.*, +, *TGCN Sept. 2021 1128-1137*

Reinforcement Learning-Based Energy-Efficient Data Access for Airborne Users in Civil Aircrafts-Enabled SAGIN. *Chen, Q.*, +, *TGCN June 2021 934-949*

Secrecy Energy Efficiency in Cognitive Radio Networks With Untrusted Secondary Users. *Wang, W.*, +, *TGCN March 2021 216-230*

SSUR: An Approach to Optimizing Virtual Machine Allocation Strategy Based on User Requirements for Cloud Data Center. *Huang, Y.*, +, *TGCN June 2021 670-681*

Statistical-QoS Guarantee for IoT Network Driven by Laser-Powered UAV Relay and RF Backscatter Communications. *Hassan, M.Z.*, +, *TGCN March 2021 406-425*

Wireless Power and Energy Harvesting Control in IoD by Deep Reinforcement Learning. *Yao, J.*, +, *TGCN June 2021 980-989*

Quantization (signal)

An Optimal Low-Complexity Energy-Efficient ADC Bit Allocation for Massive MIMO. *Ahmed, I.Z.*, +, *TGCN March 2021 61-71*

Quantum computing

Quantum Learning-Enabled Green Communication for Next-Generation Wireless Systems. *Jaiswal, A.*, +, *TGCN Sept. 2021 1015-1028*

Queuing theory

An Integration of Online Learning and Online Control for Green Offloading in Fog-Assisted IoT Systems. *Gao, X.*, +, *TGCN Sept. 2021 1632-1646*

Computation Offloading in Heterogeneous Mobile Edge Computing With Energy Harvesting. *Zhang, T.*, +, *TGCN March 2021 552-565*

Energy Efficient Data Gathering in IoT Networks With Heterogeneous Traffic for Remote Area Surveillance Applications: A Cross Layer Approach. *Bhattacharjee, D.*, +, *TGCN Sept. 2021 1165-1178*

Multi-Timescale Multi-Dimension Resource Allocation for NOMA-Edge Computing-Based Power IoT With Massive Connectivity. *Yu, H.*, +, *TGCN Sept. 2021 1101-1113*

On the Influence of Charging Stations Spatial Distribution on Aerial Wireless Networks. *Qin, Y.*, +, *TGCN Sept. 2021 1395-1409*

Statistical-QoS Guarantee for IoT Network Driven by Laser-Powered UAV Relay and RF Backscatter Communications. *Hassan, M.Z.*, +, *TGCN March 2021 406-425*

R

Radar imaging

BL-ALM: A Blind Scalable Edge-Guided Reconstruction Filter for Smart Environmental Monitoring Through Green IoMT-UAV Networks. *Khosravi, M.R.*, +, *TGCN June 2021 727-736*

Radio access networks

Device-Clustering and Rate-Splitting Enabled Device-to-Device Cooperation Framework in Fog Radio Access Network. *Hassan, M.Z.*, +, *TGCN Sept. 2021 1482-1501*

Energy Efficient Resource Allocation Optimization in Fog Radio Access Networks With Outdated Channel Knowledge. *Dinh, T.H.L.*, +, *TGCN March 2021 146-159*

Energy Optimization in Ultra-Dense Radio Access Networks via Traffic-Aware Cell Switching. *Ozturk, M.*, +, *TGCN June 2021 832-845*

Energy-Efficient vBBU Migration and Wavelength Reassignment in Cloud-Fog RAN. *Tinini, R.I.*, +, *TGCN March 2021 18-28*

GROVE: A Cost-Efficient Green Radio Over Ethernet Architecture for Next Generation Radio Access Networks. *Pamuklu, T.*, +, *TGCN March 2021 84-93*

Radio frequency

Distributed Resource Allocation in RF-Powered Cognitive Ambient Backscatter Networks. *Zhu, K.*, +, *TGCN Dec. 2021 1657-1668*

Green Tethered UAVs for EMF-Aware Cellular Networks. *Lou, Z.*, +, *TGCN Dec. 2021 1697-1711*

Machine Learning Based Beam Selection With Low Complexity Hybrid Beamforming Design for 5G Massive MIMO Systems. *Ahmed, I.*, +, *TGCN Dec. 2021 2160-2173*

RIS-Assisted Advanced Spatial Modulation Techniques for Ambient Backscatter Communications. *Bhowal, A.*, +, *TGCN Dec. 2021 1684-1696*

Radio networks

A New Non-Linear Joint Model for RF Energy Harvesters in Wireless Networks. *Alqahtani, D.*, +, *TGCN June 2021 895-907*

Deadline Constrained Packet Scheduling in the Presence of an Energy Harvesting Jammer. *Rahman, H.*, +, *TGCN March 2021 278-290*

Energy Efficiency Maximization Under Minimum Rate Constraints in Multi-Cell MIMO Systems With Finite Buffers. *Saraiva, J.V.*, +, *TGCN March 2021 174-189*

Link Schedulers for Green Wireless Networks With Energy Sharing. *Wang, L.*, +, *TGCN Sept. 2021 1580-1593*

On the Influence of Charging Stations Spatial Distribution on Aerial Wireless Networks. *Qin, Y.*, +, *TGCN Sept. 2021 1395-1409*

Optimization of SWIPT With Battery-Assisted Energy Harvesting Full-Duplex Relays. *Agrawal, K.*, +, *TGCN March 2021 243-260*

Physical Layer Security of Cognitive Ambient Backscatter Communications for Green Internet-of-Things. *Li, X.*, +, *TGCN Sept. 2021 1066-1076*

Reconfigurable Intelligent Surface for Green Edge Inference. *Hua, S.*, +, *TGCN June 2021 964-979*

Radio receivers

Cyclic Delay Diversity With Index Modulation for Green Internet of Things. *Wen, M.*, +, *TGCN June 2021 600-610*

Feasible Point Pursuit and Successive Convex Approximation for Transmit Power Minimization in SWIPT-Multigroup Multicasting Systems. *Gautam, S.*, +, *TGCN June 2021 884-894*

Joint Bit Allocation and Hybrid Beamforming Optimization for Energy Efficient Millimeter Wave MIMO Systems. *Kaushik, A.*, +, *TGCN March 2021 119-132*

MEES-WuR: Minimum Energy Coding With Early Shutdown for Wake-Up Receivers. *Djidi, N.E.H.*, +, *TGCN Sept. 2021 1502-1513*

Online Power Allocation at Energy Harvesting Transmitter for Multiple Receivers With and Without Individual Rate Constraints for OMA and NOMA Transmissions. *Ashraf, M.*, +, *TGCN Sept. 2021 1594-1609*

Receiver-Initiated Data Collection in Wake-Up Radio Enabled mIoT Networks: Achieving Collision-Free Transmissions by Hashing and Partitioning. *Hsu, C.*, +, *TGCN June 2021 868-883*

System and Design for Selective OFDM SWIPT Transmission. *Buckley, R.F.*, +, *TGCN March 2021 335-347*

Radio spectrum management

E-S-RSM-RSA: A Novel Energy and Spectrum Efficient Regenerator Aware Multipath Based Survivable RSA in Offline EON. *Halder, J.*, +, *TGCN Sept. 2021 1451-1466*

Energy Efficient MIMO-OFDM Spectrum Sensing Using Deep Stacked Spiking Delayed Feedback Reservoir Computing. *Hamedani, K.*, +, *TGCN March 2021 484-496*

Energy-Efficient Cross-Layer Spectrum Sharing in CR Green IoT Networks. *Salameh, H.A.B.*, +, *TGCN Sept. 2021 1091-1100*

Energy-Efficient Multivariate Privacy-Aware RF Spectrum Reservation in Wireless Virtualization for Wireless Internet of Things. *Adebayo, A.A.*, +, *TGCN June 2021 682-692*

Fluid-Based Energy Efficiency Analysis of JT-CoMP Scheme in Femto Cellular Networks. *Hou, Y.*, +, *TGCN March 2021 133-145*

Full-Duplex Non-Orthogonal Multiple Access Cooperative Overlay Spectrum-Sharing Networks With SWIPT. *Le, Q.N.*, +, *TGCN March 2021 322-334*

Radio transceivers

Energy Efficiency Maximization Under Minimum Rate Constraints in Multi-Cell MIMO Systems With Finite Buffers. *Saraiva, J.V.*, +, *TGCN March 2021 174-189*

Radio transmitters

Joint Bit Allocation and Hybrid Beamforming Optimization for Energy Efficient Millimeter Wave MIMO Systems. *Kaushik, A.*, +, *TGCN March 2021 119-132*

Online Power Allocation at Energy Harvesting Transmitter for Multiple Receivers With and Without Individual Rate Constraints for OMA and NOMA Transmissions. *Ashraf, M.*, +, *TGCN Sept. 2021 1594-1609*

Receiver-Initiated Data Collection in Wake-Up Radio Enabled mIoT Networks: Achieving Collision-Free Transmissions by Hashing and Partitioning. *Hsu, C.*, +, *TGCN June 2021 868-883*

Secrecy Energy Efficiency in Cognitive Radio Networks With Untrusted Secondary Users. *Wang, W.*, +, *TGCN March 2021 216-230*

Radiofrequency interference

Cooperative Transmission of Wireless Information and Energy in Anti-Eavesdropping UAV Relay Network. *Ning, Q.*, +, *TGCN Sept. 2021 1283-1292*

Energy Efficient Resource Allocation Optimization in Fog Radio Access Networks With Outdated Channel Knowledge. *Dinh, T.H.L.*, +, *TGCN March 2021 146-159*

