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This index covers all technical items—papers, correspondence, reviews, etc.—that appeared in this periodical during 2019, and items from previous years that were commented upon or corrected in 2019. 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.

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- Huang, M.**, Liu, A., Xiong, N.N., Wang, T., and Vasilakos, A.V., A Low-Latency Communication Scheme for Mobile Wireless Sensor Control Systems; *TSMC Feb. 2019 317-332*
- Huang, M.**, see Ma, L., *TSMC May 2019 861-880*
- Huang, P.**, see Xiong, X., *TSMC Jan. 2019 265-278*
- Huang, S.**, Li, L., Cai, H., Xu, B., Li, G., and Jiang, L., A Configurable WoT Application Platform Based on Spatiotemporal Semantic Scenarios; *TSMC Jan. 2019 123-135*
- Huang, T.**, see Shen, Y., *TSMC Feb. 2019 433-443*
- Huang, T.**, see Wu, Z., *TSMC Feb. 2019 386-394*
- Huang, T.**, see Wen, G., *TSMC Feb. 2019 406-417*
- Huang, T.**, see Li, Z., *TSMC June 2019 1041-1052*
- Huang, T.**, see Que, H., *TSMC July 2019 1399-1407*
- Huang, T.**, see Wang, J., *TSMC July 2019 1357-1370*
- Huang, T.**, see Wen, S., *TSMC Sept. 2019 1787-1796*
- Huang, T.**, see Wu, Z., *TSMC Oct. 2019 2097-2107*
- Huang, T.**, see Luo, B., *TSMC Oct. 2019 2155-2165*
- Huang, T.**, see He, X., *TSMC Dec. 2019 2700-2709*
- Huang, W.**, see Liu, C., *TSMC Dec. 2019 2710-2723*
- Huang, X.**, see Fan, Y., *TSMC Nov. 2019 2254-2265*
- Huang, Y.**, see Huang, B., *TSMC May 2019 881-890*
- Huang, Y.**, Zhang, Y., Shi, P., Wu, Z., Qian, J., and Chambers, J.A., Robust Kalman Filters Based on Gaussian Scale Mixture Distributions With Application to Target Tracking; *TSMC Oct. 2019 2082-2096*
- Huang, Y.**, Sithole, L., and Lee, T., Structure From Motion Technique for Scene Detection Using Autonomous Drone Navigation; *TSMC Dec. 2019 2559-2570*
- Huang, Z.**, see Xiao, Q., *TSMC Feb. 2019 375-385*
- Huang, Z.**, Xu, X., He, H., Tan, J., and Sun, Z., Parameterized Batch Reinforcement Learning for Longitudinal Control of Autonomous Land Vehicles; *TSMC April 2019 730-741*
- Huang, Z.**, see Cheng, J., *TSMC Sept. 2019 1832-1844*
- Hui, Q.**, see Liu, Y., *TSMC Nov. 2019 2242-2253*
- Huo, B.**, see Yin, L., *TSMC June 2019 1131-1140*
- Hussain, A.**, see Xiong, F., *TSMC Jan. 2019 216-226*
- Hwang, C.**, and Liao, G., Real-Time Pose Imitation by Mid-Size Humanoid Robot With Servo-Cradle-Head RGB-D Vision System; *TSMC Jan. 2019 181-191*

I

- Iacoviello, D.**, see Di Giamberardino, P., *TSMC Oct. 2019 2119-2130*
- Inceoglu, A.**, Koc, C., Kanat, B.O., Ersen, M., and Sariel, S., Continuous Visual World Modeling for Autonomous Robot Manipulation; *TSMC Jan. 2019 192-205*

J

- Ji, P.**, Zhang, H., and Wang, J., A Fuzzy Decision Support Model With Sentiment Analysis for Items Comparison in e-Commerce: The Case Study of <http://PConline.com>; *TSMC Oct. 2019 1993-2004*
- Ji, X.**, see Zhang, Y., *TSMC May 2019 845-860*
- Ji, Y.**, see Guo, H., *TSMC Jan. 2019 2-13*
- Ji, Z.**, see Yan, K., *TSMC July 2019 1349-1356*
- Jia, W.**, see Fei, L., *TSMC Feb. 2019 346-363*
- Jiang, B.**, Karimi, H.R., Kao, Y., and Gao, C., Takagi-Sugeno Model-Based Sliding Mode Observer Design for Finite-Time Synthesis of Semi-Markovian Jump Systems; *TSMC July 2019 1505-1515*

- Jiang, B.**, see Chen, H., *TSMC Aug. 2019 1731-1738*
- Jiang, B.**, see Wu, Y., *TSMC Oct. 2019 2108-2118*
- Jiang, C.**, Ni, Z., Guo, Y., and He, H., Learning Human-Robot Interaction for Robot-Assisted Pedestrian Flow Optimization; *TSMC April 2019 797-813*
- Jiang, H.**, Zhang, H., Luo, Y., and Han, J., Neural-Network-Based Robust Control Schemes for Nonlinear Multiplayer Systems With Uncertainties via Adaptive Dynamic Programming; *TSMC March 2019 579-588*
- Jiang, J.**, see Cao, J., *TSMC Aug. 2019 1652-1664*
- Jiang, L.**, see Huang, S., *TSMC Jan. 2019 123-135*
- Jiang, X.**, see Yan, H., *TSMC Oct. 2019 2050-2058*
- Jin, B.**, see Feng, L., *TSMC Dec. 2019 2384-2395*
- Jin, S.**, see Chi, R., *TSMC April 2019 687-696*
- Jin, S.**, see Duan, J., *TSMC June 2019 1175-1185*
- Jin, Y.**, and Lee, M., Enhancing Binocular Depth Estimation Based on Proactive Perception and Action Cyclic Learning for an Autonomous Developmental Robot; *TSMC Jan. 2019 169-180*
- Joby, M.**, see Sakthivel, R., *TSMC Sept. 2019 1797-1805*
- Junping, X.**, see Hu, B., *TSMC Aug. 2019 1720-1730*

K

- Kamel, A.**, Sheng, B., Yang, P., Li, P., Shen, R., and Feng, D.D., Deep Convolutional Neural Networks for Human Action Recognition Using Depth Maps and Postures; *TSMC Sept. 2019 1806-1819*
- Kanat, B.O.**, see Inceoglu, A., *TSMC Jan. 2019 192-205*
- Kang, Q.**, Song, X., Zhou, M., and Li, L., A Collaborative Resource Allocation Strategy for Decomposition-Based Multiobjective Evolutionary Algorithms; *TSMC Dec. 2019 2416-2423*
- Kang, Y.**, see Lv, W., *TSMC June 2019 1241-1253*
- Kao, Y.**, see Jiang, B., *TSMC July 2019 1505-1515*
- Karimi, H.R.**, see Saravanakumar, R., *TSMC Feb. 2019 395-405*
- Karimi, H.R.**, see Jiang, B., *TSMC July 2019 1505-1515*
- Karimi, H.R.**, see Cheng, J., *TSMC Sept. 2019 1749-1758*
- Karimi, H.R.**, see Mao, J., *TSMC Sept. 2019 1893-1900*
- Karimi, H.R.**, see Yan, H., *TSMC Oct. 2019 2050-2058*
- Karimi, H.R.**, see Shojaei, F., *TSMC Nov. 2019 2340-2351*
- Khalgui, M.**, see Lakhthar, W., *TSMC March 2019 623-637*
- Khayatian, A.**, see Shojaei, F., *TSMC Nov. 2019 2340-2351*
- Kilgour, D.M.**, see Wang, J., *TSMC May 2019 904-916*
- Kim, S.**, and Moon, I., Traveling Salesman Problem With a Drone Station; *TSMC Jan. 2019 42-52*
- Koc, C.**, see Inceoglu, A., *TSMC Jan. 2019 192-205*
- Kong, L.**, see He, W., *TSMC March 2019 543-554*
- Kong, X.**, Liu, X., Ma, L., and Lee, K.Y., Hierarchical Distributed Model Predictive Control of Standalone Wind/Solar/Battery Power System; *TSMC Aug. 2019 1570-1581*
- Kuang, H.**, Chen, L., Chan, L.L.H., Cheung, R.C.C., and Yan, H., Feature Selection Based on Tensor Decomposition and Object Proposal for Night-Time Multiclass Vehicle Detection; *TSMC Jan. 2019 71-80*
- Kvaternik, K.**, see Wang, S., *TSMC Aug. 2019 1612-1623*

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- La, H.M.**, see Woods, A.C., *TSMC April 2019 665-676*
- Lai, Q.**, see Chen, S., *TSMC Dec. 2019 2605-2611*
- Lakhthar, W.**, Mzid, R., Khalgui, M., Li, Z., Frey, G., and Al-Ahmari, A., Multiobjective Optimization Approach for a Portable Development of Reconfigurable Real-Time Systems: From Specification to Implementation; *TSMC March 2019 623-637*
- Le, X.**, Chen, S., Li, F., Yan, Z., and Xi, J., Distributed Neurodynamic Optimization for Energy Internet Management; *TSMC Aug. 2019 1624-1633*
- Ledwich, G.**, see Xing, L., *TSMC Aug. 2019 1601-1611*
- Lee, K.Y.**, see Kong, X., *TSMC Aug. 2019 1570-1581*
- Lee, M.**, see Jin, Y., *TSMC Jan. 2019 169-180*
- Lee, T.**, see Huang, Y., *TSMC Dec. 2019 2559-2570*

- Li, B., Wang, Z., and Han, Q., Input-to-State Stabilization of Delayed Differential Systems With Exogenous Disturbances: The Event-Triggered Case; *TSMC June 2019 1099-1109*
- Li, B., see Zhang, X., *TSMC Oct. 2019 2071-2081*
- Li, C., see He, X., *TSMC Dec. 2019 2700-2709*
- Li, D., see Lu, S., *TSMC Dec. 2019 2511-2518*
- Li, F., see Du, C., *TSMC Feb. 2019 364-374*
- Li, F., see Le, X., *TSMC Aug. 2019 1624-1633*
- Li, G., see Huang, S., *TSMC Jan. 2019 123-135*
- Li, G., see He, W., *TSMC May 2019 1027-1038*
- Li, G., Wang, X., and Li, S., Finite-Time Output Consensus of Higher-Order Multiagent Systems With Mismatched Disturbances and Unknown State Elements; *TSMC Dec. 2019 2571-2581*
- Li, H., see Niu, B., *TSMC Feb. 2019 418-432*
- Li, H., see Xu, K., *TSMC May 2019 1016-1026*
- Li, H., see Niu, B., *TSMC July 2019 1386-1398*
- Li, H., see Wang, B., *TSMC July 2019 1482-1495*
- Li, H., see Cao, J., *TSMC Aug. 2019 1652-1664*
- Li, H., see Zhang, Y., *TSMC Sept. 2019 1759-1768*
- Li, H., see Yao, D., *TSMC Oct. 2019 2016-2025*
- Li, H., see Feng, L., *TSMC Dec. 2019 2384-2395*
- Li, H., see Wang, Z., *TSMC Dec. 2019 2612-2622*
- Li, J., see Wu, J., *TSMC March 2019 638-648*
- Li, J., and Zhang, Q., Fuzzy Reduced-Order Compensator-Based Stabilization for Interconnected Descriptor Systems via Integral Sliding Modes; *TSMC April 2019 752-765*
- Li, J., see Niu, B., *TSMC July 2019 1386-1398*
- Li, J., see Wang, B., *TSMC July 2019 1482-1495*
- Li, K., see Yang, D., *TSMC Aug. 2019 1739-1748*
- Li, L., see Huang, S., *TSMC Jan. 2019 123-135*
- Li, L., see Kang, Q., *TSMC Dec. 2019 2416-2423*
- Li, P., see Liu, G., *TSMC July 2019 1371-1385*
- Li, P., see Kamel, A., *TSMC Sept. 2019 1806-1819*
- Li, P., see Yao, D., *TSMC Oct. 2019 2016-2025*
- Li, Q., see Zhao, L., *TSMC June 2019 1110-1118*
- Li, Q., see Wang, R., *TSMC Dec. 2019 2664-2675*
- Li, R., see Xiong, X., *TSMC Jan. 2019 265-278*
- Li, S., Shao, Z., and Guan, Y., A Dynamic Neural Network Approach for Efficient Control of Manipulators; *TSMC May 2019 932-941*
- Li, S., Song, S., Huang, G., and Wu, C., Cross-Domain Extreme Learning Machines for Domain Adaptation; *TSMC June 2019 1194-1207*
- Li, S., Guo, J., and Xiang, Z., Global Stabilization of a Class of Switched Nonlinear Systems Under Sampled-Data Control; *TSMC Sept. 2019 1912-1919*
- Li, S., see Xiao, L., *TSMC Nov. 2019 2210-2220*
- Li, S., see Li, G., *TSMC Dec. 2019 2571-2581*
- Li, W., see Than, T.D., *TSMC June 2019 1270-1284*
- Li, W., see Du, D., *TSMC Aug. 2019 1698-1711*
- Li, X., see Wen, L., *TSMC Jan. 2019 136-144*
- Li, X., Shi, D., Li, Y., and Zhen, X., Impact of Carbon Regulations on the Supply Chain With Carbon Reduction Effort; *TSMC June 2019 1218-1227*
- Li, X., see Du, D., *TSMC Aug. 2019 1698-1711*
- Li, X., Ahn, C.K., Lu, D., and Guo, S., Robust Simultaneous Fault Estimation and Nonfragile Output Feedback Fault-Tolerant Control for Markovian Jump Systems; *TSMC Sept. 2019 1769-1776*
- Li, X., Gao, L., Pan, Q., Wan, L., and Chao, K., An Effective Hybrid Genetic Algorithm and Variable Neighborhood Search for Integrated Process Planning and Scheduling in a Packaging Machine Workshop; *TSMC Oct. 2019 1933-1945*
- Li, X., Global Exponential Stability of Impulsive Delay Systems With Flexible Impulse Frequency; *TSMC Oct. 2019 2166-2174*
- Li, X., see Liu, C., *TSMC Dec. 2019 2710-2723*
- Li, X., see Shi, C., *TSMC Dec. 2019 2548-2558*
- Li, Y., see Xiong, X., *TSMC Jan. 2019 265-278*
- Li, Y., see Li, X., *TSMC June 2019 1218-1227*
- Li, Y., see Huang, B., *TSMC Aug. 2019 1634-1642*
- Li, Y., Yang, G., and Tong, S., Fuzzy Adaptive Distributed Event-Triggered Consensus Control of Uncertain Nonlinear Multiagent Systems; *TSMC Sept. 2019 1777-1786*
- Li, Y., Zhao, Y., Wang, G., Wang, Z., and Gao, M., ELM-Based Large-Scale Genetic Association Study via Statistically Significant Pattern; *TSMC Oct. 2019 2175-2188*
- Li, Y., see Fan, Y., *TSMC Nov. 2019 2254-2265*
- Li, Z., see Zhu, G., *TSMC Feb. 2019 333-345*
- Li, Z., see Deng, C., *TSMC March 2019 516-527*
- Li, Z., see Lakhdhari, W., *TSMC March 2019 623-637*
- Li, Z., see Huang, B., *TSMC May 2019 954-963*
- Li, Z., Fang, J., Tang, Y., and Huang, T., Consensus of Linear Discrete-Time Multi-Agent Systems: A Low-Gain Distributed Impulsive Strategy; *TSMC June 2019 1041-1052*
- Li, Z., see Liu, G., *TSMC July 2019 1371-1385*
- Li, Z., see Zhang, X., *TSMC Dec. 2019 2424-2437*
- Li, Z., see Feng, Y., *TSMC Dec. 2019 2438-2451*
- Liang, B., see Xu, W., *TSMC Dec. 2019 2464-2477*
- Liang, D., see Wu, Y., *TSMC June 2019 1186-1193*
- Liang, H., Zhou, Y., Ma, H., and Zhou, Q., Adaptive Distributed Observer Approach for Cooperative Containment Control of Nonidentical Networks; *TSMC Feb. 2019 299-307*
- Liang, H., see Ma, H., *TSMC Feb. 2019 287-298*
- Liang, H., see Ma, H., *TSMC March 2019 506-515*
- Liang, H., see Liu, Y., *TSMC Oct. 2019 1981-1992*
- Liao, G., see Hwang, C., *TSMC Jan. 2019 181-191*
- Lim, C., see Xu, J., *TSMC Oct. 2019 2059-2070*
- Lin, C., see Chen, J., *TSMC April 2019 833-842*
- Lin, S., see Zhou, Y., *TSMC Dec. 2019 2636-2650*
- Lin, W., see Deng, C., *TSMC March 2019 516-527*
- Lin, X., see Yao, X., *TSMC Dec. 2019 2406-2415*
- Lin, Y., see Liu, X., *TSMC Dec. 2019 2623-2635*
- Lin, Z., see Ma, L., *TSMC May 2019 861-880*
- Lin, Z., see Xie, Y., *TSMC Aug. 2019 1582-1591*
- Liu, A., see Huang, M., *TSMC Feb. 2019 317-332*
- Liu, A., see Liu, Y., *TSMC Oct. 2019 1946-1960*
- Liu, B., see Zhao, L., *TSMC June 2019 1110-1118*
- Liu, C., see Yi, D., *TSMC Jan. 2019 159-168*
- Liu, C., see Yang, S., *TSMC Jan. 2019 53-63*
- Liu, C., see Yi, D., *TSMC Jan. 2019 64-70*
- Liu, C., see Cheng, J., *TSMC Sept. 2019 1832-1844*
- Liu, C., Fang, B., Sun, F., Li, X., and Huang, W., Learning to Grasp Familiar Objects Based on Experience and Objects' Shape Affordance; *TSMC Dec. 2019 2710-2723*
- Liu, D., see Yang, X., *TSMC Sept. 2019 1866-1878*
- Liu, D., see Luo, B., *TSMC Oct. 2019 2155-2165*
- Liu, D., and Yang, G., Data-Driven Adaptive Sliding Mode Control of Nonlinear Discrete-Time Systems With Prescribed Performance; *TSMC Dec. 2019 2598-2604*
- Liu, F., see He, S., *TSMC Feb. 2019 281-286*
- Liu, F., see Guo, H., *TSMC Jan. 2019 2-13*
- Liu, G., see Hua, C., *TSMC June 2019 1081-1087*
- Liu, G., Li, P., Li, Z., and Wu, N., Robust Deadlock Control for Automated Manufacturing Systems With Unreliable Resources Based on Petri Net Reachability Graphs; *TSMC July 2019 1371-1385*
- Liu, H., Sun, F., and Fang, B., Kernel Regularized Nonlinear Dictionary Learning for Sparse Coding; *TSMC April 2019 766-775*
- Liu, H., see Liu, H., *TSMC April 2019 766-775*
- Liu, H., see Xi, J., *TSMC July 2019 1338-1348*
- Liu, H., see Xu, W., *TSMC Dec. 2019 2464-2477*
- Liu, J., see He, W., *TSMC May 2019 1027-1038*
- Liu, J., see Huang, B., *TSMC May 2019 954-963*
- Liu, J., Gu, Y., Zha, L., Liu, Y., and Cao, J., Event-Triggered H_∞ Load Frequency Control for Multiarea Power Systems Under Hybrid Cyber Attacks; *TSMC Aug. 2019 1665-1678*
- Liu, J., see Luo, B., *TSMC Oct. 2019 2155-2165*

- Liu, J.**, Zhang, Y., Yu, Y., and Sun, C., Fixed-Time Event-Triggered Consensus for Nonlinear Multiagent Systems Without Continuous Communications; *TSMC Nov. 2019* 2221-2229
- Liu, J.**, Gu, Y., Xie, X., Yue, D., and Park, J.H., Hybrid-Driven-Based \mathcal{H}_∞ Control for Networked Cascade Control Systems With Actuator Saturations and Stochastic Cyber Attacks; *TSMC Dec. 2019* 2452-2463
- Liu, L.**, see Huang, B., *TSMC Aug. 2019* 1634-1642
- Liu, M.**, see Yan, H., *TSMC Oct. 2019* 2050-2058
- Liu, Q.**, see Guo, L., *TSMC Jan. 2019* 31-41
- Liu, Q.**, Ye, M., Qin, J., and Yu, C., Event-Triggered Algorithms for Leader-Follower Consensus of Networked Euler-Lagrange Agents; *TSMC July 2019* 1435-1447
- Liu, W.**, see Liu, Y., *TSMC June 2019* 1088-1098
- Liu, X.**, Ge, S.S., and Goh, C., Neural-Network-Based Switching Formation Tracking Control of Multiagents With Uncertainties in Constrained Space; *TSMC May 2019* 1006-1015
- Liu, X.**, see Wang, X., *TSMC July 2019* 1496-1504
- Liu, X.**, see Kong, X., *TSMC Aug. 2019* 1570-1581
- Liu, X.**, Zhan, Z., Lin, Y., Chen, W., Gong, Y., Gu, T., Yuan, H., and Zhang, J., Historical and Heuristic-Based Adaptive Differential Evolution; *TSMC Dec. 2019* 2623-2635
- Liu, Y.**, Wang, Z., Yuan, Y., and Liu, W., Event-Triggered Partial-Nodes-Based State Estimation for Delayed Complex Networks With Bounded Distributed Delays; *TSMC June 2019* 1088-1098
- Liu, Y.**, see Liu, J., *TSMC Aug. 2019* 1665-1678
- Liu, Y.**, Liu, A., Xiong, N.N., Wang, T., and Gui, W., Content Propagation for Content-Centric Networking Systems From Location-Based Social Networks; *TSMC Oct. 2019* 1946-1960
- Liu, Y.**, Dong, Y., Liang, H., Chiclana, F., and Herrera-Viedma, E., Multiple Attribute Strategic Weight Manipulation With Minimum Cost in a Group Decision Making Context With Interval Attribute Weights Information; *TSMC Oct. 2019* 1981-1992
- Liu, Y.**, Park, J.H., and Fang, F., Global Exponential Stability of Delayed Neural Networks Based on a New Integral Inequality; *TSMC Nov. 2019* 2318-2325
- Liu, Y.**, Guo, F., He, X., and Hui, Q., Boundary Control for an Axially Moving System With Input Restriction Based on Disturbance Observers; *TSMC Nov. 2019* 2242-2253
- Liu, Y.**, Wang, Q., Hu, H., and He, Y., A Novel Real-Time Moving Target Tracking and Path Planning System for a Quadrotor UAV in Unknown Unstructured Outdoor Scenes; *TSMC Nov. 2019* 2362-2372
- Liu, Y.**, see Zhou, Y., *TSMC Dec. 2019* 2636-2650
- Liu, Y.**, see Lu, S., *TSMC Dec. 2019* 2511-2518
- Liu, Z.**, see Xiong, F., *TSMC Jan. 2019* 216-226
- Loia, V.**, see Cavaliere, D., *TSMC March 2019* 555-567
- Lu, D.**, see Li, X., *TSMC Sept. 2019* 1769-1776
- Lu, F.**, Zeng, Q., Zhou, M., Bao, Y., and Duan, H., Complex Reachability Trees and Their Application to Deadlock Detection for Unbounded Petri Nets; *TSMC June 2019* 1164-1174
- Lu, G.**, see Fei, L., *TSMC Feb. 2019* 346-363
- Lu, H.**, see Yan, K., *TSMC July 2019* 1349-1356
- Lu, J.**, see Wang, W., *TSMC June 2019* 1152-1163
- Lu, J.**, see Wang, G., *TSMC July 2019* 1527-1540
- Lu, N.**, see Wu, Y., *TSMC Oct. 2019* 2108-2118
- Lu, R.**, see Tao, J., *TSMC Feb. 2019* 308-316
- Lu, R.**, see Wu, Z., *TSMC Oct. 2019* 2097-2107
- Lu, S.**, Li, D., and Liu, Y., Adaptive Neural Network Control for Uncertain Time-Varying State Constrained Robotics Systems; *TSMC Dec. 2019* 2511-2518
- Luo, B.**, Liu, D., Huang, T., and Liu, J., Output Tracking Control Based on Adaptive Dynamic Programming With Multistep Policy Evaluation; *TSMC Oct. 2019* 2155-2165
- Luo, J.**, see Sun, J., *TSMC Jan. 2019* 107-122
- Luo, Y.**, see Jiang, H., *TSMC March 2019* 579-588
- Lv, C.**, see Guo, H., *TSMC Jan. 2019* 14-30
- Lv, W.**, Kang, Y., and Qin, J., Indoor Localization for Skid-Steering Mobile Robot by Fusing Encoder, Gyroscope, and Magnetometer; *TSMC June 2019* 1241-1253
- Lv, Y.**, and Ren, X., Approximate Nash Solutions for Multiplayer Mixed-Zero-Sum Game With Reinforcement Learning; *TSMC Dec. 2019* 2739-2750
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- Ma, B.**, see Zhang, X., *TSMC Oct. 2019* 2071-2081
- Ma, H.**, see Liang, H., *TSMC Feb. 2019* 299-307
- Ma, H.**, Zhou, Q., Bai, L., and Liang, H., Observer-Based Adaptive Fuzzy Fault-Tolerant Control for Stochastic Nonstrict-Feedback Nonlinear Systems With Input Quantization; *TSMC Feb. 2019* 287-298
- Ma, H.**, Liang, H., Zhou, Q., and Ahn, C.K., Adaptive Dynamic Surface Control Design for Uncertain Nonlinear Strict-Feedback Systems With Unknown Control Direction and Disturbances; *TSMC March 2019* 506-515
- Ma, L.**, see Deng, F., *TSMC April 2019* 814-820
- Ma, L.**, Wang, X., Huang, M., Lin, Z., Tian, L., and Chen, H., Two-Level Master-Slave RFID Networks Planning via Hybrid Multiobjective Artificial Bee Colony Optimizer; *TSMC May 2019* 861-880
- Ma, L.**, see Kong, X., *TSMC Aug. 2019* 1570-1581
- Mallik, S.**, see Bhadra, T., *TSMC June 2019* 1119-1130
- Mao, J.**, Karimi, H.R., and Xiang, Z., Observer-Based Adaptive Consensus for a Class of Nonlinear Multiagent Systems; *TSMC Sept. 2019* 1893-1900
- Martins, G.S.**, see Quintas, J., *TSMC Jan. 2019* 227-237
- Mavrouniotis, M.**, see Van, M., *TSMC July 2019* 1448-1458
- McIsaac, K.**, see Hashim, H.A., *TSMC Sept. 2019* 1853-1865
- Menezes, P.**, see Quintas, J., *TSMC Jan. 2019* 227-237
- Meng, D.**, see Xu, W., *TSMC Dec. 2019* 2464-2477
- Meng, K.**, Dong, Z.Y., Xu, Z., Zheng, Y., and Hill, D.J., Coordinated Dispatch of Virtual Energy Storage Systems in Smart Distribution Networks for Loading Management; *TSMC April 2019* 776-786
- Meng, T.**, see He, W., *TSMC May 2019* 1027-1038
- Meng, Z.**, see Zou, Y., *TSMC Nov. 2019* 2288-2297
- Mishra, Y.**, see Xing, L., *TSMC Aug. 2019* 1601-1611
- Montessoro, P.L.**, see Palma, D., *TSMC Dec. 2019* 2676-2687
- Moon, I.**, see Kim, S., *TSMC Jan. 2019* 42-52
- Muhammad, K.**, Ahmad, J., Lv, Z., Bellavista, P., Yang, P., and Baik, S.W., Efficient Deep CNN-Based Fire Detection and Localization in Video Surveillance Applications; *TSMC July 2019* 1419-1434
- Munetomo, M.**, see Faramondi, L., *TSMC Oct. 2019* 2036-2049
- Murphy, J.**, see Zemouri, S., *TSMC Dec. 2019* 2582-2597
- Mustafa, G.**, see Agha, R., *TSMC March 2019* 568-578
- Mutalik, P.**, see George, K., *TSMC May 2019* 976-990
- Mzid, R.**, see Lakhdar, W., *TSMC March 2019* 623-637

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- Nappi, M.**, see Abate, A.F., *TSMC March 2019* 469-481
- Nguang, S.K.**, see Shen, M., *TSMC Sept. 2019* 1901-1911
- Nguyen, V.**, see Sun, W., *TSMC Nov. 2019* 2201-2209
- Ni, X.**, see Wang, S., *TSMC Nov. 2019* 2266-2277
- Ni, Z.**, see Jiang, C., *TSMC April 2019* 797-813
- Niu, B.**, Wang, D., Li, H., Xie, X., Alotaibi, N.D., and Alsaadi, F.E., A Novel Neural-Network-Based Adaptive Control Scheme for Output-Constrained Stochastic Switched Nonlinear Systems; *TSMC Feb. 2019* 418-432
- Niu, B.**, Li, H., Zhang, Z., Li, J., Hayat, T., and Alsaadi, F.E., Adaptive Neural-Network-Based Dynamic Surface Control for Stochastic Interconnected Nonlinear Nonstrict-Feedback Systems With Dead Zone; *TSMC July 2019* 1386-1398

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- Ochoa-Luna, C.**, see Brahmi, B., *TSMC March 2019* 600-611
- Ojetunde, B.**, Shibata, N., and Gao, J., Secure Payment System Utilizing MANET for Disaster Areas; *TSMC Dec. 2019* 2651-2663
- Oliva, G.**, see Faramondi, L., *TSMC Oct. 2019* 2036-2049
- Orchard, J.**, see Wang, L., *TSMC Oct. 2019* 2131-2143
- Ou, Y.**, see Duan, J., *TSMC June 2019* 1175-1185

Ouyang, L., see Wang, S., *TSMC Nov. 2019 2266-2277*

P

Palma, D., Montessoro, P.L., Giordano, G., and Blanchini, F., Biometric Palmprint Verification: A Dynamical System Approach; *TSMC Dec. 2019 2676-2687*

Pan, Q., see Li, X., *TSMC Oct. 2019 1933-1945*

Pan, Y., see Xu, Y., *TSMC Nov. 2019 2308-2317*

Pang, Y., see Yang, D., *TSMC Aug. 2019 1739-1748*

Pani, A., see Zhang, J., *TSMC June 2019 1141-1151*

Panzieri, S., see Faramondi, L., *TSMC Oct. 2019 2036-2049*

Park, J.H., see Liu, Y., *TSMC Nov. 2019 2318-2325*

Park, J.H., see Yao, X., *TSMC Dec. 2019 2406-2415*

Park, J.H., see Liu, J., *TSMC Dec. 2019 2452-2463*

Pascucci, F., see Faramondi, L., *TSMC Oct. 2019 2036-2049*

Pei, H., see Chen, S., *TSMC Dec. 2019 2605-2611*

Peng, C., Zhang, J., and Han, Q., Consensus of Multiagent Systems With Nonlinear Dynamics Using an Integrated Sampled-Data-Based Event-Triggered Communication Scheme; *TSMC March 2019 589-599*

