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Biography

I received the B.S. degree in Automation and the Ph.D. degree in Control Science and Engineering from University of Science and Technology of China, Hefei, Anhui, China, in 2010 and 2015, respectively. From June 2015 to June 2017, I was a Lecturer with School of Computer Science and Control Engineering, North University of China. Since July 2017, I am a Lecturer with School of Electrical and Control Engineering, North University of China. My current research focuses on Quantum Systems Control, Prognostic and Health Management, and Reinforcement Learning.

Education

Ph.D.(Supervised by Prof. Shuang Cong), 2010.9-2015.6
Department of Automation, University of Science and Technology of China

B.S. (Supervised by Prof. Shuang Cong), 2006.9-2010.7
Department of Automation, University of Science and Technology of China

Working Experience

Lecturer, Jul. 2017–present.
School of Electrical and Control Engineering, North University of China

Lecturer, Jun. 2015– Jun. 2017.
School of Computer Science and Control Engineering, North University of China

Grants

1. North University of China, Discipline Building Project, Principal investigator, 2023.01-2025.12, Amount granted ¥100,000
2. Scientific and Technological Innovation Programs of Higher Education Institutions in Shanxi, Project 2019L0583, Principal investigator, 2019.07-2021.06, Amount granted ¥20,000
3. Natural Science Foundation of Shanxi Province, Project 201801D221208, Principal investigator, 2018.12-2020.12, Amount granted ¥30,000
4. Science Foundation of North University of China, Project 2017025, Principal investigator, 2017.01-2019.12, Amount granted ¥30,000
5. North University of China, Start-up Grant, Project 20150057, Principal investigator, 2015.09-2018.06, Amount granted ¥200,000

Publications[1]

Submitted Papers

[1] ∗: Corresponding author; #: Equal contribution.

1. **Jie Wen**[*,#], Fangmin Wang[#], Yuanhao Shi, Jianfang Jia and Jianchao Zeng[*], Rapid Stabilization of Stochastic Quantum Systems in A Unified Framework, *Chinese Physics B*, under review (Round 2), Feb 6, 2023.
2. **Jie Wen**[*], Fangling Wang, Stable Levitation of Single-point Levitation Systems for Maglev Trains Based on Cascade Control, *Transactions of the Institute of Measurement and Control*, under review, Jan 7, 2023.
3. **Jie Wen**[*], Yuanhao Shi, Xiaoqiong Pang, Jianfang Jia and Jianchao Zeng[*], Exponential Stabilization of Stochastic Time-delay Quantum Systems Based on Continuous Measurement Feedback, *Journal of The Franklin Institute*, under review, Nov 2, 2022.

