Bohui Wang

SENIOR MEMBER IEEE XI AN JIAOTONG UNIVERSITY, XI AN 710049, CHINA \cdot Full Professor

	EDUCATION	
01/09/2012 - 30/09/2016	Ph.D. in Control Science and Engineerin	g Shanghai Jiao Tong University, P.R.China
01/09/2009 - 01/07/2012	M.S. in Computer Science	Xi'an University of Science And Technology, P.R.China
01/09/2009 - 01/07/2012	B.S. in Computer Science	haanxi University of Science and Technology, P.R.China
	ACADEMIC APPOINTMENTS	
2023 – present	Full Professor Xi' an Jiaotong University, P.R.China	SCHOOL OF CYBER SCIENCE AND ENGINEERING
2018 – 2023	Leading Research Staff Nanyang Technological University, Singapor	SCHOOL OF ELECTRICAL & ELECTRONIC ENGINEERING e
2016 – 2018	Assistant Professor Xidian University, P.R.China	School of Aerospace Science and Technology
	Awards and Recognitions	
2023	2023 7th Chinese Conference on Swarm Intelligence and Cooperative Control best Organizer	
2022	2022 IEEE ICIT best paper	
2021	National Natural Science Fund for Excellent Young Scientists Fund Program(Overseas) 2021	
2020	Outstanding Associate Editor of 2019 for IEEE Access	
2018	Excellent Doctoral Thesis in China Institute of Electronics. (Only awarded to 22 doctoral thesis in 2016-2018) Doctoral Dissertation "Cooperative control of multi-agent systems with limited information mode"	
2018	22/2016-2018 Excellent Doctoral Thesis in China Education Society of Electronics. (Only awarded to 22 doctoral thesis in 2016-2018) Doctoral Dissertation "Cooperative control of multi-agent systems with limited information mode"	
2018	5/2016-2018 Excellent Doctoral Thesis in China Simulation Federation. (Only awarded to 5 doctoral thesis in 2016-2018)	
2018	22/2016-2018 Publons Peer Review Awards	
2017	Best Poster Paper Award Finalist in Proceedings of Chinese Control Conference (CCC17)	
2016	Excellent Doctoral Thesis Award Finalist in Shanghai jiaotong university (Highest Honor for PhD in Shanghai jiaotong university, only awarded to 14/6000 PhD graduate in 2016; 2016 is the first year and can be selected within three years)	
2016	Honorary graduate of Shanghai jiaotong university (Highest Honor for PhD in Shanghai jiaotong university, only awarded to 15/500 PhD graduate each academic year)	
2015	Shanghai Jiao Tong University outstanding scholarship	
2014/2015	Kaiyuan inspirational scholarship	
2014	Best Student Paper Award in Shanghai §	graduate student BBS

PROFESSIONAL ACTIVITIES AND SERVICE

Service Committees

- 2020 present, Vice executive secretary, Youth committee of Chinese Institute of Command and Control
- 2018 present, Member, The professional committees for Intelligent IoT System of China Simulation federation
- 2020 present, Member, The professional committees for Swarm Intelligence and Cooperative Control
 of Chinese Institute of Command and Control
- 2023, Member, Best Student Paper Prize Award Committee, 2023 7th Chinese Conference on Swarm Intelligence and Cooperative Control

Journal Editorial Boards

- 2022 present, Associate Editor for IEEE Transactions on Systems, Man, and Cybernetics: Systems, IF:11.471.
- 2022 present, Associate Editor for IEEE Transactions on Aerospace and Electronic Systems, IF:3.491.
- 2022 present, Associate Editor for Heliyon Engineering, Cell, IF:4.000.
- 2020 2022, Associate Editor for IEEE Robotics and Automation Letters, IF:3.9.
- 2018 2020, Associate Editor for The Journal of Engineering.
- 2018 2023, Associate Editor for IEEE ACCESS.
- 2018 2023, Associate Editor for IET Intelligent Transport Systems, IF: 2.480.
- 2023 present, Associate Editor for IET Signal Processing, IF: 1.700.
- 2022 2024, Associate Editor for PLOS ONE.
- 2022 2024, Associate Editor for PLOS Complex Systems.