Peng, C., Sun, H., Yang, M., and Wang, Y., A Survey on Security Communication and Control for Smart Grids Under Malicious Cyber Attacks; *TSMC Aug. 2019 1554-1569*

Peng, J., see Xu, J., *TSMC Nov. 2019 2230-2241*

Peng, X., see Sun, J., *TSMC Jan. 2019 107-122*

Peng, Y., see Zhang, X., *TSMC Dec. 2019 2424-2437*

Prakash, O., Samantaray, A.K., and Bhattacharyya, R., Model-Based Diagnosis of Multiple Faults in Hybrid Dynamical Systems With Dynamically Updated Parameters; *TSMC June 2019 1053-1072*

Q

Qi, Q., see Tao, F., *TSMC Jan. 2019 81-91*

Qi, W., see Cheng, J., *TSMC Sept. 2019 1749-1758*

Qian, F., see Xing, L., *TSMC Aug. 2019 1601-1611*

Qian, J., see Huang, Y., *TSMC Oct. 2019 2082-2096*

Qian, W., see Bu, X., *TSMC April 2019 677-686*

Qian, W., Gao, Y., and Yang, Y., Global Consensus of Multiagent Systems With Internal Delays and Communication Delays; *TSMC Oct. 2019 1961-1970*

Qian, Y., see Sun, N., *TSMC July 2019 1309-1321*

Qiao, H., see Xiong, F., *TSMC Jan. 2019 216-226*

Qiao, S., see Xiong, X., *TSMC Jan. 2019 265-278*

Qiao, Y., Wu, N., Yang, F., Zhou, M., Zhu, Q., and Qu, T., Robust Scheduling of Time-Constrained Dual-Arm Cluster Tools With Wafer Revisiting and Activity Time Disturbance; *TSMC June 2019 1228-1240*

Qin, J., see Lv, W., *TSMC June 2019 1241-1253*

Qin, J., see Liu, Q., *TSMC July 2019 1435-1447*

Qin, Y., see Hu, B., *TSMC Aug. 2019 1720-1730*

Qiu, T., see Han, M., *TSMC Oct. 2019 2144-2154*

Qu, T., see Qiao, Y., *TSMC June 2019 1228-1240*

Que, H., Fang, M., Wu, Z., Su, H., Huang, T., and Zhang, D., Exponential Synchronization via Aperiodic Sampling of Complex Delayed Networks; *TSMC July 2019 1399-1407*

Quintas, J., Martins, G.S., Santos, L., Menezes, P., and Dias, J., Toward a Context-Aware Human-Robot Interaction Framework Based on Cognitive Development; *TSMC Jan. 2019 227-237*

R

Rahman, M.H., see Brahmi, B., *TSMC March 2019 600-611*

Rahmani-Andebili, M., and Shen, H., Price-Controlled Energy Management of Smart Homes for Maximizing Profit of a GENCO; *TSMC April 2019 697-709*

Rahmani-Andebili, M., Shen, H., and Fotuhi-Firuzabad, M., Planning and Operation of Parking Lots Considering System, Traffic, and Drivers Behavioral Model; *TSMC Sept. 2019 1879-1892*

Rajchakit, G., see Saravanakumar, R., *TSMC Feb. 2019 395-405*

Ramanathan, P., see Cecil, J., *TSMC Jan. 2019 92-106*

Rana, O., see Yaseen, M.U., *TSMC Jan. 2019 253-264*

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Ren, C., see He, S., *TSMC Feb. 2019 281-286*

Ren, W., see Han, M., *TSMC Oct. 2019 2144-2154*

Ren, X., see Lv, Y., *TSMC Dec. 2019 2739-2750*

Ren, Z., see Zhao, Z., *TSMC Oct. 2019 1971-1980*

Ren, Z., see Zhao, Z., *TSMC Dec. 2019 2374-2383*

Ren, Z., see Wang, R., *TSMC Dec. 2019 2664-2675*

Rezaee, H., and Abdollahi, F., Stationary Consensus Control of a Class of High-Order Uncertain Nonlinear Agents With Communication Delays; *TSMC June 2019 1285-1290*

Rezgui, Y., see Zhao, W., *TSMC June 2019 1254-1269*

Ricciardi, S., see Abate, A.F., *TSMC March 2019 469-481*

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Saad, M., see Brahmi, B., *TSMC March 2019 600-611*

Saggese, A., see Cavaliere, D., *TSMC March 2019 555-567*

Sakthivel, R., see Selvaraj, P., *TSMC July 2019 1516-1526*

Sakthivel, R., Ahn, C.K., and Joby, M., Fault-Tolerant Resilient Control For Fuzzy Fractional Order Systems; *TSMC Sept. 2019 1797-1805*

Samantaray, A.K., see Prakash, O., *TSMC June 2019 1053-1072*

Santos, L., see Quintas, J., *TSMC Jan. 2019 227-237*

Saravanakumar, R., Rajchakit, G., Ahn, C.K., and Karimi, H.R., Exponential Stability, Passivity, and Dissipativity Analysis of Generalized Neural Networks With Mixed Time-Varying Delays; *TSMC Feb. 2019 395-405*

Sari-Khanbaglo, M.P., see Taleizadeh, A.A., *TSMC Dec. 2019 2688-2699*

Sariel, S., see Inceoglu, A., *TSMC Jan. 2019 192-205*

Saxena, D., and Raychoudhury, V., Design and Verification of an NDN-Based Safety-Critical Application: A Case Study With Smart Healthcare; *TSMC May 2019 991-1005*

Schlueter, M., see Faramondi, L., *TSMC Oct. 2019 2036-2049*

Selvaraj, P., Sakthivel, R., and Ahn, C.K., Observer-Based Synchronization of Complex Dynamical Networks Under Actuator Saturation and Probabilistic Faults; *TSMC July 2019 1516-1526*

Senatore, S., see Cavaliere, D., *TSMC March 2019 555-567*

Setola, R., see Faramondi, L., *TSMC Oct. 2019 2036-2049*

Shang, Y., Subgraph Robustness of Complex Networks Under Attacks; *TSMC April 2019 821-832*

Shao, Z., see Li, S., *TSMC May 2019 932-941*

She, K., see Wang, X., *TSMC July 2019 1496-1504*

Shen, H., see Rahmani-Andebili, M., *TSMC April 2019 697-709*

Shen, H., see Rahmani-Andebili, M., *TSMC Sept. 2019 1879-1892*

Shen, M., Nguang, S.K., and Ahn, C.K., Quantized H_∞ Output Control of Linear Markov Jump Systems in Finite Frequency Domain; *TSMC Sept. 2019 1901-1911*

Shen, R., see Kamel, A., *TSMC Sept. 2019 1806-1819*

Shen, W., see Yan, K., *TSMC July 2019 1349-1356*

Shen, Y., Wu, Z., Shi, P., Su, H., and Huang, T., Asynchronous Filtering for Markov Jump Neural Networks With Quantized Outputs; *TSMC Feb. 2019 433-443*

Shen, Y., see Wu, Z., *TSMC Oct. 2019 2097-2107*

Sheng, B., see Kamel, A., *TSMC Sept. 2019 1806-1819*

Shi, C., Yang, G., and Li, X., Data-Based Fault-Tolerant Consensus Control for Uncertain Multiagent Systems Via Weighted Edge Dynamics; *TSMC Dec. 2019 2548-2558*

Shi, D., see Li, X., *TSMC June 2019 1218-1227*

Shi, L., see Wang, X., *TSMC July 2019 1496-1504*

Shi, P., see Shen, Y., *TSMC Feb. 2019 433-443*

Shi, P., see Wu, Z., *TSMC Feb. 2019 386-394*

Shi, P., see Huang, Y., *TSMC Oct. 2019 2082-2096*

Shi, P., see Xu, J., *TSMC Oct. 2019 2059-2070*

Shibata, N., see Ojetunde, B., *TSMC Dec. 2019 2651-2663*

- Shojaei, F.**, Arefi, M.M., Khayatian, A., and Karimi, H.R., Observer-Based Fuzzy Adaptive Dynamic Surface Control of Uncertain Nonstrict Feedback Systems With Unknown Control Direction and Unknown Dead-Zone; *TSMC Nov. 2019 2340-2351*
- Sithole, L.**, see Huang, Y., *TSMC Dec. 2019 2559-2570*
- Song, M.**, see Chen, S., *TSMC May 2019 942-953*
- Song, Q.**, see Chen, X., *TSMC Nov. 2019 2278-2287*
- Song, S.**, see Li, S., *TSMC June 2019 1194-1207*
- Song, S.**, see Wu, H., *TSMC Dec. 2019 2499-2510*
- Song, X.**, see Kang, Q., *TSMC Dec. 2019 2416-2423*
- Song, Y.**, see Su, X., *TSMC June 2019 1208-1217*
- Song, Y.**, Wang, Z., Ding, D., and Wei, G., Robust H_2/H_∞ Model Predictive Control for Linear Systems With Polytopic Uncertainties Under Weighted MEF-TOD Protocol; *TSMC July 2019 1470-1481*
- Song, Y.**, see Wen, S., *TSMC Sept. 2019 1787-1796*
- Su, C.**, see Zhang, X., *TSMC Dec. 2019 2424-2437*
- Su, H.**, see Shen, Y., *TSMC Feb. 2019 433-443*
- Su, H.**, see Wu, Z., *TSMC Feb. 2019 386-394*
- Su, H.**, see Wang, P., *TSMC March 2019 649-662*
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- Su, H.**, see Wu, H., *TSMC July 2019 1459-1469*
- Su, H.**, see Wu, Z., *TSMC Oct. 2019 2097-2107*
- Su, J.**, see Yi, D., *TSMC Jan. 2019 159-168*
- Su, J.**, see Yi, D., *TSMC Jan. 2019 64-70*
- Su, J.**, and Chen, W., Model-Based Fault Diagnosis System Verification Using Reachability Analysis; *TSMC April 2019 742-751*
- Su, S.**, see Wang, N., *TSMC July 2019 1322-1337*
- Su, S.**, see Sun, W., *TSMC Nov. 2019 2201-2209*
- Su, X.**, Wen, Y., Song, Y., and Hayat, T., Dissipativity-Based Fuzzy Control of Nonlinear Systems via an Event-Triggered Mechanism; *TSMC June 2019 1208-1217*
- Suarez, R.**, see Garcia, N., *TSMC Nov. 2019 2298-2307*
- Sui, T.**, see Yu, L., *TSMC Aug. 2019 1712-1719*
- Sun, B.**, see Xiong, F., *TSMC Jan. 2019 216-226*
- Sun, C.**, see He, W., *TSMC March 2019 543-554*
- Sun, C.**, see He, W., *TSMC May 2019 1027-1038*
- Sun, C.**, see Liu, J., *TSMC Nov. 2019 2221-2229*
- Sun, F.**, see Liu, H., *TSMC April 2019 766-775*
- Sun, F.**, see Liu, C., *TSMC Dec. 2019 2710-2723*
- Sun, H.**, see Peng, C., *TSMC Aug. 2019 1554-1569*
- Sun, J.**, see Wen, G., *TSMC Feb. 2019 406-417*
- Sun, J.**, Yang, Y., Xiong, N.N., Dai, L., Peng, X., and Luo, J., Complex Network Construction of Multivariate Time Series Using Information Geometry; *TSMC Jan. 2019 107-122*
- Sun, J.**, see Zhang, Y., *TSMC Sept. 2019 1759-1768*
- Sun, N.**, see Wu, Y., *TSMC June 2019 1186-1193*
- Sun, N.**, Yang, T., Fang, Y., Wu, Y., and Chen, H., Transportation Control of Double-Pendulum Cranes With a Nonlinear Quasi-PID Scheme: Design and Experiments; *TSMC July 2019 1408-1418*
- Sun, N.**, Yang, T., Chen, H., Fang, Y., and Qian, Y., Adaptive Anti-Swing and Positioning Control for 4-DOF Rotary Cranes Subject to Uncertain/Unknown Parameters With Hardware Experiments; *TSMC July 2019 1309-1321*
- Sun, Q.**, see Huang, B., *TSMC Aug. 2019 1634-1642*
- Sun, W.**, see Xia, J., *TSMC July 2019 1541-1548*
- Sun, W.**, Su, S., Xia, J., and Nguyen, V., Adaptive Fuzzy Tracking Control of Flexible-Joint Robots With Full-State Constraints; *TSMC Nov. 2019 2201-2209*
- Sun, X.**, see Yu, L., *TSMC Aug. 2019 1712-1719*
- Sun, Z.**, see Huang, Z., *TSMC April 2019 730-741*
- T**
- Taha, A.F.**, see Wang, S., *TSMC Aug. 2019 1612-1623*
- Taleizadeh, A.A.**, Sari-Khanbaglo, M.P., and Cardenas-Barron, L.E., Outsourcing Rework of Imperfect Items in the Economic Production Quantity (EPQ) Inventory Model With Backordered Demand; *TSMC Dec. 2019 2688-2699*
- Tan, J.**, see Huang, Z., *TSMC April 2019 730-741*
- Tan, J.**, see Feng, Y., *TSMC Dec. 2019 2438-2451*
- Tan, M.**, see Wang, R., *TSMC March 2019 482-493*
- Tanaka, K.**, see Tanaka, M., *TSMC June 2019 1291-1297*
- Tanaka, M.**, Tanaka, K., and Wang, H.O., Practical Model Construction and Stable Control of an Unmanned Aerial Vehicle With a Parafoil-Type Wing; *TSMC June 2019 1291-1297*
- Tang, Y.**, see Li, Z., *TSMC June 2019 1041-1052*
- Tang, Y.Y.**, see Xu, J., *TSMC Nov. 2019 2230-2241*
- Tao, F.**, and Qi, Q., New IT Driven Service-Oriented Smart Manufacturing: Framework and Characteristics; *TSMC Jan. 2019 81-91*
- Tao, J.**, Lu, R., Wu, Z., and Wu, Y., Reliable Control Against Sensor Failures for Markov Jump Systems With Unideal Measurements; *TSMC Feb. 2019 308-316*
- Tavcar, J.**, and Horvath, I., A Review of the Principles of Designing Smart Cyber-Physical Systems for Run-Time Adaptation: Learned Lessons and Open Issues; *TSMC Jan. 2019 145-158*
- Teng, S.**, see Fei, L., *TSMC Feb. 2019 346-363*
- Than, T.D.**, Alici, G., Zhou, H., Harvey, S., and Li, W., Enhanced Localization of Robotic Capsule Endoscopes Using Positron Emission Markers and Rigid-Body Transformation; *TSMC June 2019 1270-1284*
- Tian, G.**, see Feng, Y., *TSMC Dec. 2019 2438-2451*
- Tian, L.**, see Ma, L., *TSMC May 2019 861-880*
- Tian, Y.**, see Hu, B., *TSMC Aug. 2019 1720-1730*
- Tian, Y.**, see Xing, L., *TSMC Aug. 2019 1601-1611*
- Tong, S.**, see Li, Y., *TSMC Sept. 2019 1777-1786*
- Tsakalidis, G.**, and Vergidis, K., A Systematic Approach Toward Description and Classification of Cybercrime Incidents; *TSMC April 2019 710-729*
- V**
- Van, M.**, Mavrouniotis, M., and Ge, S.S., An Adaptive Backstepping Nonsingular Fast Terminal Sliding Mode Control for Robust Fault Tolerant Control of Robot Manipulators; *TSMC July 2019 1448-1458*
- Vasilakos, A.V.**, see Huang, M., *TSMC Feb. 2019 317-332*
- Vento, M.**, see Cavaliere, D., *TSMC March 2019 555-567*
- Vergidis, K.**, see Tsakalidis, G., *TSMC April 2019 710-729*
- W**
- Wan, L.**, see Li, X., *TSMC Oct. 2019 1933-1945*
- Wang, B.**, Li, H., Li, J., and Wang, Y., Composite Differential Evolution for Constrained Evolutionary Optimization; *TSMC July 2019 1482-1495*
- Wang, C.**, see Xi, J., *TSMC July 2019 1338-1348*
- Wang, C.**, see Zhang, X., *TSMC Dec. 2019 2424-2437*
- Wang, D.**, see Niu, B., *TSMC Feb. 2019 418-432*
- Wang, F.**, and Zhang, X., Adaptive Finite Time Control of Nonlinear Systems Under Time-Varying Actuator Failures; *TSMC Sept. 2019 1845-1852*
- Wang, F.**, see Wang, S., *TSMC Nov. 2019 2266-2277*
- Wang, G.**, see Wu, J., *TSMC March 2019 638-648*
- Wang, G.**, Zhang, G., Choi, K., and Lu, J., Deep Additive Least Squares Support Vector Machines for Classification With Model Transfer; *TSMC July 2019 1527-1540*
- Wang, G.**, see Li, Y., *TSMC Oct. 2019 2175-2188*
- Wang, H.**, see Feng, L., *TSMC Dec. 2019 2384-2395*
- Wang, H.O.**, see Tanaka, M., *TSMC June 2019 1291-1297*
- Wang, J.**, Hipel, K.W., Fang, L., Xu, H., and Kilgour, D.M., Behavioral Analysis in the Graph Model for Conflict Resolution; *TSMC May 2019 904-916*
- Wang, J.**, Wei, P., Wu, H., Huang, T., and Xu, M., Pinning Synchronization of Complex Dynamical Networks With Multiweights; *TSMC July 2019 1357-1370*
- Wang, J.**, see Wang, S., *TSMC Aug. 2019 1612-1623*
- Wang, J.**, see Ji, P., *TSMC Oct. 2019 1993-2004*
- Wang, L.**, see Xi, J., *TSMC July 2019 1338-1348*
- Wang, L.**, and Orchard, J., Investigating the Evolution of a Neuroplasticity Network for Learning; *TSMC Oct. 2019 2131-2143*
- Wang, L.**, see Feng, L., *TSMC Dec. 2019 2384-2395*

- Wang, N.**, Su, S., Han, M., and Chen, W., Backpropagating Constraints-Based Trajectory Tracking Control of a Quadrotor With Constrained Actuator Dynamics and Complex Unknowns; *TSMC July 2019 1322-1337*
- Wang, P.**, see Wen, G., *TSMC Feb. 2019 406-417*
- Wang, P.**, Zhang, B., and Su, H., Stabilization of Stochastic Uncertain Complex-Valued Delayed Networks via Aperiodically Intermittent Nonlinear Control; *TSMC March 2019 649-662*
- Wang, Q.**, see Zhang, Z., *TSMC March 2019 612-622*
- Wang, Q.**, see Chen, J., *TSMC April 2019 833-842*
- Wang, Q.**, see Liu, Y., *TSMC Nov. 2019 2362-2372*
- Wang, R.**, Wang, S., Wang, Y., Tan, M., and Yu, J., A Paradigm for Path Following Control of a Ribbon-Fin Propelled Biomimetic Underwater Vehicle; *TSMC March 2019 482-493*
- Wang, R.**, see Wang, X., *TSMC July 2019 1299-1308*
- Wang, R.**, see Zhang, X., *TSMC Oct. 2019 2071-2081*
- Wang, R.**, Dong, X., Li, Q., and Ren, Z., Distributed Time-Varying Formation Control for Linear Swarm Systems With Switching Topologies Using an Adaptive Output-Feedback Approach; *TSMC Dec. 2019 2664-2675*
- Wang, S.**, see Deng, C., *TSMC March 2019 516-527*
- Wang, S.**, see Wang, R., *TSMC March 2019 482-493*
- Wang, S.**, see Zhang, Y., *TSMC May 2019 917-931*
- Wang, S.**, Taha, A.F., Wang, J., Kvaternik, K., and Hahn, A., Energy Crowdsourcing and Peer-to-Peer Energy Trading in Blockchain-Enabled Smart Grids; *TSMC Aug. 2019 1612-1623*
- Wang, S.**, Ouyang, L., Yuan, Y., Ni, X., Han, X., and Wang, F., Blockchain-Enabled Smart Contracts: Architecture, Applications, and Future Trends; *TSMC Nov. 2019 2266-2277*
- Wang, T.**, see Huang, M., *TSMC Feb. 2019 317-332*
- Wang, T.**, see Liu, Y., *TSMC Oct. 2019 1946-1960*
- Wang, W.**, see Yang, S., *TSMC Jan. 2019 53-63*
- Wang, W.**, Gu, D., and Xie, G., Autonomous Optimization of Swimming Gait in a Fish Robot With Multiple Onboard Sensors; *TSMC May 2019 891-903*
- Wang, W.**, Zhang, G., and Lu, J., Hierarchy Visualization for Group Recommender Systems; *TSMC June 2019 1152-1163*
- Wang, X.**, see Ma, L., *TSMC May 2019 861-880*
- Wang, X.**, Liu, X., She, K., Zhong, S., and Shi, L., Delay-Dependent Impulsive Distributed Synchronization of Stochastic Complex Dynamical Networks With Time-Varying Delays; *TSMC July 2019 1496-1504*
- Wang, X.**, Zhang, T., and Wang, R., Noniterative Deep Learning: Incorporating Restricted Boltzmann Machine Into Multilayer Random Weight Neural Networks; *TSMC July 2019 1299-1308*
- Wang, X.**, see Zhao, X., *TSMC Sept. 2019 1820-1831*
- Wang, X.**, and Yang, G., Event-Triggered H_∞ Filtering for Discrete-Time T-S Fuzzy Systems via Network Delay Optimization Technique; *TSMC Oct. 2019 2026-2035*
- Wang, X.**, see Li, G., *TSMC Dec. 2019 2571-2581*
- Wang, X.**, see Xu, W., *TSMC Dec. 2019 2464-2477*
- Wang, Y.**, Xia, Y., Ahn, C.K., and Zhu, Y., Exponential Stabilization of Takagi-Sugeno Fuzzy Systems With Aperiodic Sampling: An Aperiodic Adaptive Event-Triggered Method; *TSMC Feb. 2019 444-454*
- Wang, Y.**, see Zhang, Q., *TSMC March 2019 494-505*
- Wang, Y.**, see Wang, R., *TSMC March 2019 482-493*
- Wang, Y.**, see Zhang, Y., *TSMC May 2019 845-860*
- Wang, Y.**, see Wang, B., *TSMC July 2019 1482-1495*
- Wang, Y.**, see Peng, C., *TSMC Aug. 2019 1554-1569*
- Wang, Y.**, see Cao, J., *TSMC Aug. 2019 1652-1664*
- Wang, Y.**, see Zhang, X., *TSMC Dec. 2019 2424-2437*
- Wang, Y.**, see Xin, B., *TSMC Dec. 2019 2536-2547*
- Wang, Z.**, and Wu, H., Robust Guaranteed Cost Sampled-Data Fuzzy Control for Uncertain Nonlinear Time-Delay Systems; *TSMC May 2019 964-975*
- Wang, Z.**, see Li, B., *TSMC June 2019 1099-1109*
- Wang, Z.**, see Duan, J., *TSMC June 2019 1175-1185*
- Wang, Z.**, see Liu, Y., *TSMC June 2019 1088-1098*
- Wang, Z.**, see Xia, J., *TSMC July 2019 1541-1548*
- Wang, Z.**, see Song, Y., *TSMC July 2019 1470-1481*
- Wang, Z.**, see Chen, J., *TSMC Aug. 2019 1679-1687*
- Wang, Z.**, see Li, Y., *TSMC Oct. 2019 2175-2188*
- Wang, Z.**, and Li, H., Incremental Spatiotemporal Learning for Online Modeling of Distributed Parameter Systems; *TSMC Dec. 2019 2612-2622*
- Wei, G.**, see Song, Y., *TSMC July 2019 1470-1481*
- Wei, G.**, see Chen, W., *TSMC Aug. 2019 1688-1697*
- Wei, P.**, see Wang, J., *TSMC July 2019 1357-1370*
- Wei, Z.**, see Zhang, J., *TSMC June 2019 1141-1151*
- Wen, G.**, Wang, P., Huang, T., Yu, W., and Sun, J., Robust Neuro-Adaptive Containment of Multileader Multiagent Systems With Uncertain Dynamics; *TSMC Feb. 2019 406-417*
- Wen, G.**, see Zhao, Z., *TSMC Oct. 2019 1971-1980*
- Wen, G.**, see Zhao, Z., *TSMC Dec. 2019 2374-2383*
- Wen, L.**, Gao, L., and Li, X., A New Deep Transfer Learning Based on Sparse Auto-Encoder for Fault Diagnosis; *TSMC Jan. 2019 136-144*
- Wen, S.**, Hu, R., Yang, Y., Huang, T., Zeng, Z., and Song, Y., Memristor-Based Echo State Network With Online Least Mean Square; *TSMC Sept. 2019 1787-1796*
- Wen, Y.**, see Su, X., *TSMC June 2019 1208-1217*
- Woods, A.C.**, and La, H.M., A Novel Potential Field Controller for Use on Aerial Robots; *TSMC April 2019 665-676*
- Wu, C.**, see Li, S., *TSMC June 2019 1194-1207*
- Wu, C.**, see Wu, H., *TSMC Dec. 2019 2499-2510*
- Wu, H.**, see Wang, Z., *TSMC May 2019 964-975*
- Wu, H.**, and Su, H., Observer-Based Consensus for Positive Multiagent Systems With Directed Topology and Nonlinear Control Input; *TSMC July 2019 1459-1469*
- Wu, H.**, see Wang, J., *TSMC July 2019 1357-1370*
- Wu, H.**, Song, S., You, K., and Wu, C., Depth Control of Model-Free AUVs via Reinforcement Learning; *TSMC Dec. 2019 2499-2510*
- Wu, J.**, Wu, Z., Li, J., Wang, G., Zhao, H., and Chen, W., Practical Adaptive Fuzzy Control of Nonlinear Pure-Feedback Systems With Quantized Nonlinearity Input; *TSMC March 2019 638-648*
- Wu, L.**, see Du, D., *TSMC Aug. 2019 1698-1711*
- Wu, M.**, see Zhang, Z., *TSMC March 2019 612-622*
- Wu, N.**, see Zhu, G., *TSMC Feb. 2019 333-345*
- Wu, N.**, see Qiao, Y., *TSMC June 2019 1228-1240*
- Wu, N.**, see Liu, G., *TSMC July 2019 1371-1385*
- Wu, X.**, see Huang, B., *TSMC May 2019 954-963*
- Wu, X.**, see Cheng, J., *TSMC Sept. 2019 1832-1844*
- Wu, Y.**, see Tao, J., *TSMC Feb. 2019 308-316*
- Wu, Y.**, Sun, N., Fang, Y., and Liang, D., An Increased Nonlinear Coupling Motion Controller for Underactuated Multi-TORA Systems: Theoretical Design and Hardware Experimentation; *TSMC June 2019 1186-1193*
- Wu, Y.**, Hu, B., and Guan, Z., Exponential Consensus Analysis for Multiagent Networks Based on Time-Delay Impulsive Systems; *TSMC June 2019 1073-1080*
- Wu, Y.**, see Sun, N., *TSMC July 2019 1408-1418*
- Wu, Y.**, Zhao, Y., and Hu, J., Bipartite Consensus Control of High-Order Multiagent Systems With Unknown Disturbances; *TSMC Oct. 2019 2189-2199*
- Wu, Y.**, Jiang, B., and Lu, N., A Descriptor System Approach for Estimation of Incipient Faults With Application to High-Speed Railway Traction Devices; *TSMC Oct. 2019 2108-2118*
- Wu, Z.**, see Shen, Y., *TSMC Feb. 2019 433-443*
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- Cooperative Adaptive Event-Triggered Control for Multiagent Systems With Actuator Failures. *Zhang, Y., +, TSMC Sept. 2019 1759-1768*
- Coordination Control of a Dual-Arm Exoskeleton Robot Using Human Impedance Transfer Skills. *Huang, B., +, TSMC May 2019 954-963*
- Decentralized Adaptive Neural Approximated Inverse Control for a Class of Large-Scale Nonlinear Hysteretic Systems With Time Delays. *Zhang, X., +, TSMC Dec. 2019 2424-2437*
- Distributed Adaptive Fuzzy Containment Control of Stochastic Pure-Feedback Nonlinear Multiagent Systems With Local Quantized Controller and Tracking Constraint. *Zhang, L., +, TSMC April 2019 787-796*
- Dual-Loop Adaptive Iterative Learning Control for a Timoshenko Beam With Output Constraint and Input Backlash. *He, W., +, TSMC May 2019 1027-1038*
- Energy-Saving Dynamic Bias Current Control of Active Magnetic Bearing Positioning System Using Adaptive Differential Evolution. *Chen, S., +, TSMC May 2019 942-953*
- Exponential Stabilization of Takagi–Sugeno Fuzzy Systems With Aperiodic Sampling: An Aperiodic Adaptive Event-Triggered Method. *Wang, Y., +, TSMC Feb. 2019 444-454*
- Finite-Time Adaptive Fuzzy Control for Nonlinear Systems With Full State Constraints. *Xia, J., +, TSMC July 2019 1541-1548*
- Finite-Time Synchronization for Chaotic Gyros Systems With Terminal Sliding Mode Control. *Yin, L., +, TSMC June 2019 1131-1140*
- Fuzzy Adaptive Distributed Event-Triggered Consensus Control of Uncertain Nonlinear Multiagent Systems. *Li, Y., +, TSMC Sept. 2019 1777-1786*
- Fuzzy Tracking Control for a Class of Uncertain MIMO Nonlinear Systems With State Constraints. *He, W., +, TSMC March 2019 543-554*
- Immersion and Invariance-Based Adaptive Controller for Quadrotor Systems. *Zou, Y., +, TSMC Nov. 2019 2288-2297*
- Model Free Adaptive Iterative Learning Consensus Tracking Control for a Class of Nonlinear Multiagent Systems. *Bu, X., +, TSMC April 2019 677-686*
- Neural-Network-Based Robust Control Schemes for Nonlinear Multiplayer Systems With Uncertainties via Adaptive Dynamic Programming. *Jiang, H., +, TSMC March 2019 579-588*
- Observer-Based Adaptive Consensus for a Class of Nonlinear Multiagent Systems. *Mao, J., +, TSMC Sept. 2019 1893-1900*
- Observer-Based Adaptive Fuzzy Fault-Tolerant Control for Stochastic Nonstrict-Feedback Nonlinear Systems With Input Quantization. *Ma, H., +, TSMC Feb. 2019 287-298*
- Observer-Based Decentralized Adaptive NNs Fault-Tolerant Control of a Class of Large-Scale Uncertain Nonlinear Systems With Actuator Failures. *Yang, Y., +, TSMC March 2019 528-542*
- Observer-Based Fuzzy Adaptive Dynamic Surface Control of Uncertain Nonstrict Feedback Systems With Unknown Control Direction and Unknown Dead-Zone. *Shojaei, F., +, TSMC Nov. 2019 2340-2351*
- Pinning Synchronization of Complex Dynamical Networks With Multiweights. *Wang, J., +, TSMC July 2019 1357-1370*
- Practical Adaptive Fuzzy Control of Nonlinear Pure-Feedback Systems With Quantized Nonlinearity Input. *Wu, J., +, TSMC March 2019 638-648*
- Robust Neuro-Adaptive Containment of Multileader Multiagent Systems With Uncertain Dynamics. *Wen, G., +, TSMC Feb. 2019 406-417*
- Robust Simultaneous Fault Estimation and Nonfragile Output Feedback Fault-Tolerant Control for Markovian Jump Systems. *Li, X., +, TSMC Sept. 2019 1769-1776*
- Adaptive systems**
- Data-Driven Adaptive Sliding Mode Control of Nonlinear Discrete-Time Systems With Prescribed Performance. *Liu, D., +, TSMC Dec. 2019 2598-2604*
- Distributed Time-Varying Formation Control for Linear Swarm Systems With Switching Topologies Using an Adaptive Output-Feedback Approach. *Wang, R., +, TSMC Dec. 2019 2664-2675*
- Robust Adaptive Nonsingular Terminal Sliding Mode Control for Automatic Train Operation. *Yao, X., +, TSMC Dec. 2019 2406-2415*
- Advertising data processing**
- Online Change-Point Detection in Sparse Time Series With Application to Online Advertising. *Zhang, J., +, TSMC June 2019 1141-1151*
- Aerodynamics**
- Practical Model Construction and Stable Control of an Unmanned Aerial Vehicle With a Parafoil-Type Wing. *Tanaka, M., +, TSMC June 2019 1291-1297*
- Aerospace components**
- Practical Model Construction and Stable Control of an Unmanned Aerial Vehicle With a Parafoil-Type Wing. *Tanaka, M., +, TSMC June 2019 1291-1297*
- Aerospace electronics**
- Singularity-Free Trajectory Planning of Free-Floating Multiarm Space Robots for Keeping the Base Inertially Stabilized. *Xu, W., +, TSMC Dec. 2019 2464-2477*
- Air conditioning**
- Coordinated Dispatch of Virtual Energy Storage Systems in Smart Distribution Networks for Loading Management. *Meng, K., +, TSMC April 2019 776-786*
- Distributed Energy Management Strategy for Reaching Cost-Driven Optimal Operation Integrated With Wind Forecasting in Multimicrogrids System. *He, X., +, TSMC Aug. 2019 1643-1651*
- Air pollution**
- Automated Model Construction for Combined Sewer Overflow Prediction Based on Efficient LASSO Algorithm. *Zhao, W., +, TSMC June 2019 1254-1269*
- The MR-CA Models for Analysis of Pollution Sources and Prediction of PM_{2.5}. *Deng, F., +, TSMC April 2019 814-820*
- Air pollution control**
- Impact of Carbon Regulations on the Supply Chain With Carbon Reduction Effort. *Li, X., +, TSMC June 2019 1218-1227*
- Aircraft control**
- Immersion and Invariance-Based Adaptive Controller for Quadrotor Systems. *Zou, Y., +, TSMC Nov. 2019 2288-2297*
- Reliable Tracking Control for Under-Actuated Quadrotors With Wind Disturbances. *Xu, J., +, TSMC Oct. 2019 2059-2070*
- Algorithm design and analysis**
- A Continuous-Time Algorithm for Distributed Optimization Based on Multiagent Networks. *He, X., +, TSMC Dec. 2019 2700-2709*
- An Efficient Marginal-Return-Based Constructive Heuristic to Solve the Sensor–Weapon–Target Assignment Problem. *Xin, B., +, TSMC Dec. 2019 2536-2547*
- Angular velocity measurement**
- Nonlinear Stochastic Attitude Filters on the Special Orthogonal Group 3: Ito and Stratonovich. *Hashim, H.A., +, TSMC Sept. 2019 1853-1865*
- Approximation algorithms**
- Approximate Nash Solutions for Multiplayer Mixed-Zero-Sum Game With Reinforcement Learning. *Lv, Y., +, TSMC Dec. 2019 2739-2750*
- Approximation theory**
- Adaptive Neural Backstepping Control Design for A Class of Nonsmooth Nonlinear Systems. *Zhao, X., +, TSMC Sept. 2019 1820-1831*
- Finite-Time Adaptive Fuzzy Control for Nonlinear Systems With Full State Constraints. *Xia, J., +, TSMC July 2019 1541-1548*
- Robust Neuro-Adaptive Containment of Multileader Multiagent Systems With Uncertain Dynamics. *Wen, G., +, TSMC Feb. 2019 406-417*
- Artificial bee colony algorithm**
- Two-Level Master–Slave RFID Networks Planning via Hybrid Multiobjective Artificial Bee Colony Optimizer. *Ma, L., +, TSMC May 2019 861-880*
- Artificial neural networks**
- Adaptive Neural Network Control for Uncertain Time-Varying State Constrained Robotics Systems. *Lu, S., +, TSMC Dec. 2019 2511-2518*
- Approximate Nash Solutions for Multiplayer Mixed-Zero-Sum Game With Reinforcement Learning. *Lv, Y., +, TSMC Dec. 2019 2739-2750*
- Assembling**
- An Advanced Cyber Physical Framework for Micro Devices Assembly. *Cecil, J., +, TSMC Jan. 2019 92-106*
- Assembly planning**
- An Advanced Cyber Physical Framework for Micro Devices Assembly. *Cecil, J., +, TSMC Jan. 2019 92-106*
- Asymptotic stability**
- H_2 Performance Analysis and Applications of 2-D Hidden Bernoulli Jump System. *Wu, Z., +, TSMC Oct. 2019 2097-2107*

