

辽宁科技大学硕士生导师基本情况登记表

姓名	武力兵	性别	男	出生年月	1980.12	所在学院	理学院数学系	
职称	教授	学位	博士	研究方向		控制科学与工程		
所属学科	数学	导师资格		硕士研究生导师（获得时间：2017 年） 博士研究生导师（获得时间：2023 年）				
联系电话		18941202285		电子邮件		beyondwlb@163.com		
办公地址		理学院 B307		主讲课程		高等代数、概率论与数理统计、常微分方程、线性代数、 线性系统、非线性系统等		
教育经历	2000.09-2004.07	渤海大学		数学系 数学与应用数学专业			学士；	
	2004.09-2007.03	东北大学		理学院 基础数学专业泛函分析方向			硕士；	
	2011.09-2016.07	东北大学		信息科学与工程学院 控制理论与控制工程专业			博士；	
	2018.09-2019.08	韩国岭南大学		电气工程系			博士后；	
	2024.07-2024.12	加拿大湖首大学		电气工程系			访问学者。	
工作经历	2007.03-2017.12	辽宁科技大学		理学院数学系	讲师；			
	2018.01-2022.12	辽宁科技大学		理学院数学系	副教授；			
	2023.01-至今	辽宁科技大学		理学院数学系	教授；			
	2025.06-至今	辽宁科技大学		理学院数学系	教工数学系党支部书记。			
研究方向	自适应控制；容错控制；智能控制；事件触发控制等。							
研究生培养情况	1. 已培养及在读硕士研究生数量：30 人，已毕业 20 人；已培养及在读博士研究生数量：1 人。 2. 研究生培养质量：获评辽宁省优秀硕士学位论文 1 人次；辽宁科技大学优秀硕士学位论文 2 人次；国家奖学金 1 人次；辽宁省优秀毕业生 2 人次；辽宁科技大学优秀毕业生 2 人次；学生以第一作者在《IEEE Transactions on Fuzzy Systems》、《Fuzzy Sets and Systems》、《Nonlinear Dynamics》、《Applied Mathematics and Computation》等国际著名期刊上发表 SCI 期刊论文 28 篇；学生以第一作者在省级期刊及中文核心期刊发表论文 10 篇；学生主持辽宁科技大学研究生科技创新项目 2 项。							
科研项目	1. 国家自然科学基金项目，62441309，基于事件触发机制的非线性约束系统模糊自适应容错控制，2025.01-2025.12，15 万元，在研，主持。 2. 辽宁省自然科学基金面上项目，一类切换非线性系统的预设时间控制，2025.09-2027.08，8 万元，在研，主持。 3. 辽宁省高校基本科研业务费项目，LJ212410146024，非线性切换多智能体系统的模糊自适应固定时间容错控制，2024.01-2025.12，10 万元，在研，主持。 4. 辽宁省科技厅面上项目，2022-MS-356，具有执行器约束模式的多智能体系统事件触发控制，2022.09-2024.08，5 万元，已结题，主持。 5. 辽宁省教育厅面上项目，LJKZ0284，带有全状态受限随机非线性系统的事件触发控制研究，2021.09-2023.08，5 万元，已结题，主持。 6. 辽宁省自然科学基金指导项目，20180551190，不确定非线性切换系统的有限时间自适应容错控制研究，2018.09-2020.08，5 万元，已结题，主持。 7. 辽宁省教育厅重点项目，2017LNZD05，模型不确定下三角非线性系统自适应故障估计与容错控制研究，2017.10-2019.09，10 万元，已结题，主持。							