Conference Editorial Boards

- 2023, Associate Editor for IEEE Robotics and Automation Society for ICRA.
- 2022, Associate Editor for The 16th IFAC Symposium on Large Scale Complex Systems: Theory and Applications (IFAC LSS 2022)
- 2018-2022, Associate Editor for The 15/16 th International Conference on Control, Automation, Robotics and Vision (ICARCV 2018/2020)
- 2023, Program Committee, 2023 7th Chinese Conference on Swarm Intelligence and Cooperative Control
- 2023, Program Committee, The 20th IEEE International Conference on Ubiquitous Intelligence and Computing (UIC 2023)
- 2023, Panel Chair, The 2th IEEE Industrial Electronics Society Annual Online Conference
- 2022, Program Committee, 2022 IEEE International Smart Cities Conference (ISC2 2022)
- 2022, Program Committee, 6th Annual Conference of the IEEE Industrial Electronics Society (IECON 2020)
- 2017, Program Committee, 2017 36th Chinese Control Conference (CCC)

Conference and Workshop Organization

- 2023, Organized a Special Session on "Security game and cooperative control of Cyber Physical Systems" in the 2023 7th Chinese Conference on Swarm Intelligence and Cooperative Control(SS organizers: Bohui Wang)
- 2022, Organized a Special Session on "Optimization and Control of Cyber Physical Systems" in the 17th IEEE International Conference on Control & Automation (ICCA 2022)(SS organizers: Zhang, Kun, Bohui Wang)
- 2021, Organized a Special Session on "Resilient and Swarm Cooperative Control of Complex Cyber-Physical Systems" in the 2021 IEEE 30th International Symposium on Industrial Electronics (ISIE)(SS organizers: Bohui Wang, Bin Zhang, Xiwang Dong, Yu Zhao)
- 2020, Organized a Special Session on "Resilient and Networked Control of Complex Cyber-Physical Systems" in the 21st IFAC World Congress which was held, in Berlin, Germany, July 12-17, 2020. https://www.ifac2020.org/. (SS organizers: Bohui Wang*, Yu Zhao, Chao Shen, Hao Liu, Dong Zhang, Xiaoling Liang, Bin Zhang, Langwen Zhang.)
- 2019, Organized a Special Session on "Resilient Control of Complex Cyber-Physical Systems" in the 28th IEEE International Symposium on Industrial Electronics (IEEE-ISIE), which was held, June 12-15 2019, at Vancouver, Canada. http://www.ieee-isie2019.org/#. (SS organizers: Bin Zhang, Yu Zhao, Bohui Wang, and Mo-Yuen Chow.)

Review

- IEEE Transactions on Automatic Control(150+)
- Automatica(50+)
- IEEE Transactions on Industrial Electronics(50+)
- IEEE Transactions on Cybernetics(50+)
- IEEE Transactions on Industrial Informatics(50+)
- IEEE Transactions on Neural Networks and Learning Systems(20+)
- IEEE Transactions on Control of Network Systems
- · SIAM Journal of Control and Optimization (SICON)
- IEEE Transactions on Control Systems Technology
- · IEEE Transactions on Robotics
- IEEE Transactions on Systems Man Cybernetics-Systems
- Systems & Control Letters
- · International Journal of Adaptive Control and Signal Processing
- International Journal of Modern Physics C
- · IMA Journal of Mathematical Control and Information
- · ISA Transactions
- · Neurocomputing
- Nonlinear Dynamics
- Transactions of the Institute of Measurement and Control
- IEEE Access
- IET Control Theory Applications
- International Journal of Advanced Robotic Systems
- · SCIENCE CHINA Information Sciences
- · IEEE Journal of Selected Topics in Signal Processing
- IFAC World Congress
- IEEE Conference on Decision and Control
- American Control Conference
- ANZCC
- ICRA
- · CASE
- ...