A Novel Asynchronous Control for Artificial Delayed Markovian Jump Systems via Output Feedback Sliding Mode Approach. *Du, C.*, +, *TSMC Feb. 2019 364-374*

Acceleration-Level Pseudo-Dynamic Visual Servoing of Mobile Robots With Backstepping and Dynamic Surface Control. *Zhang, X.*, +, *TSMC Oct. 2019 2071-2081*

An Adaptive Backstepping Nonsingular Fast Terminal Sliding Mode Control for Robust Fault Tolerant Control of Robot Manipulators. *Van, M.*, +, *TSMC July 2019 1448-1458*

An Increased Nonlinear Coupling Motion Controller for Underactuated Multi-TORA Systems: Theoretical Design and Hardware Experimentation. *Wu, Y.*, +, *TSMC June 2019 1186-1193*

Asynchronous Filtering for Markov Jump Neural Networks With Quantized Outputs. *Shen, Y.*, +, *TSMC Feb. 2019 433-443*

Cooperative Stabilization for Linear Switched Systems With Asynchronous Switching. *Hua, C.*, +, *TSMC June 2019 1081-1087*

Dissipativity-Based Fuzzy Control of Nonlinear Systems via an Event-Triggered Mechanism. *Su, X.*, +, *TSMC June 2019 1208-1217*

Event-Triggered H_∞ Load Frequency Control for Multiarea Power Systems Under Hybrid Cyber Attacks. *Liu, J.*, +, *TSMC Aug. 2019 1665-1678*

Event-Triggered Partial-Nodes-Based State Estimation for Delayed Complex Networks With Bounded Distributed Delays. *Liu, Y.*, +, *TSMC June 2019 1088-1098*

Exponential Stability, Passivity, and Dissipativity Analysis of Generalized Neural Networks With Mixed Time-Varying Delays. *Saravanakumar, R.*, +, *TSMC Feb. 2019 395-405*

Exponential Stabilization of Takagi–Sugeno Fuzzy Systems With Aperiodic Sampling: An Aperiodic Adaptive Event-Triggered Method. *Wang, Y.*, +, *TSMC Feb. 2019 444-454*

Exponential Synchronization of Neural Networks With Time-Varying Delays via Dynamic Intermittent Output Feedback Control. *Zhang, Z.*, +, *TSMC March 2019 612-622*

Fast and Stable Learning of Dynamical Systems Based on Extreme Learning Machine. *Duan, J.*, +, *TSMC June 2019 1175-1185*

Fault-Tolerant Resilient Control For Fuzzy Fractional Order Systems. *Sakthivel, R.*, +, *TSMC Sept. 2019 1797-1805*

Finite-Time Resilient Controller Design of a Class of Uncertain Nonlinear Systems With Time-Delays Under Asynchronous Switching. *He, S.*, +, *TSMC Feb. 2019 281-286*

Global Asymptotic Stability and Adaptive Ultimate Mittag–Leffler Synchronization for a Fractional-Order Complex-Valued Memristive Neural Networks With Delays. *Chen, J.*, +, *TSMC Dec. 2019 2519-2535*

Global Exponential Stability of Impulsive Delay Systems With Flexible Impulse Frequency. *Li, X.*, *TSMC Oct. 2019 2166-2174*

Global Stabilization of a Class of Switched Nonlinear Systems Under Sampled-Data Control. *Li, S.*, +, *TSMC Sept. 2019 1912-1919*

Immersion and Invariance-Based Adaptive Controller for Quadrotor Systems. *Zou, Y.*, +, *TSMC Nov. 2019 2288-2297*

Passivity Analysis for Memristor-Based Inertial Neural Networks With Discrete and Distributed Delays. *Xiao, Q.*, +, *TSMC Feb. 2019 375-385*

Practical Model Construction and Stable Control of an Unmanned Aerial Vehicle With a Parafoil-Type Wing. *Tanaka, M.*, +, *TSMC June 2019 1291-1297*

Quantized Fuzzy Output Feedback H_∞ Control for Nonlinear Systems With Adjustment of Dynamic Parameters. *Chang, X.*, +, *TSMC Oct. 2019 2005-2015*

Reliable Control Against Sensor Failures for Markov Jump Systems With Unideal Measurements. *Tao, J.*, +, *TSMC Feb. 2019 308-316*

Robust Guaranteed Cost Sampled-Data Fuzzy Control for Uncertain Nonlinear Time-Delay Systems. *Wang, Z.*, +, *TSMC May 2019 964-975*

Atmospheric composition

The MR-CA Models for Analysis of Pollution Sources and Prediction of $PM_{2.5}$. *Deng, F.*, +, *TSMC April 2019 814-820*

Attitude control

Immersion and Invariance-Based Adaptive Controller for Quadrotor Systems. *Zou, Y.*, +, *TSMC Nov. 2019 2288-2297*

Authentication

Secure Payment System Utilizing MANET for Disaster Areas. *Ojetunde, B.*, +, *TSMC Dec. 2019 2651-2663*

Autonomous aerial vehicles

A Novel Potential Field Controller for Use on Aerial Robots. *Woods, A.C.*, +, *TSMC April 2019 665-676*

A Novel Real-Time Moving Target Tracking and Path Planning System for a Quadrotor UAV in Unknown Unstructured Outdoor Scenes. *Liu, Y.*, +, *TSMC Nov. 2019 2362-2372*

Practical Model Construction and Stable Control of an Unmanned Aerial Vehicle With a Parafoil-Type Wing. *Tanaka, M.*, +, *TSMC June 2019 1291-1297*

Semantically Enhanced UAVs to Increase the Aerial Scene Understanding. *Cavaliere, D.*, +, *TSMC March 2019 555-567*

Autonomous underwater vehicles

A Paradigm for Path Following Control of a Ribbon-Fin Propelled Biometric Underwater Vehicle. *Wang, R.*, +, *TSMC March 2019 482-493*

Autonomous Optimization of Swimming Gait in a Fish Robot With Multiple Onboard Sensors. *Wang, W.*, +, *TSMC May 2019 891-903*

B

Backpropagation

Backpropagating Constraints-Based Trajectory Tracking Control of a Quadrotor With Constrained Actuator Dynamics and Complex Unknowns. *Wang, N.*, +, *TSMC July 2019 1322-1337*

Event-Triggered Optimal Neuro-Controller Design With Reinforcement Learning for Unknown Nonlinear Systems. *Yang, X.*, +, *TSMC Sept. 2019 1866-1878*

Backstepping

Output Feedback Stabilization for an Axially Moving System. *Zhao, Z.*, +, *TSMC Dec. 2019 2374-2383*

Bandwidth

Hybrid-Driven-Based H_∞ Control for Networked Cascade Control Systems With Actuator Saturations and Stochastic Cyber Attacks. *Liu, J.*, +, *TSMC Dec. 2019 2452-2463*

Battery powered vehicles

Planning and Operation of Parking Lots Considering System, Traffic, and Drivers Behavioral Model. *Rahmani-Andebili, M.*, +, *TSMC Sept. 2019 1879-1892*

Bayes methods

Robust Kalman Filters Based on Gaussian Scale Mixture Distributions With Application to Target Tracking. *Huang, Y.*, +, *TSMC Oct. 2019 2082-2096*

Beams (structures)

Dual-Loop Adaptive Iterative Learning Control for a Timoshenko Beam With Output Constraint and Input Backlash. *He, W.*, +, *TSMC May 2019 1027-1038*

Belief networks

A New Deep Transfer Learning Based on Sparse Auto-Encoder for Fault Diagnosis. *Wen, L.*, +, *TSMC Jan. 2019 136-144*

Belts

Output Feedback Stabilization for an Axially Moving System. *Zhao, Z.*, +, *TSMC Dec. 2019 2374-2383*

Benchmark testing

Historical and Heuristic-Based Adaptive Differential Evolution. *Liu, X.*, +, *TSMC Dec. 2019 2623-2635*

Bending

Dual-Loop Adaptive Iterative Learning Control for a Timoshenko Beam With Output Constraint and Input Backlash. *He, W.*, +, *TSMC May 2019 1027-1038*

Big Data

New IT Driven Service-Oriented Smart Manufacturing: Framework and Characteristics. *Tao, F.*, +, *TSMC Jan. 2019 81-91*

Bioinformatics

Investigating the Evolution of a Neuroplasticity Network for Learning. *Wang, L.*, +, *TSMC Oct. 2019 2131-2143*

Biological organs

Enhanced Localization of Robotic Capsule Endoscopes Using Positron Emission Markers and Rigid-Body Transformation. *Than, T.D., +, TSMC June 2019 1270-1284*

Biology computing

ELM-Based Large-Scale Genetic Association Study via Statistically Significant Pattern. *Li, Y., +, TSMC Oct. 2019 2175-2188*

Identification of Multiview Gene Modules Using Mutual Information-Based Hypograph Mining. *Bhadra, T., +, TSMC June 2019 1119-1130*

Biomechanics

Coordination Control of a Dual-Arm Exoskeleton Robot Using Human Impedance Transfer Skills. *Huang, B., +, TSMC May 2019 954-963*

Biomedical communication

Design and Verification of an NDN-Based Safety-Critical Application: A Case Study With Smart Healthcare. *Saxena, D., +, TSMC May 2019 991-1005*

Biometrics (access control)

Feature Extraction Methods for Palmprint Recognition: A Survey and Evaluation. *Fei, L., +, TSMC Feb. 2019 346-363*

I-Am: Implicitly Authenticate Me—Person Authentication on Mobile Devices Through Ear Shape and Arm Gesture. *Abate, A.F., +, TSMC March 2019 469-481*

Biomimetics

A Paradigm for Path Following Control of a Ribbon-Fin Propelled Biomimetic Underwater Vehicle. *Wang, R., +, TSMC March 2019 482-493*

Bitcoin

Secure Payment System Utilizing MANET for Disaster Areas. *Ojetunde, B., +, TSMC Dec. 2019 2651-2663*

Boltzmann machines

Noniterative Deep Learning: Incorporating Restricted Boltzmann Machine Into Multilayer Random Weight Neural Networks. *Wang, X., +, TSMC July 2019 1299-1308*

Brain

Investigating the Evolution of a Neuroplasticity Network for Learning. *Wang, L., +, TSMC Oct. 2019 2131-2143*

Brakes

A Computationally Efficient and Hierarchical Control Strategy for Velocity Optimization of On-Road Vehicles. *Guo, L., +, TSMC Jan. 2019 31-41*

Parameterized Batch Reinforcement Learning for Longitudinal Control of Autonomous Land Vehicles. *Huang, Z., +, TSMC April 2019 730-741*

Brownian motion

Sliding-Mode Control for Singular Markovian Jump Systems With Brownian Motion Based on Stochastic Sliding Mode Surface. *Zhang, Q., +, TSMC March 2019 494-505*

Buildings (structures)

Price-Controlled Energy Management of Smart Homes for Maximizing Profit of a GENCO. *Rahmani-Andebili, M., +, TSMC April 2019 697-709*

C**Cameras**

Structure From Motion Technique for Scene Detection Using Autonomous Drone Navigation. *Huang, Y., +, TSMC Dec. 2019 2559-2570*

Cancer

Identification of Multiview Gene Modules Using Mutual Information-Based Hypograph Mining. *Bhadra, T., +, TSMC June 2019 1119-1130*

Learning a Distance Metric by Balancing KL-Divergence for Imbalanced Datasets. *Feng, L., +, TSMC Dec. 2019 2384-2395*

Cancer detection

Learning a Distance Metric by Balancing KL-Divergence for Imbalanced Datasets. *Feng, L., +, TSMC Dec. 2019 2384-2395*

Cellular automata

The MR-CA Models for Analysis of Pollution Sources and Prediction of PM_{2.5}. *Deng, F., +, TSMC April 2019 814-820*

Chaos

Finite-Time Synchronization for Chaotic Gyros Systems With Terminal Sliding Mode Control. *Yin, L., +, TSMC June 2019 1131-1140*

Multivariate Chaotic Time Series Prediction Based on Improved Grey Relational Analysis. *Han, M., +, TSMC Oct. 2019 2144-2154*

Circuit stability

Global Asymptotic Stability and Adaptive Ultimate Mittag-Leffler Synchronization for a Fractional-Order Complex-Valued Memristive Neural Networks With Delays. *Chen, J., +, TSMC Dec. 2019 2519-2535*

Closed loop systems

A Novel Neural-Network-Based Adaptive Control Scheme for Output-Constrained Stochastic Switched Nonlinear Systems. *Niu, B., +, TSMC Feb. 2019 418-432*

Acceleration-Level Pseudo-Dynamic Visual Servoing of Mobile Robots With Backstepping and Dynamic Surface Control. *Zhang, X., +, TSMC Oct. 2019 2071-2081*

Adaptive Dynamic Surface Control Design for Uncertain Nonlinear Strict-Feedback Systems With Unknown Control Direction and Disturbances. *Ma, H., +, TSMC March 2019 506-515*

Adaptive Finite Time Control of Nonlinear Systems Under Time-Varying Actuator Failures. *Wang, F., +, TSMC Sept. 2019 1845-1852*

Adaptive Neural Backstepping Control Design for A Class of Nonsmooth Nonlinear Systems. *Zhao, X., +, TSMC Sept. 2019 1820-1831*

Adaptive Neural-Network-Based Dynamic Surface Control for Stochastic Interconnected Nonlinear Nonstrict-Feedback Systems With Dead Zone. *Niu, B., +, TSMC July 2019 1386-1398*

An Increased Nonlinear Coupling Motion Controller for Underactuated Multi-TORA Systems: Theoretical Design and Hardware Experimentation. *Wu, Y., +, TSMC June 2019 1186-1193*

Backpropagating Constraints-Based Trajectory Tracking Control of a Quadrotor With Constrained Actuator Dynamics and Complex Unknowns. *Wang, N., +, TSMC July 2019 1322-1337*

Boundary Control for an Axially Moving System With Input Restriction Based on Disturbance Observers. *Liu, Y., +, TSMC Nov. 2019 2242-2253*

Consensus of Multiagent Systems With Nonlinear Dynamics Using an Integrated Sampled-Data-Based Event-Triggered Communication Scheme. *Peng, C., +, TSMC March 2019 589-599*

Dissipativity-Based Fuzzy Control of Nonlinear Systems via an Event-Triggered Mechanism. *Su, X., +, TSMC June 2019 1208-1217*

Distributed Adaptive Fuzzy Containment Control of Stochastic Pure-Feedback Nonlinear Multiagent Systems With Local Quantized Controller and Tracking Constraint. *Zhang, L., +, TSMC April 2019 787-796*

Event-Triggered Optimal Neuro-Controller Design With Reinforcement Learning for Unknown Nonlinear Systems. *Yang, X., +, TSMC Sept. 2019 1866-1878*

Exponential Synchronization of Neural Networks With Time-Varying Delays via Dynamic Intermittent Output Feedback Control. *Zhang, Z., +, TSMC March 2019 612-622*

Fault-Tolerant Resilient Control For Fuzzy Fractional Order Systems. *Sakthivel, R., +, TSMC Sept. 2019 1797-1805*

Finite-Time Adaptive Fuzzy Control for Nonlinear Systems With Full State Constraints. *Xia, J., +, TSMC July 2019 1541-1548*

Finite-Time Resilient Controller Design of a Class of Uncertain Nonlinear Systems With Time-Delays Under Asynchronous Switching. *He, S., +, TSMC Feb. 2019 281-286*

Fuzzy Adaptive Distributed Event-Triggered Consensus Control of Uncertain Nonlinear Multiagent Systems. *Li, Y., +, TSMC Sept. 2019 1777-1786*

Fuzzy Reduced-Order Compensator-Based Stabilization for Interconnected Descriptor Systems via Integral Sliding Modes. *Li, J., +, TSMC April 2019 752-765*

Fuzzy Tracking Control for a Class of Uncertain MIMO Nonlinear Systems With State Constraints. *He, W., +, TSMC March 2019 543-554*

Global Stabilization of a Class of Switched Nonlinear Systems Under Sampled-Data Control. *Li, S., +, TSMC Sept. 2019 1912-1919*

Immersion and Invariance-Based Adaptive Controller for Quadrotor Systems. *Zou, Y., +, TSMC Nov. 2019 2288-2297*

Input-to-State Stabilization of Delayed Differential Systems With Exogenous Disturbances: The Event-Triggered Case. *Li, B., +, TSMC June 2019 1099-1109*

Observer-Based Adaptive Consensus for a Class of Nonlinear Multiagent Systems. *Mao, J., +, TSMC Sept. 2019 1893-1900*

Observer-Based Adaptive Fuzzy Fault-Tolerant Control for Stochastic Nonstrict-Feedback Nonlinear Systems With Input Quantization. *Ma, H., +, TSMC Feb. 2019 287-298*

Observer-Based Decentralized Adaptive NNs Fault-Tolerant Control of a Class of Large-Scale Uncertain Nonlinear Systems With Actuator Failures. *Yang, Y., +, TSMC March 2019 528-542*

Observer-Based Fuzzy Adaptive Dynamic Surface Control of Uncertain Nonstrict Feedback Systems With Unknown Control Direction and Unknown Dead-Zone. *Shojaei, F., +, TSMC Nov. 2019 2340-2351*

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Quantized Fuzzy Output Feedback \mathcal{H}_∞ Control for Nonlinear Systems With Adjustment of Dynamic Parameters. *Chang, X., +, TSMC Oct. 2019 2005-2015*

Regularization and Stabilization for Rectangular T-S Fuzzy Discrete-Time Systems With Time Delay. *Chen, J., +, TSMC April 2019 833-842*

Reliable Control Against Sensor Failures for Markov Jump Systems With Unideal Measurements. *Tao, J., +, TSMC Feb. 2019 308-316*

Robust H_2/H_∞ Model Predictive Control for Linear Systems With Polytopic Uncertainties Under Weighted MEF-TOD Protocol. *Song, Y., +, TSMC July 2019 1470-1481*

Robust Guaranteed Cost Sampled-Data Fuzzy Control for Uncertain Nonlinear Time-Delay Systems. *Wang, Z., +, TSMC May 2019 964-975*

Robust Neuro-Adaptive Containment of Multileader Multiagent Systems With Uncertain Dynamics. *Wen, G., +, TSMC Feb. 2019 406-417*

Robust Simultaneous Fault Estimation and Nonfragile Output Feedback Fault-Tolerant Control for Markovian Jump Systems. *Li, X., +, TSMC Sept. 2019 1769-1776*

Takagi-Sugeno Model-Based Sliding Mode Observer Design for Finite-Time Synthesis of Semi-Markovian Jump Systems. *Jiang, B., +, TSMC July 2019 1505-1515*

Trajectory Tracking Control of a One Degree of Freedom Manipulator Based on a Switched Sliding Mode Controller With a Novel Extended State Observer Framework. *Zhao, L., +, TSMC June 2019 1110-1118*

Transportation Control of Double-Pendulum Cranes With a Nonlinear Quasi-PID Scheme: Design and Experiments. *Sun, N., +, TSMC July 2019 1408-1418*

Cloud computing

Deep Learning Hyper-Parameter Optimization for Video Analytics in Clouds. *Yaseen, M.U., +, TSMC Jan. 2019 253-264*

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Cluster tools

Robust Scheduling of Time-Constrained Dual-Arm Cluster Tools With Wafer Revisiting and Activity Time Disturbance. *Qiao, Y., +, TSMC June 2019 1228-1240*

Cognition

Autonomous Cognitive Robots Need Emotional Modulations: Introducing the eMODUL Model. *Belkaid, M., +, TSMC Jan. 2019 206-215*

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Autonomous Cognitive Robots Need Emotional Modulations: Introducing the eMODUL Model. *Belkaid, M., +, TSMC Jan. 2019 206-215*

Collaboration

A Collaborative Resource Allocation Strategy for Decomposition-Based Multiobjective Evolutionary Algorithms. *Kang, Q., +, TSMC Dec. 2019 2416-2423*

Collision avoidance

A Real-Time and Fully Distributed Approach to Motion Planning for Multi-robot Systems. *Zhou, Y., +, TSMC Dec. 2019 2636-2650*

Motion Planning by Demonstration With Human-Likeness Evaluation for Dual-Arm Robots. *Garcia, N., +, TSMC Nov. 2019 2298-2307*

Neural-Network-Based Switching Formation Tracking Control of Multiagents With Uncertainties in Constrained Space. *Liu, X., +, TSMC May 2019 1006-1015*

Compensation

Adaptive Dynamic Surface Control Design for Uncertain Nonlinear Strict-Feedback Systems With Unknown Control Direction and Disturbances. *Ma, H., +, TSMC March 2019 506-515*

Fuzzy Reduced-Order Compensator-Based Stabilization for Interconnected Descriptor Systems via Integral Sliding Modes. *Li, J., +, TSMC April 2019 752-765*

Practical Adaptive Fuzzy Control of Nonlinear Pure-Feedback Systems With Quantized Nonlinearity Input. *Wu, J., +, TSMC March 2019 638-648*

Regularization and Stabilization for Rectangular T-S Fuzzy Discrete-Time Systems With Time Delay. *Chen, J., +, TSMC April 2019 833-842*

Voltage Distributed Cooperative Control Considering Communication Security in Photovoltaic Power System. *Zhang, Z., +, TSMC Aug. 2019 1592-1600*

Complex networks

A Novel Method for Detecting New Overlapping Community in Complex Evolving Networks. *Cheng, J., +, TSMC Sept. 2019 1832-1844*

Complex Network Construction of Multivariate Time Series Using Information Geometry. *Sun, J., +, TSMC Jan. 2019 107-122*

Delay-Dependent Impulsive Distributed Synchronization of Stochastic Complex Dynamical Networks With Time-Varying Delays. *Wang, X., +, TSMC July 2019 1496-1504*

Event-Triggered Partial-Nodes-Based State Estimation for Delayed Complex Networks With Bounded Distributed Delays. *Liu, Y., +, TSMC June 2019 1088-1098*

Exponential Synchronization via Aperiodic Sampling of Complex Delayed Networks. *Que, H., +, TSMC July 2019 1399-1407*

Observer-Based Synchronization of Complex Dynamical Networks Under Actuator Saturation and Probabilistic Faults. *Selvaraj, P., +, TSMC July 2019 1516-1526*

Pinning Synchronization of Complex Dynamical Networks With Multiweights. *Wang, J., +, TSMC July 2019 1357-1370*

Subgraph Robustness of Complex Networks Under Attacks. *Shang, Y., TSMC April 2019 821-832*

Complexity theory

Target Disassembly Sequencing and Scheme Evaluation for CNC Machine Tools Using Improved Multiobjective Ant Colony Algorithm and Fuzzy Integral. *Feng, Y., +, TSMC Dec. 2019 2438-2451*

Computational complexity

Kernel-Based Random Vector Functional-Link Network for Fast Learning of Spatiotemporal Dynamic Processes. *Xu, K., +, TSMC May 2019 1016-1026*

Passivity Analysis for Memristor-Based Inertial Neural Networks With Discrete and Distributed Delays. *Xiao, Q., +, TSMC Feb. 2019 375-385*

Two-Level Master-Slave RFID Networks Planning via Hybrid Multiobjective Artificial Bee Colony Optimizer. *Ma, L., +, TSMC May 2019 861-880*

Computational linguistics

A Fuzzy Decision Support Model With Sentiment Analysis for Items Comparison in e-Commerce: The Case Study of <http://PCOnline.com>. *Ji, P., +, TSMC Oct. 2019 1993-2004*

Computational modeling

Incremental Spatiotemporal Learning for Online Modeling of Distributed Parameter Systems. *Wang, Z., +, TSMC Dec. 2019 2612-2622*

Computer crime

A Systematic Approach Toward Description and Classification of Cyber-crime Incidents. *Tsakalidis, G., +, TSMC April 2019 710-729*

Computer network management

A Configurable WoT Application Platform Based on Spatiotemporal Semantic Scenarios. *Huang, S., +, TSMC Jan. 2019 123-135*

Computer network security

ADMM-Based Distributed State Estimation of Smart Grid Under Data Deception and Denial of Service Attacks. *Du, D., +, TSMC Aug. 2019 1698-1711*

Content Propagation for Content-Centric Networking Systems From Location-Based Social Networks. *Liu, Y., +, TSMC Oct. 2019 1946-1960*

Computer science

Historical and Heuristic-Based Adaptive Differential Evolution. *Liu, X., +, TSMC Dec. 2019 2623-2635*

Computer vision

A Machine Vision System for Stacked Substrates Counting With a Robust Stripe Detection Algorithm. *Zhao, H., +, TSMC Nov. 2019 2352-2361*

Efficient Deep CNN-Based Fire Detection and Localization in Video Surveillance Applications. *Muhammad, K., +, TSMC July 2019 1419-1434*

Computerized instrumentation

Abnormal Odor Detection in Electronic Nose via Self-Expression Inspired Extreme Learning Machine. *Zhang, L., +, TSMC Oct. 2019 1922-1932*