Energy-Efficient Joint Optimization of Channel Assignment, Power Allocation, and Relay Selection Based on Hypergraph for Uplink mMTC Networks. *Feng, L.*, +, *TGCN March 2021 203-215*

Fluid-Based Energy Efficiency Analysis of JT-CoMP Scheme in Femto Cellular Networks. *Hou, Y.*, +, *TGCN March 2021 133-145*

Link Schedulers for Green Wireless Networks With Energy Sharing. *Wang, L.*, +, *TGCN Sept. 2021 1580-1593*

Multi-Timescale Multi-Dimension Resource Allocation for NOMA-Edge Computing-Based Power IoT With Massive Connectivity. *Yu, H.*, +, *TGCN Sept. 2021 1101-1113*

Rate and Energy Efficiency Improvements of Massive MIMO-Based Stochastic Cellular Networks With NOMA. *Kusaladharma, S.*, +, *TGCN Sept. 2021 1467-1481*

Robust Resource Allocation for Two-Tier HetNets: An Interference-Efficiency Perspective. *Xu, Y.*, +, *TGCN Sept. 2021 1514-1528*

Radiofrequency power transmission

Feasible Point Pursuit and Successive Convex Approximation for Transmit Power Minimization in SWIPT-Multigroup Multicasting Systems. *Gautam, S.*, +, *TGCN June 2021 884-894*

System and Design for Selective OFDM SWIPT Transmission. *Buckley, R.F.*, +, *TGCN March 2021 335-347*

Random processes

Energy-Efficient UAV Communications Under Stochastic Trajectory: A Markov Decision Process Approach. *Han, D.*, +, *TGCN March 2021 106-118*

Randomized algorithms

UV-CDS: An Energy-Efficient Scheduling of UAVs for Premises Sterilization. *Tazrin, T.*, +, *TGCN Sept. 2021 1191-1201*

Rayleigh channels

Energy Harvesting Optimization of Uplink-NOMA System for IoT Networks Based on Channel Capacity Analysis Using the Water Cycle Algorithm. *Bulut, I.S.*, +, *TGCN March 2021 291-307*

Receivers

Alternative Chirp Spread Spectrum Techniques for LPWANs. *Bizon Franco de Almeida, I.*, +, *TGCN Dec. 2021 1846-1855*

Cooperative Beamforming and Jamming for Secure VLC System in the Presence of Active and Passive Eavesdroppers. *Cho, S.*, +, *TGCN Dec. 2021 1988-1998*

Distributed Resource Allocation in RF-Powered Cognitive Ambient Backscatter Networks. *Zhu, K.*, +, *TGCN Dec. 2021 1657-1668*

Energy-Efficient Resource Allocation in Multi-UAV Networks With NOMA. *Najmeddin, S.*, +, *TGCN Dec. 2021 1906-1917*

High-Density Resource-Restricted Pulse-Based IoT Networks. *Peper, F.*, +, *TGCN Dec. 2021 1856-1868*

Robust Active and Passive Beamformer Design for IRS-Aided Downlink MISO PS-SWIPT With a Nonlinear Energy Harvesting Model. *Zargari, S.*, +, *TGCN Dec. 2021 2027-2041*

SLA-Aware Protocol Design for Energy-Efficient OLT Transmitter in TWDM-EPON. *Dutta, S.*, +, *TGCN Dec. 2021 1961-1973*

Recurrent neural networks

Energy Efficient MIMO-OFDM Spectrum Sensing Using Deep Stacked Spiking Delayed Feedback Reservoir Computing. *Hamedani, K.*, +, *TGCN March 2021 484-496*

Reinforcement learning

Offline and Online UAV-Enabled Data Collection in Time-Constrained IoT Networks. *Ghdiri, O.*, +, *TGCN Dec. 2021 1918-1933*

Relaxation theory

Feasible Point Pursuit and Successive Convex Approximation for Transmit Power Minimization in SWIPT-Multigroup Multicasting Systems. *Gautam, S.*, +, *TGCN June 2021 884-894*

Relay networks (telecommunication)

3D Trajectory and Transmit Power Optimization for UAV-Enabled Multi-Link Relaying Systems. *Liu, T.*, +, *TGCN March 2021 392-405*

An Energy-Efficient Selection Mechanism of Relay and Edge Computing in UAV-Assisted Cellular Networks. *Liu, Z.*, +, *TGCN Sept. 2021 1306-1318*

Analysis of Asymmetric Dual-Hop Energy Harvesting-Based Wireless Communication Systems in Mixed Fading Environments. *Illi, E.*, +, *TGCN March 2021 261-277*

Cooperative Transmission of Wireless Information and Energy in Anti-Eavesdropping UAV Relay Network. *Ning, Q.*, +, *TGCN Sept. 2021 1283-1292*

Multi-Agent Reinforcement Learning for Energy Harvesting Two-Hop Communications With a Partially Observable System State. *Ortiz, A.*, +, *TGCN March 2021 442-456*

Optimal Energy Sharing for Cooperative Relaying in a Random Access Network With Energy Harvesting Nodes. *Mortazavi, S.M.*, +, *TGCN March 2021 231-242*

Optimization of SWIPT With Battery-Assisted Energy Harvesting Full-Duplex Relays. *Agrawal, K.*, +, *TGCN March 2021 243-260*

Quantum Learning-Enabled Green Communication for Next-Generation Wireless Systems. *Jaiswal, A.*, +, *TGCN Sept. 2021 1015-1028*

SER Analysis for SWIPT-Enabled Differential Decode-and-Forward Relay Networks. *Lu, Y.*, +, *TGCN March 2021 348-361*

Statistical-QoS Guarantee for IoT Network Driven by Laser-Powered UAV Relay and RF Backscatter Communications. *Hassan, M.Z.*, +, *TGCN March 2021 406-425*

Relays

Energy-Efficient UAV Assisted Secure Relay Transmission via Cooperative Computation Offloading. *Wang, T.*, +, *TGCN Dec. 2021 1669-1683*

Power-Spectrum Trading for Full-Duplex D2D Communications in Cellular Networks. *Feng, D.*, +, *TGCN Dec. 2021 2016-2026*

Toward a Green Secure Relay System for Mission-Critical IoT: Hybrid Duplex Relay Selection and Resource Allocation in the Finite Block Length Regime. *Cao, J.*, +, *TGCN Dec. 2021 1869-1879*

Reliability

Blockchain-Based Data Dissemination Scheme for 5G-Enabled Softwarized UAV Networks. *Gupta, R.*, +, *TGCN Dec. 2021 1712-1721*

Remote sensing by radar

BL-ALM: A Blind Scalable Edge-Guided Reconstruction Filter for Smart Environmental Monitoring Through Green IoMT-UAV Networks. *Khosravi, M.R.*, +, *TGCN June 2021 727-736*

Remotely operated vehicles

An Energy-Efficient Selection Mechanism of Relay and Edge Computing in UAV-Assisted Cellular Networks. *Liu, Z.*, +, *TGCN Sept. 2021 1306-1318*

Resource Inference for Sustainable and Responsive Task Offloading in Challenged Edge Networks. *Sacco, A.*, +, *TGCN Sept. 2021 1114-1127*

UEE-RPL: A UAV-Based Energy Efficient Routing for Internet of Things. *Yang, Z.*, +, *TGCN Sept. 2021 1333-1344*

Renewable energy sources

Contract and Lyapunov Optimization-Based Load Scheduling and Energy Management for UAV Charging Stations. *Lu, L.*, +, *TGCN Sept. 2021 1381-1394*

GROVE: A Cost-Efficient Green Radio Over Ethernet Architecture for Next Generation Radio Access Networks. *Pamuklu, T.*, +, *TGCN March 2021 84-93*

Multi-Energy Scheduling of an Industrial Integrated Energy System by Reinforcement Learning-Based Differential Evolution. *Xu, Z.*, +, *TGCN Sept. 2021 1077-1090*

Resource allocation

A New Non-Linear Joint Model for RF Energy Harvesters in Wireless Networks. *Alqahtani, D.*, +, *TGCN June 2021 895-907*

AFED-EF: An Energy-Efficient VM Allocation Algorithm for IoT Applications in a Cloud Data Center. *Zhou, Z.*, +, *TGCN June 2021 658-669*

Device-Clustering and Rate-Splitting Enabled Device-to-Device Cooperation Framework in Fog Radio Access Network. *Hassan, M.Z.*, +, *TGCN Sept. 2021 1482-1501*