PUBLICATIONS

Under Review

- Bohui Wang. A Distributed Adaptive Observer-based Approach to Synchronization of Heterogeneous Non-monotonic Nonlinear Systems For Formation Application. *IEEE Transactions on Automatic Control*. 2024, Conditionally accepted as Paper
- Haotian Xu, Shuai Liu, Bohui Wang, Jingcheng Wang. Distributed Observer Design over Directed Switching Topologies. *IEEE Transactions on Automatic Control*. 2024, Conditionally accepted as Paper

BOOK CHAPTERS

I. Langwen Zhang, Miaomiao Xie, Wei Xie & Bohui Wang. (2022). Optimal Subsystem Decomposition and Resilient Distributed State Estimation for Wastewater Treatment Plants. In Security and Resilience in Cyber-Physical Systems: Detection, Estimation and Control (pp. 299-322). Cham: Springer International Publishing.

JOURNAL PUBLICATIONS

I. Jiaming Qi, Guangtao Ran, Bohui Wang*, Jian Liu, Wanyu Ma, Peng Zhou, David Navarro-Alarcon. Adaptive shape servoing of elastic rods using parameterized regression features and auto-tuning motion controls. *IEEE Robotics and Automation Letters*, 2024,9(2): 1428 - 1435.

- Bohui Wang*, Chao Shen. A Time-varying Observer-based Approach to Equilibrium Estimation and Compensation for Synchronization of Heterogeneous Nonlinear Cyber-physical Systems. *IEEE Transactions on Automatic Control*, 2023,68(10):6176 - 6183.
- 3. Zhengen Zhao, Yunsong Xu, Yuzhe Li, Yu Zhao, **Bohui Wang**, Guanghui Wen. Sparse actuator attack detection and identification: A data-driven approach. *IEEE Transactions on Cybernetics*, 2023,53(6):4054 4064.
- Qing Wang, Xiwang Dong, Bohui Wang, Yongzhao Hua, Zhang Ren. Finite-time Observer-based Fault-tolerant Output Formation Tracking Control for Heterogeneous Nonlinear Multi-agent Systems. *IEEE Transactions on Network Science and Engineering*, 2023,10(1):1822 - 1834.
- 5. Zhijian Hu, Rong Su, Yujia Wang, **Bohui Wang**, Lingying Huang, Yun Lu. Security Enhancement for Longitudinal Vehicle Platooning Under Denial-of-Service Attacks: From Resilient Controller Design Perspective. *IFAC-PapersOnLine*, 2023,56 (2):1088-1093.
- 6. Yun Lu, **Bohui Wang**, Lingying Huang, Nanbin Zhao, Rong Su. Modeling of Driver Cut-in Behavior Towards a Platoon. *IEEE Transactions on Intelligent Transportation Systems*, 2022, 23(12):24636 24648
- Shangwei Zhao, Jingcheng Wang, Haotian Xu, Bohui Wang. Composite Observer-Based Optimal Attitude-Tracking Control With Reinforcement Learning for Hypersonic Vehicles. IEEE Transactions on Cybernetics, 2022,53(2):913-926
- 8. **Bohui Wang***, Rong Su. A Distributed Platoon Control Framework for Connected Automated Vehicles in an Urban Traffic Network. *IEEE Transactions on Control of Network Systems*, 2022,9 (4), 1717-1730
- Langwen Zhang, Bohui Wang*, Yuanshi Zheng, Ali Zemouche, Xudong Zhao, Chao Shen.
 Distributed Stochastic Model Predictive Control for Cyber-physical Systems with Multiple
 State Delays and Probabilistic Saturation Constraints. *IEEE Transactions on Cybernetics*,
 2022,53(11):6987 6997.
- Bohui Wang*. Distributed Error Estimation for Quasi-synchronization of Heterogeneous Dynamical Networks. *IEEE Transactions on Automatic Control, Technical Note*,2022,67 (5):2489-2496
- Haotian Xu, Shuai Liu, Jingcheng Wang, Bohui Wang. Distributed-Observer-based Distributed Control Law for Affine Nonlinear Systems and its Application on Interconnected Cruise Control of Intelligent Vehicles. *IEEE Transactions on Intelligent Vehicles*, 2022,8 (2):1874-1888
- Chunyu Wu, Xudong Zhao, Bohui Wang, etc. Model-based dynamic event-triggered control for cyber-physical systems subject to dynamic quantization and DoS attacks. *IEEE Transactions on Network Science and Engineering*, 2022, 9(4):2406 - 2417.
- 13. Yan Wang*, Rong Su, **Bohui Wang**. Optimal control of interconnected systems with time-correlated noises: Application to vehicle platoon. *Automatica*, *Regular Paper*, 2022,137, 110018.
- 14. **Bohui Wang***. A time-varying observer design for synchronization with an unknown target and its applications in coordinated mission rendezvous. *Automatica, Regular Paper*, 2022,136, 109931.
- 15. Bohui Wang*, Weisheng Chen, Bin Zhang, Peng Shi. A nonlinear observer-based approach to robust cooperative tracking for heterogeneous spacecraft attitude control and formation applications. IEEE Transactions on Automatic Control, Technical Note, 2022,68 (1), 400-407