Concave programming

Robust H_2/H_∞ Model Predictive Control for Linear Systems With Polytopic Uncertainties Under Weighted MEF-TOD Protocol. *Song, Y., +, TSMC July 2019 1470-1481*

Robust Deadlock Control for Automated Manufacturing Systems With Unreliable Resources Based on Petri Net Reachability Graphs. *Liu, G., +, TSMC July 2019 1371-1385*

Condition monitoring

Fixed-Time Event-Triggered Consensus for Nonlinear Multiagent Systems Without Continuous Communications. *Liu, J., +, TSMC Nov. 2019 2221-2229*

Construction

Automated Model Construction for Combined Sewer Overflow Prediction Based on Efficient LASSO Algorithm. *Zhao, W., +, TSMC June 2019 1254-1269*

Consumer products

Impact of Carbon Regulations on the Supply Chain With Carbon Reduction Effort. *Li, X., +, TSMC June 2019 1218-1227*

Continuous time systems

Event-Triggered Optimal Neuro-Controller Design With Reinforcement Learning for Unknown Nonlinear Systems. *Yang, X., +, TSMC Sept. 2019 1866-1878*

Exponential Stabilization of Takagi–Sugeno Fuzzy Systems With Aperiodic Sampling: An Aperiodic Adaptive Event-Triggered Method. *Wang, Y., +, TSMC Feb. 2019 444-454*

Fuzzy Adaptive Distributed Event-Triggered Consensus Control of Uncertain Nonlinear Multiagent Systems. *Li, Y., +, TSMC Sept. 2019 1777-1786*

Quantized Fuzzy Output Feedback \mathcal{H}_∞ Control for Nonlinear Systems With Adjustment of Dynamic Parameters. *Chang, X., +, TSMC Oct. 2019 2005-2015*

Reliable Filtering of Nonlinear Markovian Jump Systems: The Continuous-Time Case. *Wu, Z., +, TSMC Feb. 2019 386-394*

Takagi–Sugeno Model-Based Sliding Mode Observer Design for Finite-Time Synthesis of Semi-Markovian Jump Systems. *Jiang, B., +, TSMC July 2019 1505-1515*

Contracts

Blockchain-Enabled Smart Contracts: Architecture, Applications, and Future Trends. *Wang, S., +, TSMC Nov. 2019 2266-2277*

Control engineering computing

False-Data Injection Attack in Electricity Generation System Subject to Actuator Saturation: Analysis and Design. *Yu, L., +, TSMC Aug. 2019 1712-1719*

Learning Human–Robot Interaction for Robot-Assisted Pedestrian Flow Optimization. *Jiang, C., +, TSMC April 2019 797-813*

Semantically Enhanced UAVs to Increase the Aerial Scene Understanding. *Cavaliere, D., +, TSMC March 2019 555-567*

Voltage Distributed Cooperative Control Considering Communication Security in Photovoltaic Power System. *Zhang, Z., +, TSMC Aug. 2019 1592-1600*

Control nonlinearities

A Novel Neural-Network-Based Adaptive Control Scheme for Output-Constrained Stochastic Switched Nonlinear Systems. *Niu, B., +, TSMC Feb. 2019 418-432*

A Paradigm for Path Following Control of a Ribbon-Fin Propelled Biomimetic Underwater Vehicle. *Wang, R., +, TSMC March 2019 482-493*

Acceleration-Level Pseudo-Dynamic Visual Servoing of Mobile Robots With Backstepping and Dynamic Surface Control. *Zhang, X., +, TSMC Oct. 2019 2071-2081*

Adaptive Dynamic Surface Control Design for Uncertain Nonlinear Strict-Feedback Systems With Unknown Control Direction and Disturbances. *Ma, H., +, TSMC March 2019 506-515*

Adaptive Fuzzy Tracking Control of Flexible-Joint Robots With Full-State Constraints. *Sun, W., +, TSMC Nov. 2019 2201-2209*

Adaptive Neural Backstepping Control Design for A Class of Nonsmooth Nonlinear Systems. *Zhao, X., +, TSMC Sept. 2019 1820-1831*

Adaptive Neural-Network-Based Dynamic Surface Control for Stochastic Interconnected Nonlinear Nonstrict-Feedback Systems With Dead Zone. *Niu, B., +, TSMC July 2019 1386-1398*

An Adaptive Backstepping Nonsingular Fast Terminal Sliding Mode Control for Robust Fault Tolerant Control of Robot Manipulators. *Van, M., +, TSMC July 2019 1448-1458*

Backpropagating Constraints-Based Trajectory Tracking Control of a Quadrotor With Constrained Actuator Dynamics and Complex Unknowns. *Wang, N., +, TSMC July 2019 1322-1337*

Boundary Control for an Axially Moving System With Input Restriction Based on Disturbance Observers. *Liu, Y., +, TSMC Nov. 2019 2242-2253*

Finite-Time Adaptive Fuzzy Control for Nonlinear Systems With Full State Constraints. *Xia, J., +, TSMC July 2019 1541-1548*

Global Stabilization of a Class of Switched Nonlinear Systems Under Sampled-Data Control. *Li, S., +, TSMC Sept. 2019 1912-1919*

Immersion and Invariance-Based Adaptive Controller for Quadrotor Systems. *Zou, Y., +, TSMC Nov. 2019 2288-2297*

Observer-Based Consensus for Positive Multiagent Systems With Directed Topology and Nonlinear Control Input. *Wu, H., +, TSMC July 2019 1459-1469*

Observer-Based Decentralized Adaptive NNs Fault-Tolerant Control of a Class of Large-Scale Uncertain Nonlinear Systems With Actuator Failures. *Yang, Y., +, TSMC March 2019 528-542*

Observer-Based Fuzzy Adaptive Dynamic Surface Control of Uncertain Nonstrict Feedback Systems With Unknown Control Direction and Unknown Dead-Zone. *Shojaei, F., +, TSMC Nov. 2019 2340-2351*

Practical Adaptive Fuzzy Control of Nonlinear Pure-Feedback Systems With Quantized Nonlinearity Input. *Wu, J., +, TSMC March 2019 638-648*

Control system analysis

An Improved Data-Driven Point-to-Point ILC Using Additional On-Line Control Inputs With Experimental Verification. *Chi, R., +, TSMC April 2019 687-696*

Control system synthesis

H_∞ Output Tracking Control for Networked Systems With Adaptively Adjusted Event-Triggered Scheme. *Yan, H., +, TSMC Oct. 2019 2050-2058*

A Descriptor System Approach for Estimation of Incipient Faults With Application to High-Speed Railway Traction Devices. *Wu, Y., +, TSMC Oct. 2019 2108-2118*

A Novel Asynchronous Control for Artificial Delayed Markovian Jump Systems via Output Feedback Sliding Mode Approach. *Du, C., +, TSMC Feb. 2019 364-374*

A Novel Neural-Network-Based Adaptive Control Scheme for Output-Constrained Stochastic Switched Nonlinear Systems. *Niu, B., +, TSMC Feb. 2019 418-432*

Acceleration-Level Pseudo-Dynamic Visual Servoing of Mobile Robots With Backstepping and Dynamic Surface Control. *Zhang, X., +, TSMC Oct. 2019 2071-2081*

Adaptive Distributed Consensus Control of One-Sided Lipschitz Nonlinear Multiagents. *Agha, R., +, TSMC March 2019 568-578*

Adaptive Dynamic Surface Control Design for Uncertain Nonlinear Strict-Feedback Systems With Unknown Control Direction and Disturbances. *Ma, H., +, TSMC March 2019 506-515*

Adaptive Fuzzy Tracking Control of Flexible-Joint Robots With Full-State Constraints. *Sun, W., +, TSMC Nov. 2019 2201-2209*

Adaptive Neural Backstepping Control Design for A Class of Nonsmooth Nonlinear Systems. *Zhao, X., +, TSMC Sept. 2019 1820-1831*

An Adaptive Backstepping Nonsingular Fast Terminal Sliding Mode Control for Robust Fault Tolerant Control of Robot Manipulators. *Van, M., +, TSMC July 2019 1448-1458*

- An Event-Based Asynchronous Approach to Markov Jump Systems With Hidden Mode Detections and Missing Measurements. *Cheng, J., +, TSMC Sept. 2019 1749-1758*
- An Improved Data-Driven Point-to-Point ILC Using Additional On-Line Control Inputs With Experimental Verification. *Chi, R., +, TSMC April 2019 687-696*
- An Increased Nonlinear Coupling Motion Controller for Underactuated Multi-TORA Systems: Theoretical Design and Hardware Experimentation. *Wu, Y., +, TSMC June 2019 1186-1193*
- Aperiodically Intermittent Control for Quasi-Synchronization of Delayed Memristive Neural Networks: An Interval Matrix and Matrix Measure Combined Method. *Fan, Y., +, TSMC Nov. 2019 2254-2265*
- Backpropagating Constraints-Based Trajectory Tracking Control of a Quadrotor With Constrained Actuator Dynamics and Complex Unknowns. *Wang, N., +, TSMC July 2019 1322-1337*
- Bipartite Consensus Control of High-Order Multiagent Systems With Unknown Disturbances. *Wu, Y., +, TSMC Oct. 2019 2189-2199*
- Completely Distributed Guaranteed-Performance Consensualization for High-Order Multiagent Systems With Switching Topologies. *Xi, J., +, TSMC July 2019 1338-1348*
- Consensus of Linear Discrete-Time Multi-Agent Systems: A Low-Gain Distributed Impulsive Strategy. *Li, Z., +, TSMC June 2019 1041-1052*
- Consensus of Linear Multiagent Systems With Input-Based Triggering Condition. *Xu, Y., +, TSMC Nov. 2019 2308-2317*
- Control of Omnidirectional Robot Using Z-Number-Based Fuzzy System. *Abiyev, R.H., +, TSMC Jan. 2019 238-252*
- Cooperative Adaptive Event-Triggered Control for Multiagent Systems With Actuator Failures. *Zhang, Y., +, TSMC Sept. 2019 1759-1768*
- Dissipativity-Based Fuzzy Control of Nonlinear Systems via an Event-Triggered Mechanism. *Su, X., +, TSMC June 2019 1208-1217*
- Distributed Adaptive Fuzzy Containment Control of Stochastic Pure-Feedback Nonlinear Multiagent Systems With Local Quantized Controller and Tracking Constraint. *Zhang, L., +, TSMC April 2019 787-796*
- Distributed Event-Triggered Secondary Voltage Control for Microgrids With Time Delay. *Xie, Y., +, TSMC Aug. 2019 1582-1591*
- Dual-Loop Adaptive Iterative Learning Control for a Timoshenko Beam With Output Constraint and Input Backlash. *He, W., +, TSMC May 2019 1027-1038*
- Event-Triggered H_∞ Filtering for Discrete-Time T-S Fuzzy Systems via Network Delay Optimization Technique. *Wang, X., +, TSMC Oct. 2019 2026-2035*
- Event-Triggered Algorithms for Leader-Follower Consensus of Networked Euler-Lagrange Agents. *Liu, Q., +, TSMC July 2019 1435-1447*
- Event-Triggered Optimal Neuro-Controller Design With Reinforcement Learning for Unknown Nonlinear Systems. *Yang, X., +, TSMC Sept. 2019 1866-1878*
- Event-Triggered Sliding Mode Control of Discrete-Time Markov Jump Systems. *Yao, D., +, TSMC Oct. 2019 2016-2025*
- Exponential Stabilization of Takagi-Sugeno Fuzzy Systems With Aperiodic Sampling: An Aperiodic Adaptive Event-Triggered Method. *Wang, Y., +, TSMC Feb. 2019 444-454*
- Exponential Synchronization of Neural Networks With Time-Varying Delays via Dynamic Intermittent Output Feedback Control. *Zhang, Z., +, TSMC March 2019 612-622*
- Fault-Tolerant Resilient Control For Fuzzy Fractional Order Systems. *Sakthivel, R., +, TSMC Sept. 2019 1797-1805*
- Finite-Time Adaptive Fuzzy Control for Nonlinear Systems With Full State Constraints. *Xia, J., +, TSMC July 2019 1541-1548*
- Finite-Time Resilient Controller Design of a Class of Uncertain Nonlinear Systems With Time-Delays Under Asynchronous Switching. *He, S., +, TSMC Feb. 2019 281-286*
- Finite-Time Synchronization for Chaotic Gyros Systems With Terminal Sliding Mode Control. *Yin, L., +, TSMC June 2019 1131-1140*
- Fuzzy Adaptive Distributed Event-Triggered Consensus Control of Uncertain Nonlinear Multiagent Systems. *Li, Y., +, TSMC Sept. 2019 1777-1786*
- Fuzzy Reduced-Order Compensator-Based Stabilization for Interconnected Descriptor Systems via Integral Sliding Modes. *Li, J., +, TSMC April 2019 752-765*
- Fuzzy Tracking Control for a Class of Uncertain MIMO Nonlinear Systems With State Constraints. *He, W., +, TSMC March 2019 543-554*
- Global Stabilization of a Class of Switched Nonlinear Systems Under Sampled-Data Control. *Li, S., +, TSMC Sept. 2019 1912-1919*
- Immersion and Invariance-Based Adaptive Controller for Quadrotor Systems. *Zou, Y., +, TSMC Nov. 2019 2288-2297*
- Input-to-State Stabilization of Delayed Differential Systems With Exogenous Disturbances: The Event-Triggered Case. *Li, B., +, TSMC June 2019 1099-1109*
- Model Free Adaptive Iterative Learning Consensus Tracking Control for a Class of Nonlinear Multiagent Systems. *Bu, X., +, TSMC April 2019 677-686*
- Neural-Network-Based Switching Formation Tracking Control of Multiagents With Uncertainties in Constrained Space. *Liu, X., +, TSMC May 2019 1006-1015*
- Observer-Based Adaptive Consensus for a Class of Nonlinear Multiagent Systems. *Mao, J., +, TSMC Sept. 2019 1893-1900*
- Observer-Based Decentralized Adaptive NNs Fault-Tolerant Control of a Class of Large-Scale Uncertain Nonlinear Systems With Actuator Failures. *Yang, Y., +, TSMC March 2019 528-542*
- Observer-Based Fuzzy Adaptive Dynamic Surface Control of Uncertain Nonstrict Feedback Systems With Unknown Control Direction and Unknown Dead-Zone. *Shojaei, F., +, TSMC Nov. 2019 2340-2351*
- Pinning Synchronization of Complex Dynamical Networks With Multiweights. *Wang, J., +, TSMC July 2019 1357-1370*
- Practical Adaptive Fuzzy Control of Nonlinear Pure-Feedback Systems With Quantized Nonlinearity Input. *Wu, J., +, TSMC March 2019 638-648*
- Practical Model Construction and Stable Control of an Unmanned Aerial Vehicle With a Parafoil-Type Wing. *Tanaka, M., +, TSMC June 2019 1291-1297*
- Quantized Fuzzy Output Feedback H_∞ Control for Nonlinear Systems With Adjustment of Dynamic Parameters. *Chang, X., +, TSMC Oct. 2019 2005-2015*
- Regularization and Stabilization for Rectangular T-S Fuzzy Discrete-Time Systems With Time Delay. *Chen, J., +, TSMC April 2019 833-842*
- Reliable Control Against Sensor Failures for Markov Jump Systems With Unideal Measurements. *Tao, J., +, TSMC Feb. 2019 308-316*
- Reliable Filtering of Nonlinear Markovian Jump Systems: The Continuous-Time Case. *Wu, Z., +, TSMC Feb. 2019 386-394*
- Robust H_2/H_∞ Model Predictive Control for Linear Systems With Polytopic Uncertainties Under Weighted MEF-TOD Protocol. *Song, Y., +, TSMC July 2019 1470-1481*
- Robust Guaranteed Cost Sampled-Data Fuzzy Control for Uncertain Nonlinear Time-Delay Systems. *Wang, Z., +, TSMC May 2019 964-975*
- Robust Neuro-Adaptive Containment of Multileader Multiagent Systems With Uncertain Dynamics. *Wen, G., +, TSMC Feb. 2019 406-417*
- Sliding-Mode Control for Singular Markovian Jump Systems With Brownian Motion Based on Stochastic Sliding Mode Surface. *Zhang, Q., +, TSMC March 2019 494-505*
- Takagi-Sugeno Model-Based Sliding Mode Observer Design for Finite-Time Synthesis of Semi-Markovian Jump Systems. *Jiang, B., +, TSMC July 2019 1505-1515*
- Trajectory Tracking Control of a One Degree of Freedom Manipulator Based on a Switched Sliding Mode Controller With a Novel Extended State Observer Framework. *Zhao, L., +, TSMC June 2019 1110-1118*
- Transportation Control of Double-Pendulum Cranes With a Nonlinear Quasi-PID Scheme: Design and Experiments. *Sun, N., +, TSMC July 2019 1408-1418*

Control systems

- Decentralized Adaptive Neural Approximated Inverse Control for a Class of Large-Scale Nonlinear Hysteretic Systems With Time Delays. *Zhang, X., +, TSMC Dec. 2019 2424-2437*

Convergence

- Data-Driven Adaptive Sliding Mode Control of Nonlinear Discrete-Time Systems With Prescribed Performance. *Liu, D.*, +, *TSMC Dec. 2019* 2598-2604
- Distributed Neurodynamic Optimization for Energy Internet Management. *Le, X.*, +, *TSMC Aug. 2019* 1624-1633
- Output Tracking Control Based on Adaptive Dynamic Programming With Multistep Policy Evaluation. *Luo, B.*, +, *TSMC Oct. 2019* 2155-2165

Convex functions

- A Continuous-Time Algorithm for Distributed Optimization Based on Multiagent Networks. *He, X.*, +, *TSMC Dec. 2019* 2700-2709

Convex programming

- Distributed Neurodynamic Optimization for Energy Internet Management. *Le, X.*, +, *TSMC Aug. 2019* 1624-1633
- Global Consensus of Multiagent Systems With Internal Delays and Communication Delays. *Qian, W.*, +, *TSMC Oct. 2019* 1961-1970
- Observer-Based Consensus for Positive Multiagent Systems With Directed Topology and Nonlinear Control Input. *Wu, H.*, +, *TSMC July 2019* 1459-1469

Convolutional neural nets

- Deep Convolutional Neural Networks for Human Action Recognition Using Depth Maps and Postures. *Kamel, A.*, +, *TSMC Sept. 2019* 1806-1819
- Efficient Deep CNN-Based Fire Detection and Localization in Video Surveillance Applications. *Muhammad, K.*, +, *TSMC July 2019* 1419-1434
- Fault Diagnosis for Energy Internet Using Correlation Processing-Based Convolutional Neural Networks. *Yang, D.*, +, *TSMC Aug. 2019* 1739-1748

Cost function

- Depth Control of Model-Free AUVs via Reinforcement Learning. *Wu, H.*, +, *TSMC Dec. 2019* 2499-2510

Covariance analysis

- Distributed Resilient Filtering for Power Systems Subject to Denial-of-Service Attacks. *Chen, W.*, +, *TSMC Aug. 2019* 1688-1697

Covariance matrices

- Complex Network Construction of Multivariate Time Series Using Information Geometry. *Sun, J.*, +, *TSMC Jan. 2019* 107-122
- Fusion State Estimation for Power Systems Under DoS Attacks: A Switched System Approach. *Chen, J.*, +, *TSMC Aug. 2019* 1679-1687

Cranes

- Adaptive Anti-Swing and Positioning Control for 4-DOF Rotary Cranes Subject to Uncertain/Unknown Parameters With Hardware Experiments. *Sun, N.*, +, *TSMC July 2019* 1309-1321
- Transportation Control of Double-Pendulum Cranes With a Nonlinear Quasi-PID Scheme: Design and Experiments. *Sun, N.*, +, *TSMC July 2019* 1408-1418

Critical infrastructures

- Network Structural Vulnerability: A Multiobjective Attacker Perspective. *Faramondi, L.*, +, *TSMC Oct. 2019* 2036-2049

Crowdsourcing

- Energy Crowdsourcing and Peer-to-Peer Energy Trading in Blockchain-Enabled Smart Grids. *Wang, S.*, +, *TSMC Aug. 2019* 1612-1623

Cryptocurrencies

- A Collaborative Intrusion Detection Approach Using Blockchain for Microgrid Systems. *Hu, B.*, +, *TSMC Aug. 2019* 1720-1730
- Blockchain-Enabled Smart Contracts: Architecture, Applications, and Future Trends. *Wang, S.*, +, *TSMC Nov. 2019* 2266-2277

Cryptography

- Energy Crowdsourcing and Peer-to-Peer Energy Trading in Blockchain-Enabled Smart Grids. *Wang, S.*, +, *TSMC Aug. 2019* 1612-1623

Cyber-physical systems

- Distributed Dimensionality Reduction Fusion Estimation for Cyber-Physical Systems Under DoS Attacks. *Chen, B.*, +, *TSMC Feb. 2019* 455-468

Cyberattack

- Hybrid-Driven-Based \mathcal{H}_∞ Control for Networked Cascade Control Systems With Actuator Saturations and Stochastic Cyber Attacks. *Liu, J.*, +, *TSMC Dec. 2019* 2452-2463

Cybernetics

- An Efficient Marginal-Return-Based Constructive Heuristic to Solve the Sensor-Weapon-Target Assignment Problem. *Xin, B.*, +, *TSMC Dec. 2019* 2536-2547

- Historical and Heuristic-Based Adaptive Differential Evolution. *Liu, X.*, +, *TSMC Dec. 2019* 2623-2635
- Learning a Distance Metric by Balancing KL-Divergence for Imbalanced Datasets. *Feng, L.*, +, *TSMC Dec. 2019* 2384-2395
- Outsourcing Rework of Imperfect Items in the Economic Production Quantity (EPQ) Inventory Model With Backordered Demand. *Taleizadeh, A.A.*, +, *TSMC Dec. 2019* 2688-2699

D**Damping**

- An Increased Nonlinear Coupling Motion Controller for Underactuated Multi-TORA Systems: Theoretical Design and Hardware Experimentation. *Wu, Y.*, +, *TSMC June 2019* 1186-1193
- UDE-Based Variable Impedance Control of Uncertain Robot Systems. *Dong, Y.*, +, *TSMC Dec. 2019* 2487-2498

Data analysis

- A Machine Vision System for Stacked Substrates Counting With a Robust Stripe Detection Algorithm. *Zhao, H.*, +, *TSMC Nov. 2019* 2352-2361
- A New Deep Transfer Learning Based on Sparse Auto-Encoder for Fault Diagnosis. *Wen, L.*, +, *TSMC Jan. 2019* 136-144
- Fast Reduced Set-Based Exemplar Finding and Cluster Assignment. *Zhang, Y.*, +, *TSMC May 2019* 917-931
- Multivariate Chaotic Time Series Prediction Based on Improved Grey Relational Analysis. *Han, M.*, +, *TSMC Oct. 2019* 2144-2154

Data handling

- A Configurable WoT Application Platform Based on Spatiotemporal Semantic Scenarios. *Huang, S.*, +, *TSMC Jan. 2019* 123-135

Data mining

- ELM-Based Large-Scale Genetic Association Study via Statistically Significant Pattern. *Li, Y.*, +, *TSMC Oct. 2019* 2175-2188
- Identification of Multiview Gene Modules Using Mutual Information-Based Hypograph Mining. *Bhadra, T.*, +, *TSMC June 2019* 1119-1130

Data models

- A Configurable WoT Application Platform Based on Spatiotemporal Semantic Scenarios. *Huang, S.*, +, *TSMC Jan. 2019* 123-135
- Incremental Spatiotemporal Learning for Online Modeling of Distributed Parameter Systems. *Wang, Z.*, +, *TSMC Dec. 2019* 2612-2622

Data privacy

- Blockchain-Enabled Smart Contracts: Architecture, Applications, and Future Trends. *Wang, S.*, +, *TSMC Nov. 2019* 2266-2277

Data visualization

- Hierarchy Visualization for Group Recommender Systems. *Wang, W.*, +, *TSMC June 2019* 1152-1163

DC motors

- Adaptive Robust Triple-Step Control for Compensating Cogging Torque and Model Uncertainty in a DC Motor. *Hu, Y.*, +, *TSMC Dec. 2019* 2396-2405

Decentralized control

- Event-Triggered Algorithms for Leader-Follower Consensus of Networked Euler-Lagrange Agents. *Liu, Q.*, +, *TSMC July 2019* 1435-1447
- Fuzzy Reduced-Order Compensator-Based Stabilization for Interconnected Descriptor Systems via Integral Sliding Modes. *Li, J.*, +, *TSMC April 2019* 752-765
- Multitarget Tracking Control for Coupled Heterogeneous Inertial Agents Systems Based on Flocking Behavior. *Chen, S.*, +, *TSMC Dec. 2019* 2605-2611
- Observer-Based Decentralized Adaptive NNs Fault-Tolerant Control of a Class of Large-Scale Uncertain Nonlinear Systems With Actuator Failures. *Yang, Y.*, +, *TSMC March 2019* 528-542

Decision making

- Behavioral Analysis in the Graph Model for Conflict Resolution. *Wang, J.*, +, *TSMC May 2019* 904-916
- Multiple Attribute Strategic Weight Manipulation With Minimum Cost in a Group Decision Making Context With Interval Attribute Weights Information. *Liu, Y.*, +, *TSMC Oct. 2019* 1981-1992
- Toward a Context-Aware Human-Robot Interaction Framework Based on Cognitive Development. *Quintas, J.*, +, *TSMC Jan. 2019* 227-237

Decision support systems

A Fuzzy Decision Support Model With Sentiment Analysis for Items Comparison in e-Commerce: The Case Study of <http://PConline.com>. *Ji, P.*, +, *TSMC Oct. 2019 1993-2004*

Automated Model Construction for Combined Sewer Overflow Prediction Based on Efficient LASSO Algorithm. *Zhao, W.*, +, *TSMC June 2019 1254-1269*

Delay effects

Decentralized Adaptive Neural Approximated Inverse Control for a Class of Large-Scale Nonlinear Hysteretic Systems With Time Delays. *Zhang, X.*, +, *TSMC Dec. 2019 2424-2437*

Global Asymptotic Stability and Adaptive Ultimate Mittag–Leffler Synchronization for a Fractional-Order Complex-Valued Memristive Neural Networks With Delays. *Chen, J.*, +, *TSMC Dec. 2019 2519-2535*

Delay systems

H_∞ Output Tracking Control for Networked Systems With Adaptively Adjusted Event-Triggered Scheme. *Yan, H.*, +, *TSMC Oct. 2019 2050-2058*

Consensus of Multiagent Systems With Nonlinear Dynamics Using an Integrated Sampled-Data-Based Event-Triggered Communication Scheme. *Peng, C.*, +, *TSMC March 2019 589-599*

Distributed Event-Triggered Secondary Voltage Control for Microgrids With Time Delay. *Xie, Y.*, +, *TSMC Aug. 2019 1582-1591*

Global Consensus of Multiagent Systems With Internal Delays and Communication Delays. *Qian, W.*, +, *TSMC Oct. 2019 1961-1970*

Robust Guaranteed Cost Sampled-Data Fuzzy Control for Uncertain Nonlinear Time-Delay Systems. *Wang, Z.*, +, *TSMC May 2019 964-975*

Stabilization of Stochastic Uncertain Complex-Valued Delayed Networks via Aperiodically Intermittent Nonlinear Control. *Wang, P.*, +, *TSMC March 2019 649-662*

Delay-differential systems

Global Exponential Stability of Impulsive Delay Systems With Flexible Impulse Frequency. *Li, X.*, *TSMC Oct. 2019 2166-2174*

Input-to-State Stabilization of Delayed Differential Systems With Exogenous Disturbances: The Event-Triggered Case. *Li, B.*, +, *TSMC June 2019 1099-1109*

Delays

A Novel Asynchronous Control for Artificial Delayed Markovian Jump Systems via Output Feedback Sliding Mode Approach. *Du, C.*, +, *TSMC Feb. 2019 364-374*

An Event-Based Asynchronous Approach to Markov Jump Systems With Hidden Mode Detections and Missing Measurements. *Cheng, J.*, +, *TSMC Sept. 2019 1749-1758*

Aperiodically Intermittent Control for Quasi-Synchronization of Delayed Memristive Neural Networks: An Interval Matrix and Matrix Measure Combined Method. *Fan, Y.*, +, *TSMC Nov. 2019 2254-2265*

Asynchronous Filtering for Markov Jump Neural Networks With Quantized Outputs. *Shen, Y.*, +, *TSMC Feb. 2019 433-443*

Delay-Dependent Impulsive Distributed Synchronization of Stochastic Complex Dynamical Networks With Time-Varying Delays. *Wang, X.*, +, *TSMC July 2019 1496-1504*

Event-Triggered H_∞ Filtering for Discrete-Time T–S Fuzzy Systems via Network Delay Optimization Technique. *Wang, X.*, +, *TSMC Oct. 2019 2026-2035*

Event-Triggered Partial-Nodes-Based State Estimation for Delayed Complex Networks With Bounded Distributed Delays. *Liu, Y.*, +, *TSMC June 2019 1088-1098*

Exponential Consensus Analysis for Multiagent Networks Based on Time-Delay Impulsive Systems. *Wu, Y.*, +, *TSMC June 2019 1073-1080*

Exponential Stability, Passivity, and Dissipativity Analysis of Generalized Neural Networks With Mixed Time-Varying Delays. *Saravanakumar, R.*, +, *TSMC Feb. 2019 395-405*

Exponential Synchronization of Neural Networks With Time-Varying Delays via Dynamic Intermittent Output Feedback Control. *Zhang, Z.*, +, *TSMC March 2019 612-622*

Exponential Synchronization via Aperiodic Sampling of Complex Delayed Networks. *Que, H.*, +, *TSMC July 2019 1399-1407*

Finite-Time Resilient Controller Design of a Class of Uncertain Nonlinear Systems With Time-Delays Under Asynchronous Switching. *He, S.*, +, *TSMC Feb. 2019 281-286*

Global Asymptotic Stability and Adaptive Ultimate Mittag–Leffler Synchronization for a Fractional-Order Complex-Valued Memristive Neural Networks With Delays. *Chen, J.*, +, *TSMC Dec. 2019 2519-2535*

Global Exponential Stability of Delayed Neural Networks Based on a New Integral Inequality. *Liu, Y.*, +, *TSMC Nov. 2019 2318-2325*

Input-to-State Stabilization of Delayed Differential Systems With Exogenous Disturbances: The Event-Triggered Case. *Li, B.*, +, *TSMC June 2019 1099-1109*

Passivity Analysis for Memristor-Based Inertial Neural Networks With Discrete and Distributed Delays. *Xiao, Q.*, +, *TSMC Feb. 2019 375-385*