1. SCI 期刊

- [1] Ming-Rui Liu, **Li-Bing Wu***, Huan-Qing Wang, Liang-Dong Guo, and Sheng-Juan Huang. Disturbance observer-based nonsingular fixed-time fuzzy adaptive event-triggered output feedback control of uncertain nonlinear systems[J]. *Fuzzy Sets and Systems*, 2025, 498: 109-132. (TOP 期刊论文, 中科院 1 区, 影响因子: 3.2)
- [2] Ming-Rui Liu, **Li-Bing Wu***, Ming Chen, Guo-Fei Cui, and Qi Chen. Model-based event-triggered leaderless consensus control for nonlinear pure-feedback multi-agent systems [J]. *Asian Journal of Control*, 2025, 27(2): 973-986.
- [3] Ming-Rui Liu, **Li-Bing Wu***, and Wen-Di Ci. Observer-based adaptive fuzzy quantized fault-tolerant control of nonstrict-feedback nonlinear systems with actuator and sensor faults [J]. *International Journal of Systems Science*, 2024, 56(5): 935-952.
- [4] Ming-Rui Liu, **Li-Bing Wu***, Hong Sang, Liang-Dong Guo, and Sheng-Juan Huang. Disturbance observer-based fuzzy adaptive switched tuning control of uncertain nonlinear systems with full state constraints [J]. *Applied Mathematics and Computation*, 2024, 487(15): 129110.
- [5] Ming-Rui Liu, **Li-Bing Wu***, Meng Wu, and Wen-Chao Ma. Event-triggered adaptive fault estimation and fault-tolerant control for strict-feedback nonlinear systems with full state constraints [J]. *Nonlinear Dynamics*, 2025, 113: 2505-2520.
- [6] Qi Chen, **Li-Bing Wu***. Fixed-time adaptive fault-tolerant control of stochastic nonlinear systems with time-varying full-state constraints [J]. *Nonlinear Dynamics*, 2024, 112: 22113-22129.
- [7] Qi Chen, **Li-Bing Wu***, Ming Chen, and Ming-Rui Liu. Fixed-time adaptive event-triggered fault-tolerant control of nonlinear systems with actuator failures [J]. *Asian Journal of Control*, 2025, 27(2): 765-781.
- [8] Meng Wu, **Li-Bing Wu***, and Pu Wang. Event-triggered adaptive leaderless consensus control for nonlinear multi-agent systems with unknown dead-zones and output constraints [J]. *Applied Mathematics and Computation*, 2024, 469(15): 128523.
- [9] Meng Wu, **Li-Bing Wu***, Ying Yan, and Yan-Wu Dong. Adaptive fuzzy fault-tolerant control of stochastic nonlinear multiagent systems with input quantization and state constraints [J]. *Asian Journal of Control*, 2024, 26(5): 2377-2389.
- [10] Meng Wu, **Li-Bing Wu***, and Guo-Fei Cui. Event-triggered adaptive control for consensus tracking of multi-agent systems with input saturations and full-state constraints [J]. *Journal of Mathematical Analysis and Applications*, 2024, 540(1): 128572.
- [11] Guo-Fei Cui, **Li-Bing Wu***, and Meng Wu. Adaptive event-triggered fault-tolerant control for leader-following consensus of multi-agent systems [J]. *International Journal of Systems Science*, 2024, 55(15): 3291-3303.
- [12] **Li-Bing Wu**, Xi-Qin He, Liang-Dong Guo, Sheng-Juan Huang, and Yu-Han Hu. Neural network adaptive switched fault-tolerant control of uncertain nonlinear systems with full state constraints [J]. *Neurocomputing*, 2024, 598(14): 128034.
- [13] Ming-Rui Liu, **Li-Bing Wu***, Qing-Kun Yu, and Nan-Nan Zhao. Observer-based fuzzy adaptive event-triggered control for strictly uncertain nonlinear systems with partial state constraints and output dead-zones [J]. *International Journal of Systems Science*, 2023, 55(2): 191-208.
- [14] **Li-Bing Wu**, Ju H. Park*, Liang-Dong Guo, and Sheng-Juan Huang. Prescribed performance event-triggered fault-tolerant control of uncertain pure-feedback nonlinear systems[J]. *International Journal of Control*, 2023, 97(7): 1532-1541.
- [15] Ya-Xin Li, **Li-Bing Wu***, Yu-Han Hu, Wei-Jun Yan, Nan-Nan Zhao, and Jin Nie. Adaptive fault-tolerant control of switched nonlinear systems based on tuning function method [J]. *Asian Journal of Control*, 2023, 25(5): 3474-3486.
- [16] Yi-Fan Dun and **Li-Bing Wu**. Fixed-time prescribed performance fault compensation control of uncertain pure-feedback nonlinear systems [J]. *International Journal of Systems Science*, 2022, 54(3): 607-617.
- [17] Hui-Yun Zhang, **Li-Bing Wu***, Wei-Jun Yan, and Yu-Han Hu. Finite time adaptive filter control of nonlinear systems with actuator faults and state constraints [J]. *Asian Journal of Control*, 2022, 25(2): 1606-1618.
- [18] Yu Yao and **Li-Bing Wu***. Backstepping control for fractional discrete-time systems [J]. *Applied Mathematics and Computation*, 2022, 434(1): 127450.
- [19] Yan Yan, **Li-Bing Wu***, Wei-Jun Yan, Yu-Han Hu, Nan-Nan Zhao, and Ming Chen. Finite-time event-triggered fault-tolerant control for a family of pure-feedback systems [J]. *Applied Mathematics and Computation*, 2022, 426(1): 127087.
- [20] Yi-Fan Dun, **Li-Bing Wu***, Yu-Han Hu, Jun-Mei Fan, and Zhi-Guo Zhang. Fault compensation control of MIMO nonlinear systems subject to unknown control directions [J]. *Nonlinear Dynamics*, 2022, 107: 1063-1079.
- [21] Ya-Xin Li, **Li-Bing Wu***, and Yu-Han Hu. Fault-tolerant control for nonlinear switched systems with unknown control coefficients and full-state constraints [J]. *Information Sciences*, 2022, 582: 750-766.