16. Guangtao Ran, Chuanjiang Li, Sakthivel Rathinasamy, Chunsong Han, Bohui Wang. Adaptive event-triggered asynchronous control for interval type-2 fuzzy Markov jump systems with cyber-attacks. *IEEE Transactions on Control of Network Systems*, 2022, 9(1):88-99.

- 17. Nanbin Zhao, **Bohui Wang**, Rong Su. On-Road Safety Prompt Framework for Platoon. *IFAC-PapersOnLine*,2022,55 (11):155-160
- 18. Haotian Xu, Jingcheng Wang, Bohui Wang, Ibrahim Brahmia. An Improved Distributed Nonlinear Observers for Leader-Following Consensus via Differential Geometry Approach. IEEE Transactions on Systems, Man, and Cybernetics: Systems Regular Paper,, 2021,52 (10):6085-6098
- Haotian Xu, Jingcheng Wang, Bohui Wang, Ibrahim Brahmia. Distributed Observer Design for Linear Systems to Achieve Omniscience Asymptotically Under Jointly Connected Switching Networks. *IEEE Transactions on Cybernetics, Regular Paper, IF*: 11.079, 2021,52 (12): 13383-13394
- 20. Yi Zhang, Rong Su, Yicheng Zhang, Bohui Wang. Dynamic Multi-Bus Dispatching Strategy With Boarding and Holding Control for Passenger Delay Alleviation and Schedule Reliability: A Combined Dispatching-Operation System. *IEEE Transactions on Intelligent Transportation Systems*, 2021, 23 (8):12846-12860
- 21. Haotian Xu, Jingcheng Wang, Hongyuan Wang, **Bohui Wang**. Distributed observers design for a class of nonlinear systems to achieve omniscience asymptotically via differential geometry. *International Journal of Robust and Nonlinear Control*, 2021, 52 (12): 13383-13394
- Langwen Zhang, Bohui Wang*, Yang Tang, Yuanlong Li. Distributed Stochastic Model Predictive Control for Cyber-physical Systems with Multiple State Delays and Probabilistic Saturation Constraints. Automatica, Brief Paper, IF: 6.355, 2021,129, 109574
- 23. Wanbing Zhao, Hao Liu, **Bohui Wang***. Model-free attitude synchronization for multiple heterogeneous quadrotors via reinforcement learning. International Journal of Intelligent Systems, 2021,36 (6):2528-2547
- 24. Xin Huo, Hamid Reza Karimi, Xudong Zhao, Bohui Wang, Guangdeng Zong. Adaptive-Critic Design for Decentralized Event-Triggered Control of Constrained Nonlinear Interconnected Systems Within an Identifier-Critic Framework. *IEEE Transactions on Cybernetics, Regular Paper, IF:* 11.079, 2021,52 (8):7478-7491
- 25. Bohui Wang*, Weisheng Chen, Bin Zhang, Yu Zhao, Peng Shi. Cooperative Control-based Task Assignments for Multi-agent Systems with Intermittent Communication. IEEE Transactions on Industrial Informatics, Regular Paper, IF: 9.112, 2020, 17 (10): 6697-6708.
- 26. Hongjing Liang, Guangliang Liu, Tingwen Huang, Hak-Keung Lam, **Bohui Wang**. Cooperative fault-tolerant control for networks of stochastic nonlinear systems with nondifferential saturation nonlinearity. *IEEE Transactions on Systems*, *Man*, *and Cybernetics: Systems*, 2020, 52 (3): 1362-1372.
- 27. Haotian Xu, Jingcheng Wang, **Bohui Wang**, Yan Song, Ibrahim Brahmi. Comments on Output synchronization of nonlinear heterogeneous multi-agent systems with switching networks:[Systems & Control Letters 125 (2019) 45-50]. Systems & Control Letters,IF: 2.762, 2020:144, 104756.
- 28. **Bohui Wang**. Attitude control strategy of heterogeneous spacecraft based on saturation constraint and time-varying observer design. Nanjing Xinxi Gongcheng Daxue Xuebao, 2020, 12 (3):289-297.
- 29. **Bohui Wang***, Yu Zhao, Langwen Zhang, "Synchronization of heterogeneous multi-Agent systems a distributed observer and compensation framework", *Advanced Control for Applications Engineering and Industrial Systems*, 2020, 2 (2): e43.
- 30. **Bohui Wang***, Weisheng Chen, Jingcheng Wang, Bin Zhang, Peng Shi. Semi-global Tracking Cooperative Control for Multi-agent Systems with Input Saturation: A Multiple Saturation Levels Framework. *IEEE Transactions on Automatic Control, Technical Note, IF:* 5.625, 2020, 66 (3): 1215-1222.