Regularization and Stabilization for Rectangular T–S Fuzzy Discrete-Time Systems With Time Delay. *Chen, J.*, +, *TSMC April 2019 833-842*

Reliable Control Against Sensor Failures for Markov Jump Systems With Unideal Measurements. *Tao, J.*, +, *TSMC Feb. 2019 308-316*

State Estimation for Quaternion-Valued Neural Networks With Multiple Time Delays. *Chen, X.*, +, *TSMC Nov. 2019 2278-2287*

Stationary Consensus Control of a Class of High-Order Uncertain Nonlinear Agents With Communication Delays. *Rezaee, H.*, +, *TSMC June 2019 1285-1290*

Design engineering

Supervisor Synthesis for FMS Based on Critical Activity Places. *Huang, B.*, +, *TSMC May 2019 881-890*

Difference equations

Distributed Resilient Filtering for Power Systems Subject to Denial-of-Service Attacks. *Chen, W.*, +, *TSMC Aug. 2019 1688-1697*

Differential equations

Exponential Consensus Analysis for Multiagent Networks Based on Time-Delay Impulsive Systems. *Wu, Y.*, +, *TSMC June 2019 1073-1080*

Fault-Tolerant Resilient Control For Fuzzy Fractional Order Systems. *Sakthivel, R.*, +, *TSMC Sept. 2019 1797-1805*

Passivity Analysis for Memristor-Based Inertial Neural Networks With Discrete and Distributed Delays. *Xiao, Q.*, +, *TSMC Feb. 2019 375-385*

Directed graphs

Adaptive Distributed Consensus Control of One-Sided Lipschitz Nonlinear Multiagents. *Agha, R.*, +, *TSMC March 2019 568-578*

Event-Triggered Algorithms for Leader–Follower Consensus of Networked Euler–Lagrange Agents. *Liu, Q.*, +, *TSMC July 2019 1435-1447*

Discrete event systems

Fault Identification of Discrete Event Systems Modeled by Petri Nets With Unobservable Transitions. *Zhu, G.*, +, *TSMC Feb. 2019 333-345*

Discrete time systems

Consensus of Linear Discrete-Time Multi-Agent Systems: A Low-Gain Distributed Impulsive Strategy. *Li, Z.*, +, *TSMC June 2019 1041-1052*

Event-Triggered H_∞ Filtering for Discrete-Time T–S Fuzzy Systems via Network Delay Optimization Technique. *Wang, X.*, +, *TSMC Oct. 2019 2026-2035*

Event-Triggered Partial-Nodes-Based State Estimation for Delayed Complex Networks With Bounded Distributed Delays. *Liu, Y.*, +, *TSMC June 2019 1088-1098*

Event-Triggered Sliding Mode Control of Discrete-Time Markov Jump Systems. *Yao, D.*, +, *TSMC Oct. 2019 2016-2025*

Output Tracking Control Based on Adaptive Dynamic Programming With Multistep Policy Evaluation. *Luo, B.*, +, *TSMC Oct. 2019 2155-2165*

Regularization and Stabilization for Rectangular T–S Fuzzy Discrete-Time Systems With Time Delay. *Chen, J.*, +, *TSMC April 2019 833-842*

Reliable Filtering of Nonlinear Markovian Jump Systems: The Continuous-Time Case. *Wu, Z.*, +, *TSMC Feb. 2019 386-394*

Diseases

Design and Verification of an NDN-Based Safety-Critical Application: A Case Study With Smart Healthcare. *Saxena, D.*, +, *TSMC May 2019 991-1005*

ELM-Based Large-Scale Genetic Association Study via Statistically Significant Pattern. *Li, Y.*, +, *TSMC Oct. 2019 2175-2188*

Modeling the Effects of Prevention and Early Diagnosis on HIV/AIDS Infection Diffusion. *Di Giamberardino, P.*, +, *TSMC Oct. 2019 2119-2130*

Distributed algorithms

Distributed Energy Management Strategy for Reaching Cost-Driven Optimal Operation Integrated With Wind Forecasting in Multimicrogrids System. *He, X., +, TSMC Aug. 2019 1643-1651*

Distributed Optimal Economic Dispatch for Microgrids Considering Communication Delays. *Huang, B., +, TSMC Aug. 2019 1634-1642*

Distributed control

A Survey on Security Communication and Control for Smart Grids Under Malicious Cyber Attacks. *Peng, C., +, TSMC Aug. 2019 1554-1569*

Adaptive Distributed Consensus Control of One-Sided Lipschitz Nonlinear Multiagents. *Agha, R., +, TSMC March 2019 568-578*

Adaptive Distributed Observer Approach for Cooperative Containment Control of Nonidentical Networks. *Liang, H., +, TSMC Feb. 2019 299-307*

Bipartite Consensus Control of High-Order Multiagent Systems With Unknown Disturbances. *Wu, Y., +, TSMC Oct. 2019 2189-2199*

Completely Distributed Guaranteed-Performance Consensualization for High-Order Multiagent Systems With Switching Topologies. *Xi, J., +, TSMC July 2019 1338-1348*

Consensus of Linear Discrete-Time Multi-Agent Systems: A Low-Gain Distributed Impulsive Strategy. *Li, Z., +, TSMC June 2019 1041-1052*

Consensus of Linear Multiagent Systems With Input-Based Triggering Condition. *Xu, Y., +, TSMC Nov. 2019 2308-2317*

Delay-Dependent Impulsive Distributed Synchronization of Stochastic Complex Dynamical Networks With Time-Varying Delays. *Wang, X., +, TSMC July 2019 1496-1504*

Distributed Adaptive Fuzzy Containment Control of Stochastic Pure-Feedback Nonlinear Multiagent Systems With Local Quantized Controller and Tracking Constraint. *Zhang, L., +, TSMC April 2019 787-796*

Distributed Event-Triggered Secondary Voltage Control for Microgrids With Time Delay. *Xie, Y., +, TSMC Aug. 2019 1582-1591*

Distributed State-of-Charge Balance Control With Event-Triggered Signal Transmissions for Multiple Energy Storage Systems in Smart Grid. *Xing, L., +, TSMC Aug. 2019 1601-1611*

Event-Triggered Algorithms for Leader-Follower Consensus of Networked Euler-Lagrange Agents. *Liu, Q., +, TSMC July 2019 1435-1447*

Fuzzy Adaptive Distributed Event-Triggered Consensus Control of Uncertain Nonlinear Multiagent Systems. *Li, Y., +, TSMC Sept. 2019 1777-1786*

Hierarchical Distributed Model Predictive Control of Standalone Wind/Solar/Battery Power System. *Kong, X., +, TSMC Aug. 2019 1570-1581*

Robust Neuro-Adaptive Containment of Multileader Multiagent Systems With Uncertain Dynamics. *Wen, G., +, TSMC Feb. 2019 406-417*

Voltage Distributed Cooperative Control Considering Communication Security in Photovoltaic Power System. *Zhang, Z., +, TSMC Aug. 2019 1592-1600*

Distributed databases

Blockchain-Enabled Smart Contracts: Architecture, Applications, and Future Trends. *Wang, S., +, TSMC Nov. 2019 2266-2277*

Energy Crowdsourcing and Peer-to-Peer Energy Trading in Blockchain-Enabled Smart Grids. *Wang, S., +, TSMC Aug. 2019 1612-1623*

Distributed parameter systems

Boundary Control for an Axially Moving System With Input Restriction Based on Disturbance Observers. *Liu, Y., +, TSMC Nov. 2019 2242-2253*

Distributed power generation

A Collaborative Intrusion Detection Approach Using Blockchain for Multimicrogrid Systems. *Hu, B., +, TSMC Aug. 2019 1720-1730*

Distributed Energy Management Strategy for Reaching Cost-Driven Optimal Operation Integrated With Wind Forecasting in Multimicrogrids System. *He, X., +, TSMC Aug. 2019 1643-1651*

Distributed Event-Triggered Secondary Voltage Control for Microgrids With Time Delay. *Xie, Y., +, TSMC Aug. 2019 1582-1591*

Distributed Optimal Economic Dispatch for Microgrids Considering Communication Delays. *Huang, B., +, TSMC Aug. 2019 1634-1642*

Double Auction With Hidden User Information: Application to Energy Transaction in Microgrid. *Faqiry, M.N., +, TSMC Nov. 2019 2326-2339*

Energy Crowdsourcing and Peer-to-Peer Energy Trading in Blockchain-Enabled Smart Grids. *Wang, S., +, TSMC Aug. 2019 1612-1623*

Hierarchical Distributed Model Predictive Control of Standalone Wind/Solar/Battery Power System. *Kong, X., +, TSMC Aug. 2019 1570-1581*

Distributed sensors

Complex Network Construction of Multivariate Time Series Using Information Geometry. *Sun, J., +, TSMC Jan. 2019 107-122*

Distribution networks

Coordinated Dispatch of Virtual Energy Storage Systems in Smart Distribution Networks for Loading Management. *Meng, K., +, TSMC April 2019 776-786*

Energy Crowdsourcing and Peer-to-Peer Energy Trading in Blockchain-Enabled Smart Grids. *Wang, S., +, TSMC Aug. 2019 1612-1623*

Disturbance observers

Output Feedback Stabilization for an Axially Moving System. *Zhao, Z., +, TSMC Dec. 2019 2374-2383*

Driver information systems

New Driver Workload Prediction Using Clustering-Aided Approaches. *Yi, D., +, TSMC Jan. 2019 64-70*

Personalized Driver Workload Inference by Learning From Vehicle Related Measurements. *Yi, D., +, TSMC Jan. 2019 159-168*

Drones

Structure From Motion Technique for Scene Detection Using Autonomous Drone Navigation. *Huang, Y., +, TSMC Dec. 2019 2559-2570*

Dynamic programming

Learning Human-Robot Interaction for Robot-Assisted Pedestrian Flow Optimization. *Jiang, C., +, TSMC April 2019 797-813*

Neural-Network-Based Robust Control Schemes for Nonlinear Multiplayer Systems With Uncertainties via Adaptive Dynamic Programming. *Jiang, H., +, TSMC March 2019 579-588*

Output Tracking Control Based on Adaptive Dynamic Programming With Multistep Policy Evaluation. *Luo, B., +, TSMC Oct. 2019 2155-2165*

E**Ecology**

Efficient Deep CNN-Based Fire Detection and Localization in Video Surveillance Applications. *Muhammad, K., +, TSMC July 2019 1419-1434*

Economic indicators

Joint Optimization of Cash Management and Routing for New-Generation Automated Teller Machine Networks. *Bati, S., +, TSMC Dec. 2019 2724-2738*

Economics

A Continuous-Time Algorithm for Distributed Optimization Based on Multiagent Networks. *He, X., +, TSMC Dec. 2019 2700-2709*

Outsourcing Rework of Imperfect Items in the Economic Production Quantity (EPQ) Inventory Model With Backordered Demand. *Taleizadeh, A.A., +, TSMC Dec. 2019 2688-2699*

Edge detection

Content-Insensitive Blind Image Blurriness Assessment Using Weibull Statistics and Sparse Extreme Learning Machine. *Deng, C., +, TSMC March 2019 516-527*

Eigenvalues and eigenfunctions

Distributed Time-Varying Formation Control for Linear Swarm Systems With Switching Topologies Using an Adaptive Output-Feedback Approach. *Wang, R., +, TSMC Dec. 2019 2664-2675*

Electric current control

Energy-Saving Dynamic Bias Current Control of Active Magnetic Bearing Positioning System Using Adaptive Differential Evolution. *Chen, S., +, TSMC May 2019 942-953*

Electric vehicle charging

Planning and Operation of Parking Lots Considering System, Traffic, and Drivers Behavioral Model. *Rahmani-Andebili, M., +, TSMC Sept. 2019 1879-1892*

Electricity supply industry

Energy Crowdsourcing and Peer-to-Peer Energy Trading in Blockchain-Enabled Smart Grids. *Wang, S., +, TSMC Aug. 2019 1612-1623*

Electronic commerce

A Fuzzy Decision Support Model With Sentiment Analysis for Items Comparison in e-Commerce: The Case Study of <http://PCOnline.com>. *Ji, P., +, TSMC Oct. 2019 1993-2004*

Electronic noses

Abnormal Odor Detection in Electronic Nose via Self-Expression Inspired Extreme Learning Machine. *Zhang, L., +, TSMC Oct. 2019 1922-1932*

Endoscopes

Enhanced Localization of Robotic Capsule Endoscopes Using Positron Emission Markers and Rigid-Body Transformation. *Than, T.D., +, TSMC June 2019 1270-1284*

Energy Internet

Guest Editorial Special Issue on New Trends in Energy Internet: Artificial Intelligence-Based Control, Network Security, and Management. *Yue, D., +, TSMC Aug. 2019 1551-1553*

Energy management

Guest Editorial Special Issue on New Trends in Energy Internet: Artificial Intelligence-Based Control, Network Security, and Management. *Yue, D., +, TSMC Aug. 2019 1551-1553*

Energy management systems

Detecting Prosumer-Community Groups in Smart Grids From the Multiagent Perspective. *Cao, J., +, TSMC Aug. 2019 1652-1664*

Distributed Energy Management Strategy for Reaching Cost-Driven Optimal Operation Integrated With Wind Forecasting in Multimicrogrids System. *He, X., +, TSMC Aug. 2019 1643-1651*

Distributed Neurodynamic Optimization for Energy Internet Management. *Le, X., +, TSMC Aug. 2019 1624-1633*

Price-Controlled Energy Management of Smart Homes for Maximizing Profit of a GENCO. *Rahmani-Andebili, M., +, TSMC April 2019 697-709*

Energy storage

Distributed State-of-Charge Balance Control With Event-Triggered Signal Transmissions for Multiple Energy Storage Systems in Smart Grid. *Xing, L., +, TSMC Aug. 2019 1601-1611*

Entropy

ADPDF: A Hybrid Attribute Discrimination Method for Psychometric Data With Fuzziness. *Xiong, X., +, TSMC Jan. 2019 265-278*

Environmental legislation

Impact of Carbon Regulations on the Supply Chain With Carbon Reduction Effort. *Li, X., +, TSMC June 2019 1218-1227*

Epidemics

Modeling the Effects of Prevention and Early Diagnosis on HIV/AIDS Infection Diffusion. *Di Giamberardino, P., +, TSMC Oct. 2019 2119-2130*

Estimation theory

Adaptive Dynamic Surface Control Design for Uncertain Nonlinear Strict-Feedback Systems With Unknown Control Direction and Disturbances. *Ma, H., +, TSMC March 2019 506-515*

Fast Reduced Set-Based Exemplar Finding and Cluster Assignment. *Zhang, Y., +, TSMC May 2019 917-931*

Evolutionary computation

A Collaborative Resource Allocation Strategy for Decomposition-Based Multiobjective Evolutionary Algorithms. *Kang, Q., +, TSMC Dec. 2019 2416-2423*

Autonomous Optimization of Swimming Gait in a Fish Robot With Multiple Onboard Sensors. *Wang, W., +, TSMC May 2019 891-903*

Composite Differential Evolution for Constrained Evolutionary Optimization. *Wang, B., +, TSMC July 2019 1482-1495*

Energy-Saving Dynamic Bias Current Control of Active Magnetic Bearing Positioning System Using Adaptive Differential Evolution. *Chen, S., +, TSMC May 2019 942-953*

Investigating the Evolution of a Neuroplasticity Network for Learning. *Wang, L., +, TSMC Oct. 2019 2131-2143*

Extrapolation

Fusion State Estimation for Power Systems Under DoS Attacks: A Switched System Approach. *Chen, J., +, TSMC Aug. 2019 1679-1687*

F**Fading channels**

Reliable Control Against Sensor Failures for Markov Jump Systems With Unideal Measurements. *Tao, J., +, TSMC Feb. 2019 308-316*

Fault diagnosis

A Descriptor System Approach for Estimation of Incipient Faults With Application to High-Speed Railway Traction Devices. *Wu, Y., +, TSMC Oct. 2019 2108-2118*

A New Deep Transfer Learning Based on Sparse Auto-Encoder for Fault Diagnosis. *Wen, L., +, TSMC Jan. 2019 136-144*

Fast and Accurate Classification of Time Series Data Using Extended ELM: Application in Fault Diagnosis of Air Handling Units. *Yan, K., +, TSMC July 2019 1349-1356*

Fault Diagnosis for Energy Internet Using Correlation Processing-Based Convolutional Neural Networks. *Yang, D., +, TSMC Aug. 2019 1739-1748*

Model-Based Diagnosis of Multiple Faults in Hybrid Dynamical Systems With Dynamically Updated Parameters. *Prakash, O., +, TSMC June 2019 1053-1072*

Model-Based Fault Diagnosis System Verification Using Reachability Analysis. *Su, J., +, TSMC April 2019 742-751*

Robust Simultaneous Fault Estimation and Nonfragile Output Feedback Fault-Tolerant Control for Markovian Jump Systems. *Li, X., +, TSMC Sept. 2019 1769-1776*

Fault tolerance

Adaptive Finite Time Control of Nonlinear Systems Under Time-Varying Actuator Failures. *Wang, F., +, TSMC Sept. 2019 1845-1852*

Data-Based Fault-Tolerant Consensus Control for Uncertain Multiagent Systems Via Weighted Edge Dynamics. *Shi, C., +, TSMC Dec. 2019 2548-2558*

Fault tolerant control

An Adaptive Backstepping Nonsingular Fast Terminal Sliding Mode Control for Robust Fault Tolerant Control of Robot Manipulators. *Van, M., +, TSMC July 2019 1448-1458*

Fault Identification of Discrete Event Systems Modeled by Petri Nets With Unobservable Transitions. *Zhu, G., +, TSMC Feb. 2019 333-345*

Observer-Based Adaptive Fuzzy Fault-Tolerant Control for Stochastic Nonstrict-Feedback Nonlinear Systems With Input Quantization. *Ma, H., +, TSMC Feb. 2019 287-298*

Observer-Based Decentralized Adaptive NNs Fault-Tolerant Control of a Class of Large-Scale Uncertain Nonlinear Systems With Actuator Failures. *Yang, Y., +, TSMC March 2019 528-542*

Robust Simultaneous Fault Estimation and Nonfragile Output Feedback Fault-Tolerant Control for Markovian Jump Systems. *Li, X., +, TSMC Sept. 2019 1769-1776*

Fault tolerant systems

Data-Based Fault-Tolerant Consensus Control for Uncertain Multiagent Systems Via Weighted Edge Dynamics. *Shi, C., +, TSMC Dec. 2019 2548-2558*

Feature extraction

Biometric Palmprint Verification: A Dynamical System Approach. *Palma, D., +, TSMC Dec. 2019 2676-2687*

Deep Convolutional Neural Networks for Human Action Recognition Using Depth Maps and Postures. *Kamel, A., +, TSMC Sept. 2019 1806-1819*

Fault Diagnosis for Energy Internet Using Correlation Processing-Based Convolutional Neural Networks. *Yang, D., +, TSMC Aug. 2019 1739-1748*

Feature Extraction Methods for Palmprint Recognition: A Survey and Evaluation. *Fei, L., +, TSMC Feb. 2019 346-363*

Feature Selection Based on Tensor Decomposition and Object Proposal for Night-Time Multiclass Vehicle Detection. *Kuang, H., +, TSMC Jan. 2019 71-80*

I-Am: Implicitly Authenticate Me—Person Authentication on Mobile Devices Through Ear Shape and Arm Gesture. *Abate, A.F., +, TSMC March 2019 469-481*

Learning to Grasp Familiar Objects Based on Experience and Objects' Shape Affordance. *Liu, C., +, TSMC Dec. 2019 2710-2723*

Scene Understanding in Deep Learning-Based End-to-End Controllers for Autonomous Vehicles. *Yang, S., +, TSMC Jan. 2019 53-63*

Structure From Motion Technique for Scene Detection Using Autonomous Drone Navigation. *Huang, Y., +, TSMC Dec. 2019 2559-2570*

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- Adaptive Dynamic Surface Control Design for Uncertain Nonlinear Strict-Feedback Systems With Unknown Control Direction and Disturbances. *Ma, H., +, TSMC March 2019 506-515*
- Adaptive Neural Backstepping Control Design for A Class of Nonsmooth Nonlinear Systems. *Zhao, X., +, TSMC Sept. 2019 1820-1831*
- Adaptive Neural-Network-Based Dynamic Surface Control for Stochastic Interconnected Nonlinear Nonstrict-Feedback Systems With Dead Zone. *Niu, B., +, TSMC July 2019 1386-1398*
- An Increased Nonlinear Coupling Motion Controller for Underactuated Multi-TORA Systems: Theoretical Design and Hardware Experimentation. *Wu, Y., +, TSMC June 2019 1186-1193*
- Consensus of Linear Discrete-Time Multi-Agent Systems: A Low-Gain Distributed Impulsive Strategy. *Li, Z., +, TSMC June 2019 1041-1052*
- Delay-Dependent Impulsive Distributed Synchronization of Stochastic Complex Dynamical Networks With Time-Varying Delays. *Wang, X., +, TSMC July 2019 1496-1504*
- Distributed Adaptive Fuzzy Containment Control of Stochastic Pure-Feedback Nonlinear Multiagent Systems With Local Quantized Controller and Tracking Constraint. *Zhang, L., +, TSMC April 2019 787-796*
- Exponential Synchronization of Neural Networks With Time-Varying Delays via Dynamic Intermittent Output Feedback Control. *Zhang, Z., +, TSMC March 2019 612-622*
- Finite-Time Adaptive Fuzzy Control for Nonlinear Systems With Full State Constraints. *Xia, J., +, TSMC July 2019 1541-1548*
- Fuzzy Adaptive Distributed Event-Triggered Consensus Control of Uncertain Nonlinear Multiagent Systems. *Li, Y., +, TSMC Sept. 2019 1777-1786*
- Fuzzy Tracking Control for a Class of Uncertain MIMO Nonlinear Systems With State Constraints. *He, W., +, TSMC March 2019 543-554*
- Input-to-State Stabilization of Delayed Differential Systems With Exogenous Disturbances: The Event-Triggered Case. *Li, B., +, TSMC June 2019 1099-1109*
- Learning Human-Robot Interaction for Robot-Assisted Pedestrian Flow Optimization. *Jiang, C., +, TSMC April 2019 797-813*
- Observer-Based Adaptive Consensus for a Class of Nonlinear Multiagent Systems. *Mao, J., +, TSMC Sept. 2019 1893-1900*
- Observer-Based Adaptive Fuzzy Fault-Tolerant Control for Stochastic Nonstrict-Feedback Nonlinear Systems With Input Quantization. *Ma, H., +, TSMC Feb. 2019 287-298*
- Observer-Based Consensus for Positive Multiagent Systems With Directed Topology and Nonlinear Control Input. *Wu, H., +, TSMC July 2019 1459-1469*
- Observer-Based Decentralized Adaptive NNs Fault-Tolerant Control of a Class of Large-Scale Uncertain Nonlinear Systems With Actuator Failures. *Yang, Y., +, TSMC March 2019 528-542*
- Observer-Based Fuzzy Adaptive Dynamic Surface Control of Uncertain Nonstrict Feedback Systems With Unknown Control Direction and Unknown Dead-Zone. *Shojaei, F., +, TSMC Nov. 2019 2340-2351*
- Pinning Synchronization of Complex Dynamical Networks With Multi-weights. *Wang, J., +, TSMC July 2019 1357-1370*
- Practical Adaptive Fuzzy Control of Nonlinear Pure-Feedback Systems With Quantized Nonlinearity Input. *Wu, J., +, TSMC March 2019 638-648*
- Quantized Fuzzy Output Feedback \mathcal{H}_∞ Control for Nonlinear Systems With Adjustment of Dynamic Parameters. *Chang, X., +, TSMC Oct. 2019 2005-2015*
- Reliable Control Against Sensor Failures for Markov Jump Systems With Unideal Measurements. *Tao, J., +, TSMC Feb. 2019 308-316*
- Robust H_2/H_∞ Model Predictive Control for Linear Systems With Polytopic Uncertainties Under Weighted MEF-TOD Protocol. *Song, Y., +, TSMC July 2019 1470-1481*
- Robust Neuro-Adaptive Containment of Multileader Multiagent Systems With Uncertain Dynamics. *Wen, G., +, TSMC Feb. 2019 406-417*
- Robust Simultaneous Fault Estimation and Nonfragile Output Feedback Fault-Tolerant Control for Markovian Jump Systems. *Li, X., +, TSMC Sept. 2019 1769-1776*
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- Finite-Time Output Consensus of Higher-Order Multiagent Systems With Mismatched Disturbances and Unknown State Elements. *Li, G., +, TSMC Dec. 2019 2571-2581*
- Feedforward neural networks**
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- Abnormal Odor Detection in Electronic Nose via Self-Expression Inspired Extreme Learning Machine. *Zhang, L., +, TSMC Oct. 2019 1922-1932*
- Cross-Domain Extreme Learning Machines for Domain Adaptation. *Li, S., +, TSMC June 2019 1194-1207*
- Event-Triggered Optimal Neuro-Controller Design With Reinforcement Learning for Unknown Nonlinear Systems. *Yang, X., +, TSMC Sept. 2019 1866-1878*
- Fast and Accurate Classification of Time Series Data Using Extended ELM: Application in Fault Diagnosis of Air Handling Units. *Yan, K., +, TSMC July 2019 1349-1356*
- Noniterative Deep Learning: Incorporating Restricted Boltzmann Machine Into Multilayer Random Weight Neural Networks. *Wang, X., +, TSMC July 2019 1299-1308*
- Field programmable gate arrays**
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- Filtering theory**
- Asynchronous Filtering for Markov Jump Neural Networks With Quantized Outputs. *Shen, Y., +, TSMC Feb. 2019 433-443*
- Reliable Filtering of Nonlinear Markovian Jump Systems: The Continuous-Time Case. *Wu, Z., +, TSMC Feb. 2019 386-394*
- Financial data processing**
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- Forging**
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- Frequency control**
- Event-Triggered H_∞ Load Frequency Control for Multiarea Power Systems Under Hybrid Cyber Attacks. *Liu, J., +, TSMC Aug. 2019 1665-1678*
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- Frequency-domain analysis**
- A Machine Vision System for Stacked Substrates Counting With a Robust Stripe Detection Algorithm. *Zhao, H., +, TSMC Nov. 2019 2352-2361*
- Quantized H_∞ Output Control of Linear Markov Jump Systems in Finite Frequency Domain. *Shen, M., +, TSMC Sept. 2019 1901-1911*

Friction

Adaptive Anti-Swing and Positioning Control for 4-DOF Rotary Cranes Subject to Uncertain/Unknown Parameters With Hardware Experiments. *Sun, N., +, TSMC July 2019 1309-1321*

Adaptive Robust Triple-Step Control for Compensating Cogging Torque and Model Uncertainty in a DC Motor. *Hu, Y., +, TSMC Dec. 2019 2396-2405*

Fuel economy

A Computationally Efficient and Hierarchical Control Strategy for Velocity Optimization of On-Road Vehicles. *Guo, L., +, TSMC Jan. 2019 31-41*

Fuzzy control

A Paradigm for Path Following Control of a Ribbon-Fin Propelled Biomimetic Underwater Vehicle. *Wang, R., +, TSMC March 2019 482-493*

Adaptive Finite Time Control of Nonlinear Systems Under Time-Varying Actuator Failures. *Wang, F., +, TSMC Sept. 2019 1845-1852*

Adaptive Fuzzy Tracking Control of Flexible-Joint Robots With Full-State Constraints. *Sun, W., +, TSMC Nov. 2019 2201-2209*

Control of Omnidirectional Robot Using Z-Number-Based Fuzzy System. *Abiyev, R.H., +, TSMC Jan. 2019 238-252*

Dissipativity-Based Fuzzy Control of Nonlinear Systems via an Event-Triggered Mechanism. *Su, X., +, TSMC June 2019 1208-1217*

Distributed Adaptive Fuzzy Containment Control of Stochastic Pure-Feedback Nonlinear Multiagent Systems With Local Quantized Controller and Tracking Constraint. *Zhang, L., +, TSMC April 2019 787-796*

Event-Triggered H_∞ Filtering for Discrete-Time T-S Fuzzy Systems via Network Delay Optimization Technique. *Wang, X., +, TSMC Oct. 2019 2026-2035*