Journal Papers

1. Yanru Yang, **Jie Wen**[*], Jianyu Liang, Yuanhao Shi, Yukai Tian and Jiang Wang, Remaining Useful Life Prediction for Lithium-Ion Batteries Based on the Partial Voltage and Temperature, *Sustainability*, 2023, 15(2): 1602. doi: 10.3390/su15021602 (SCI, SSCI, IF=3.889)
2. Yukai Tian, **Jie Wen**[*], Yanru Yang, Yuanhao Shi and Jianchao Zeng, State-of-Health Prediction of Lithium-Ion Batteries Based on CNN-BiLSTM-AM, *Batteries*, 2022, 8(10): 155. doi: 10.3390/batteries8100155 (SCI, WOS: 000874274200001, IDS: 5R1JL, IF=5.938)
3. **Jie Wen**[*], Yuanhao Shi, Xiaoqiong Pang, Jianfang Jia and Jianchao Zeng[*], Global Exponential Stabilization of Eigenstates for Quantum Spin-$\frac{1}{2}$ Systems via Improved Feedback Control, *Journal of The Franklin Institute*, online, Aug 15, 2022. (SCI, IF=4.246)
4. **Jie Wen**[*], Yuanhao Shi, Jianfang Jia and Jianchao Zeng, Exponential Stabilization of Spin-$\frac{1}{2}$ Systems Based on Switching State Feedback, *Romanian Journal of Physics*, 2022, 67(9-10): 119. (SCI, WOS: 000892872400005, IDS: 6S3DV, IF=1.662)
5. **Jie Wen**[*,#], Fangmin Wang[#], Yuanhao Shi, Jianfang Jia and Jianchao Zeng[*], Feedback Exponential Stabilization of Stochastic Quantum Systems Based on State Space Division, *Results in Physics*, 2022, 37: 105525. doi: 10.1016/j.rinp.2022.105525 (SCI, WOS: 000803757500005, IDS: 1S0NX, IF=4.565)
6. **Jie Wen**[*], Yuanhao Shi, Jianfang Jia and Jianchao Zeng[*], Exponential Stabilization of Stochastic Quantum Systems via Combined Feedback, *Results in Physics*, 2021, 30: 104862. doi: 10.1016/j.rinp.2021.104862 (SCI, WOS: 000714834200003, IDS: WR9TE, IF=4.565)
7. **Jie Wen**[*], Yuanhao Shi, Xiaoqiong Pang and Jianfang Jia, Optimal Soot Blowing and Repair Plan for Boiler Based on HJB Equation, *Optimization*, 2022, 71(16): 4603-4622. doi: 10.1080/02331934.2021.1954922 (SCI, WOS: 000674820100001, IDS: TL4IC, IF=2.456)
8. Yanru Yang, **Jie Wen**[*], Yuanhao Shi and Jianchao Zeng[*], State of Health Prediction of Lithium-ion Batteries Based on the Discharge Voltage and Temperature, *Electronics*, 2021, 10(12): 1497. doi: 10.3390/electronics10121497 (SCI, WOS: 000666001200001, IDS: SY6NB, IF=2.690)
9. **Jie Wen**[*], Yuanhao Shi, Jianfang Jia and Jianchao Zeng[*], Exponential Stabilization of Two-level Quantum Systems Based on Continuous Noise-assisted Feedback, *Results in Physics*, 2021, 22: 103929. doi: 10.1016/j.rinp.2021.103929 (SCI, WOS: 000632534300010, IDS: RC1AJ, IF=4.565)
10. Yanru Yang, **Jie Wen**[*], Yuanhao Shi, Zehui Zhang, Wenhai LIU, Remaining Useful Life Prediction for Lithium-ion Battery Based on CEEMDAN and SVR, *Journal of Electronic Measurement and Instrumentation*, 2020, 34(12): 197-205. doi: 10.13382/j.jemi.B2003108
11. **Jie Wen**[*], Yuanhao Shi, Xiaoqiong Pang, Jianfang Jia and Jianchao Zeng[*], Rapid Stabilization of Time Delay Stochastic Quantum Systems Based on Continuous Measurement Feedback, *Journal of The Franklin Institute*, 2020, 357(12): 7515-7536. doi: 10.1016/j.jfranklin.2020.05.016 (SCI, WOS: 000565957100004, IDS: NJ3ON, IF=4.246)
12. **Jie Wen**[*], Yuanhao Shi, Xiaoqiong Pang, Jianfang Jia and Jianchao Zeng[*], Optimization of Boiler Soot Blowing Based on Hamilton-Jacobi-Bellman Equation, *IEEE Access*, 2019, 7(1): 20850-20862. doi: 10.1109/ACCESS.2019.2897362 (SCI, WOS: 000460548400001, IDS: HN9VN, IF=3.476)
13. **Jie Wen**[*], Yuanhao Shi and Xiaonong Lu, Stabilizing a Class of Mixed States for Stochastic Quantum Systems via Switching Control, *Journal of The Franklin Institute*, 2018, 355(5): 2562-2582. doi: 10.1016/j.jfranklin.2018.01.031 (SCI, WOS: 000427827800022, IDS: FZ8AQ, IF=4.246)
14. **Jie Wen**[*], Yuanhao Shi and Xiaonong Lu, Stabilizing a Rotary Inverted Pendulum Based on Logarithmic Lyapunov Function, *Journal of Control Science and Engineering*, 2017, 2017: 4091302. doi: 10.1155/2017/4091302 (EI: 20171203481385)