31. **Bohui Wang**. Cooperative Consensus for Heterogeneous Nonlinear Multiagent Systems Under a Leader Having Bounded Unknown Inputs. *IEEE Transactions on Systems, Man, and Cybernetics: Systems, Regular Paper, IF:* 9.309, 2020, 51 (11): 7075-7086.

- 32. **Bohui Wang***, Bin Zhang, Rong Su. Optimal Tracking Cooperative Control for Cyber-Physical Systems: Dynamic Fault Tolerant Control and Resilient Management. *IEEE Transactions on Industrial Informatics, Regular Paper, IF: 9.112*, 2020,17 (1): 158-167.
- 33. Qi Zhou, Wei Wang, Hongjing Liang, Michael Basin, **Bohui Wang**. Observer-Based Event-Triggered Fuzzy Adaptive Bipartite Containment Control of Multi-Agent Systems with Input Quantization. *IEEE Transactions on Fuzzy Systems, Regular Paper, IF*: 8.759, 2019, 29 (2): 372-384.
- 34. **Bohui Wang***, Weisheng Chen, and Bin Zhang. Regulation Cooperative Control for Heterogeneous Chaotic Systems and Secure Communication: A Synchronization Error Estimation Framework. *Automatica, Regular Paper, IF: 6.355*, 2019, 108: 108486.
- 35. **Bohui Wang**. Cluster Event-triggered Tracking Cooperative and Formation Control for Multi-vehicle Systems: An Extended Magnification Region Condition. *IEEE Transactions on Systems, Man, and Cybernetics: Systems, Regular Paper, IF:* 9.309, 2019, 51 (5): 3229-3239.
- 36. **Bohui Wang***, Weisheng Chen, Bin Zhang. Semi-global Robust Tracking Consensus for Multi-agent Uncertain Systems with Input Saturation via Metamorphic Low-gain Feedback. *Automatica*, *Brief Paper*, *IF*: 6.355, 2019, 103: 363-373.
- 37. Yu Zhao, Guanghui Wen, Dong Zhang, **Bohui Wang**, Qixiu Duan. Time-Varying Formation for General Linear Multi-Agent Systems on Directed Topologies: An Fully Distributed Adaptive Design. *IEEE Transactions on Systems, Man, and Cybernetics: Systems, Regular Paper, IF:* 9.309, 2018,51(1):532-541.
- 38. **Bohui Wang***, Weisheng Chen, Jingcheng Wang, Bin Zhang, Zhengqiang Zhang, Xingguo Qiu. Cooperative tracking control of multiagent systems: A heterogeneous coupling network and intermittent communication framework. *IEEE Transactions on Cybernetics*, *Regular Paper*, *IF*: 11.079, 2018, 49 (12):4308-4320
- 39. Bohui Wang*, Jingcheng Wang, Bin Zhang, Weisheng Chen, Zhengqiang Zhang, Xingguo Qiu. Accurate Cooperative Control for Multiple Leaders Multi-agent Uncertain Systems: A Two-layer Node-to-node Communication Framework. *IEEE Transactions on Industrial Informatics, Regular Paper, IF:* 9.112, 2018, 14(6): 2395-2405.
- 40. Bohui Wang*, Jingcheng Wang, Bin Zhang, Weisheng Chen, Zhengqiang Zhang. Leader-follower Consensus of Multi-vehicle Wirelessly Networked Uncertain Systems Subject to Nonlinear Dynamics and Actuator Fault. *IEEE Transactions on Automation Science* and Engineering, Regular Paper, IF: 5.224, 2018, 15(2): 492-505.
- 41. **Bohui Wang**, Jingcheng Wang, Langwen Zhang, Bin Zhang, Xiaocheng Li. Cooperative Control of Heterogeneous Uncertain Dynamical Networks: An Adaptive Explicit Synchronization Framework. *IEEE Transactions on Cybernetics, Regular Paper, IF: 11.079*, 2017, 47(6):1484-1495.
- 42. **Bohui Wang**, Jingcheng Wang, Langwen Zhang, Bin Zhang. Global Cooperative Control Framework for Multi-agent Systems Subject to Actuator Saturation with Industrial Applications. *IEEE Transactions on Systems, Man, and Cybernetics: Systems, Regular Paper, Hot paper, IF*: 9.309, 2017, 47(7):1270-1283.
- 43. **Bohui Wang**, Jingcheng Wang, Bin Zhang, Hai Lin, Xiaocheng Li, Hongyuan Wang. Leader-follower Consensus for Multi-agent Systems with Three-layer Network Framework and Dynamic Interaction Jointly Connected Topology. *Neurocomputing*, *IF*: 4.438, 2017, 207:231-239.
- 44. Xiaoying, Huang, Jingcheng Wang, Langwen Zhang, **Bohui Wang**. Data-driven Modeling and Fuzzy Multiple-model predictive Control of Oxygen Content in Coal-fired Power Plant. *Transactions of the Institute of Measurement and Control, IF:* 1.956, 2017, 39(11):1631-1642.