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- Enhancing Binocular Depth Estimation Based on Proactive Perception and Action Cyclic Learning for an Autonomous Developmental Robot. *Jin, Y., +, TSMC Jan. 2019 169-180*
- Fast and Accurate Classification of Time Series Data Using Extended ELM: Application in Fault Diagnosis of Air Handling Units. *Yan, K., +, TSMC July 2019 1349-1356*
- Fault Diagnosis for Energy Internet Using Correlation Processing-Based Convolutional Neural Networks. *Yang, D., +, TSMC Aug. 2019 1739-1748*
- Guided Policy Search for Sequential Multitask Learning. *Xiong, F., +, TSMC Jan. 2019 216-226*
- Kernel Regularized Nonlinear Dictionary Learning for Sparse Coding. *Liu, H., +, TSMC April 2019 766-775*
- Kernel-Based Random Vector Functional-Link Network for Fast Learning of Spatiotemporal Dynamic Processes. *Xu, K., +, TSMC May 2019 1016-1026*
- Memristor-Based Echo State Network With Online Least Mean Square. *Wen, S., +, TSMC Sept. 2019 1787-1796*
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- New Driver Workload Prediction Using Clustering-Aided Approaches. *Yi, D., +, TSMC Jan. 2019 64-70*
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- Noniterative Deep Learning: Incorporating Restricted Boltzmann Machine Into Multilayer Random Weight Neural Networks. *Wang, X., +, TSMC July 2019 1299-1308*
- Personalized Driver Workload Inference by Learning From Vehicle Related Measurements. *Yi, D., +, TSMC Jan. 2019 159-168*
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- Model Free Adaptive Iterative Learning Consensus Tracking Control for a Class of Nonlinear Multiagent Systems. *Bu, X., +, TSMC April 2019 677-686*
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- A Descriptor System Approach for Estimation of Incipient Faults With Application to High-Speed Railway Traction Devices. *Wu, Y., +, TSMC Oct. 2019 2108-2118*
- Asynchronous Filtering for Markov Jump Neural Networks With Quantized Outputs. *Shen, Y., +, TSMC Feb. 2019 433-443*
- Completely Distributed Guaranteed-Performance Consensualization for High-Order Multiagent Systems With Switching Topologies. *Xi, J., +, TSMC July 2019 1338-1348*
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- Event-Triggered H_∞ Load Frequency Control for Multiarea Power Systems Under Hybrid Cyber Attacks. *Liu, J., +, TSMC Aug. 2019 1665-1678*
- Event-Triggered Partial-Nodes-Based State Estimation for Delayed Complex Networks With Bounded Distributed Delays. *Liu, Y., +, TSMC June 2019 1088-1098*
- Exponential Stability, Passivity, and Dissipativity Analysis of Generalized Neural Networks With Mixed Time-Varying Delays. *Saravanakumar, R., +, TSMC Feb. 2019 395-405*
- Exponential Synchronization of Neural Networks With Time-Varying Delays via Dynamic Intermittent Output Feedback Control. *Zhang, Z., +, TSMC March 2019 612-622*
- Fault-Tolerant Resilient Control For Fuzzy Fractional Order Systems. *Sakhivel, R., +, TSMC Sept. 2019 1797-1805*
- Finite-Time Resilient Controller Design of a Class of Uncertain Nonlinear Systems With Time-Delays Under Asynchronous Switching. *He, S., +, TSMC Feb. 2019 281-286*
- Global Exponential Stability of Delayed Neural Networks Based on a New Integral Inequality. *Liu, Y., +, TSMC Nov. 2019 2318-2325*
- Global Exponential Stability of Impulsive Delay Systems With Flexible Impulse Frequency. *Li, X., TSMC Oct. 2019 2166-2174*
- Input-to-State Stabilization of Delayed Differential Systems With Exogenous Disturbances: The Event-Triggered Case. *Li, B., +, TSMC June 2019 1099-1109*
- Observer-Based Consensus for Positive Multiagent Systems With Directed Topology and Nonlinear Control Input. *Wu, H., +, TSMC July 2019 1459-1469*
- Observer-Based Synchronization of Complex Dynamical Networks Under Actuator Saturation and Probabilistic Faults. *Selvaraj, P., +, TSMC July 2019 1516-1526*
- Passivity Analysis for Memristor-Based Inertial Neural Networks With Discrete and Distributed Delays. *Xiao, Q., +, TSMC Feb. 2019 375-385*
- Practical Model Construction and Stable Control of an Unmanned Aerial Vehicle With a Parafoil-Type Wing. *Tanaka, M., +, TSMC June 2019 1291-1297*
- Quantized H_∞ Output Control of Linear Markov Jump Systems in Finite Frequency Domain. *Shen, M., +, TSMC Sept. 2019 1901-1911*
- Quantized Fuzzy Output Feedback \mathcal{H}_∞ Control for Nonlinear Systems With Adjustment of Dynamic Parameters. *Chang, X., +, TSMC Oct. 2019 2005-2015*
- Regularization and Stabilization for Rectangular T-S Fuzzy Discrete-Time Systems With Time Delay. *Chen, J., +, TSMC April 2019 833-842*
- Reliable Control Against Sensor Failures for Markov Jump Systems With Unideal Measurements. *Tao, J., +, TSMC Feb. 2019 308-316*
- Robust Guaranteed Cost Sampled-Data Fuzzy Control for Uncertain Nonlinear Time-Delay Systems. *Wang, Z., +, TSMC May 2019 964-975*

Robust Simultaneous Fault Estimation and Nonfragile Output Feedback Fault-Tolerant Control for Markovian Jump Systems. *Li, X., +, TSMC Sept. 2019 1769-1776*

Sliding-Mode Control for Singular Markovian Jump Systems With Brownian Motion Based on Stochastic Sliding Mode Surface. *Zhang, Q., +, TSMC March 2019 494-505*

Stabilization of Stochastic Uncertain Complex-Valued Delayed Networks via Aperiodically Intermittent Nonlinear Control. *Wang, P., +, TSMC March 2019 649-662*

State Estimation for Quaternion-Valued Neural Networks With Multiple Time Delays. *Chen, X., +, TSMC Nov. 2019 2278-2287*

Takagi–Sugeno Model-Based Sliding Mode Observer Design for Finite-Time Synthesis of Semi-Markovian Jump Systems. *Jiang, B., +, TSMC July 2019 1505-1515*

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An Improved Data-Driven Point-to-Point ILC Using Additional On-Line Control Inputs With Experimental Verification. *Chi, R., +, TSMC April 2019 687-696*

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Fault Identification of Discrete Event Systems Modeled by Petri Nets With Unobservable Transitions. *Zhu, G., +, TSMC Feb. 2019 333-345*

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Multiple Attribute Strategic Weight Manipulation With Minimum Cost in a Group Decision Making Context With Interval Attribute Weights Information. *Liu, Y., +, TSMC Oct. 2019 1981-1992*

Price-Controlled Energy Management of Smart Homes for Maximizing Profit of a GENCO. *Rahmani-Andebili, M., +, TSMC April 2019 697-709*

Target Disassembly Sequencing and Scheme Evaluation for CNC Machine Tools Using Improved Multiobjective Ant Colony Algorithm and Fuzzy Integral. *Feng, Y., +, TSMC Dec. 2019 2438-2451*

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Consensus of Linear Discrete-Time Multi-Agent Systems: A Low-Gain Distributed Impulsive Strategy. *Li, Z., +, TSMC June 2019 1041-1052*

Consensus of Linear Multiagent Systems With Input-Based Triggering Condition. *Xu, Y., +, TSMC Nov. 2019 2308-2317*

Cooperative Stabilization for Linear Switched Systems With Asynchronous Switching. *Hua, C., +, TSMC June 2019 1081-1087*

Event-Triggered Algorithms for Leader–Follower Consensus of Networked Euler–Lagrange Agents. *Liu, Q., +, TSMC July 2019 1435-1447*

Global Consensus of Multiagent Systems With Internal Delays and Communication Delays. *Qian, W., +, TSMC Oct. 2019 1961-1970*

Quantized H_∞ Output Control of Linear Markov Jump Systems in Finite Frequency Domain. *Shen, M., +, TSMC Sept. 2019 1901-1911*

Robust H_2/H_∞ Model Predictive Control for Linear Systems With Polytopic Uncertainties Under Weighted MEF-TOD Protocol. *Song, Y., +, TSMC July 2019 1470-1481*

Linearization techniques

Transportation Control of Double-Pendulum Cranes With a Nonlinear Quasi-PID Scheme: Design and Experiments. *Sun, N., +, TSMC July 2019 1408-1418*

Load flow

Fusion State Estimation for Power Systems Under DoS Attacks: A Switched System Approach. *Chen, J., +, TSMC Aug. 2019 1679-1687*

Load forecasting

Distributed Energy Management Strategy for Reaching Cost-Driven Optimal Operation Integrated With Wind Forecasting in Multimicrogrids System. *He, X., +, TSMC Aug. 2019 1643-1651*

Load management

Coordinated Dispatch of Virtual Energy Storage Systems in Smart Distribution Networks for Loading Management. *Meng, K., +, TSMC April 2019 776-786*

Load modeling

Adaptive Robust Triple-Step Control for Compensating Cogging Torque and Model Uncertainty in a DC Motor. *Hu, Y., +, TSMC Dec. 2019 2396-2405*

Load regulation

Event-Triggered H_∞ Load Frequency Control for Multiarea Power Systems Under Hybrid Cyber Attacks. *Liu, J., +, TSMC Aug. 2019 1665-1678*

Lyapunov methods

H_2 Performance Analysis and Applications of 2-D Hidden Bernoulli Jump System. *Wu, Z., +, TSMC Oct. 2019 2097-2107*

H_∞ Output Tracking Control for Networked Systems With Adaptively Adjusted Event-Triggered Scheme. *Yan, H., +, TSMC Oct. 2019 2050-2058*

A Novel Potential Field Controller for Use on Aerial Robots. *Woods, A.C., +, TSMC April 2019 665-676*

A Paradigm for Path Following Control of a Ribbon-Fin Propelled Biometric Underwater Vehicle. *Wang, R., +, TSMC March 2019 482-493*

Acceleration-Level Pseudo-Dynamic Visual Servoing of Mobile Robots With Backstepping and Dynamic Surface Control. *Zhang, X., +, TSMC Oct. 2019 2071-2081*

Adaptive Anti-Swing and Positioning Control for 4-DOF Rotary Cranes Subject to Uncertain/Unknown Parameters With Hardware Experiments. *Sun, N., +, TSMC July 2019 1309-1321*

Adaptive Fuzzy Tracking Control of Flexible-Joint Robots With Full-State Constraints. *Sun, W., +, TSMC Nov. 2019 2201-2209*

Adaptive Neural Backstepping Control Design for A Class of Nonsmooth Nonlinear Systems. *Zhao, X., +, TSMC Sept. 2019 1820-1831*

Adaptive Neural-Network-Based Dynamic Surface Control for Stochastic Interconnected Nonlinear Nonstrict-Feedback Systems With Dead Zone. *Niu, B., +, TSMC July 2019 1386-1398*

An Adaptive Backstepping Nonsingular Fast Terminal Sliding Mode Control for Robust Fault Tolerant Control of Robot Manipulators. *Van, M., +, TSMC July 2019 1448-1458*

An Increased Nonlinear Coupling Motion Controller for Underactuated Multi-TORA Systems: Theoretical Design and Hardware Experimentation. *Wu, Y., +, TSMC June 2019 1186-1193*

Asynchronous Filtering for Markov Jump Neural Networks With Quantized Outputs. *Shen, Y., +, TSMC Feb. 2019 433-443*

Backpropagating Constraints-Based Trajectory Tracking Control of a Quadrotor With Constrained Actuator Dynamics and Complex Unknowns. *Wang, N., +, TSMC July 2019 1322-1337*

Consensus of Linear Discrete-Time Multi-Agent Systems: A Low-Gain Distributed Impulsive Strategy. *Li, Z., +, TSMC June 2019 1041-1052*

Consensus of Multiagent Systems With Nonlinear Dynamics Using an Integrated Sampled-Data-Based Event-Triggered Communication Scheme. *Peng, C., +, TSMC March 2019 589-599*

Cooperative Adaptive Event-Triggered Control for Multiagent Systems With Actuator Failures. *Zhang, Y., +, TSMC Sept. 2019 1759-1768*

Delay-Dependent Impulsive Distributed Synchronization of Stochastic Complex Dynamical Networks With Time-Varying Delays. *Wang, X., +, TSMC July 2019 1496-1504*

Dissipativity-Based Fuzzy Control of Nonlinear Systems via an Event-Triggered Mechanism. *Su, X., +, TSMC June 2019 1208-1217*

Distributed Adaptive Fuzzy Containment Control of Stochastic Pure-Feedback Nonlinear Multiagent Systems With Local Quantized Controller and Tracking Constraint. *Zhang, L., +, TSMC April 2019 787-796*

Event-Triggered H_∞ Load Frequency Control for Multiarea Power Systems Under Hybrid Cyber Attacks. *Liu, J., +, TSMC Aug. 2019 1665-1678*

Event-Triggered H_∞ Filtering for Discrete-Time T–S Fuzzy Systems via Network Delay Optimization Technique. *Wang, X., +, TSMC Oct. 2019 2026-2035*

Event-Triggered Algorithms for Leader–Follower Consensus of Networked Euler–Lagrange Agents. *Liu, Q., +, TSMC July 2019 1435-1447*

Event-Triggered Optimal Neuro-Controller Design With Reinforcement Learning for Unknown Nonlinear Systems. *Yang, X., +, TSMC Sept. 2019 1866-1878*

Event-Triggered Partial-Nodes-Based State Estimation for Delayed Complex Networks With Bounded Distributed Delays. *Liu, Y., +, TSMC June 2019 1088-1098*

- Exponential Stability, Passivity, and Dissipativity Analysis of Generalized Neural Networks With Mixed Time-Varying Delays. *Saravanakumar, R.*, +, *TSMC Feb. 2019 395-405*
- Exponential Stabilization of Takagi–Sugeno Fuzzy Systems With Aperiodic Sampling: An Aperiodic Adaptive Event-Triggered Method. *Wang, Y.*, +, *TSMC Feb. 2019 444-454*
- Exponential Synchronization of Neural Networks With Time-Varying Delays via Dynamic Intermittent Output Feedback Control. *Zhang, Z.*, +, *TSMC March 2019 612-622*
- Exponential Synchronization via Aperiodic Sampling of Complex Delayed Networks. *Que, H.*, +, *TSMC July 2019 1399-1407*
- Fault-Tolerant Resilient Control For Fuzzy Fractional Order Systems. *Sakthivel, R.*, +, *TSMC Sept. 2019 1797-1805*
- Finite-Time Adaptive Fuzzy Control for Nonlinear Systems With Full State Constraints. *Xia, J.*, +, *TSMC July 2019 1541-1548*
- Finite-Time Resilient Controller Design of a Class of Uncertain Nonlinear Systems With Time-Delays Under Asynchronous Switching. *He, S.*, +, *TSMC Feb. 2019 281-286*
- Finite-Time Synchronization for Chaotic Gyros Systems With Terminal Sliding Mode Control. *Yin, L.*, +, *TSMC June 2019 1131-1140*
- Fuzzy Tracking Control for a Class of Uncertain MIMO Nonlinear Systems With State Constraints. *He, W.*, +, *TSMC March 2019 543-554*
- Global Consensus of Multiagent Systems With Internal Delays and Communication Delays. *Qian, W.*, +, *TSMC Oct. 2019 1961-1970*
- Global Exponential Stability of Delayed Neural Networks Based on a New Integral Inequality. *Liu, Y.*, +, *TSMC Nov. 2019 2318-2325*
- Immersion and Invariance-Based Adaptive Controller for Quadrotor Systems. *Zou, Y.*, +, *TSMC Nov. 2019 2288-2297*
- Input-to-State Stabilization of Delayed Differential Systems With Exogenous Disturbances: The Event-Triggered Case. *Li, B.*, +, *TSMC June 2019 1099-1109*
- Neural-Network-Based Switching Formation Tracking Control of Multiagents With Uncertainties in Constrained Space. *Liu, X.*, +, *TSMC May 2019 1006-1015*
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- Observer-Based Synchronization of Complex Dynamical Networks Under Actuator Saturation and Probabilistic Faults. *Selvaraj, P.*, +, *TSMC July 2019 1516-1526*
- Pinning Synchronization of Complex Dynamical Networks With Multiweights. *Wang, J.*, +, *TSMC July 2019 1357-1370*
- Reliable Control Against Sensor Failures for Markov Jump Systems With Unideal Measurements. *Tao, J.*, +, *TSMC Feb. 2019 308-316*
- Robust Guaranteed Cost Sampled-Data Fuzzy Control for Uncertain Nonlinear Time-Delay Systems. *Wang, Z.*, +, *TSMC May 2019 964-975*
- Robust Neuro-Adaptive Containment of Multileader Multiagent Systems With Uncertain Dynamics. *Wen, G.*, +, *TSMC Feb. 2019 406-417*
- Sliding-Mode Control for Singular Markovian Jump Systems With Brownian Motion Based on Stochastic Sliding Mode Surface. *Zhang, Q.*, +, *TSMC March 2019 494-505*
- Stabilization of Stochastic Uncertain Complex-Valued Delayed Networks via Aperiodically Intermittent Nonlinear Control. *Wang, P.*, +, *TSMC March 2019 649-662*
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- An Adaptive Backstepping Nonsingular Fast Terminal Sliding Mode Control for Robust Fault Tolerant Control of Robot Manipulators. *Van, M.*, +, *TSMC July 2019 1448-1458*
- Continuous Visual World Modeling for Autonomous Robot Manipulation. *Inceoglu, A.*, +, *TSMC Jan. 2019 192-205*
- Coordination Control of a Dual-Arm Exoskeleton Robot Using Human Impedance Transfer Skills. *Huang, B.*, +, *TSMC May 2019 954-963*
- Motion Planning by Demonstration With Human-Likeness Evaluation for Dual-Arm Robots. *Garcia, N.*, +, *TSMC Nov. 2019 2298-2307*
- Singularity-Free Trajectory Planning of Free-Floating Multiarm Space Robots for Keeping the Base Inertially Stabilized. *Xu, W.*, +, *TSMC Dec. 2019 2464-2477*
- Solving Time-Varying System of Nonlinear Equations by Finite-Time Recurrent Neural Networks With Application to Motion Tracking of Robot Manipulators. *Xiao, L.*, +, *TSMC Nov. 2019 2210-2220*
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- A Review of the Principles of Designing Smart Cyber-Physical Systems for Run-Time Adaptation: Learned Lessons and Open Issues. *Tavcar, J.*, +, *TSMC Jan. 2019 145-158*
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- Robust Deadlock Control for Automated Manufacturing Systems With Unreliable Resources Based on Petri Net Reachability Graphs. *Liu, G.*, +, *TSMC July 2019 1371-1385*

Markov processes

- A Novel Asynchronous Control for Artificial Delayed Markovian Jump Systems via Output Feedback Sliding Mode Approach. *Du, C.*, +, *TSMC Feb. 2019 364-374*
- Asynchronous Filtering for Markov Jump Neural Networks With Quantized Outputs. *Shen, Y.*, +, *TSMC Feb. 2019 433-443*
- Depth Control of Model-Free AUVs via Reinforcement Learning. *Wu, H.*, +, *TSMC Dec. 2019 2499-2510*
- New Incremental Learning Algorithm With Support Vector Machines. *Xu, J.*, +, *TSMC Nov. 2019 2230-2241*

Quantized H_∞ Output Control of Linear Markov Jump Systems in Finite Frequency Domain. *Shen, M., +, TSMC Sept. 2019 1901-1911*

Reliable Control Against Sensor Failures for Markov Jump Systems With Unideal Measurements. *Tao, J., +, TSMC Feb. 2019 308-316*

Robust Simultaneous Fault Estimation and Nonfragile Output Feedback Fault-Tolerant Control for Markovian Jump Systems. *Li, X., +, TSMC Sept. 2019 1769-1776*

Sliding-Mode Control for Singular Markovian Jump Systems With Brownian Motion Based on Stochastic Sliding Mode Surface. *Zhang, Q., +, TSMC March 2019 494-505*

Mathematical model

An Efficient Marginal-Return-Based Constructive Heuristic to Solve the Sensor–Weapon–Target Assignment Problem. *Xin, B., +, TSMC Dec. 2019 2536-2547*

Incremental Spatiotemporal Learning for Online Modeling of Distributed Parameter Systems. *Wang, Z., +, TSMC Dec. 2019 2612-2622*

Target Disassembly Sequencing and Scheme Evaluation for CNC Machine Tools Using Improved Multiobjective Ant Colony Algorithm and Fuzzy Integral. *Feng, Y., +, TSMC Dec. 2019 2438-2451*

Matrix algebra

H_2 Performance Analysis and Applications of 2-D Hidden Bernoulli Jump System. *Wu, Z., +, TSMC Oct. 2019 2097-2107*

Adaptive Distributed Observer Approach for Cooperative Containment Control of Nonidentical Networks. *Liang, H., +, TSMC Feb. 2019 299-307*

Aperiodically Intermittent Control for Quasi-Synchronization of Delayed Memristive Neural Networks: An Interval Matrix and Matrix Measure Combined Method. *Fan, Y., +, TSMC Nov. 2019 2254-2265*

Complex Network Construction of Multivariate Time Series Using Information Geometry. *Sun, J., +, TSMC Jan. 2019 107-122*

Consensus of Linear Discrete-Time Multi-Agent Systems: A Low-Gain Distributed Impulsive Strategy. *Li, Z., +, TSMC June 2019 1041-1052*

Distributed Resilient Filtering for Power Systems Subject to Denial-of-Service Attacks. *Chen, W., +, TSMC Aug. 2019 1688-1697*

Exponential Stabilization of Takagi–Sugeno Fuzzy Systems With Aperiodic Sampling: An Aperiodic Adaptive Event-Triggered Method. *Wang, Y., +, TSMC Feb. 2019 444-454*

Exponential Synchronization via Aperiodic Sampling of Complex Delayed Networks. *Que, H., +, TSMC July 2019 1399-1407*

Model-Based Diagnosis of Multiple Faults in Hybrid Dynamical Systems With Dynamically Updated Parameters. *Prakash, O., +, TSMC June 2019 1053-1072*

Robust Kalman Filters Based on Gaussian Scale Mixture Distributions With Application to Target Tracking. *Huang, Y., +, TSMC Oct. 2019 2082-2096*

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Robust Kalman Filters Based on Gaussian Scale Mixture Distributions With Application to Target Tracking. *Huang, Y., +, TSMC Oct. 2019 2082-2096*

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Distributed Dimensionality Reduction Fusion Estimation for Cyber-Physical Systems Under DoS Attacks. *Chen, B., +, TSMC Feb. 2019 455-468*

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Learning a Distance Metric by Balancing KL-Divergence for Imbalanced Datasets. *Feng, L., +, TSMC Dec. 2019 2384-2395*

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Robust Kalman Filters Based on Gaussian Scale Mixture Distributions With Application to Target Tracking. *Huang, Y., +, TSMC Oct. 2019 2082-2096*

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Robust Kalman Filters Based on Gaussian Scale Mixture Distributions With Application to Target Tracking. *Huang, Y., +, TSMC Oct. 2019 2082-2096*

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Fast and Accurate Classification of Time Series Data Using Extended ELM: Application in Fault Diagnosis of Air Handling Units. *Yan, K., +, TSMC July 2019 1349-1356*

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ADPDF: A Hybrid Attribute Discrimination Method for Psychometric Data With Fuzziness. *Xiong, X., +, TSMC Jan. 2019 265-278*

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Medical robotics

Cartesian Trajectory Tracking of a 7-DOF Exoskeleton Robot Based on Human Inverse Kinematics. *Brahmi, B., +, TSMC March 2019 600-611*

Coordination Control of a Dual-Arm Exoskeleton Robot Using Human Impedance Transfer Skills. *Huang, B., +, TSMC May 2019 954-963*

Enhanced Localization of Robotic Capsule Endoscopes Using Positron Emission Markers and Rigid-Body Transformation. *Than, T.D., +, TSMC June 2019 1270-1284*

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Memristor-Based Echo State Network With Online Least Mean Square. *Wen, S., +, TSMC Sept. 2019 1787-1796*

Passivity Analysis for Memristor-Based Inertial Neural Networks With Discrete and Distributed Delays. *Xiao, Q., +, TSMC Feb. 2019 375-385*

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MIMO systems

Fuzzy Tracking Control for a Class of Uncertain MIMO Nonlinear Systems With State Constraints. *He, W., +, TSMC March 2019 543-554*

Observer-Based Decentralized Adaptive NNs Fault-Tolerant Control of a Class of Large-Scale Uncertain Nonlinear Systems With Actuator Failures. *Yang, Y., +, TSMC March 2019 528-542*

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Secure Payment System Utilizing MANET for Disaster Areas. *Ojetunde, B., +, TSMC Dec. 2019 2651-2663*

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Secure Payment System Utilizing MANET for Disaster Areas. *Ojetunde, B., +, TSMC Dec. 2019 2651-2663*

Mobile computing

A Low-Latency Communication Scheme for Mobile Wireless Sensor Control Systems. *Huang, M., +, TSMC Feb. 2019 317-332*

I-Am: Implicitly Authenticate Me—Person Authentication on Mobile Devices Through Ear Shape and Arm Gesture. *Abate, A.F., +, TSMC March 2019 469-481*

Secure Payment System Utilizing MANET for Disaster Areas. *Ojetunde, B., +, TSMC Dec. 2019 2651-2663*

Mobile robots

A Novel Potential Field Controller for Use on Aerial Robots. *Woods, A.C., +, TSMC April 2019 665-676*

A Novel Real-Time Moving Target Tracking and Path Planning System for a Quadrotor UAV in Unknown Unstructured Outdoor Scenes. *Liu, Y., +, TSMC Nov. 2019 2362-2372*

A Review of Estimation for Vehicle Tire-Road Interactions Toward Automated Driving. *Guo, H., +, TSMC Jan. 2019 14-30*

Acceleration-Level Pseudo-Dynamic Visual Servoing of Mobile Robots With Backstepping and Dynamic Surface Control. *Zhang, X., +, TSMC Oct. 2019 2071-2081*

- Adaptive Neural Network Control for Uncertain Time-Varying State Constrained Robotics Systems. *Lu, S., +, TSMC Dec. 2019 2511-2518*
- Autonomous Cognitive Robots Need Emotional Modulations: Introducing the eMODUL Model. *Belkaid, M., +, TSMC Jan. 2019 206-215*
- Autonomous Optimization of Swimming Gait in a Fish Robot With Multiple Onboard Sensors. *Wang, W., +, TSMC May 2019 891-903*
- Continuous Visual World Modeling for Autonomous Robot Manipulation. *Inceoglu, A., +, TSMC Jan. 2019 192-205*
- Control of Omnidirectional Robot Using Z-Number-Based Fuzzy System. *Abiyev, R.H., +, TSMC Jan. 2019 238-252*
- Enhancing Binocular Depth Estimation Based on Proactive Perception and Action Cyclic Learning for an Autonomous Developmental Robot. *Jin, Y., +, TSMC Jan. 2019 169-180*
- Indoor Localization for Skid-Steering Mobile Robot by Fusing Encoder, Gyroscope, and Magnetometer. *Lv, W., +, TSMC June 2019 1241-1253*
- Learning Human–Robot Interaction for Robot-Assisted Pedestrian Flow Optimization. *Jiang, C., +, TSMC April 2019 797-813*
- Motion Planning by Demonstration With Human-Likeness Evaluation for Dual-Arm Robots. *Garcia, N., +, TSMC Nov. 2019 2298-2307*
- Neural-Network-Based Switching Formation Tracking Control of Multiagents With Uncertainties in Constrained Space. *Liu, X., +, TSMC May 2019 1006-1015*
- Parameterized Batch Reinforcement Learning for Longitudinal Control of Autonomous Land Vehicles. *Huang, Z., +, TSMC April 2019 730-741*
- Real-Time Pose Imitation by Mid-Size Humanoid Robot With Servo-Cradle-Head RGB-D Vision System. *Hwang, C., +, TSMC Jan. 2019 181-191*
- Semantically Enhanced UAVs to Increase the Aerial Scene Understanding. *Cavaliere, D., +, TSMC March 2019 555-567*

Motion control

- A Dynamic Neural Network Approach for Efficient Control of Manipulators. *Li, S., +, TSMC May 2019 932-941*
- An Increased Nonlinear Coupling Motion Controller for Underactuated Multi-TORA Systems: Theoretical Design and Hardware Experimentation. *Wu, Y., +, TSMC June 2019 1186-1193*
- Autonomous Optimization of Swimming Gait in a Fish Robot With Multiple Onboard Sensors. *Wang, W., +, TSMC May 2019 891-903*
- Cartesian Trajectory Tracking of a 7-DOF Exoskeleton Robot Based on Human Inverse Kinematics. *Brahmi, B., +, TSMC March 2019 600-611*
- Coordination Control of a Dual-Arm Exoskeleton Robot Using Human Impedance Transfer Skills. *Huang, B., +, TSMC May 2019 954-963*
- Learning Human–Robot Interaction for Robot-Assisted Pedestrian Flow Optimization. *Jiang, C., +, TSMC April 2019 797-813*
- Motion Planning by Demonstration With Human-Likeness Evaluation for Dual-Arm Robots. *Garcia, N., +, TSMC Nov. 2019 2298-2307*
- Neural-Network-Based Switching Formation Tracking Control of Multiagents With Uncertainties in Constrained Space. *Liu, X., +, TSMC May 2019 1006-1015*
- Solving Time-Varying System of Nonlinear Equations by Finite-Time Recurrent Neural Networks With Application to Motion Tracking of Robot Manipulators. *Xiao, L., +, TSMC Nov. 2019 2210-2220*

Multi-agent systems

- Adaptive Distributed Consensus Control of One-Sided Lipschitz Nonlinear Multiagents. *Agha, R., +, TSMC March 2019 568-578*
- Adaptive Distributed Observer Approach for Cooperative Containment Control of Nonidentical Networks. *Liang, H., +, TSMC Feb. 2019 299-307*
- Bipartite Consensus Control of High-Order Multiagent Systems With Unknown Disturbances. *Wu, Y., +, TSMC Oct. 2019 2189-2199*
- Completely Distributed Guaranteed-Performance Consensualization for High-Order Multiagent Systems With Switching Topologies. *Xi, J., +, TSMC July 2019 1338-1348*
- Consensus of Linear Discrete-Time Multi-Agent Systems: A Low-Gain Distributed Impulsive Strategy. *Li, Z., +, TSMC June 2019 1041-1052*
- Consensus of Linear Multiagent Systems With Input-Based Triggering Condition. *Xu, Y., +, TSMC Nov. 2019 2308-2317*
- Consensus of Multiagent Systems With Nonlinear Dynamics Using an Integrated Sampled-Data-Based Event-Triggered Communication Scheme. *Peng, C., +, TSMC March 2019 589-599*

- Cooperative Adaptive Event-Triggered Control for Multiagent Systems With Actuator Failures. *Zhang, Y., +, TSMC Sept. 2019 1759-1768*
- Data-Based Fault-Tolerant Consensus Control for Uncertain Multiagent Systems Via Weighted Edge Dynamics. *Shi, C., +, TSMC Dec. 2019 2548-2558*
- Detecting Prosumer-Community Groups in Smart Grids From the Multiagent Perspective. *Cao, J., +, TSMC Aug. 2019 1652-1664*
- Distributed Adaptive Fuzzy Containment Control of Stochastic Pure-Feedback Nonlinear Multiagent Systems With Local Quantized Controller and Tracking Constraint. *Zhang, L., +, TSMC April 2019 787-796*
- Event-Triggered Algorithms for Leader–Follower Consensus of Networked Euler–Lagrange Agents. *Liu, Q., +, TSMC July 2019 1435-1447*
- Exponential Consensus Analysis for Multiagent Networks Based on Time-Delay Impulsive Systems. *Wu, Y., +, TSMC June 2019 1073-1080*
- Finite-Time Output Consensus of Higher-Order Multiagent Systems With Mismatched Disturbances and Unknown State Elements. *Li, G., +, TSMC Dec. 2019 2571-2581*
- Fixed-Time Event-Triggered Consensus for Nonlinear Multiagent Systems Without Continuous Communications. *Liu, J., +, TSMC Nov. 2019 2221-2229*
- Fuzzy Adaptive Distributed Event-Triggered Consensus Control of Uncertain Nonlinear Multiagent Systems. *Li, Y., +, TSMC Sept. 2019 1777-1786*
- Global Consensus of Multiagent Systems With Internal Delays and Communication Delays. *Qian, W., +, TSMC Oct. 2019 1961-1970*
- Guest Editorial Special Issue on New Trends in Energy Internet: Artificial Intelligence-Based Control, Network Security, and Management. *Yue, D., +, TSMC Aug. 2019 1551-1553*
- Mean Square Leader–Following Consensus of Second-Order Nonlinear Multiagent Systems With Noises and Unmodeled Dynamics. *Zou, W., +, TSMC Dec. 2019 2478-2486*
- Model Free Adaptive Iterative Learning Consensus Tracking Control for a Class of Nonlinear Multiagent Systems. *Bu, X., +, TSMC April 2019 677-686*
- Multitarget Tracking Control for Coupled Heterogeneous Inertial Agents Systems Based on Flocking Behavior. *Chen, S., +, TSMC Dec. 2019 2605-2611*
- Neural-Network-Based Robust Control Schemes for Nonlinear Multiplayer Systems With Uncertainties via Adaptive Dynamic Programming. *Jiang, H., +, TSMC March 2019 579-588*
- Neural-Network-Based Switching Formation Tracking Control of Multiagents With Uncertainties in Constrained Space. *Liu, X., +, TSMC May 2019 1006-1015*
- Observer-Based Adaptive Consensus for a Class of Nonlinear Multiagent Systems. *Mao, J., +, TSMC Sept. 2019 1893-1900*
- Observer-Based Consensus for Positive Multiagent Systems With Directed Topology and Nonlinear Control Input. *Wu, H., +, TSMC July 2019 1459-1469*
- Robust Neuro-Adaptive Containment of Multileader Multiagent Systems With Uncertain Dynamics. *Wen, G., +, TSMC Feb. 2019 406-417*
- Stationary Consensus Control of a Class of High-Order Uncertain Nonlinear Agents With Communication Delays. *Rezaee, H., +, TSMC June 2019 1285-1290*