- E-S-RSM-RSA: A Novel Energy and Spectrum Efficient Regenerator Aware Multipath Based Survivable RSA in Offline EON. *Halder, J.*, +, *TGCN Sept. 2021 1451-1466*
- Energy Efficiency Maximization Under Minimum Rate Constraints in Multi-Cell MIMO Systems With Finite Buffers. *Saraiva, J.V.*, +, *TGCN March 2021 174-189*
- Energy Efficient Resource Allocation Optimization in Fog Radio Access Networks With Outdated Channel Knowledge. *Dinh, T.H.L.*, +, *TGCN March 2021 146-159*
- Energy-Efficient Joint Optimization of Channel Assignment, Power Allocation, and Relay Selection Based on Hypergraph for Uplink mMTC Networks. *Feng, L.*, +, *TGCN March 2021 203-215*
- Energy-Efficient Multivariate Privacy-Aware RF Spectrum Reservation in Wireless Virtualization for Wireless Internet of Things. *Adebayo, A.A.*, +, *TGCN June 2021 682-692*
- Energy-Efficient Offloading for Mission-Critical IoT Services Using EVT-Embedded Intelligent Learning. *Feng, L.*, +, *TGCN Sept. 2021 1179-1190*
- Energy-Efficient Resource Allocation With Flexible Frame Structure for Hybrid eMBB and URLLC Services. *Sui, W.*, +, *TGCN March 2021 72-83*
- Energy-Efficient vBBU Migration and Wavelength Reassignment in Cloud-Fog RAN. *Tinini, R.I.*, +, *TGCN March 2021 18-28*
- Improving Power Stability of Energy Harvesting Devices With Edge Computing-Assisted Time Fair Energy Allocation. *Cui, E.*, +, *TGCN March 2021 540-551*
- Multi-Timescale Multi-Dimension Resource Allocation for NOMA-Edge Computing-Based Power IoT With Massive Connectivity. *Yu, H.*, +, *TGCN Sept. 2021 1101-1113*
- Online Power Allocation at Energy Harvesting Transmitter for Multiple Receivers With and Without Individual Rate Constraints for OMA and NOMA Transmissions. *Ashraf, M.*, +, *TGCN Sept. 2021 1594-1609*
- Reinforcement Learning-Based Energy-Efficient Data Access for Airborne Users in Civil Aircrafts-Enabled SAGIN. *Chen, Q.*, +, *TGCN June 2021 934-949*
- Resource Inference for Sustainable and Responsive Task Offloading in Challenged Edge Networks. *Sacco, A.*, +, *TGCN Sept. 2021 1114-1127*
- Robust Resource Allocation for Two-Tier HetNets: An Interference-Efficiency Perspective. *Xu, Y.*, +, *TGCN Sept. 2021 1514-1528*
- Statistical-QoS Guarantee for IoT Network Driven by Laser-Powered UAV Relay and RF Backscatter Communications. *Hassan, M.Z.*, +, *TGCN March 2021 406-425*
- Temperature-Aware Virtual Data Center Embedding to Avoid Hot Spots in Data Centers. *Guo, C.*, +, *TGCN March 2021 497-511*
- Trajectory and Resource Optimization in OFDM-Based UAV-Powered IoT Network. *Lu, W.*, +, *TGCN Sept. 2021 1259-1270*
- UEE-RPL: A UAV-Based Energy Efficient Routing for Internet of Things. *Yang, Z.*, +, *TGCN Sept. 2021 1333-1344*
- Resource management**
- Centralized and Distributed Algorithms for Energy and Spectrum Efficient User Association in Small Cell Networks. *Javad-Kalbasi, M.*, +, *TGCN Dec. 2021 1781-1790*
- Distributed Resource Allocation in RF-Powered Cognitive Ambient Backscatter Networks. *Zhu, K.*, +, *TGCN Dec. 2021 1657-1668*
- Energy Aware Latency Minimization for Network Slicing Enabled Edge Computing. *Hossain, M.A.*, +, *TGCN Dec. 2021 2150-2159*
- Energy-Efficient Resource Allocation in Multi-UAV Networks With NOMA. *Najmeddin, S.*, +, *TGCN Dec. 2021 1906-1917*
- Energy-Efficient Secure Video Streaming in UAV-Enabled Wireless Networks: A Safe-DQN Approach. *Zhang, Z.*, +, *TGCN Dec. 2021 1892-1905*
- Fairness-Aware Task Scheduling and Resource Allocation in UAV-Enabled Mobile Edge Computing Networks. *Zhao, M.*, +, *TGCN Dec. 2021 2174-2187*
- Green Tethered UAVs for EMF-Aware Cellular Networks. *Lou, Z.*, +, *TGCN Dec. 2021 1697-1711*
- Hybrid Energy Resource Allocation for Simultaneous Wireless Information and Power Transfer for Green Communications. *Shen, L.*, +, *TGCN Dec. 2021 2121-2138*
- Network Operator Revenue Maximization in Dual Powered Green Cellular Networks. *Balakrishnan, A.*, +, *TGCN Dec. 2021 1791-1805*
- Offline and Online UAV-Enabled Data Collection in Time-Constrained IoT Networks. *Ghdiri, O.*, +, *TGCN Dec. 2021 1918-1933*
- Power-Spectrum Trading for Full-Duplex D2D Communications in Cellular Networks. *Feng, D.*, +, *TGCN Dec. 2021 2016-2026*
- Toward a Green Secure Relay System for Mission-Critical IoT: Hybrid Duplex Relay Selection and Resource Allocation in the Finite Block Length Regime. *Cao, J.*, +, *TGCN Dec. 2021 1869-1879*
- River pollution**
- An Energy-Efficient River Water Pollution Monitoring System in Internet of Things. *Chopade, S.*, +, *TGCN June 2021 693-702*
- Rivers**
- An Energy-Efficient River Water Pollution Monitoring System in Internet of Things. *Chopade, S.*, +, *TGCN June 2021 693-702*
- Road traffic**
- A Low-Latency and Energy-Efficient Multimetric Routing Protocol Based on Network Connectivity in VANET Communication. *Wang, X.*, +, *TGCN Dec. 2021 1761-1776*
- Robot sensing systems**
- Task Selection and Collision-Free Route Planning for Mobile Crowdsensing Using Multi-Population Mean-Field Games. *Kang, Y.*, +, *TGCN Dec. 2021 1947-1960*
- Robot vision**
- BL-ALM: A Blind Scalable Edge-Guided Reconstruction Filter for Smart Environmental Monitoring Through Green IoMT-UAV Networks. *Khosravi, M.R.*, +, *TGCN June 2021 727-736*
- Robust control**
- Robust Design for UAV-Enabled Multiuser Relaying System With SWIPT. *Wang, J.*, +, *TGCN Sept. 2021 1293-1305*
- Routing protocols**
- A Low-Latency and Energy-Efficient Multimetric Routing Protocol Based on Network Connectivity in VANET Communication. *Wang, X.*, +, *TGCN Dec. 2021 1761-1776*
- DARE-SEP: A Hybrid Approach of Distance Aware Residual Energy-Efficient SEP for WSN. *Naeem, A.*, +, *TGCN June 2021 611-621*
- RENEW: A Practical Module for Reliable Routing in Networks of Energy-Harvesting Wireless Sensors. *Prasad, R.V.*, +, *TGCN Sept. 2021 1558-1569*
- UEE-RPL: A UAV-Based Energy Efficient Routing for Internet of Things. *Yang, Z.*, +, *TGCN Sept. 2021 1333-1344*
- S**
- Satellite broadcasting**
- Analysis of Area Spectral & Energy Efficiency in a CoMP-Enabled User-Centric Cloud RAN. *Kasi, S.K.*, +, *TGCN Dec. 2021 1999-2015*
- Satellite communication**
- 3D Trajectory and Transmit Power Optimization for UAV-Enabled Multi-Link Relaying Systems. *Liu, T.*, +, *TGCN March 2021 392-405*
- Energy Efficient Network Coding HARQ Transmission Scheme for S-IoT. *Jiao, J.*, +, *TGCN March 2021 308-321*
- SCADA systems**
- An Integral Data Gathering Framework for Supervisory Control and Data Acquisition Systems in Green IoT. *Xiang, X.*, +, *TGCN June 2021 714-726*
- Scheduling**
- CoxNet: A Computation Reuse Architecture at the Edge. *Bellal, Z.*, +, *TGCN June 2021 765-777*
- SEC²: A Secure and Energy Efficient Barrier Coverage Scheduling for WSN-Based IoT Applications. *Thomas, D.*, +, *TGCN June 2021 622-634*
- Contract and Lyapunov Optimization-Based Load Scheduling and Energy Management for UAV Charging Stations. *Lv, L.*, +, *TGCN Sept. 2021 1381-1394*
- Energy Efficient Data Gathering in IoT Networks With Heterogeneous Traffic for Remote Area Surveillance Applications: A Cross Layer Approach. *Bhattacharjee, D.*, +, *TGCN Sept. 2021 1165-1178*
- Energy-Aware Scheduling of Streaming Applications on Edge-Devices in IoT-Based Healthcare. *Tariq, U.U.*, +, *TGCN June 2021 803-815*