15. Shuang Cong*, **Jie Wen**, Sen Kuang and Fangfang Meng, Global Stabilization Control of Stochastic Quantum Systems, *Science China Information Sciences*, 2016, 59(11): 112502. doi: 10.1007/s11432-015-0911-7 (SCI, WOS: 000389031400012, IDS: ED7GV, IF=7.275)
16. **Jie Wen**, Shuang Cong*, Preparation of Quantum Gates for Open Quantum Systems by Lyapunov Control Method, *Open Systems & Information Dynamics*, 2016, 23(01): 1650005. doi: 10.1142/S1230161216500050 (SCI, WOS: 000373397200005, IDS: DI3KJ, IF=0.571)
17. Shuang Cong*, **Jie Wen** and Xubo Zou, Comparison of Time Optimal Control for Two Level Quantum Systems, *Journal of Systems Engineering and Electronics*, 2014, 25(1): 95-103. doi: 10.1109/JSEE.2014.00011 (SCI, WOS: 000333697000011, IDS: AE1AH, IF=1.363)

Conference Papers

1. **Jie Wen***, Jikuo Wu, Yukai Tian, Levitation Control of Maglev Systems Based on Cascade Control, *2022 China Automation Congress*, Xiamen, 2022: 11.25-11.27. (EI)
2. Yanru Yang, **Jie Wen***, Yuanhao Shi, Jianfang Jia, Mengwei Li and Jianchao Zeng, Remaining Useful Life Prediction of Lithium-ion Batteries Based on the Discharge Voltage, *2021 China Automation Congress*, Beijing, 2021: 10.22-10.24. (EI)
3. **Jie Wen***, Yuanhao Shi, Xiaoqiong Pang, Jianfang Jia and Jianchao Zeng*, Optimal Soot Blowing Strategies in Boiler Systems with Variable Steam Flow, *The 37th Chinese Control Conference*, Wuhan, 2018: 7.25-8.27. doi: 10.23919/ChiCC.2018.8484204 (EI: 20191106627178, CA).
4. Shuang Cong*, **Jie Wen**, Fangfang Meng and Kezhi Li, Global Stabilization of Mixed-states for Stochastic Quantum Systems via Switching Control, *IFAC-PapersOnLine*, 2017, 50(1): 13032-13037. doi: 10.1016/j.ifacol.2017.08.2001 (EI: 20181304949576, JA).
5. **Jie Wen***, Yuanhao Shi and Xiaonong Lu, Stabilizing a Rotary Inverted Pendulum Based on Lyapunov Stability Theorem, *The 29th Chinese Control and Decision Conference*, Chongqing, 2017: 5.28-5.30. doi: 10.1109/CCDC.2017.7978173 (EI: 20173504089966, CA)
6. Shuang Cong*, **Jie Wen**, Sen Kuang and Fangfang Meng, Global Stabilization of an Eigenstate for Stochastic Quantum Systems, *IEEE International Conference on Control & Automation*, Kathmandu, 2016: 6.01-6.03. doi: 10.1109/ICCA.2016.7505405 (EI: 20163102669472, CA)
7. **Jie Wen**, Shuang Cong*, Lyapunov-based Control for the Operator Preparation in Markovian Open Quantum Systems, *IEEE International Conference on Information and Automation*, Hailar, 2014: 7.28-7.30. doi: 10.1109/ICInfA.2014.6932658 (EI: 20145000304413, CA)
8. **Jie Wen**, Shuang Cong* and Xubo Zou, Realization of Quantum Hadamard Gate Based on Lyapunov Method, *The 10th World Congress on Intelligent Control and Automation*, Beijin, 2012: 7.06-7.08. doi: 10.1109/WCICA.2012.6359443 (EI: 20130415919919, CA)
9. **Jie Wen**, Shuang Cong*, Transfer from Arbitrary Pure State to Target Mixed State for Quantum Systems, *The 18th World Congress of the International Federation of Automatic Control*, Milano, 2011: 8.28-9.02. doi: 10.3182/20110828-6-IT-1002.00389 (EI: 20124015492630, CA)