45. **Bohui Wang**, Jingcheng Wang, Langwen Zhang, Yang Ge. Joining Consensus of Networked Multi-agent Systems with Nonlinear Couplings and Weighting Constraints. *International Journal of Systems Science*, *IF*: 2.469, 2016, 47(5): 1185-1201.

- Bohui Wang, Jingcheng Wang, Langwen Zhang, Bin Zhang. Explicit Synchronization of Heterogeneous Dynamics Networks Via Three-layer Communication Framework. International Journal of Control, IF: 2.930, 2016, 89(6): 1269-1284.
- 47. **Bohui Wang**, Jingcheng Wang, Langwen Zhang, Bin Zhang. Robust Adaptive Consensus Tracking for Higher-order Multi-agent Uncertain Systems with Nonlinear Dynamics Via Distributed Intermittent Communication Protocol. *International Journal of Adaptive Control and Signal Processing, IF: 2.239*, 2016,30(3): 511-533.
- 48. Yang Ge, Jingcheng Wang, Langwen Zhang, **Bohui Wang**, Chuang Li. Robust fault tolerant control of distributed networked control systems with variable structure. *Journal of the Franklin Institute*, 2016,353 (12):2553-2575.
- 49. Langwen Zhang, Jingcheng Wang, **Bohui Wang**. Robust fault tolerant control of distributed networked control systems with variable structure. *International Journal of Systems Science*, 2015,46 (13):2393-2406.
- 50. Langwen Zhang, Jingcheng Wang, Yang Ge, **Bohui Wang**. Constrained distributed model predictive control for state-delayed systems with polytopic uncertainty description. Transactions of the Institute of Measurement and Control, 2014,36 (8):954-962.
- 51. Langwen Zhang, Jingcheng Wang, Yang Ge, **Bohui Wang**. Constrained distributed model predictive control for state-delayed systems with polytopic uncertainty description. *IET Control Theory & Applications*, 2014, 8 (17): 1843-1851.
- 52. Langwen Zhang, Jingcheng Wang, **Bohui Wang**. Constrained distributed model predictive control for state-delayed systems with polytopic uncertainty description. *IFAC Proceedings Volumes*, 2014, 47 (3): 8540-8545.