- Energy-Efficient UAV Communications Under Stochastic Trajectory: A Markov Decision Process Approach. *Han, D.*, +, *TGCN March 2021 106-118*
- Multi-Energy Scheduling of an Industrial Integrated Energy System by Reinforcement Learning-Based Differential Evolution. *Xu, Z.*, +, *TGCN Sept. 2021 1077-1090*
- UAV Deployment and IoT Device Association for Energy-Efficient Data-Gathering in Fixed-Wing Multi-UAV Networks. *Kuo, Y.*, +, *TGCN Dec. 2021 1934-1946*
- UV-CDS: An Energy-Efficient Scheduling of UAVs for Premises Sterilization. *Tazrin, T.*, +, *TGCN Sept. 2021 1191-1201*
- Search problems**
- Computation Offloading in Heterogeneous Mobile Edge Computing With Energy Harvesting. *Zhang, T.*, +, *TGCN March 2021 552-565*
- Improving Power Stability of Energy Harvesting Devices With Edge Computing-Assisted Time Fair Energy Allocation. *Cui, E.*, +, *TGCN March 2021 540-551*
- Secrecy Energy Efficiency in Cognitive Radio Networks With Untrusted Secondary Users. *Wang, W.*, +, *TGCN March 2021 216-230*
- Secondary cells**
- On the Influence of Charging Stations Spatial Distribution on Aerial Wireless Networks. *Qin, Y.*, +, *TGCN Sept. 2021 1395-1409*
- Security**
- Blockchain-Based Data Dissemination Scheme for 5G-Enabled Softwarized UAV Networks. *Gupta, R.*, +, *TGCN Dec. 2021 1712-1721*
- Toward a Green Secure Relay System for Mission-Critical IoT: Hybrid Duplex Relay Selection and Resource Allocation in the Finite Block Length Regime. *Cao, J.*, +, *TGCN Dec. 2021 1869-1879*
- Security of data**
- Synthesized Corpora to Evaluate Fuzzing for Green Internet of Things Programs. *Zhu, X.*, +, *TGCN Sept. 2021 1041-1050*
- Self-organizing networks**
- Guest Editorial Special Issue on “Green Communication and Computing Technologies for 6G Networks” in IEEE Transactions on Green Communications and Networking. *Anpalagan, A.*, +, *TGCN Dec. 2021 1653-1656*
- Sensor systems**
- Event-Triggered Transmission Policies for Harvesting Powered Sensors With Time-Varying Models. *Seifullaev, R.*, +, *TGCN Dec. 2021 2139-2149*
- Sensors**
- Event-Triggered Transmission Policies for Harvesting Powered Sensors With Time-Varying Models. *Seifullaev, R.*, +, *TGCN Dec. 2021 2139-2149*
- Steady-State Rate-Optimal Power Adaptation in Energy Harvesting Opportunistic Cognitive Radios With Spectrum Sensing and Channel Estimation Errors. *Yazdani, H.*, +, *TGCN Dec. 2021 2104-2120*
- Task Selection and Collision-Free Route Planning for Mobile Crowdsensing Using Multi-Population Mean-Field Games. *Kang, Y.*, +, *TGCN Dec. 2021 1947-1960*
- UAV Deployment and IoT Device Association for Energy-Efficient Data-Gathering in Fixed-Wing Multi-UAV Networks. *Kuo, Y.*, +, *TGCN Dec. 2021 1934-1946*
- Servers**
- Energy Aware Latency Minimization for Network Slicing Enabled Edge Computing. *Hossain, M.A.*, +, *TGCN Dec. 2021 2150-2159*
- Energy-Efficient Topology Construction via Power Allocation for Decentralized Learning via Smart Devices With Edge Computing. *Kuo, J.*, +, *TGCN Dec. 2021 1806-1819*
- Fairness-Aware Task Scheduling and Resource Allocation in UAV-Enabled Mobile Edge Computing Networks. *Zhao, M.*, +, *TGCN Dec. 2021 2174-2187*
- Task Selection and Collision-Free Route Planning for Mobile Crowdsensing Using Multi-Population Mean-Field Games. *Kang, Y.*, +, *TGCN Dec. 2021 1947-1960*
- Service-oriented architecture**
- A Hierarchical Energy-Efficient Service Selection Approach With QoS Constraints for Internet of Things. *Tong, E.*, +, *TGCN June 2021 645-657*
- Signal detection**
- Energy Efficient MIMO-OFDM Spectrum Sensing Using Deep Stacked Spiking Delayed Feedback Reservoir Computing. *Hamedani, K.*, +, *TGCN March 2021 484-496*
- Rate and Energy Efficiency Improvements of Massive MIMO-Based Stochastic Cellular Networks With NOMA. *Kusaladharma, S.*, +, *TGCN Sept. 2021 1467-1481*
- Signal to noise ratio**
- Centralized and Distributed Algorithms for Energy and Spectrum Efficient User Association in Small Cell Networks. *Javad-Kalbasi, M.*, +, *TGCN Dec. 2021 1781-1790*
- Cooperative Beamforming and Jamming for Secure VLC System in the Presence of Active and Passive Eavesdroppers. *Cho, S.*, +, *TGCN Dec. 2021 1988-1998*
- Simulation**
- Toward a Green Secure Relay System for Mission-Critical IoT: Hybrid Duplex Relay Selection and Resource Allocation in the Finite Block Length Regime. *Cao, J.*, +, *TGCN Dec. 2021 1869-1879*
- Signal value decomposition**
- Robust Design for UAV-Enabled Multiuser Relaying System With SWIPT. *Wang, J.*, +, *TGCN Sept. 2021 1293-1305*
- Smart devices**
- Energy-Efficient Topology Construction via Power Allocation for Decentralized Learning via Smart Devices With Edge Computing. *Kuo, J.*, +, *TGCN Dec. 2021 1806-1819*
- Smart power grids**
- Efficient Allocation of Harvested Energy at the Edge by Building a Tangible Micro-Grid—The Texas Case. *Kouvelas, N.*, +, *TGCN March 2021 94-105*
- Integrating Future Smart Home Operation Platform With Demand Side Management via Deep Reinforcement Learning. *Li, T.*, +, *TGCN June 2021 921-933*
- Social networking (online)**
- Heterogeneous Mobile Networking for Lightweight UAV Assisted Emergency Communication. *Zhang, C.*, +, *TGCN Sept. 2021 1345-1356*
- Software defined networking**
- Energy-Saving and Resource-Efficient Algorithm for Virtual Network Function Placement With Network Scaling. *Chen, M.*, +, *TGCN March 2021 29-40*
- Green Multi-Stage Upgrade for Bundled-Link SDNs With Budget and Delay Constraints. *Hiryanto, L.*, +, *TGCN Sept. 2021 1410-1425*
- Sorting**
- Secure and Energy Efficient-Based E-Health Care Framework for Green Internet of Things. *Kaur, M.*, +, *TGCN Sept. 2021 1223-1231*
- Spatial diversity**
- Analysis of Area Spectral & Energy Efficiency in a CoMP-Enabled User-Centric Cloud RAN. *Kasi, S.K.*, +, *TGCN Dec. 2021 1999-2015*
- Spatial filters**
- BL-ALM: A Blind Scalable Edge-Guided Reconstruction Filter for Smart Environmental Monitoring Through Green IoMT-UAV Networks. *Khosravi, M.R.*, +, *TGCN June 2021 727-736*
- Special issues and sections**
- Guest Editorial Special Issue on “Green Communication and Computing Technologies for 6G Networks” in IEEE Transactions on Green Communications and Networking. *Anpalagan, A.*, +, *TGCN Dec. 2021 1653-1656*
- Guest Editorial Special Issue on Green Internet of Things: Challenges and Future Opportunities—Part I. *Prasad, R.R.V.*, +, *TGCN June 2021 569-573*
- Guest Editorial Special Issue on Selected Papers From IEEE Globecom 2020. *So, D.K.C.*, +, *TGCN Dec. 2021 1777-1780*
- Special Issue on Green Internet of Things: Challenges and Future Opportunities—Part II. *Venkatesha Prasad, R.R.*, +, *TGCN Sept. 2021 1011-1014*
- Special Issue on Unmanned Aerial Vehicle (UAV)-Enabled Green Communications and Networking. *Zhao, N.*, +, *TGCN Sept. 2021 1232-1235*
- Spectral efficiency**
- RIS-Assisted Advanced Spatial Modulation Techniques for Ambient Backscattering Communications. *Bhowal, A.*, +, *TGCN Dec. 2021 1684-1696*

Spread spectrum communication

Throughput-Optimal Broadcast for Time-Varying Directed Acyclic Wireless Multi-Hop Networks With Energy Harvesting Constraints. *Tian, X., +, TGCN Dec. 2021 2089-2103*

Static VAR compensators

Energy-Efficient Secure Video Streaming in UAV-Enabled Wireless Networks: A Safe-DQN Approach. *Zhang, Z., +, TGCN Dec. 2021 1892-1905*

Statistical analysis

Intrusion Detection in Green Internet of Things: A Deep Deterministic Policy Gradient-Based Algorithm. *Nie, L., +, TGCN June 2021 778-788*

Statistics

IADE: An Improved Differential Evolution Algorithm to Preserve Sustainability in a 6G Network. *Zhou, Z., +, TGCN Dec. 2021 1747-1760*

Task Selection and Collision-Free Route Planning for Mobile Crowdsensing Using Multi-Population Mean-Field Games. *Kang, Y., +, TGCN Dec. 2021 1947-1960*

Sterilization (microbiological)

UV-CDS: An Energy-Efficient Scheduling of UAVs for Premises Sterilization. *Tazrin, T., +, TGCN Sept. 2021 1191-1201*

Stochastic processes

Cache- and Energy Harvesting-Enabled D2D Cellular Network: Modeling, Analysis and Optimization. *Meng, Y., +, TGCN June 2021 703-713*

Distributed Resource Allocation in RF-Powered Cognitive Ambient Backscatter Networks. *Zhu, K., +, TGCN Dec. 2021 1657-1668*

Distributed Resource Allocation in RF-Powered Cognitive Ambient Backscatter Networks. *Zhu, K., +, TGCN Dec. 2021 1657-1668*

Event-Triggered Transmission Policies for Harvesting Powered Sensors With Time-Varying Models. *Seifullaev, R., +, TGCN Dec. 2021 2139-2149*

Multi-Timescale Multi-Dimension Resource Allocation for NOMA-Edge Computing-Based Power IoT With Massive Connectivity. *Yu, H., +, TGCN Sept. 2021 1101-1113*

Network Operator Revenue Maximization in Dual Powered Green Cellular Networks. *Balakrishnan, A., +, TGCN Dec. 2021 1791-1805*

On the Influence of Charging Stations Spatial Distribution on Aerial Wireless Networks. *Qin, Y., +, TGCN Sept. 2021 1395-1409*

Steady-State Rate-Optimal Power Adaptation in Energy Harvesting Opportunistic Cognitive Radios With Spectrum Sensing and Channel Estimation Errors. *Yazdani, H., +, TGCN Dec. 2021 2104-2120*

Towards Optimal Energy Efficiency in Cell-Free Massive MIMO Systems. *Papazafeiropoulos, A., +, TGCN June 2021 816-831*

