

## Complete Publication List at University of Nebraska-Lincoln (09/2015–present)

### Journal Papers

1. Mehdi Firouznia and **Qing Hui**, “On Performance Gauge of Average Multi-Cue Multi-Choice Decision Making: A Converse Lyapunov Approach,” *IEEE/CAA Journal of Automatica Sinica*, to appear.
2. Chen Peng, Yanlin Zhou, and **Qing Hui**, “Distributed Fault Diagnosis of Networked Dynamical Systems with Time-Varying Topology,” *Journal of the Franklin Institute*, to appear.
3. Yu Liu, Fang Guo, Xiuyu He, and **Qing Hui**, “Boundary Control for an Axially Moving System with Input Restriction Based on Disturbance Observers,” *IEEE Transactions on Systems, Man, and Cybernetics: Systems*, vol. 49, no. 11, pp. 2242-2253, 2019.
4. Yu Liu, Yun Fu, Wei He, and **Qing Hui**, “Modeling and Observer-Based Vibration Control of a Flexible Spacecraft With External Disturbances,” *IEEE Transactions on Industrial Electronics*, vol. 66, no. 11, pp. 8648-8658, 2019.
5. Haopeng Zhang and **Qing Hui**, “Many Objective Cooperative Bat Searching Algorithm,” *Applied Soft Computing*, vol. 77, pp. 412-437, 2019.
6. Zhe Zhang, Wei Qiao, and **Qing Hui**, “Power System Stabilization Using Energy-Dissipating Hybrid Control,” *IEEE Transactions on Power Systems*, vol. 34, no. 1, pp. 215-224, 2019.
7. Haopeng Zhang and **Qing Hui**, “Parallel Multiagent Coordination Optimization Algorithm: Implementation, Evaluation, and Applications,” *IEEE Transactions on Automation Science and Engineering*, vol. 14, no. 2, pp. 984-995, 2017.
8. Zhenyi Liu, Philip Smith, Trevor Park, A. Alexandre Trindade, and **Qing Hui**, “Automated Contaminant Source Localization in Spatio-Temporal Fields: A Response Surface and Experimental Design Approach,” *IEEE Transactions on Systems, Man, and Cybernetics: Systems*, vol. 47, no. 3, pp. 569-583, 2017.
9. **Qing Hui**, “Further Results on Paracontracting Matrices and Correction to ‘Optimal Semistable Control in Ad Hoc Network Systems: A Sequential Two-Stage Approach’,” *IEEE Transactions on Automatic Control*, vol. 60, no. 12, pp. 3305-3309, 2015.
10. Xianlin Zeng and **Qing Hui**, “Energy-Event-Triggered Hybrid Supervisory Control for Cyber-Physical Network Systems,” *IEEE Transactions on Automatic Control*, vol. 60, no. 11, pp. 3083-3088, 2015.

### Book Chapter Papers

1. Jie Cheng, Qishuai Liu, **Qing Hui**, and Fred Choobineh, “The Joint Optimization of Critical Interdependent Infrastructure of an Electricity-Water-Gas System,” in *Systems Engineering in Context*, S.C. Adams, P. A. Beling, J. H. Lambert, and W. T. Scherer, Eds., Springer-Verlag, 2019.

### Conference Papers

1. Haopeng Zhang and **Qing Hui**, “A Coupled Spring Forced Bat Searching Algorithm: Design, Analysis and Evaluation,” *2020 American Control Conference*, Denver, CO, June 2020.
2. Emmanuel Bernuau, Emmanuel Moulay, Patrick Coirault, and **Qing Hui**, “Topological Properties for Compact Stable Attractors in  $\mathbb{R}^n$ ,” *2019 SIAM Conference on Control and Its Applications*, Chengdu, China, June 2019.
3. Qishuai Liu, Emmanuel Moulay, Patrick Coirault, and **Qing Hui**, “Deep Learning Based Formation Control for the Multi-Agent Coordination,” *16th IEEE International Conference on Networking, Sensing and Control*, Banff, Canada, May 2019.