CONFERENCE ARTICLES

- I. Lingying Huang, Bohui Wang, Yun Lu, Rong Su. Mixed Traffic Optimization With Platooning Technology Based on Stackelberg Game Theory. 2023 IEEE International Conference on Cybernetics and Intelligent Systems (CIS) and IEEE Conference on Robotics, Automation and Mechatronics (RAM), 2023: 140-145.
- Zhijian Hu, Rong Su, Yujia Wang, Zeyuan Xu, Bohui Wang, Yun Lu. Distributed Interval Type-2 Fuzzy Filtering for Wireless Sensor Networks With Intermittent Measurements. 2023 American Control Conference (ACC), 2023: 4877-4882.
- Nanbin Zhao, Bohui Wang, Ruikang Luo, Yun Lu, Jialu Zhang, Rong Su. A Scenario Encoding Model for Long-Term Lane-Change Prediction Using Self-Organizing Map. 2022 17th International Conference on Control, Automation, Robotics and Vision (ICARCV), 2022: 831-836.
- 4. Kun Zhang, Rong Su, Yu Lu, **Bohui Wang**. An Optimal Traffic Dispatching Strategy with Uncertain Evacuees' Behaviors under Emergency Evacuation Situation. 2022 IEEE 17th International Conference on Control & Automation (ICCA), 2022: 746-751.
- 5. Nanbin Zhao, **Bohui Wang**, Yiping Xiong, Rong Su. Safety Prompt Advanced Driver-Assistance System with Lane-Change Prediction and Free Space Detection. 2022 *IEEE 17th International Conference on Control & Automation (ICCA)*, 2022: 734-739.
- 6. Nanbin Zhao, **Bohui Wang**, Yun Lu, Rong Su. Direction convolutional LSTM network: Prediction network for drivers' lane-changing behaviours. 2022 IEEE 17th International Conference on Control & Automation (ICCA), 2022: 752-757.
- 7. **Bohui Wang**, Bin Zhang, Xinpeng Fang, Yu Zhao. Swarm cooperative control of heterogeneous industrial cyber-physical systems: A distributed observer approach. 2021 4th IEEE International Conference on Industrial Cyber-Physical Systems (ICPS), 2022: 737-740.

8. Haotian Xu, Jingcheng Wang, Hongyuan Wang, **Bohui Wang**, Miaoshun Bai. Distributed Observer Design for Omniscience Asymptotical Aimed at a Class of Nonlinear System. *2019 IEEE 58th Conference on Decision and Control (CDC)*, 2019: 3303-3308.