Stochastic programming

Statistical Learning Based Joint Antenna Selection and User Scheduling for Single-Cell Massive MIMO Systems. *Guo, M., +, TGCN March 2021 471-483*

Storage management

Energy-Efficient Scans by Weaving Indexes Into the Storage Layout in Computing Platforms for Internet of Things. *Li, Y., +, TGCN Sept. 2021 1212-1222*

Streaming media

Energy-Efficient Secure Video Streaming in UAV-Enabled Wireless Networks: A Safe-DQN Approach. *Zhang, Z., +, TGCN Dec. 2021 1892-1905*

Sustainable development

Guest Editorial Special Issue on "Green Communication and Computing Technologies for 6G Networks" in IEEE Transactions on Green Communications and Networking. *Anpalagan, A., +, TGCN Dec. 2021 1653-1656*

Guest Editorial Special Issue on Green Internet of Things: Challenges and Future Opportunities—Part I. *Prasad, R.R.V., +, TGCN June 2021 569-573*

Synchronization

High-Density Resource-Restricted Pulse-Based IoT Networks. *Peper, F., +, TGCN Dec. 2021 1856-1868*

System performance

UAV-Enabled Wireless Power Transfer: A Tutorial Overview. *Xie, L., +, TGCN Dec. 2021 2042-2064*

T**Task analysis**

Energy Aware Latency Minimization for Network Slicing Enabled Edge Computing. *Hossain, M.A., +, TGCN Dec. 2021 2150-2159*

Fairness-Aware Task Scheduling and Resource Allocation in UAV-Enabled Mobile Edge Computing Networks. *Zhao, M., +, TGCN Dec. 2021 2174-2187*

Two-Layer Stackelberg Game-Based Offloading Strategy for Mobile Edge Computing Enhanced FiWi Access Networks. *Yang, B., +, TGCN March 2021 457-470*

Telecommunication computing

An Integration of Online Learning and Online Control for Green Offloading in Fog-Assisted IoT Systems. *Gao, X., +, TGCN Sept. 2021 1632-1646*

Deep Reinforcement Learning-Assisted Energy Harvesting Wireless Networks. *Ye, J., +, TGCN June 2021 990-1002*

Energy Efficient MIMO-OFDM Spectrum Sensing Using Deep Stacked Spiking Delayed Feedback Reservoir Computing. *Hamedani, K., +, TGCN March 2021 484-496*

Energy Optimization in Ultra-Dense Radio Access Networks via Traffic-Aware Cell Switching. *Ozturk, M., +, TGCN June 2021 832-845*

Multi-Agent Reinforcement Learning for Energy Harvesting Two-Hop Communications With a Partially Observable System State. *Ortiz, A., +, TGCN March 2021 442-456*

Statistical Learning Based Joint Antenna Selection and User Scheduling for Single-Cell Massive MIMO Systems. *Guo, M., +, TGCN March 2021 471-483*

Telecommunication control

Quantum Learning-Enabled Green Communication for Next-Generation Wireless Systems. *Jaiswal, A., +, TGCN Sept. 2021 1015-1028*

Telecommunication links

Link Schedulers for Green Wireless Networks With Energy Sharing. *Wang, L., +, TGCN Sept. 2021 1580-1593*

Telecommunication network management

BER Analysis of a Backscatter Communication System With Non-Orthogonal Multiple Access. *Nazar, A.W., +, TGCN June 2021 574-586*

Energy-Efficient Multivariate Privacy-Aware RF Spectrum Reservation in Wireless Virtualization for Wireless Internet of Things. *Adebayo, A.A., +, TGCN June 2021 682-692*

Telecommunication network planning

GROVE: A Cost-Efficient Green Radio Over Ethernet Architecture for Next Generation Radio Access Networks. *Pamuklu, T., +, TGCN March 2021 84-93*

Quantum Learning-Enabled Green Communication for Next-Generation Wireless Systems. *Jaiswal, A., +, TGCN Sept. 2021 1015-1028*

Telecommunication network reliability

Energy-Efficient and Reliable IoT Access Without Radio Resource Reservation. *Azari, A., +, TGCN June 2021 908-920*

Energy-Efficient Resource Allocation With Flexible Frame Structure for Hybrid eMBB and URLLC Services. *Sui, W., +, TGCN March 2021 72-83*

Full-Duplex Non-Orthogonal Multiple Access Cooperative Overlay Spectrum-Sharing Networks With SWIPT. *Le, Q.N., +, TGCN March 2021 322-334*

Intelligent Reflecting Surfaces Assisted UAV Communications for IoT Networks: Performance Analysis. *Mahmoud, A., +, TGCN Sept. 2021 1029-1040*

MEES-WuR: Minimum Energy Coding With Early Shutdown for Wake-Up Receivers. *Djidi, N.E.H., +, TGCN Sept. 2021 1502-1513*

Optimization of SWIPT With Battery-Assisted Energy Harvesting Full-Duplex Relays. *Agrawal, K., +, TGCN March 2021 243-260*

Physical Layer Security of Cognitive Ambient Backscatter Communications for Green Internet-of-Things. *Li, X., +, TGCN Sept. 2021 1066-1076*

Uplink Power Allocation for Throughput and Energy Efficiency Over Nakagami-*m* Fading Channels. *Ho, D.H., +, TGCN March 2021 190-202*

Telecommunication network routing

E-S-RSM-RSA: A Novel Energy and Spectrum Efficient Regenerator Aware Multipath Based Survivable RSA in Offline EON. *Halder, J., +, TGCN Sept. 2021 1451-1466*

Green Multi-Stage Upgrade for Bundled-Link SDNs With Budget and Delay Constraints. *Hiryanto, L., +, TGCN Sept. 2021 1410-1425*

GROVE: A Cost-Efficient Green Radio Over Ethernet Architecture for Next Generation Radio Access Networks. *Pamuklu, T., +, TGCN March 2021 84-93*

Telecommunication network topology

- A Novel Joint Optimization Method Based on Mobile Data Collection for Wireless Rechargeable Sensor Networks. *Boukerche, A.*, +, *TGCN Sept. 2021 1610-1622*
- E-S-RSM-RSA: A Novel Energy and Spectrum Efficient Regenerator Aware Multipath Based Survivable RSA in Offline EON. *Halder, J.*, +, *TGCN Sept. 2021 1451-1466*
- Energy Efficiency in Sliceable-Transponder Enabled Elastic Optical Networks. *Costa, L.R.*, +, *TGCN June 2021 789-802*
- Energy Efficient Data Gathering in IoT Networks With Heterogeneous Traffic for Remote Area Surveillance Applications: A Cross Layer Approach. *Bhattacharjee, D.*, +, *TGCN Sept. 2021 1165-1178*
- Green Multi-Stage Upgrade for Bundled-Link SDNs With Budget and Delay Constraints. *Hiryanto, L.*, +, *TGCN Sept. 2021 1410-1425*
- GROVE: A Cost-Efficient Green Radio Over Ethernet Architecture for Next Generation Radio Access Networks. *Pamuklu, T.*, +, *TGCN March 2021 84-93*
- Role Assignment for Spatially-Correlated Data Aggregation Using Multi-Sink Internet of Underwater Things. *Al-Habob, A.A.*, +, *TGCN Sept. 2021 1570-1579*

Telecommunication power management

- A New Non-Linear Joint Model for RF Energy Harvesters in Wireless Networks. *Alqahtani, D.*, +, *TGCN June 2021 895-907*
- A Novel Joint Optimization Method Based on Mobile Data Collection for Wireless Rechargeable Sensor Networks. *Boukerche, A.*, +, *TGCN Sept. 2021 1610-1622*
- A Reinforcement Learning Approach to Optimize Energy Usage in RF-Charging Sensor Networks. *Ren, H.*, +, *TGCN March 2021 526-539*
- An Integration of Online Learning and Online Control for Green Offloading in Fog-Assisted IoT Systems. *Gao, X.*, +, *TGCN Sept. 2021 1632-1646*
- BER Analysis of a Backscatter Communication System With Non-Orthogonal Multiple Access. *Nazar, A.W.*, +, *TGCN June 2021 574-586*
- Cooperative Transmission of Wireless Information and Energy in Anti-Eavesdropping UAV Relay Network. *Ning, Q.*, +, *TGCN Sept. 2021 1283-1292*
- Deep Reinforcement Learning-Assisted Energy Harvesting Wireless Networks. *Ye, J.*, +, *TGCN June 2021 990-1002*
- E-S-RSM-RSA: A Novel Energy and Spectrum Efficient Regenerator Aware Multipath Based Survivable RSA in Offline EON. *Halder, J.*, +, *TGCN Sept. 2021 1451-1466*
- Energy Efficiency Maximization Under Minimum Rate Constraints in Multi-Cell MIMO Systems With Finite Buffers. *Saraiva, J.V.*, +, *TGCN March 2021 174-189*
- Energy Efficient Resource Allocation Optimization in Fog Radio Access Networks With Outdated Channel Knowledge. *Dinh, T.H.L.*, +, *TGCN March 2021 146-159*
- Energy Optimization in Ultra-Dense Radio Access Networks via Traffic-Aware Cell Switching. *Ozturk, M.*, +, *TGCN June 2021 832-845*
- Energy-Efficient and Reliable IoT Access Without Radio Resource Reservation. *Azari, A.*, +, *TGCN June 2021 908-920*
- Energy-Efficient Cross-Layer Spectrum Sharing in CR Green IoT Networks. *Salameh, H.A.B.*, +, *TGCN Sept. 2021 1091-1100*
- Energy-Efficient Joint Optimization of Channel Assignment, Power Allocation, and Relay Selection Based on Hypergraph for Uplink mMTC Networks. *Feng, L.*, +, *TGCN March 2021 203-215*
- Energy-Efficient MAC for Cellular IoT: State-of-the-Art, Challenges, and Standardization. *Shah, S.W.H.*, +, *TGCN June 2021 587-599*
- Energy-Efficient Multivariate Privacy-Aware RF Spectrum Reservation in Wireless Virtualization for Wireless Internet of Things. *Adebayo, A.A.*, +, *TGCN June 2021 682-692*
- Energy-Efficient Precoder Design for Downlink Multi-User MISO Networks With Finite Blocklength Codes. *Singh, K.*, +, *TGCN March 2021 160-173*
- Energy-Efficient Resource Allocation With Flexible Frame Structure for Hybrid eMBB and URLLC Services. *Sui, W.*, +, *TGCN March 2021 72-83*