4. Fayrouz Isfoula, Emmanuel Bernuau, Emmanuel Moulay, Patrick Coirault, Qishuai Liu, and **Qing Hui**, “Practical Consensus Tracking of Multi-Agent Systems with Linear Controllers,” *2019 European Control Conference*, Napoli, Italy, June 2019.
5. Qishuai Liu and **Qing Hui**, “B-Splines-Based Fuzzy C-Means to Maximizing Overlap Areas for Interconnected Power Systems,” *14th IEEE Conference on Industrial Electronics and Applications*, Xi’an, China, June 2019.
6. Mehdi Firouznia and **Qing Hui**, “Human-in-the-Loop Approach in Thermostatically Controlled Loads,” *2019 American Control Conference*, Philadelphia, PA, July 2019.
7. Qishuai Liu and **Qing Hui**, “The Formation Control of Mobile Autonomous Multi-Agent Systems Using Deep Reinforcement Learning,” *13th Annual IEEE International Systems Conference*, Orlando, FL, April 2019.
8. Mehdi Firouznia, Chen Peng, and **Qing Hui**, “Toward Building a Human-Cognition-in-the-Loop Supervisory Control System for Humanized Decision-Making,” *13th Annual IEEE International Systems Conference*, Orlando, FL, April 2019.
9. Jie Cheng, Qishuai Liu, **Qing Hui**, and Fred Choobineh, “The Joint Optimization of Critical Interdependent Infrastructure of an Electricity-Water-Gas System,” *16th Annual Conference on Systems Engineering Research*, Charlottesville, VA, May 2018.
10. Qishuai Liu and **Qing Hui**, “The Bat-Inspired Consensus Protocols with Differential Privacy,” *14th IEEE International Conference on Control and Automation*, Anchorage, AK, June 2018.
11. Yanlin Zhou, Chen Peng, and **Qing Hui**, “A Spiking Neural Dynamical Drift-Diffusion Model on Collective Decision Making with Self-Organized Criticality,” *2018 American Control Conference*, Milwaukee, WI, June 2018.
12. Chen Peng, Yanlin Zhou, and **Qing Hui**, “Distributed Fault Diagnosis with Shared-Basis and B-Splines-Based Matched Learning,” *13th IEEE Conference on Automation Science and Engineering*, Xi’an, China, August 2017.
13. Qishuai Liu and **Qing Hui**, “Hybrid Stability Analysis via Extended Small-Gain Theorem for Networked Cyber-Physical Systems with Transmission Delay,” *13th IEEE Conference on Automation Science and Engineering*, Xi’an, China, August 2017.
14. Qishuai Liu and **Qing Hui**, “The Convergence Analysis of Bat-Inspired Consensus Protocols with Nonlinear Dynamics,” *13th IEEE Conference on Automation Science and Engineering*, Xi’an, China, August 2017.
15. Haopeng Zhang and **Qing Hui**, “Cooperative Bat Searching Algorithm: A Combined Perspective from Multiagent Coordination and Swarm Intelligence,” *13th IEEE Conference on Automation Science and Engineering*, Xi’an, China, August 2017.
16. Yufan Jiang and **Qing Hui**, “Kalman Filter with Diffusion Strategies for Detecting Power Grid False Data Injection Attacks,” *2017 IEEE International Conference on Electro Information Technology*, Lincoln, NE, May 2017.
17. Haopeng Zhang, **Qing Hui**, and Qishuai Liu, “Bio-Inspired Consensus under Suggested Convergence Direction,” *2017 American Control Conference*, Seattle, WA, May 2017.
18. Mehdi Firouznia and **Qing Hui**, “Modeling Stochastic Noise in Neural Networks: A Survey,” *2017 American Control Conference*, Seattle, WA, May 2017.
19. **Qing Hui**, Wei Qiao, and Chen Peng, “Neuromorphic-Computing-Based Feedback Control: A Cognitive Supervisory Control Framework,” *The 55th IEEE Conference on Decision and Control*, Las Vegas, NV, December 2016.

20. Qishuai Liu and **Qing Hui**, “A Hybrid ACO Algorithm Based on Bayesian Factorizations and Reinforcement Learning for Continuous Optimization,” *2016 IEEE Congress on Evolutionary Computation*, Vancouver, Canada, July 2016.
21. Chen Peng and **Qing Hui**, “Comparison of Differential Grouping and Random Grouping Methods on  $\epsilon$ CCPSO for Large-Scale Constrained Optimization,” *2016 IEEE Congress on Evolutionary Computation*, Vancouver, Canada, July 2016.
22. Chen Peng and **Qing Hui**, “Real-Time Distributed Decomposition for Large-Scale Distributed Fault Diagnosis over Dynamic Graphs,” *2016 American Control Conference*, Boston, MA, July 2016.
23. **Qing Hui** and Chen Peng, “Randomized Target Search and Its Convergence in Dynamic Multi-Layer Networks,” *2016 American Control Conference*, Boston, MA, July 2016.
24. **Qing Hui** and Haopeng Zhang, “Global Convergence Analysis of Swarm Optimization Using Paracontraction and Semistability Theory,” *2016 American Control Conference*, Boston, MA, July 2016.
25. **Qing Hui** and Chen Peng, “Strong Semistabilizability and Partial Semistabilizability with Applications to Semistabilization Analysis of Multi-Layer Networks,” *2016 European Control Conference*, Aalborg, Denmark, June 2016.
26. Xianlin Zeng and **Qing Hui**, “A Hybrid Controller Design for Complex Network Systems with Hybrid Automaton-Based Convergence Analysis,” *2016 IEEE International Systems Conference*, Orlando, FL, April 2016.
27. Jin Cheng and **Qing Hui**, “Motion Planning for AmigoBot with Line-Segment-Based Map and Voronoi Diagram,” *2016 IEEE International Systems Conference*, Orlando, FL, April 2016.
28. Chen Peng and **Qing Hui**, “ $\epsilon$  Constrained CCPSO with Different Improvement Detection Techniques for Large-Scale Constrained Optimization,” *The 49th Hawaii International Conference on System Sciences*, Kauai, HI, January 2016.
29. Xianlin Zeng and **Qing Hui**, “Partial Cluster Stabilization and Partial Cascade Stabilization of Physical Networks,” *2015 IFAC Workshop on Analysis and Design of Hybrid Systems*, Atlanta, GA, October 2015.