Multi-robot systems

- A Real-Time and Fully Distributed Approach to Motion Planning for Multi-robot Systems. *Zhou, Y., +, TSMC Dec. 2019 2636-2650*
- Control of Omnidirectional Robot Using Z-Number-Based Fuzzy System. *Abiyev, R.H., +, TSMC Jan. 2019 238-252*
- Neural-Network-Based Switching Formation Tracking Control of Multiagents With Uncertainties in Constrained Space. *Liu, X., +, TSMC May 2019 1006-1015*
- Observer-Based Adaptive Consensus for a Class of Nonlinear Multiagent Systems. *Mao, J., +, TSMC Sept. 2019 1893-1900*
- Robust Neuro-Adaptive Containment of Multileader Multiagent Systems With Uncertain Dynamics. *Wen, G., +, TSMC Feb. 2019 406-417*

Multidimensional systems

- Boundary Control for an Axially Moving System With Input Restriction Based on Disturbance Observers. *Liu, Y., +, TSMC Nov. 2019 2242-2253*

Muscles

Coordination Control of a Dual-Arm Exoskeleton Robot Using Human Impedance Transfer Skills. *Huang, B., +, TSMC May 2019 954-963*

N**Nash equilibrium**

Approximate Nash Solutions for Multiplayer Mixed-Zero-Sum Game With Reinforcement Learning. *Lu, Y., +, TSMC Dec. 2019 2739-2750*

Natural gas technology

Boundary Adaptive Robust Control of a Flexible Riser System With Input Nonlinearities. *Zhao, Z., +, TSMC Oct. 2019 1971-1980*

Navigation

A Novel Potential Field Controller for Use on Aerial Robots. *Woods, A.C., +, TSMC April 2019 665-676*

Network security

Guest Editorial Special Issue on New Trends in Energy Internet: Artificial Intelligence-Based Control, Network Security, and Management. *Yue, D., +, TSMC Aug. 2019 1551-1553*

Network servers

Design and Verification of an NDN-Based Safety-Critical Application: A Case Study With Smart Healthcare. *Saxena, D., +, TSMC May 2019 991-1005*

Network theory (graphs)

A Novel Method for Detecting New Overlapping Community in Complex Evolving Networks. *Cheng, J., +, TSMC Sept. 2019 1832-1844*

Adaptive Distributed Observer Approach for Cooperative Containment Control of Nonidentical Networks. *Liang, H., +, TSMC Feb. 2019 299-307*

Bipartite Consensus Control of High-Order Multiagent Systems With Unknown Disturbances. *Wu, Y., +, TSMC Oct. 2019 2189-2199*

Delay-Dependent Impulsive Distributed Synchronization of Stochastic Complex Dynamical Networks With Time-Varying Delays. *Wang, X., +, TSMC July 2019 1496-1504*

Event-Triggered Partial-Nodes-Based State Estimation for Delayed Complex Networks With Bounded Distributed Delays. *Liu, Y., +, TSMC June 2019 1088-1098*

Exponential Consensus Analysis for Multiagent Networks Based on Time-Delay Impulsive Systems. *Wu, Y., +, TSMC June 2019 1073-1080*

Kernel-Based Random Vector Functional-Link Network for Fast Learning of Spatiotemporal Dynamic Processes. *Xu, K., +, TSMC May 2019 1016-1026*

Network Structural Vulnerability: A Multiobjective Attacker Perspective. *Faramondi, L., +, TSMC Oct. 2019 2036-2049*

Stationary Consensus Control of a Class of High-Order Uncertain Nonlinear Agents With Communication Delays. *Rezaee, H., +, TSMC June 2019 1285-1290*

Subgraph Robustness of Complex Networks Under Attacks. *Shang, Y., TSMC April 2019 821-832*

Networked control systems

H_∞ Output Tracking Control for Networked Systems With Adaptively Adjusted Event-Triggered Scheme. *Yan, H., +, TSMC Oct. 2019 2050-2058*

An Event-Based Asynchronous Approach to Markov Jump Systems With Hidden Mode Detections and Missing Measurements. *Cheng, J., +, TSMC Sept. 2019 1749-1758*

Event-Triggered Algorithms for Leader-Follower Consensus of Networked Euler-Lagrange Agents. *Liu, Q., +, TSMC July 2019 1435-1447*

Input-to-State Stabilization of Delayed Differential Systems With Exogenous Disturbances: The Event-Triggered Case. *Li, B., +, TSMC June 2019 1099-1109*

Neural network architecture

Efficient Deep CNN-Based Fire Detection and Localization in Video Surveillance Applications. *Muhammad, K., +, TSMC July 2019 1419-1434*

Memristor-Based Echo State Network With Online Least Mean Square. *Wen, S., +, TSMC Sept. 2019 1787-1796*

Neural networks

A New Deep Transfer Learning Based on Sparse Auto-Encoder for Fault Diagnosis. *Wen, L., +, TSMC Jan. 2019 136-144*

Asynchronous Filtering for Markov Jump Neural Networks With Quantized Outputs. *Shen, Y., +, TSMC Feb. 2019 433-443*

Biometric Palmprint Verification: A Dynamical System Approach. *Palma, D., +, TSMC Dec. 2019 2676-2687*

Depth Control of Model-Free AUVs via Reinforcement Learning. *Wu, H., +, TSMC Dec. 2019 2499-2510*

Distributed Neurodynamic Optimization for Energy Internet Management. *Le, X., +, TSMC Aug. 2019 1624-1633*

Exponential Stability, Passivity, and Dissipativity Analysis of Generalized Neural Networks With Mixed Time-Varying Delays. *Saravanakumar, R., +, TSMC Feb. 2019 395-405*

Global Asymptotic Stability and Adaptive Ultimate Mittag-Leffler Synchronization for a Fractional-Order Complex-Valued Memristive Neural Networks With Delays. *Chen, J., +, TSMC Dec. 2019 2519-2535*

Investigating the Evolution of a Neuroplasticity Network for Learning. *Wang, L., +, TSMC Oct. 2019 2131-2143*

Kernel Regularized Nonlinear Dictionary Learning for Sparse Coding. *Liu, H., +, TSMC April 2019 766-775*

Passivity Analysis for Memristor-Based Inertial Neural Networks With Discrete and Distributed Delays. *Xiao, Q., +, TSMC Feb. 2019 375-385*

Real-Time Pose Imitation by Mid-Size Humanoid Robot With Servo-Cradle-Head RGB-D Vision System. *Hwang, C., +, TSMC Jan. 2019 181-191*

Scene Understanding in Deep Learning-Based End-to-End Controllers for Autonomous Vehicles. *Yang, S., +, TSMC Jan. 2019 53-63*

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A Dynamic Neural Network Approach for Efficient Control of Manipulators. *Li, S., +, TSMC May 2019 932-941*

A Novel Neural-Network-Based Adaptive Control Scheme for Output-Constrained Stochastic Switched Nonlinear Systems. *Niu, B., +, TSMC Feb. 2019 418-432*

Adaptive Neural Backstepping Control Design for A Class of Nonsmooth Nonlinear Systems. *Zhao, X., +, TSMC Sept. 2019 1820-1831*

Adaptive Neural-Network-Based Dynamic Surface Control for Stochastic Interconnected Nonlinear Nonstrict-Feedback Systems With Dead Zone. *Niu, B., +, TSMC July 2019 1386-1398*

Aperiodically Intermittent Control for Quasi-Synchronization of Delayed Memristive Neural Networks: An Interval Matrix and Matrix Measure Combined Method. *Fan, Y., +, TSMC Nov. 2019 2254-2265*

Distributed Adaptive Fuzzy Containment Control of Stochastic Pure-Feedback Nonlinear Multiagent Systems With Local Quantized Controller and Tracking Constraint. *Zhang, L., +, TSMC April 2019 787-796*

Energy-Saving Dynamic Bias Current Control of Active Magnetic Bearing Positioning System Using Adaptive Differential Evolution. *Chen, S., +, TSMC May 2019 942-953*

Event-Triggered Optimal Neuro-Controller Design With Reinforcement Learning for Unknown Nonlinear Systems. *Yang, X., +, TSMC Sept. 2019 1866-1878*

Exponential Synchronization of Neural Networks With Time-Varying Delays via Dynamic Intermittent Output Feedback Control. *Zhang, Z., +, TSMC March 2019 612-622*

Fuzzy Tracking Control for a Class of Uncertain MIMO Nonlinear Systems With State Constraints. *He, W., +, TSMC March 2019 543-554*

Global Exponential Stability of Delayed Neural Networks Based on a New Integral Inequality. *Liu, Y., +, TSMC Nov. 2019 2318-2325*

Neural-Network-Based Robust Control Schemes for Nonlinear Multiplayer Systems With Uncertainties via Adaptive Dynamic Programming. *Jiang, H., +, TSMC March 2019 579-588*

Neural-Network-Based Switching Formation Tracking Control of Multiagents With Uncertainties in Constrained Space. *Liu, X., +, TSMC May 2019 1006-1015*

Observer-Based Adaptive Consensus for a Class of Nonlinear Multiagent Systems. *Mao, J., +, TSMC Sept. 2019 1893-1900*

Observer-Based Decentralized Adaptive NNs Fault-Tolerant Control of a Class of Large-Scale Uncertain Nonlinear Systems With Actuator Failures. *Yang, Y., +, TSMC March 2019 528-542*

Output Tracking Control Based on Adaptive Dynamic Programming With Multistep Policy Evaluation. *Luo, B., +, TSMC Oct. 2019 2155-2165*

- Robust Neuro-Adaptive Containment of Multileader Multiagent Systems With Uncertain Dynamics. *Wen, G., +, TSMC Feb. 2019 406-417*
- Solving Time-Varying System of Nonlinear Equations by Finite-Time Recurrent Neural Networks With Application to Motion Tracking of Robot Manipulators. *Xiao, L., +, TSMC Nov. 2019 2210-2220*
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- Adaptive Anti-Swing and Positioning Control for 4-DOF Rotary Cranes Subject to Uncertain/Unknown Parameters With Hardware Experiments. *Sun, N., +, TSMC July 2019 1309-1321*
- Adaptive Distributed Consensus Control of One-Sided Lipschitz Nonlinear Multiagents. *Agha, R., +, TSMC March 2019 568-578*
- Adaptive Dynamic Surface Control Design for Uncertain Nonlinear Strict-Feedback Systems With Unknown Control Direction and Disturbances. *Ma, H., +, TSMC March 2019 506-515*
- Adaptive Finite Time Control of Nonlinear Systems Under Time-Varying Actuator Failures. *Wang, F., +, TSMC Sept. 2019 1845-1852*
- Adaptive Fuzzy Tracking Control of Flexible-Joint Robots With Full-State Constraints. *Sun, W., +, TSMC Nov. 2019 2201-2209*
- Adaptive Neural Backstepping Control Design for A Class of Nonsmooth Nonlinear Systems. *Zhao, X., +, TSMC Sept. 2019 1820-1831*
- Adaptive Neural-Network-Based Dynamic Surface Control for Stochastic Interconnected Nonlinear Nonstrict-Feedback Systems With Dead Zone. *Niu, B., +, TSMC July 2019 1386-1398*
- An Improved Data-Driven Point-to-Point ILC Using Additional On-Line Control Inputs With Experimental Verification. *Chi, R., +, TSMC April 2019 687-696*
- An Increased Nonlinear Coupling Motion Controller for Underactuated Multi-TORA Systems: Theoretical Design and Hardware Experimentation. *Wu, Y., +, TSMC June 2019 1186-1193*
- Boundary Adaptive Robust Control of a Flexible Riser System With Input Nonlinearities. *Zhao, Z., +, TSMC Oct. 2019 1971-1980*
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- Distributed Adaptive Fuzzy Containment Control of Stochastic Pure-Feedback Nonlinear Multiagent Systems With Local Quantized Controller and Tracking Constraint. *Zhang, L., +, TSMC April 2019 787-796*
- Dual-Loop Adaptive Iterative Learning Control for a Timoshenko Beam With Output Constraint and Input Backlash. *He, W., +, TSMC May 2019 1027-1038*
- Event-Triggered Optimal Neuro-Controller Design With Reinforcement Learning for Unknown Nonlinear Systems. *Yang, X., +, TSMC Sept. 2019 1866-1878*

- Fault-Tolerant Resilient Control For Fuzzy Fractional Order Systems. *Sakthivel, R., +, TSMC Sept. 2019 1797-1805*
- Finite-Time Adaptive Fuzzy Control for Nonlinear Systems With Full State Constraints. *Xia, J., +, TSMC July 2019 1541-1548*
- Finite-Time Resilient Controller Design of a Class of Uncertain Nonlinear Systems With Time-Delays Under Asynchronous Switching. *He, S., +, TSMC Feb. 2019 281-286*
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- Fixed-Time Event-Triggered Consensus for Nonlinear Multiagent Systems Without Continuous Communications. *Liu, J., +, TSMC Nov. 2019 2221-2229*
- Fuzzy Adaptive Distributed Event-Triggered Consensus Control of Uncertain Nonlinear Multiagent Systems. *Li, Y., +, TSMC Sept. 2019 1777-1786*
- Fuzzy Reduced-Order Compensator-Based Stabilization for Interconnected Descriptor Systems via Integral Sliding Modes. *Li, J., +, TSMC April 2019 752-765*
- Fuzzy Tracking Control for a Class of Uncertain MIMO Nonlinear Systems With State Constraints. *He, W., +, TSMC March 2019 543-554*
- Global Stabilization of a Class of Switched Nonlinear Systems Under Sampled-Data Control. *Li, S., +, TSMC Sept. 2019 1912-1919*
- Immersion and Invariance-Based Adaptive Controller for Quadrotor Systems. *Zou, Y., +, TSMC Nov. 2019 2288-2297*
- Input-to-State Stabilization of Delayed Differential Systems With Exogenous Disturbances: The Event-Triggered Case. *Li, B., +, TSMC June 2019 1099-1109*
- Model Free Adaptive Iterative Learning Consensus Tracking Control for a Class of Nonlinear Multiagent Systems. *Bu, X., +, TSMC April 2019 677-686*
- Neural-Network-Based Robust Control Schemes for Nonlinear Multiplayer Systems With Uncertainties via Adaptive Dynamic Programming. *Jiang, H., +, TSMC March 2019 579-588*
- Nonlinear Model Predictive Lateral Stability Control of Active Chassis for Intelligent Vehicles and Its FPGA Implementation. *Guo, H., +, TSMC Jan. 2019 2-13*
- Observer-Based Adaptive Consensus for a Class of Nonlinear Multiagent Systems. *Mao, J., +, TSMC Sept. 2019 1893-1900*
- Observer-Based Adaptive Fuzzy Fault-Tolerant Control for Stochastic Nonstrict-Feedback Nonlinear Systems With Input Quantization. *Ma, H., +, TSMC Feb. 2019 287-298*
- Observer-Based Consensus for Positive Multiagent Systems With Directed Topology and Nonlinear Control Input. *Wu, H., +, TSMC July 2019 1459-1469*
- Observer-Based Decentralized Adaptive NNs Fault-Tolerant Control of a Class of Large-Scale Uncertain Nonlinear Systems With Actuator Failures. *Yang, Y., +, TSMC March 2019 528-542*
- Observer-Based Fuzzy Adaptive Dynamic Surface Control of Uncertain Nonstrict Feedback Systems With Unknown Control Direction and Unknown Dead-Zone. *Shojaei, F., +, TSMC Nov. 2019 2340-2351*
- Output Tracking Control Based on Adaptive Dynamic Programming With Multistep Policy Evaluation. *Luo, B., +, TSMC Oct. 2019 2155-2165*
- Practical Adaptive Fuzzy Control of Nonlinear Pure-Feedback Systems With Quantized Nonlinearity Input. *Wu, J., +, TSMC March 2019 638-648*
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- Quantized Fuzzy Output Feedback \mathcal{H}_∞ Control for Nonlinear Systems With Adjustment of Dynamic Parameters. *Chang, X., +, TSMC Oct. 2019 2005-2015*
- Reliable Control Against Sensor Failures for Markov Jump Systems With Unideal Measurements. *Tao, J., +, TSMC Feb. 2019 308-316*
- Reliable Filtering of Nonlinear Markovian Jump Systems: The Continuous-Time Case. *Wu, Z., +, TSMC Feb. 2019 386-394*
- Robust Guaranteed Cost Sampled-Data Fuzzy Control for Uncertain Nonlinear Time-Delay Systems. *Wang, Z., +, TSMC May 2019 964-975*
- Robust Neuro-Adaptive Containment of Multileader Multiagent Systems With Uncertain Dynamics. *Wen, G., +, TSMC Feb. 2019 406-417*

Solving Time-Varying System of Nonlinear Equations by Finite-Time Recurrent Neural Networks With Application to Motion Tracking of Robot Manipulators. *Xiao, L., +, TSMC Nov. 2019 2210-2220*

Stabilization of Stochastic Uncertain Complex-Valued Delayed Networks via Aperiodically Intermittent Nonlinear Control. *Wang, P., +, TSMC March 2019 649-662*

Nonlinear dynamical systems

Adaptive Distributed Consensus Control of One-Sided Lipschitz Nonlinear Multiagents. *Agha, R., +, TSMC March 2019 568-578*

Dissipativity-Based Fuzzy Control of Nonlinear Systems via an Event-Triggered Mechanism. *Su, X., +, TSMC June 2019 1208-1217*

Mean Square Leader-Following Consensus of Second-Order Nonlinear Multiagent Systems With Noises and Unmodeled Dynamics. *Zou, W., +, TSMC Dec. 2019 2478-2486*

Robust Neuro-Adaptive Containment of Multileader Multiagent Systems With Uncertain Dynamics. *Wen, G., +, TSMC Feb. 2019 406-417*

Stationary Consensus Control of a Class of High-Order Uncertain Nonlinear Agents With Communication Delays. *Rezaee, H., +, TSMC June 2019 1285-1290*

Transportation Control of Double-Pendulum Cranes With a Nonlinear Quasi-PID Scheme: Design and Experiments. *Sun, N., +, TSMC July 2019 1408-1418*

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Solving Time-Varying System of Nonlinear Equations by Finite-Time Recurrent Neural Networks With Application to Motion Tracking of Robot Manipulators. *Xiao, L., +, TSMC Nov. 2019 2210-2220*

Nonlinear filters

Nonlinear Stochastic Attitude Filters on the Special Orthogonal Group 3: Ito and Stratonovich. *Hashim, H.A., +, TSMC Sept. 2019 1853-1865*

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A Computationally Efficient and Hierarchical Control Strategy for Velocity Optimization of On-Road Vehicles. *Guo, L., +, TSMC Jan. 2019 31-41*

Fault Identification of Discrete Event Systems Modeled by Petri Nets With Unobservable Transitions. *Zhu, G., +, TSMC Feb. 2019 333-345*

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Adaptive Neural Backstepping Control Design for A Class of Nonsmooth Nonlinear Systems. *Zhao, X., +, TSMC Sept. 2019 1820-1831*

Adaptive Neural Network Control for Uncertain Time-Varying State Constrained Robotics Systems. *Lu, S., +, TSMC Dec. 2019 2511-2518*

Data-Driven Adaptive Sliding Mode Control of Nonlinear Discrete-Time Systems With Prescribed Performance. *Liu, D., +, TSMC Dec. 2019 2598-2604*

Decentralized Adaptive Neural Approximated Inverse Control for a Class of Large-Scale Nonlinear Hysteretic Systems With Time Delays. *Zhang, X., +, TSMC Dec. 2019 2424-2437*

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Impact of Carbon Regulations on the Supply Chain With Carbon Reduction Effort. *Li, X., +, TSMC June 2019 1218-1227*

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Observer-Based Decentralized Adaptive NNs Fault-Tolerant Control of a Class of Large-Scale Uncertain Nonlinear Systems With Actuator Failures. *Yang, Y., +, TSMC March 2019 528-542*

Practical Adaptive Fuzzy Control of Nonlinear Pure-Feedback Systems With Quantized Nonlinearity Input. *Wu, J., +, TSMC March 2019 638-648*

Practical Model Construction and Stable Control of an Unmanned Aerial Vehicle With a Parafoil-Type Wing. *Tanaka, M., +, TSMC June 2019 1291-1297*

Regularization and Stabilization for Rectangular T-S Fuzzy Discrete-Time Systems With Time Delay. *Chen, J., +, TSMC April 2019 833-842*

Reliable Filtering of Nonlinear Markovian Jump Systems: The Continuous-Time Case. *Wu, Z., +, TSMC Feb. 2019 386-394*

Sliding-Mode Control for Singular Markovian Jump Systems With Brownian Motion Based on Stochastic Sliding Mode Surface. *Zhang, Q., +, TSMC March 2019 494-505*

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H_∞ Output Tracking Control for Networked Systems With Adaptively Adjusted Event-Triggered Scheme. *Yan, H., +, TSMC Oct. 2019 2050-2058*

Global Consensus of Multiagent Systems With Internal Delays and Communication Delays. *Qian, W., +, TSMC Oct. 2019 1961-1970*

Global Exponential Stability of Delayed Neural Networks Based on a New Integral Inequality. *Liu, Y., +, TSMC Nov. 2019 2318-2325*

Standards

An Altruistic Prediction-Based Congestion Control for Strict Beaconing Requirements in Urban VANETs. *Zemouri, S., +, TSMC Dec. 2019 2582-2597*

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Event-Triggered Partial-Nodes-Based State Estimation for Delayed Complex Networks With Bounded Distributed Delays. *Liu, Y., +, TSMC June 2019 1088-1098*

State Estimation for Quaternion-Valued Neural Networks With Multiple Time Delays. *Chen, X., +, TSMC Nov. 2019 2278-2287*

State feedback

H_∞ Output Tracking Control for Networked Systems With Adaptively Adjusted Event-Triggered Scheme. *Yan, H., +, TSMC Oct. 2019 2050-2058*

A Novel Asynchronous Control for Artificial Delayed Markovian Jump Systems via Output Feedback Sliding Mode Approach. *Du, C., +, TSMC Feb. 2019 364-374*

Adaptive Distributed Consensus Control of One-Sided Lipschitz Nonlinear Multiagents. *Agha, R., +, TSMC March 2019 568-578*

Event-Triggered Sliding Mode Control of Discrete-Time Markov Jump Systems. *Yao, D., +, TSMC Oct. 2019 2016-2025*

Global Stabilization of a Class of Switched Nonlinear Systems Under Sampled-Data Control. *Li, S., +, TSMC Sept. 2019 1912-1919*

Reliable Control Against Sensor Failures for Markov Jump Systems With Unideal Measurements. *Tao, J., +, TSMC Feb. 2019 308-316*

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A Machine Vision System for Stacked Substrates Counting With a Robust Stripe Detection Algorithm. *Zhao, H., +, TSMC Nov. 2019 2352-2361*

ELM-Based Large-Scale Genetic Association Study via Statistically Significant Pattern. *Li, Y., +, TSMC Oct. 2019 2175-2188*

Identification of Multiview Gene Modules Using Mutual Information-Based Hypograph Mining. *Bhadra, T., +, TSMC June 2019 1119-1130*

Statistical distributions

Robust Kalman Filters Based on Gaussian Scale Mixture Distributions With Application to Target Tracking. *Huang, Y., +, TSMC Oct. 2019 2082-2096*

Statistics

A Collaborative Resource Allocation Strategy for Decomposition-Based Multiobjective Evolutionary Algorithms. *Kang, Q., +, TSMC Dec. 2019 2416-2423*

Historical and Heuristic-Based Adaptive Differential Evolution. *Liu, X., +, TSMC Dec. 2019 2623-2635*

Steady-state

Data-Driven Adaptive Sliding Mode Control of Nonlinear Discrete-Time Systems With Prescribed Performance. *Liu, D., +, TSMC Dec. 2019 2598-2604*

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Nonlinear Model Predictive Lateral Stability Control of Active Chassis for Intelligent Vehicles and Its FPGA Implementation. *Guo, H., +, TSMC Jan. 2019 2-13*

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Hybrid-Driven-Based \mathcal{H}_∞ Control for Networked Cascade Control Systems With Actuator Saturations and Stochastic Cyber Attacks. *Liu, J., +, TSMC Dec. 2019 2452-2463*

Joint Optimization of Cash Management and Routing for New-Generation Automated Teller Machine Networks. *Bati, S., +, TSMC Dec. 2019 2724-2738*

Mean Square Leader-Following Consensus of Second-Order Nonlinear Multiagent Systems With Noises and Unmodeled Dynamics. *Zou, W., +, TSMC Dec. 2019 2478-2486*

Nonlinear Stochastic Attitude Filters on the Special Orthogonal Group 3: Ito and Stratonovich. *Hashim, H.A., +, TSMC Sept. 2019 1853-1865*

Sliding-Mode Control for Singular Markovian Jump Systems With Brownian Motion Based on Stochastic Sliding Mode Surface. *Zhang, Q., +, TSMC March 2019 494-505*

Stabilization of Stochastic Uncertain Complex-Valued Delayed Networks via Aperiodically Intermittent Nonlinear Control. *Wang, P., +, TSMC March 2019 649-662*

Stochastic programming

Price-Controlled Energy Management of Smart Homes for Maximizing Profit of a GENCO. *Rahmani-Andebili, M., +, TSMC April 2019 697-709*

Stochastic systems

\mathcal{H}_2 Performance Analysis and Applications of 2-D Hidden Bernoulli Jump System. *Wu, Z., +, TSMC Oct. 2019 2097-2107*

A Novel Asynchronous Control for Artificial Delayed Markovian Jump Systems via Output Feedback Sliding Mode Approach. *Du, C., +, TSMC Feb. 2019 364-374*

A Novel Neural-Network-Based Adaptive Control Scheme for Output-Constrained Stochastic Switched Nonlinear Systems. *Niu, B., +, TSMC Feb. 2019 418-432*

Adaptive Neural-Network-Based Dynamic Surface Control for Stochastic Interconnected Nonlinear Nonstrict-Feedback Systems With Dead Zone. *Niu, B., +, TSMC July 2019 1386-1398*

An Event-Based Asynchronous Approach to Markov Jump Systems With Hidden Mode Detections and Missing Measurements. *Cheng, J., +, TSMC Sept. 2019 1749-1758*

Asynchronous Filtering for Markov Jump Neural Networks With Quantized Outputs. *Shen, Y., +, TSMC Feb. 2019 433-443*

Delay-Dependent Impulsive Distributed Synchronization of Stochastic Complex Dynamical Networks With Time-Varying Delays. *Wang, X., +, TSMC July 2019 1496-1504*

Event-Triggered Partial-Nodes-Based State Estimation for Delayed Complex Networks With Bounded Distributed Delays. *Liu, Y., +, TSMC June 2019 1088-1098*

Event-Triggered Sliding Mode Control of Discrete-Time Markov Jump Systems. *Yao, D., +, TSMC Oct. 2019 2016-2025*

Finite-Time Resilient Controller Design of a Class of Uncertain Nonlinear Systems With Time-Delays Under Asynchronous Switching. *He, S., +, TSMC Feb. 2019 281-286*

Input-to-State Stabilization of Delayed Differential Systems With Exogenous Disturbances: The Event-Triggered Case. *Li, B., +, TSMC June 2019 1099-1109*

Observer-Based Adaptive Fuzzy Fault-Tolerant Control for Stochastic Nonstrict-Feedback Nonlinear Systems With Input Quantization. *Ma, H., +, TSMC Feb. 2019 287-298*

Observer-Based Synchronization of Complex Dynamical Networks Under Actuator Saturation and Probabilistic Faults. *Selvaraj, P., +, TSMC July 2019 1516-1526*

Reliable Control Against Sensor Failures for Markov Jump Systems With Unideal Measurements. *Tao, J., +, TSMC Feb. 2019 308-316*

Reliable Filtering of Nonlinear Markovian Jump Systems: The Continuous-Time Case. *Wu, Z., +, TSMC Feb. 2019 386-394*

Robust Simultaneous Fault Estimation and Nonfragile Output Feedback Fault-Tolerant Control for Markovian Jump Systems. *Li, X., +, TSMC Sept. 2019 1769-1776*

Sliding-Mode Control for Singular Markovian Jump Systems With Brownian Motion Based on Stochastic Sliding Mode Surface. *Zhang, Q., +, TSMC March 2019 494-505*

Takagi-Sugeno Model-Based Sliding Mode Observer Design for Finite-Time Synthesis of Semi-Markovian Jump Systems. *Jiang, B., +, TSMC July 2019 1505-1515*

Streaming media

Structure From Motion Technique for Scene Detection Using Autonomous Drone Navigation. *Huang, Y., +, TSMC Dec. 2019 2559-2570*

Substrates

A Machine Vision System for Stacked Substrates Counting With a Robust Stripe Detection Algorithm. *Zhao, H., +, TSMC Nov. 2019 2352-2361*

Supervised learning

Noniterative Deep Learning: Incorporating Restricted Boltzmann Machine Into Multilayer Random Weight Neural Networks. *Wang, X., +, TSMC July 2019 1299-1308*

Supply chain management

Impact of Carbon Regulations on the Supply Chain With Carbon Reduction Effort. *Li, X., +, TSMC June 2019 1218-1227*

Supply chains

Impact of Carbon Regulations on the Supply Chain With Carbon Reduction Effort. *Li, X., +, TSMC June 2019 1218-1227*