- Feasible Point Pursuit and Successive Convex Approximation for Transmit Power Minimization in SWIPT-Multigroup Multicasting Systems. *Gautam, S.*, +, *TGCN June 2021 884-894*
- Fluid-Based Energy Efficiency Analysis of JT-CoMP Scheme in Femto Cellular Networks. *Hou, Y.*, +, *TGCN March 2021 133-145*
- Full-Duplex Non-Orthogonal Multiple Access Cooperative Overlay Spectrum-Sharing Networks With SWIPT. *Le, Q.N.*, +, *TGCN March 2021 322-334*
- Fuzzy Rule Generation Using Modified PSO for Clustering in Wireless Sensor Networks. *Lipare, A.*, +, *TGCN June 2021 846-857*
- Joint Bit Allocation and Hybrid Beamforming Optimization for Energy Efficient Millimeter Wave MIMO Systems. *Kaushik, A.*, +, *TGCN March 2021 119-132*
- Joint Load Control and Energy Sharing for Renewable Powered Small Base Stations: A Machine Learning Approach. *Piovesan, N.*, +, *TGCN March 2021 512-525*
- MEES-WuR: Minimum Energy Coding With Early Shutdown for Wake-Up Receivers. *Djidi, N.E.H.*, +, *TGCN Sept. 2021 1502-1513*
- Modeling and Analysis of Latency Distribution in the 40-100Gbps Dual-Mode Energy Efficient Ethernet. *Jiang, W.*, +, *TGCN Sept. 2021 1426-1437*
- Multi-Agent Reinforcement Learning for Energy Harvesting Two-Hop Communications With a Partially Observable System State. *Ortiz, A.*, +, *TGCN March 2021 442-456*
- Online Power Allocation at Energy Harvesting Transmitter for Multiple Receivers With and Without Individual Rate Constraints for OMA and NOMA Transmissions. *Ashraf, M.*, +, *TGCN Sept. 2021 1594-1609*
- Optimal Energy Sharing for Cooperative Relaying in a Random Access Network With Energy Harvesting Nodes. *Mortazavi, S.M.*, +, *TGCN March 2021 231-242*
- Optimization of SWIPT With Battery-Assisted Energy Harvesting Full-Duplex Relays. *Agrawal, K.*, +, *TGCN March 2021 243-260*
- Preemptive Mobile Computation Offloading With Hard Deadlines and Concurrent Local Execution. *Teymoori, P.*, +, *TGCN June 2021 950-963*
- Quantum Learning-Enabled Green Communication for Next-Generation Wireless Systems. *Jaiswal, A.*, +, *TGCN Sept. 2021 1015-1028*
- Receiver-Initiated Data Collection in Wake-Up Radio Enabled mMTC Networks: Achieving Collision-Free Transmissions by Hashing and Partitioning. *Hsu, C.*, +, *TGCN June 2021 868-883*
- Reconfigurable Intelligent Surface for Green Edge Inference. *Hua, S.*, +, *TGCN June 2021 964-979*
- Reinforcement Learning-Based Energy-Efficient Data Access for Airborne Users in Civil Aircrafts-Enabled SAGIN. *Chen, Q.*, +, *TGCN June 2021 934-949*
- Robust Resource Allocation for Two-Tier HetNets: An Interference-Efficiency Perspective. *Xu, Y.*, +, *TGCN Sept. 2021 1514-1528*
- Role Assignment for Spatially-Correlated Data Aggregation Using Multi-Sink Internet of Underwater Things. *Al-Habob, A.A.*, +, *TGCN Sept. 2021 1570-1579*
- Secrecy Energy Efficiency in Cognitive Radio Networks With Untrusted Secondary Users. *Wang, W.*, +, *TGCN March 2021 216-230*
- Statistical Learning Based Joint Antenna Selection and User Scheduling for Single-Cell Massive MIMO Systems. *Guo, M.*, +, *TGCN March 2021 471-483*
- Statistical-QoS Guarantee for IoT Network Driven by Laser-Powered UAV Relay and RF Backscatter Communications. *Hassan, M.Z.*, +, *TGCN March 2021 406-425*
- Towards Optimal Energy Efficiency in Cell-Free Massive MIMO Systems. *Papazafeiropoulos, A.*, +, *TGCN June 2021 816-831*
- Uplink Power Allocation for Throughput and Energy Efficiency Over Nakagami- m Fading Channels. *Ho, D.H.*, +, *TGCN March 2021 190-202*

Telecommunication power supplies

- A Novel Joint Optimization Method Based on Mobile Data Collection for Wireless Rechargeable Sensor Networks. *Boukerche, A.*, +, *TGCN Sept. 2021 1610-1622*

Telecommunication scheduling

- A Novel Joint Optimization Method Based on Mobile Data Collection for Wireless Rechargeable Sensor Networks. *Boukerche, A.*, +, *TGCN Sept. 2021 1610-1622*
- Deadline Constrained Packet Scheduling in the Presence of an Energy Harvesting Jammer. *Rahman, H.*, +, *TGCN March 2021 278-290*
- Deep-Green: A Dispersed Energy-Efficiency Computing Paradigm for Green Industrial IoT. *Hu, N.*, +, *TGCN June 2021 750-764*
- Energy-Efficient and Reliable IoT Access Without Radio Resource Reservation. *Azari, A.*, +, *TGCN June 2021 908-920*
- Link Schedulers for Green Wireless Networks With Energy Sharing. *Wang, L.*, +, *TGCN Sept. 2021 1580-1593*
- Preemptive Mobile Computation Offloading With Hard Deadlines and Concurrent Local Execution. *Teymoori, P.*, +, *TGCN June 2021 950-963*
- Protocol Design for Energy Efficient OLT in TWDM-EPON Supporting Diverse Delay Bounds. *Dutta, S.*, +, *TGCN Sept. 2021 1438-1450*
- Receiver-Initiated Data Collection in Wake-Up Radio Enabled mIoT Networks: Achieving Collision-Free Transmissions by Hashing and Partitioning. *Hsu, C.*, +, *TGCN June 2021 868-883*
- Statistical Learning Based Joint Antenna Selection and User Scheduling for Single-Cell Massive MIMO Systems. *Guo, M.*, +, *TGCN March 2021 471-483*

Telecommunication security

- Cooperative Transmission of Wireless Information and Energy in Anti-Eavesdropping UAV Relay Network. *Ning, Q.*, +, *TGCN Sept. 2021 1283-1292*
- Deadline Constrained Packet Scheduling in the Presence of an Energy Harvesting Jammer. *Rahman, H.*, +, *TGCN March 2021 278-290*
- Energy-Efficient Multivariate Privacy-Aware RF Spectrum Reservation in Wireless Virtualization for Wireless Internet of Things. *Adebayo, A.A.*, +, *TGCN June 2021 682-692*

Telecommunication traffic

- Cache- and Energy Harvesting-Enabled D2D Cellular Network: Modeling, Analysis and Optimization. *Meng, Y.*, +, *TGCN June 2021 703-713*
- Deep Reinforcement Learning-Assisted Energy Harvesting Wireless Networks. *Ye, J.*, +, *TGCN June 2021 990-1002*
- E-S-RSM-RSA: A Novel Energy and Spectrum Efficient Regenerator Aware Multipath Based Survivable RSA in Offline EON. *Halder, J.*, +, *TGCN Sept. 2021 1451-1466*
- Energy Efficiency in Sliceable-Transponder Enabled Elastic Optical Networks. *Costa, L.R.*, +, *TGCN June 2021 789-802*
- Energy Efficient Data Gathering in IoT Networks With Heterogeneous Traffic for Remote Area Surveillance Applications: A Cross Layer Approach. *Bhattacharjee, D.*, +, *TGCN Sept. 2021 1165-1178*
- Energy Optimization in Ultra-Dense Radio Access Networks via Traffic-Aware Cell Switching. *Ozturk, M.*, +, *TGCN June 2021 832-845*
- Energy-Efficient and Reliable IoT Access Without Radio Resource Reservation. *Azari, A.*, +, *TGCN June 2021 908-920*
- Energy-Efficient vBBU Migration and Wavelength Reassignment in Cloud-Fog RAN. *Tinini, R.I.*, +, *TGCN March 2021 18-28*
- Green Multi-Stage Upgrade for Bundled-Link SDNs With Budget and Delay Constraints. *Hiryanto, L.*, +, *TGCN Sept. 2021 1410-1425*
- Intrusion Detection in Green Internet of Things: A Deep Deterministic Policy Gradient-Based Algorithm. *Nie, L.*, +, *TGCN June 2021 778-788*
- Joint Load Control and Energy Sharing for Renewable Powered Small Base Stations: A Machine Learning Approach. *Piovesan, N.*, +, *TGCN March 2021 512-525*
- Protocol Design for Energy Efficient OLT in TWDM-EPON Supporting Diverse Delay Bounds. *Dutta, S.*, +, *TGCN Sept. 2021 1438-1450*
- Special Issue on Unmanned Aerial Vehicle (UAV)-Enabled Green Communications and Networking. *Zhao, N.*, +, *TGCN Sept. 2021 1232-1235*