- Bohui Wang, Rong Su, Frank L Lewis. Leader-follower Consensus Tracking for Heterogeneous Nonlinear Cooperative Systems: A Decentralized Design Framework. 2019 American Control Conference (ACC), 2019: 5310-5315.
- Bohui Wang, Bin Zhang. Stable consensus for heterogeneous nonlinear multi-agent systems with non-zero inputs. 2019 IEEE 28th International Symposium on Industrial Electronics (ISIE), 2019: 2283-2288.
- Shiyi Guo, Xin Chen, Chao Cao, Jingcheng Wang, Bohui Wang. Monitoring of Operation Efficiency Module of Coal Fired Power Plant. 2019 Chinese Control And Decision Conference (CCDC), 2019: 4713-4718.
- 12. **Bohui Wang**, Xinpeng Fang, Yu Zhao. Stability Analysis of Cooperative Control for Heterogeneous Multi-agent Systems with Nonlinear Dynamics. *2019 IEEE International Conference on Industrial Technology (ICIT)*, 2019: 1446-1453.
- Bohui Wang, Xinpeng Fang, Bin Zhang. Cooperative Control for Industrial Multi-agent Systems: Framework and Problems. 2018 37th Chinese Control Conference (CCC), 2018: 6971-6976.
- 14. Qingquan Yang, Weisheng Chen, Bohui Wang, Hao Dai. Distributed cooperative adaptive identification for time-varying static parametric model systems with a cooperative PE condition by distributed event-triggered strategy. 2017 Chinese Automation Congress (CAC), 2017: 4408-4412.
- 15. Bohui Wang, Weisheng Chen, Hao Dai, Xinpeng Fang, Jingcheng Wang, Bin Zhang, Zhengqiang Zhang, Xingguo Qiu. Optimal adaptive tracking consensus for multi-vehicle systems with periodic sampling. 2017 Chinese Automation Congress (CAC), 2017: 3901-3906.
- 16. Bohui Wang, Weisheng Chen, Jingcheng Wang, Bin Zhang, Zhengqiang Zhang, Hai Lin, Bin Ma. Optimal tracking cooperative control for multi-agent systems with periodic sampling via robust model predictive control approach. 2017 36th Chinese Control Conference (CCC), 2017: 8385-8390.
- 17. **Bohui Wang**, Jingcheng Wang, Huifeng Zhu, Bin Zhang, Xiaocheng Li, Xiaofeng Wang, Leijie Dai, Ruiqing Wang. Dynamic fault tolerant control for multi-agent uncertain system with intermittent sampling. 2016 IEEE 55th Conference on Decision and Control (CDC), 2016: 63-68.
- Weize Ma, Xiaocheng Li, Jingcheng Wang, Bohui Wang, Hai Lin. Data-driven unfalsification based robust fault tolerant control. 2016 35th Chinese Control Conference (CCC), 2016: 9055-9060.
- Xiaoying Huang, Jingcheng Wang, Qi Xia, Bohui Wang. Fuzzy comprehensive evaluation of economic performance on thermal power plant using modified grey clustering. 2016 35th Chinese Control Conference (CCC), 2016: 9758-9763.
- 20. Hai Lin, Jingcheng Wang, Qi Xia, **Bohui Wang**, Xiaocheng Li, Hongyuan Wang. Fixed-lag linear unbiased smoother for networked control systems with randomly multi-step sensor delays. 2016 35th Chinese Control Conference (CCC), 2016: 7363-7368.
- 21. Xuhui Li, **Bohui Wang**, Jingcheng Wang, Bin Zhang, Hai Lin, Xiaocheng Li. Event-triggered consensus tracking for multi-agent systems with nonlinear uncertainty dynamics. *2016 35th Chinese Control Conference (CCC)*, 2016: 7820-7825.
- 22. Bohui Wang, Yingguan Wang, Bin Zhang, Fengrong Li, Jingcheng Wang, Hai Lin, Xiaocheng Li. Explicit adaptive synchronization of multi-agent uncertain systems with heterogeneous dynamic networks. 2016 American Control Conference (ACC), 2016: 1042-1047.
- 23. **Bohui Wang**, Jingcheng Wang, Langwen Zhang, Yi Zhang. Leader-follower consensus for multi-agent systems with Lipschitz-type node dynamics and jointly connected dynamical topology. 2015 34th Chinese Control Conference (CCC), 2015: 6980-6985.

24. Zhengfeng Liu, Jingcheng Wang, Yuanhao Shi, **Bohui Wang**, Langwen Zhang. A hybrid model for furnace exit gas temperature monitoring based on CM-LSSVM-PLS. *The 26th Chinese Control and Decision Conference (2014 CCDC)*, 2014: 488-493.

- 25. **Bohui Wang**, Jingcheng Wang, Yi Zhang, Langwen Zhang, Zhengfeng Liu, Kang Li. Adaptive pinning consensus of networked multi-agent systems with nonlinear couplings and directed graphs. *Proceedings of the 33rd Chinese Control Conference*, 2014: 1668-1673.
- 26. **Bohui Wang**, Jingcheng Wang, Yi Zhang, Langwen Zhang, Zhengfeng Liu, Kang Li. Adaptive pinning consensus of networked multi-agent systems with nonlinear couplings and directed graphs. *Proceedings of the 33rd Chinese Control Conference*, 2014: 1668-1673.
- 27. Bohui Wang, Jingcheng Wang, Langwen Zhang, Yang Ge, Zhengfeng Liu, Kang Li. Distributed consensus tracking of networked multi-agent systems subject to time varying nonlinear couplings by output feedback control. Proceeding of the 11th World Congress on Intelligent Control and Automation, 2014: 4183-4188.