Support vector machines

A New Deep Transfer Learning Based on Sparse Auto-Encoder for Fault Diagnosis. *Wen, L., +, TSMC Jan. 2019 136-144*

A Novel Real-Time Moving Target Tracking and Path Planning System for a Quadrotor UAV in Unknown Unstructured Outdoor Scenes. *Liu, Y., +, TSMC Nov. 2019 2362-2372*

Deep Additive Least Squares Support Vector Machines for Classification With Model Transfer. *Wang, G., +, TSMC July 2019 1527-1540*

New Incremental Learning Algorithm With Support Vector Machines. *Xu, J., +, TSMC Nov. 2019 2230-2241*

Personalized Driver Workload Inference by Learning From Vehicle Related Measurements. *Yi, D., +, TSMC Jan. 2019 159-168*

Real-Time Pose Imitation by Mid-Size Humanoid Robot With Servo-Cradle-Head RGB-D Vision System. *Hwang, C., +, TSMC Jan. 2019 181-191*

Switches

Distributed Time-Varying Formation Control for Linear Swarm Systems With Switching Topologies Using an Adaptive Output-Feedback Approach. *Wang, R., +, TSMC Dec. 2019 2664-2675*

Hybrid-Driven-Based \mathcal{H}_∞ Control for Networked Cascade Control Systems With Actuator Saturations and Stochastic Cyber Attacks. *Liu, J., +, TSMC Dec. 2019 2452-2463*

Switching systems (control)

\mathcal{H}_2 Performance Analysis and Applications of 2-D Hidden Bernoulli Jump System. *Wu, Z., +, TSMC Oct. 2019 2097-2107*

Aperiodically Intermittent Control for Quasi-Synchronization of Delayed Memristive Neural Networks: An Interval Matrix and Matrix Measure Combined Method. *Fan, Y., +, TSMC Nov. 2019 2254-2265*

Cooperative Stabilization for Linear Switched Systems With Asynchronous Switching. *Hua, C., +, TSMC June 2019 1081-1087*

Event-Triggered H_∞ Load Frequency Control for Multiarea Power Systems Under Hybrid Cyber Attacks. *Liu, J., +, TSMC Aug. 2019 1665-1678*

Global Stabilization of a Class of Switched Nonlinear Systems Under Sampled-Data Control. *Li, S., +, TSMC Sept. 2019 1912-1919*

Robust H_2/H_∞ Model Predictive Control for Linear Systems With Polytopic Uncertainties Under Weighted MEF-TOD Protocol. *Song, Y., +, TSMC July 2019 1470-1481*

Trajectory Tracking Control of a One Degree of Freedom Manipulator Based on a Switched Sliding Mode Controller With a Novel Extended State Observer Framework. *Zhao, L., +, TSMC June 2019 1110-1118*

Synchronization

Aperiodically Intermittent Control for Quasi-Synchronization of Delayed Memristive Neural Networks: An Interval Matrix and Matrix Measure Combined Method. *Fan, Y., +, TSMC Nov. 2019 2254-2265*

Delay-Dependent Impulsive Distributed Synchronization of Stochastic Complex Dynamical Networks With Time-Varying Delays. *Wang, X., +, TSMC July 2019 1496-1504*

Exponential Synchronization of Neural Networks With Time-Varying Delays via Dynamic Intermittent Output Feedback Control. *Zhang, Z., +, TSMC March 2019 612-622*

Exponential Synchronization via Aperiodic Sampling of Complex Delayed Networks. *Que, H., +, TSMC July 2019 1399-1407*

Finite-Time Synchronization for Chaotic Gyros Systems With Terminal Sliding Mode Control. *Yin, L., +, TSMC June 2019 1131-1140*

Global Asymptotic Stability and Adaptive Ultimate Mittag-Leffler Synchronization for a Fractional-Order Complex-Valued Memristive Neural Networks With Delays. *Chen, J., +, TSMC Dec. 2019 2519-2535*

Observer-Based Synchronization of Complex Dynamical Networks Under Actuator Saturation and Probabilistic Faults. *Selvaraj, P., +, TSMC July 2019 1516-1526*

Pinning Synchronization of Complex Dynamical Networks With Multiweights. *Wang, J., +, TSMC July 2019 1357-1370*

Systems engineering

An Advanced Cyber Physical Framework for Micro Devices Assembly. *Cecil, J., +, TSMC Jan. 2019 92-106*

T

Target tracking

A Novel Real-Time Moving Target Tracking and Path Planning System for a Quadrotor UAV in Unknown Unstructured Outdoor Scenes. *Liu, Y., +, TSMC Nov. 2019 2362-2372*

Multitarget Tracking Control for Coupled Heterogeneous Inertial Agents Systems Based on Flocking Behavior. *Chen, S., +, TSMC Dec. 2019 2605-2611*

Robust Kalman Filters Based on Gaussian Scale Mixture Distributions With Application to Target Tracking. *Huang, Y., +, TSMC Oct. 2019 2082-2096*
Semantically Enhanced UAVs to Increase the Aerial Scene Understanding. *Cavaliere, D., +, TSMC March 2019 555-567*

Task analysis

Learning a Distance Metric by Balancing KL-Divergence for Imbalanced Datasets. *Feng, L., +, TSMC Dec. 2019 2384-2395*

Telecommunication control

A Low-Latency Communication Scheme for Mobile Wireless Sensor Control Systems. *Huang, M., +, TSMC Feb. 2019 317-332*

Telecommunication network planning

Two-Level Master–Slave RFID Networks Planning via Hybrid Multiobjective Artificial Bee Colony Optimizer. *Ma, L., +, TSMC May 2019 861-880*

Telecommunication security

Voltage Distributed Cooperative Control Considering Communication Security in Photovoltaic Power System. *Zhang, Z., +, TSMC Aug. 2019 1592-1600*

Temperature distribution

Kernel-Based Random Vector Functional-Link Network for Fast Learning of Spatiotemporal Dynamic Processes. *Xu, K., +, TSMC May 2019 1016-1026*

Three-dimensional displays

Structure From Motion Technique for Scene Detection Using Autonomous Drone Navigation. *Huang, Y., +, TSMC Dec. 2019 2559-2570*

Three-term control

Reliable Tracking Control for Under-Actuated Quadrotors With Wind Disturbances. *Xu, J., +, TSMC Oct. 2019 2059-2070*

Transportation Control of Double-Pendulum Cranes With a Nonlinear Quasi-PID Scheme: Design and Experiments. *Sun, N., +, TSMC July 2019 1408-1418*

Thumb

Learning to Grasp Familiar Objects Based on Experience and Objects' Shape Affordance. *Liu, C., +, TSMC Dec. 2019 2710-2723*

Time series

A Multiple Model Approach to Time-Series Prediction Using an Online Sequential Learning Algorithm. *George, K., +, TSMC May 2019 976-990*

Automated Model Construction for Combined Sewer Overflow Prediction Based on Efficient LASSO Algorithm. *Zhao, W., +, TSMC June 2019 1254-1269*

Complex Network Construction of Multivariate Time Series Using Information Geometry. *Sun, J., +, TSMC Jan. 2019 107-122*

Data-Driven Detection of Hot Spots in Photovoltaic Energy Systems. *Chen, H., +, TSMC Aug. 2019 1731-1738*

Fast and Accurate Classification of Time Series Data Using Extended ELM: Application in Fault Diagnosis of Air Handling Units. *Yan, K., +, TSMC July 2019 1349-1356*

Online Change-Point Detection in Sparse Time Series With Application to Online Advertising. *Zhang, J., +, TSMC June 2019 1141-1151*

Time-varying systems

Adaptive Finite Time Control of Nonlinear Systems Under Time-Varying Actuator Failures. *Wang, F., +, TSMC Sept. 2019 1845-1852*

Adaptive Neural Network Control for Uncertain Time-Varying State Constrained Robotics Systems. *Lu, S., +, TSMC Dec. 2019 2511-2518*

Asynchronous Filtering for Markov Jump Neural Networks With Quantized Outputs. *Shen, Y., +, TSMC Feb. 2019 433-443*

Bipartite Consensus Control of High-Order Multiagent Systems With Unknown Disturbances. *Wu, Y., +, TSMC Oct. 2019 2189-2199*

Cooperative Stabilization for Linear Switched Systems With Asynchronous Switching. *Hua, C., +, TSMC June 2019 1081-1087*

Delay-Dependent Impulsive Distributed Synchronization of Stochastic Complex Dynamical Networks With Time-Varying Delays. *Wang, X., +, TSMC July 2019 1496-1504*

Distributed Event-Triggered Secondary Voltage Control for Microgrids With Time Delay. *Xie, Y., +, TSMC Aug. 2019 1582-1591*

Distributed Optimal Economic Dispatch for Microgrids Considering Communication Delays. *Huang, B., +, TSMC Aug. 2019 1634-1642*

Dual-Loop Adaptive Iterative Learning Control for a Timoshenko Beam With Output Constraint and Input Backlash. *He, W., +, TSMC May 2019 1027-1038*

Energy-Saving Dynamic Bias Current Control of Active Magnetic Bearing Positioning System Using Adaptive Differential Evolution. *Chen, S., +, TSMC May 2019 942-953*

Event-Triggered Partial-Nodes-Based State Estimation for Delayed Complex Networks With Bounded Distributed Delays. *Liu, Y., +, TSMC June 2019 1088-1098*

Exponential Stability, Passivity, and Dissipativity Analysis of Generalized Neural Networks With Mixed Time-Varying Delays. *Saravanakumar, R., +, TSMC Feb. 2019 395-405*

Exponential Synchronization of Neural Networks With Time-Varying Delays via Dynamic Intermittent Output Feedback Control. *Zhang, Z., +, TSMC March 2019 612-622*

Finite-Time Resilient Controller Design of a Class of Uncertain Nonlinear Systems With Time-Delays Under Asynchronous Switching. *He, S., +, TSMC Feb. 2019 281-286*

Global Exponential Stability of Delayed Neural Networks Based on a New Integral Inequality. *Liu, Y., +, TSMC Nov. 2019 2318-2325*

Observer-Based Adaptive Consensus for a Class of Nonlinear Multiagent Systems. *Mao, J., +, TSMC Sept. 2019 1893-1900*

Solving Time-Varying System of Nonlinear Equations by Finite-Time Recurrent Neural Networks With Application to Motion Tracking of Robot Manipulators. *Xiao, L., +, TSMC Nov. 2019 2210-2220*

State Estimation for Quaternion-Valued Neural Networks With Multiple Time Delays. *Chen, X., +, TSMC Nov. 2019 2278-2287*

Tires

A Review of Estimation for Vehicle Tire-Road Interactions Toward Automated Driving. *Guo, H., +, TSMC Jan. 2019 14-30*

Nonlinear Model Predictive Lateral Stability Control of Active Chassis for Intelligent Vehicles and Its FPGA Implementation. *Guo, H., +, TSMC Jan. 2019 2-13*

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Completely Distributed Guaranteed-Performance Consensualization for High-Order Multiagent Systems With Switching Topologies. *Xi, J., +, TSMC July 2019 1338-1348*

Complex Network Construction of Multivariate Time Series Using Information Geometry. *Sun, J., +, TSMC Jan. 2019 107-122*

Distributed Time-Varying Formation Control for Linear Swarm Systems With Switching Topologies Using an Adaptive Output-Feedback Approach. *Wang, R., +, TSMC Dec. 2019 2664-2675*

Exponential Consensus Analysis for Multiagent Networks Based on Time-Delay Impulsive Systems. *Wu, Y., +, TSMC June 2019 1073-1080*

Torque control

Adaptive Robust Triple-Step Control for Compensating Cogging Torque and Model Uncertainty in a DC Motor. *Hu, Y., +, TSMC Dec. 2019 2396-2405*

An Adaptive Backstepping Nonsingular Fast Terminal Sliding Mode Control for Robust Fault Tolerant Control of Robot Manipulators. *Van, M., +, TSMC July 2019 1448-1458*

Tracking

Adaptive Fuzzy Tracking Control of Flexible-Joint Robots With Full-State Constraints. *Sun, W., +, TSMC Nov. 2019 2201-2209*

Backpropagating Constraints-Based Trajectory Tracking Control of a Quadrotor With Constrained Actuator Dynamics and Complex Unknowns. *Wang, N., +, TSMC July 2019 1322-1337*

Output Tracking Control Based on Adaptive Dynamic Programming With Multistep Policy Evaluation. *Luo, B., +, TSMC Oct. 2019 2155-2165*

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A Descriptor System Approach for Estimation of Incipient Faults With Application to High-Speed Railway Traction Devices. *Wu, Y., +, TSMC Oct. 2019 2108-2118*

Traffic control

Learning Human–Robot Interaction for Robot-Assisted Pedestrian Flow Optimization. *Jiang, C., +, TSMC April 2019 797-813*

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Personalized Driver Workload Inference by Learning From Vehicle Related Measurements. *Yi, D., +, TSMC Jan. 2019 159-168*

Scene Understanding in Deep Learning-Based End-to-End Controllers for Autonomous Vehicles. *Yang, S., +, TSMC Jan. 2019 53-63*

Trajectory

A Real-Time and Fully Distributed Approach to Motion Planning for Multi-robot Systems. *Zhou, Y., +, TSMC Dec. 2019 2636-2650*

Depth Control of Model-Free AUVs via Reinforcement Learning. *Wu, H., +, TSMC Dec. 2019 2499-2510*

Singularity-Free Trajectory Planning of Free-Floating Multiarm Space Robots for Keeping the Base Inertially Stabilized. *Xu, W., +, TSMC Dec. 2019 2464-2477*

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Trajectory Tracking Control of a One Degree of Freedom Manipulator Based on a Switched Sliding Mode Controller With a Novel Extended State Observer Framework. *Zhao, L., +, TSMC June 2019 1110-1118*

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Solving Time-Varying System of Nonlinear Equations by Finite-Time Recurrent Neural Networks With Application to Motion Tracking of Robot Manipulators. *Xiao, L., +, TSMC Nov. 2019 2210-2220*

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An Adaptive Backstepping Nonsingular Fast Terminal Sliding Mode Control for Robust Fault Tolerant Control of Robot Manipulators. *Van, M., +, TSMC July 2019 1448-1458*

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Transportation Control of Double-Pendulum Cranes With a Nonlinear Quasi-PID Scheme: Design and Experiments. *Sun, N., +, TSMC July 2019 1408-1418*

Traveling salesman problems

Traveling Salesman Problem With a Drone Station. *Kim, S., +, TSMC Jan. 2019 42-52*

Trees (mathematics)

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Stabilization of Stochastic Uncertain Complex-Valued Delayed Networks via Aperiodically Intermittent Nonlinear Control. *Wang, P., +, TSMC March 2019 649-662*

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A Novel Asynchronous Control for Artificial Delayed Markovian Jump Systems via Output Feedback Sliding Mode Approach. *Du, C., +, TSMC Feb. 2019 364-374*

A Novel Neural-Network-Based Adaptive Control Scheme for Output-Constrained Stochastic Switched Nonlinear Systems. *Niu, B., +, TSMC Feb. 2019 418-432*

Acceleration-Level Pseudo-Dynamic Visual Servoing of Mobile Robots With Backstepping and Dynamic Surface Control. *Zhang, X., +, TSMC Oct. 2019 2071-2081*

Adaptive Anti-Swing and Positioning Control for 4-DOF Rotary Cranes Subject to Uncertain/Unknown Parameters With Hardware Experiments. *Sun, N., +, TSMC July 2019 1309-1321*

Adaptive Dynamic Surface Control Design for Uncertain Nonlinear Strict-Feedback Systems With Unknown Control Direction and Disturbances. *Ma, H., +, TSMC March 2019 506-515*

Adaptive Finite Time Control of Nonlinear Systems Under Time-Varying Actuator Failures. *Wang, F., +, TSMC Sept. 2019 1845-1852*

Adaptive Fuzzy Tracking Control of Flexible-Joint Robots With Full-State Constraints. *Sun, W., +, TSMC Nov. 2019 2201-2209*

Adaptive Neural Backstepping Control Design for A Class of Nonsmooth Nonlinear Systems. *Zhao, X., +, TSMC Sept. 2019 1820-1831*

An Adaptive Backstepping Nonsingular Fast Terminal Sliding Mode Control for Robust Fault Tolerant Control of Robot Manipulators. *Van, M., +, TSMC July 2019 1448-1458*

An Increased Nonlinear Coupling Motion Controller for Underactuated Multi-TORA Systems: Theoretical Design and Hardware Experimentation. *Wu, Y., +, TSMC June 2019 1186-1193*

Distributed Adaptive Fuzzy Containment Control of Stochastic Pure-Feedback Nonlinear Multiagent Systems With Local Quantized Controller and Tracking Constraint. *Zhang, L., +, TSMC April 2019 787-796*

Dual-Loop Adaptive Iterative Learning Control for a Timoshenko Beam With Output Constraint and Input Backlash. *He, W., +, TSMC May 2019 1027-1038*

Fault-Tolerant Resilient Control For Fuzzy Fractional Order Systems. *Sakthivel, R., +, TSMC Sept. 2019 1797-1805*

Finite-Time Adaptive Fuzzy Control for Nonlinear Systems With Full State Constraints. *Xia, J., +, TSMC July 2019 1541-1548*

Finite-Time Resilient Controller Design of a Class of Uncertain Nonlinear Systems With Time-Delays Under Asynchronous Switching. *He, S., +, TSMC Feb. 2019 281-286*

Finite-Time Synchronization for Chaotic Gyros Systems With Terminal Sliding Mode Control. *Yin, L., +, TSMC June 2019 1131-1140*

Fixed-Time Event-Triggered Consensus for Nonlinear Multiagent Systems Without Continuous Communications. *Liu, J., +, TSMC Nov. 2019 2221-2229*

Fuzzy Adaptive Distributed Event-Triggered Consensus Control of Uncertain Nonlinear Multiagent Systems. *Li, Y., +, TSMC Sept. 2019 1777-1786*

Fuzzy Tracking Control for a Class of Uncertain MIMO Nonlinear Systems With State Constraints. *He, W., +, TSMC March 2019 543-554*

Immersion and Invariance-Based Adaptive Controller for Quadrotor Systems. *Zou, Y., +, TSMC Nov. 2019 2288-2297*

Input-to-State Stabilization of Delayed Differential Systems With Exogenous Disturbances: The Event-Triggered Case. *Li, B., +, TSMC June 2019 1099-1109*

Neural-Network-Based Robust Control Schemes for Nonlinear Multiplayer Systems With Uncertainties via Adaptive Dynamic Programming. *Jiang, H., +, TSMC March 2019 579-588*

Observer-Based Adaptive Consensus for a Class of Nonlinear Multiagent Systems. *Mao, J., +, TSMC Sept. 2019 1893-1900*

Observer-Based Decentralized Adaptive NNs Fault-Tolerant Control of a Class of Large-Scale Uncertain Nonlinear Systems With Actuator Failures. *Yang, Y., +, TSMC March 2019 528-542*

Observer-Based Fuzzy Adaptive Dynamic Surface Control of Uncertain Nonstrict Feedback Systems With Unknown Control Direction and Unknown Dead-Zone. *Shojaei, F., +, TSMC Nov. 2019 2340-2351*

Practical Adaptive Fuzzy Control of Nonlinear Pure-Feedback Systems With Quantized Nonlinearity Input. *Wu, J., +, TSMC March 2019 638-648*

Reliable Control Against Sensor Failures for Markov Jump Systems With Unideal Measurements. *Tao, J., +, TSMC Feb. 2019 308-316*

Reliable Filtering of Nonlinear Markovian Jump Systems: The Continuous-Time Case. *Wu, Z., +, TSMC Feb. 2019 386-394*

Robust H_2/H_∞ Model Predictive Control for Linear Systems With Polytopic Uncertainties Under Weighted MEF-TOD Protocol. *Song, Y., +, TSMC July 2019 1470-1481*

Robust Guaranteed Cost Sampled-Data Fuzzy Control for Uncertain Nonlinear Time-Delay Systems. *Wang, Z., +, TSMC May 2019 964-975*

Robust Neuro-Adaptive Containment of Multileader Multiagent Systems With Uncertain Dynamics. *Wen, G., +, TSMC Feb. 2019 406-417*

Robust Simultaneous Fault Estimation and Nonfragile Output Feedback Fault-Tolerant Control for Markovian Jump Systems. *Li, X., +, TSMC Sept. 2019 1769-1776*

Sliding-Mode Control for Singular Markovian Jump Systems With Brownian Motion Based on Stochastic Sliding Mode Surface. *Zhang, Q., +, TSMC March 2019 494-505*

Stabilization of Stochastic Uncertain Complex-Valued Delayed Networks via Aperiodically Intermittent Nonlinear Control. *Wang, P., +, TSMC March 2019 649-662*

Stationary Consensus Control of a Class of High-Order Uncertain Nonlinear Agents With Communication Delays. *Rezaee, H., +, TSMC June 2019 1285-1290*

Takagi-Sugeno Model-Based Sliding Mode Observer Design for Finite-Time Synthesis of Semi-Markovian Jump Systems. *Jiang, B., +, TSMC July 2019 1505-1515*

Uncertainty

Adaptive Robust Triple-Step Control for Compensating Cogging Torque and Model Uncertainty in a DC Motor. *Hu, Y., +, TSMC Dec. 2019 2396-2405*

Robust Adaptive Nonsingular Terminal Sliding Mode Control for Automatic Train Operation. *Yao, X., +, TSMC Dec. 2019 2406-2415*

UDE-Based Variable Impedance Control of Uncertain Robot Systems. *Dong, Y., +, TSMC Dec. 2019 2487-2498*

Underwater vehicles

Depth Control of Model-Free AUVs via Reinforcement Learning. *Wu, H., +, TSMC Dec. 2019 2499-2510*

Unsupervised learning

Noniterative Deep Learning: Incorporating Restricted Boltzmann Machine Into Multilayer Random Weight Neural Networks. *Wang, X., +, TSMC July 2019 1299-1308*

User interfaces

Toward a Context-Aware Human–Robot Interaction Framework Based on Cognitive Development. *Quintas, J., +, TSMC Jan. 2019 227-237*

V**Variable structure systems**

A Novel Asynchronous Control for Artificial Delayed Markovian Jump Systems via Output Feedback Sliding Mode Approach. *Du, C., +, TSMC Feb. 2019 364-374*

An Adaptive Backstepping Nonsingular Fast Terminal Sliding Mode Control for Robust Fault Tolerant Control of Robot Manipulators. *Van, M., +, TSMC July 2019 1448-1458*

Backpropagating Constraints-Based Trajectory Tracking Control of a Quadrotor With Constrained Actuator Dynamics and Complex Unknowns. *Wang, N., +, TSMC July 2019 1322-1337*

Boundary Adaptive Robust Control of a Flexible Riser System With Input Nonlinearities. *Zhao, Z., +, TSMC Oct. 2019 1971-1980*

Event-Triggered Sliding Mode Control of Discrete-Time Markov Jump Systems. *Yao, D., +, TSMC Oct. 2019 2016-2025*

Finite-Time Synchronization for Chaotic Gyros Systems With Terminal Sliding Mode Control. *Yin, L., +, TSMC June 2019 1131-1140*

Fuzzy Reduced-Order Compensator-Based Stabilization for Interconnected Descriptor Systems via Integral Sliding Modes. *Li, J., +, TSMC April 2019 752-765*

Neural-Network-Based Switching Formation Tracking Control of Multiagents With Uncertainties in Constrained Space. *Liu, X., +, TSMC May 2019 1006-1015*

Sliding-Mode Control for Singular Markovian Jump Systems With Brownian Motion Based on Stochastic Sliding Mode Surface. *Zhang, Q., +, TSMC March 2019 494-505*

Stationary Consensus Control of a Class of High-Order Uncertain Nonlinear Agents With Communication Delays. *Rezaee, H., +, TSMC June 2019 1285-1290*

Takagi–Sugeno Model-Based Sliding Mode Observer Design for Finite-Time Synthesis of Semi-Markovian Jump Systems. *Jiang, B., +, TSMC July 2019 1505-1515*

Trajectory Tracking Control of a One Degree of Freedom Manipulator Based on a Switched Sliding Mode Controller With a Novel Extended State Observer Framework. *Zhao, L., +, TSMC June 2019 1110-1118*

Vectors

Composite Differential Evolution for Constrained Evolutionary Optimization. *Wang, B., +, TSMC July 2019 1482-1495*

Event-Triggered Algorithms for Leader–Follower Consensus of Networked Euler–Lagrange Agents. *Liu, Q., +, TSMC July 2019 1435-1447*

Kernel-Based Random Vector Functional-Link Network for Fast Learning of Spatiotemporal Dynamic Processes. *Xu, K., +, TSMC May 2019 1016-1026*

Nonlinear Stochastic Attitude Filters on the Special Orthogonal Group 3: Ito and Stratonovich. *Hashim, H.A., +, TSMC Sept. 2019 1853-1865*

Robust Kalman Filters Based on Gaussian Scale Mixture Distributions With Application to Target Tracking. *Huang, Y., +, TSMC Oct. 2019 2082-2096*

Vehicle dynamics

A Paradigm for Path Following Control of a Ribbon-Fin Propelled Biometric Underwater Vehicle. *Wang, R., +, TSMC March 2019 482-493*

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Backpropagating Constraints-Based Trajectory Tracking Control of a Quadrotor With Constrained Actuator Dynamics and Complex Unknowns. *Wang, N., +, TSMC July 2019 1322-1337*

Vehicular ad hoc networks

An Altruistic Prediction-Based Congestion Control for Strict Beaconing Requirements in Urban VANETs. *Zemouri, S., +, TSMC Dec. 2019 2582-2597*

Vibration control

Boundary Adaptive Robust Control of a Flexible Riser System With Input Nonlinearities. *Zhao, Z., +, TSMC Oct. 2019 1971-1980*

Dual-Loop Adaptive Iterative Learning Control for a Timoshenko Beam With Output Constraint and Input Backlash. *He, W., +, TSMC May 2019 1027-1038*

Vibrations

An Increased Nonlinear Coupling Motion Controller for Underactuated Multi-TORA Systems: Theoretical Design and Hardware Experimentation. *Wu, Y., +, TSMC June 2019 1186-1193*

Boundary Control for an Axially Moving System With Input Restriction Based on Disturbance Observers. *Liu, Y., +, TSMC Nov. 2019 2242-2253*

Dual-Loop Adaptive Iterative Learning Control for a Timoshenko Beam With Output Constraint and Input Backlash. *He, W., +, TSMC May 2019 1027-1038*

Output Feedback Stabilization for an Axially Moving System. *Zhao, Z., +, TSMC Dec. 2019 2374-2383*

Video signal processing

Deep Convolutional Neural Networks for Human Action Recognition Using Depth Maps and Postures. *Kamel, A., +, TSMC Sept. 2019 1806-1819*

Deep Learning Hyper-Parameter Optimization for Video Analytics in Clouds. *Yaseen, M.U., +, TSMC Jan. 2019 253-264*

Efficient Deep CNN-Based Fire Detection and Localization in Video Surveillance Applications. *Muhammad, K., +, TSMC July 2019 1419-1434*

Video surveillance

Efficient Deep CNN-Based Fire Detection and Localization in Video Surveillance Applications. *Muhammad, K., +, TSMC July 2019 1419-1434*

Virtual manufacturing

An Advanced Cyber Physical Framework for Micro Devices Assembly. *Cecil, J., +, TSMC Jan. 2019 92-106*

Virtual reality

An Advanced Cyber Physical Framework for Micro Devices Assembly. *Cecil, J., +, TSMC Jan. 2019 92-106*

Visual databases

Content-Insensitive Blind Image Blurriness Assessment Using Weibull Statistics and Sparse Extreme Learning Machine. *Deng, C., +, TSMC March 2019 516-527*

I-Am: Implicitly Authenticate Me—Person Authentication on Mobile Devices Through Ear Shape and Arm Gesture. *Abate, A.F., +, TSMC March 2019 469-481*

Visual servoing

Acceleration-Level Pseudo-Dynamic Visual Servoing of Mobile Robots With Backstepping and Dynamic Surface Control. *Zhang, X., +, TSMC Oct. 2019 2071-2081*

Voltage control

Distributed Event-Triggered Secondary Voltage Control for Microgrids With Time Delay. *Xie, Y., +, TSMC Aug. 2019 1582-1591*

Voltage Distributed Cooperative Control Considering Communication Security in Photovoltaic Power System. *Zhang, Z., +, TSMC Aug. 2019 1592-1600*

W**Wastewater**

Automated Model Construction for Combined Sewer Overflow Prediction Based on Efficient LASSO Algorithm. *Zhao, W., +, TSMC June 2019 1254-1269*

Weapons

An Efficient Marginal-Return-Based Constructive Heuristic to Solve the Sensor–Weapon–Target Assignment Problem. *Xin, B., +, TSMC Dec. 2019 2536-2547*

Wearable robots

Cartesian Trajectory Tracking of a 7-DOF Exoskeleton Robot Based on Human Inverse Kinematics. *Brahmi, B., +, TSMC March 2019 600-611*

Coordination Control of a Dual-Arm Exoskeleton Robot Using Human Impedance Transfer Skills. *Huang, B., +, TSMC May 2019 954-963*

Web services

A Configurable WoT Application Platform Based on Spatiotemporal Semantic Scenarios. *Huang, S., +, TSMC Jan. 2019 123-135*

New IT Driven Service-Oriented Smart Manufacturing: Framework and Characteristics. *Tao, F.*, +, *TSMC Jan. 2019 81-91*

Weibull distribution

Content-Insensitive Blind Image Blurriness Assessment Using Weibull Statistics and Sparse Extreme Learning Machine. *Deng, C.*, +, *TSMC March 2019 516-527*

Wind

Reliable Tracking Control for Under-Actuated Quadrotors With Wind Disturbances. *Xu, J.*, +, *TSMC Oct. 2019 2059-2070*

Wind power plants

Distributed Energy Management Strategy for Reaching Cost-Driven Optimal Operation Integrated With Wind Forecasting in Multimicrogrids System. *He, X.*, +, *TSMC Aug. 2019 1643-1651*

Hierarchical Distributed Model Predictive Control of Standalone Wind/Solar/Battery Power System. *Kong, X.*, +, *TSMC Aug. 2019 1570-1581*

Wireless sensor networks

A Low-Latency Communication Scheme for Mobile Wireless Sensor Control Systems. *Huang, M.*, +, *TSMC Feb. 2019 317-332*

Wrist

Learning to Grasp Familiar Objects Based on Experience and Objects' Shape Affordance. *Liu, C.*, +, *TSMC Dec. 2019 2710-2723*

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Zirconium

Depth Control of Model-Free AUVs via Reinforcement Learning. *Wu, H.*, +, *TSMC Dec. 2019 2499-2510*