Telerobotics

- Heterogeneous Mobile Networking for Lightweight UAV Assisted Emergency Communication. *Zhang, C.*, +, *TGCN Sept. 2021 1345-1356*

Temperature sensors

- Optimal Design of LEMoNet for Environmental Monitoring of Data Centers. *Jafarizadeh, M.*, +, *TGCN Dec. 2021 1820-1832*

Three-dimensional displays

- UAV-Enabled Wireless Power Transfer: A Tutorial Overview. *Xie, L.*, +, *TGCN Dec. 2021 2042-2064*

Throughput

- Centralized and Distributed Algorithms for Energy and Spectrum Efficient User Association in Small Cell Networks. *Javad-Kalbasi, M.*, +, *TGCN Dec. 2021 1781-1790*
- Hybrid Energy Resource Allocation for Simultaneous Wireless Information and Power Transfer for Green Communications. *Shen, L.*, +, *TGCN Dec. 2021 2121-2138*
- Power-Spectrum Trading for Full-Duplex D2D Communications in Cellular Networks. *Feng, D.*, +, *TGCN Dec. 2021 2016-2026*
- Throughput-Optimal Broadcast for Time-Varying Directed Acyclic Wireless Multi-Hop Networks With Energy Harvesting Constraints. *Tian, X.*, +, *TGCN Dec. 2021 2089-2103*
- Toward a Green Secure Relay System for Mission-Critical IoT: Hybrid Duplex Relay Selection and Resource Allocation in the Finite Block Length Regime. *Cao, J.*, +, *TGCN Dec. 2021 1869-1879*

Time division multiple access

- BER Analysis of a Backscatter Communication System With Non-Orthogonal Multiple Access. *Nazar, A.W.*, +, *TGCN June 2021 574-586*
- Fairness-Aware Task Scheduling and Resource Allocation in UAV-Enabled Mobile Edge Computing Networks. *Zhao, M.*, +, *TGCN Dec. 2021 2174-2187*

Time division multiplexing

- Energy-Efficient vBBU Migration and Wavelength Reassignment in Cloud-Fog RAN. *Tinini, R.I.*, +, *TGCN March 2021 18-28*
- Protocol Design for Energy Efficient OLT in TWDM-EPON Supporting Diverse Delay Bounds. *Dutta, S.*, +, *TGCN Sept. 2021 1438-1450*

Training data

- Energy-Efficient Topology Construction via Power Allocation for Decentralized Learning via Smart Devices With Edge Computing. *Kuo, J.*, +, *TGCN Dec. 2021 1806-1819*

Trajectory

- Energy-Efficient Secure Video Streaming in UAV-Enabled Wireless Networks: A Safe-DQN Approach. *Zhang, Z.*, +, *TGCN Dec. 2021 1892-1905*
- Offline and Online UAV-Enabled Data Collection in Time-Constrained IoT Networks. *Ghdiri, O.*, +, *TGCN Dec. 2021 1918-1933*
- UAV Deployment and IoT Device Association for Energy-Efficient Data-Gathering in Fixed-Wing Multi-UAV Networks. *Kuo, Y.*, +, *TGCN Dec. 2021 1934-1946*
- UAV-Enabled Wireless Power Transfer: A Tutorial Overview. *Xie, L.*, +, *TGCN Dec. 2021 2042-2064*

Trajectory control

- Trajectory Design for Throughput Maximization in UAV-Assisted Communication System. *Gupta, N.*, +, *TGCN Sept. 2021 1319-1332*

Trajectory optimization (aerospace)

- 3D Trajectory and Transmit Power Optimization for UAV-Enabled Multi-Link Relaying Systems. *Liu, T.*, +, *TGCN March 2021 392-405*

Transceivers

- Towards Understanding and Enhancing Association and Long Sleep in Low-Power WiFi IoT Systems. *Ramanna, V.K.*, +, *TGCN Dec. 2021 1833-1845*

Transmitters

- Cooperative Beamforming and Jamming for Secure VLC System in the Presence of Active and Passive Eavesdroppers. *Cho, S.*, +, *TGCN Dec. 2021 1988-1998*
- High-Density Resource-Restricted Pulse-Based IoT Networks. *Peper, F.*, +, *TGCN Dec. 2021 1856-1868*

Transmitting antennas

- RIS-Assisted Advanced Spatial Modulation Techniques for Ambient Backscattering Communications. *Bhowal, A.*, +, *TGCN Dec. 2021 1684-1696*

Transponders

- Energy Efficiency in Sliceable-Transponder Enabled Elastic Optical Networks. *Costa, L.R.*, +, *TGCN June 2021 789-802*

Tutorials

- UAV-Enabled Wireless Power Transfer: A Tutorial Overview. *Xie, L.*, +, *TGCN Dec. 2021 2042-2064*

U

Ultra reliable low latency communication

Toward a Green Secure Relay System for Mission-Critical IoT: Hybrid Duplex Relay Selection and Resource Allocation in the Finite Block Length Regime. *Cao, J.*, +, *TGCN Dec. 2021 1869-1879*

Underwater acoustic communication

Role Assignment for Spatially-Correlated Data Aggregation Using Multi-Sink Internet of Underwater Things. *Al-Habob, A.A.*, +, *TGCN Sept. 2021 1570-1579*

Unmanned aerial vehicles

Blockchain-Based Data Dissemination Scheme for 5G-Enabled Softwarized UAV Networks. *Gupta, R.*, +, *TGCN Dec. 2021 1712-1721*

Energy-Efficient UAV Assisted Secure Relay Transmission via Cooperative Computation Offloading. *Wang, T.*, +, *TGCN Dec. 2021 1669-1683*

Green Tethered UAVs for EMF-Aware Cellular Networks. *Lou, Z.*, +, *TGCN Dec. 2021 1697-1711*

Offline and Online UAV-Enabled Data Collection in Time-Constrained IoT Networks. *Ghdiri, O.*, +, *TGCN Dec. 2021 1918-1933*

Special Issue on Unmanned Aerial Vehicle (UAV)-Enabled Green Communications and Networking. *Zhao, N.*, +, *TGCN Sept. 2021 1232-1235*

UAV Deployment and IoT Device Association for Energy-Efficient Data-Gathering in Fixed-Wing Multi-UAV Networks. *Kuo, Y.*, +, *TGCN Dec. 2021 1934-1946*

UAV-Enabled Wireless Power Transfer: A Tutorial Overview. *Xie, L.*, +, *TGCN Dec. 2021 2042-2064*

Uplink

Energy-Efficient Resource Allocation in Multi-UAV Networks With NOMA. *Najmeddin, S.*, +, *TGCN Dec. 2021 1906-1917*

Power-Spectrum Trading for Full-Duplex D2D Communications in Cellular Networks. *Feng, D.*, +, *TGCN Dec. 2021 2016-2026*

Steady-State Rate-Optimal Power Adaptation in Energy Harvesting Opportunistic Cognitive Radios With Spectrum Sensing and Channel Estimation Errors. *Yazdani, H.*, +, *TGCN Dec. 2021 2104-2120*

UAV Deployment and IoT Device Association for Energy-Efficient Data-Gathering in Fixed-Wing Multi-UAV Networks. *Kuo, Y.*, +, *TGCN Dec. 2021 1934-1946*

User centered design

Analysis of Area Spectral & Energy Efficiency in a CoMP-Enabled User-Centric Cloud RAN. *Kasi, S.K.*, +, *TGCN Dec. 2021 1999-2015*

User modeling

A Reinforcement Learning Approach for User Preference-Aware Energy Sharing Systems. *Timilsina, A.*, +, *TGCN Sept. 2021 1138-1153*

V

Vehicular ad hoc networks

A Low-Latency and Energy-Efficient Multimetric Routing Protocol Based on Network Connectivity in VANET Communication. *Wang, X.*, +, *TGCN Dec. 2021 1761-1776*

Video signal processing

BL-ALM: A Blind Scalable Edge-Guided Reconstruction Filter for Smart Environmental Monitoring Through Green IoMT-UAV Networks. *Khosravi, M.R.*, +, *TGCN June 2021 727-736*

Virtual machines

AFED-EF: An Energy-Efficient VM Allocation Algorithm for IoT Applications in a Cloud Data Center. *Zhou, Z.*, +, *TGCN June 2021 658-669*

SSUR: An Approach to Optimizing Virtual Machine Allocation Strategy Based on User Requirements for Cloud Data Center. *Huang, Y.*, +, *TGCN June 2021 670-681*

Virtualization

Energy-Efficient Multivariate Privacy-Aware RF Spectrum Reservation in Wireless Virtualization for Wireless Internet of Things. *Adebayo, A.A.*, +, *TGCN June 2021 682-692*

Energy-Efficient vBBU Migration and Wavelength Reassignment in Cloud-Fog RAN. *Tinini, R.I.*, +, *TGCN March 2021 18-28*

Energy-Saving and Resource-Efficient Algorithm for Virtual Network Function Placement With Network Scaling. *Chen, M.*, +, *TGCN March 2021 29-40*

Temperature-Aware Virtual Data Center Embedding to Avoid Hot Spots in Data Centers. *Guo, C.*, +, *TGCN March 2021 497-511*

Visible light communication

Cooperative Beamforming and Jamming for Secure VLC System in the Presence of Active and Passive Eavesdroppers. *Cho, S.*, +, *TGCN Dec. 2021 1988-1998*

Energy-Efficient Precoding Designs for Multi-User Visible Light Communication Systems With Confidential Messages. *Duong, S.T.*, +, *TGCN Dec. 2021 1974-1987*

W

Wavelength division multiplexing

Energy-Efficient vBBU Migration and Wavelength Reassignment in Cloud-Fog RAN. *Tinini, R.I.*, +, *TGCN March 2021 18-28*

Protocol Design for Energy Efficient OLT in TWDM-EPON Supporting Diverse Delay Bounds. *Dutta, S.*, +, *TGCN Sept. 2021 1438-1450*

Wireless channels

Computation Offloading in Heterogeneous Mobile Edge Computing With Energy Harvesting. *Zhang, T.*, +, *TGCN March 2021 552-565*

Cooperative Transmission of Wireless Information and Energy in Anti-Eavesdropping UAV Relay Network. *Ning, Q.*, +, *TGCN Sept. 2021 1283-1292*

Energy Efficiency Maximization Under Minimum Rate Constraints in Multi-Cell MIMO Systems With Finite Buffers. *Saraiva, J.V.*, +, *TGCN March 2021 174-189*

Energy Efficient Resource Allocation Optimization in Fog Radio Access Networks With Outdated Channel Knowledge. *Dinh, T.H.L.*, +, *TGCN March 2021 146-159*

Energy-Efficient Precoder Design for Downlink Multi-User MISO Networks With Finite Blocklength Codes. *Singh, K.*, +, *TGCN March 2021 160-173*

Exploiting Cell-Free Massive MIMO for Enabling Simultaneous Wireless Information and Power Transfer. *Galappathige, D.L.*, +, *TGCN Sept. 2021 1541-1557*

MEES-WuR: Minimum Energy Coding With Early Shutdown for Wake-Up Receivers. *Djidi, N.E.H.*, +, *TGCN Sept. 2021 1502-1513*

Multi-Agent Reinforcement Learning for Energy Harvesting Two-Hop Communications With a Partially Observable System State. *Ortiz, A.*, +, *TGCN March 2021 442-456*

Optimizing Computation Efficiency for NOMA-Assisted Mobile Edge Computing With User Cooperation. *Su, B.*, +, *TGCN June 2021 858-867*

Preemptive Mobile Computation Offloading With Hard Deadlines and Concurrent Local Execution. *Teymoori, P.*, +, *TGCN June 2021 950-963*

Statistical Learning Based Joint Antenna Selection and User Scheduling for Single-Cell Massive MIMO Systems. *Guo, M.*, +, *TGCN March 2021 471-483*

Wireless communication

Alternative Chirp Spread Spectrum Techniques for LPWANS. *Bizon Franco de Almeida, I.*, +, *TGCN Dec. 2021 1846-1855*

Centralized and Distributed Algorithms for Energy and Spectrum Efficient User Association in Small Cell Networks. *Javad-Kalbasi, M.*, +, *TGCN Dec. 2021 1781-1790*

Energy Aware Latency Minimization for Network Slicing Enabled Edge Computing. *Hossain, M.A.*, +, *TGCN Dec. 2021 2150-2159*

Energy-Efficient Secure Video Streaming in UAV-Enabled Wireless Networks: A Safe-DQN Approach. *Zhang, Z.*, +, *TGCN Dec. 2021 1892-1905*

Energy-Efficient UAV Assisted Secure Relay Transmission via Cooperative Computation Offloading. *Wang, T.*, +, *TGCN Dec. 2021 1669-1683*

Hybrid Energy Resource Allocation for Simultaneous Wireless Information and Power Transfer for Green Communications. *Shen, L.*, +, *TGCN Dec. 2021 2121-2138*

Optimal Design of LEMoNet for Environmental Monitoring of Data Centers. *Jafarizadeh, M.*, +, *TGCN Dec. 2021 1820-1832*

Wireless fidelity

Towards Understanding and Enhancing Association and Long Sleep in Low-Power WiFi IoT Systems. *Ramanna, V.K.*, +, *TGCN Dec. 2021 1833-1845*

Wireless LAN

GROVE: A Cost-Efficient Green Radio Over Ethernet Architecture for Next Generation Radio Access Networks. *Pamuklu, T.*, +, *TGCN March 2021 84-93*

Wireless networks

Analysis of Area Spectral & Energy Efficiency in a CoMP-Enabled User-Centric Cloud RAN. *Kasi, S.K.*, +, *TGCN Dec. 2021 1999-2015*

Energy-Efficient Secure Video Streaming in UAV-Enabled Wireless Networks: A Safe-DQN Approach. *Zhang, Z.*, +, *TGCN Dec. 2021 1892-1905*

Guest Editorial Special Issue on “Green Communication and Computing Technologies for 6G Networks” in IEEE Transactions on Green Communications and Networking. *Anpalagan, A.*, +, *TGCN Dec. 2021 1653-1656*

Special Issue on Unmanned Aerial Vehicle (UAV)-Enabled Green Communications and Networking. *Zhao, N.*, +, *TGCN Sept. 2021 1232-1235*

Throughput-Optimal Broadcast for Time-Varying Directed Acyclic Wireless Multi-Hop Networks With Energy Harvesting Constraints. *Tian, X.*, +, *TGCN Dec. 2021 2089-2103*

UAV-Enabled Wireless Power Transfer: A Tutorial Overview. *Xie, L.*, +, *TGCN Dec. 2021 2042-2064*

Wireless sensor networks

SEC²: A Secure and Energy Efficient Barrier Coverage Scheduling for WSN-Based IoT Applications. *Thomas, D.*, +, *TGCN June 2021 622-634*

A Circuit for Simultaneous Reception of Data and Power Using a Solar Cell. *Kadirvelu, S.*, +, *TGCN Dec. 2021 2065-2075*

A Novel Joint Optimization Method Based on Mobile Data Collection for Wireless Rechargeable Sensor Networks. *Boukerche, A.*, +, *TGCN Sept. 2021 1610-1622*

A Reinforcement Learning Approach to Optimize Energy Usage in RF-Charging Sensor Networks. *Ren, H.*, +, *TGCN March 2021 526-539*

An Integral Data Gathering Framework for Supervisory Control and Data Acquisition Systems in Green IoT. *Xiang, X.*, +, *TGCN June 2021 714-726*

An Integration of Online Learning and Online Control for Green Offloading in Fog-Assisted IoT Systems. *Gao, X.*, +, *TGCN Sept. 2021 1632-1646*

BER Analysis of a Backscatter Communication System With Non-Orthogonal Multiple Access. *Nazar, A.W.*, +, *TGCN June 2021 574-586*

Content-Based Wake-Up for Top-*k* Query in Wireless Sensor Networks. *Shirraishi, J.*, +, *TGCN March 2021 362-377*

DARE-SEP: A Hybrid Approach of Distance Aware Residual Energy-Efficient SEP for WSN. *Naeem, A.*, +, *TGCN June 2021 611-621*

Energy and Distance Optimization in Rechargeable Wireless Sensor Networks. *Tsoumanis, G.*, +, *TGCN March 2021 378-391*

Energy Efficient Data Gathering in IoT Networks With Heterogeneous Traffic for Remote Area Surveillance Applications: A Cross Layer Approach. *Bhattacharjee, D.*, +, *TGCN Sept. 2021 1165-1178*

Energy-Efficient Cross-Layer Spectrum Sharing in CR Green IoT Networks. *Salameh, H.A.B.*, +, *TGCN Sept. 2021 1091-1100*

Fuzzy Rule Generation Using Modified PSO for Clustering in Wireless Sensor Networks. *Lipare, A.*, +, *TGCN June 2021 846-857*

Leveraging Graph Convolutional-LSTM for Energy-Efficient Caching in Blockchain-Based Green IoT. *Chen, G.*, +, *TGCN Sept. 2021 1154-1164*

MEES-WuR: Minimum Energy Coding With Early Shutdown for Wake-Up Receivers. *Djidi, N.E.H.*, +, *TGCN Sept. 2021 1502-1513*

Optimal Design of LEMoNet for Environmental Monitoring of Data Centers. *Jafarizadeh, M.*, +, *TGCN Dec. 2021 1820-1832*

Optimal Radius for Enhanced Lifetime in IoT Using Hybridization of Rider and Grey Wolf Optimization. *Dev, K.*, +, *TGCN June 2021 635-644*

QoS-Aware Sensor Virtualization for Provisioning Green Sensors-as-a-Service. *Rajavel, D.*, +, *TGCN Sept. 2021 1128-1137*

Quantum Learning-Enabled Green Communication for Next-Generation Wireless Systems. *Jaiswal, A.*, +, *TGCN Sept. 2021 1015-1028*

ReNEW: A Practical Module for Reliable Routing in Networks of Energy-Harvesting Wireless Sensors. *Prasad, R.V.*, +, *TGCN Sept. 2021 1558-1569*

Throughput-Optimal Broadcast for Time-Varying Directed Acyclic Wireless Multi-Hop Networks With Energy Harvesting Constraints. *Tian, X.*, +, *TGCN Dec. 2021 2089-2103*

UAV Deployment and IoT Device Association for Energy-Efficient Data-Gathering in Fixed-Wing Multi-UAV Networks. *Kuo, Y.*, +, *TGCN Dec. 2021 1934-1946*

UEE-RPL: A UAV-Based Energy Efficient Routing for Internet of Things. *Yang, Z.*, +, *TGCN Sept. 2021 1333-1344*