- [22] Rui-Yan Zhang, **Li-Bing Wu***, Nan-Nan Zhao, and Yan Yan. Adaptive event-triggered fuzzy tracking control of uncertain stochastic nonlinear systems with unmeasurable states [J]. **IEEE Transactions on Fuzzy Systems**, 2022, 30(7): 2183-2196. (TOP 期刊论文, SCI 检索源, 影响因子: 10.7)
- [23] **Li-Bing Wu**, Ju H. Park*, Xiang-Peng Xie, and Ya-Feng Li. Adaptive asymptotic tracking control of uncertain nonlinear systems based on Taylor decoupling and event-trigger [J]. **IEEE Transactions on Systems, Man, and Cybernetics: Systems**, 2022, 52(4): 2053-2060. (TOP 期刊论文, 中科院 1 区, 影响因子: 8.7)
- [24] Yan Yan, **Li-Bing Wu***, Nan-Nan Zhao, and Rui-Yan Zhang. Adaptive asymptotic tracking fault-tolerant control of uncertain nonlinear systems with actuator failures and event-triggered inputs [J]. *International Journal of Control Automation and Systems*, 2021, 19(3): 1241-1251.
- [25] **Li-Bing Wu**, Ju H. Park*, Xiang-Peng Xie, and Ya-Juan Liu. Neural network adaptive tracking control of uncertain MIMO nonlinear systems with output constraints and event-triggered inputs [J]. **IEEE Transactions on Neural Networks and Learning Systems**, 2021, 32(2): 695-707. (TOP 期刊论文, SCI 检索源, 影响因子: 10.4)
- [26] **Li-Bing Wu**, Ju H. Park*, Xiang-Peng Xie, Chuang Gao, and Nan-Nan Zhao. Fuzzy adaptive event-triggered control for a class of uncertain nonaffine nonlinear systems with full state constraints [J]. **IEEE Transactions on Fuzzy Systems**, 2021, 29(4): 904-916. (TOP 期刊论文, SCI 检索源, 影响因子: 11.9)
- [27] **Li-Bing Wu**, Ju H. Park, Xiang-Peng Xie, and Nan-Nan Zhao. Adaptive fuzzy tracking control for a class of uncertain switched nonlinear systems with full-state constraints and input saturations [J]. **IEEE Transactions on Cybernetics**, 2021, 51(12): 6054-6065. (TOP 期刊论文, SCI 检索源, 影响因子: 9.4)
- [28] **Li-Bing Wu** and Ju H. Park. Adaptive fault-tolerant control of uncertain switched nonaffine nonlinear systems with actuator faults and time delays [J]. **IEEE Transactions on Systems, Man, and Cybernetics: Systems**, 2020, 50(9): 3470-3480. (TOP 期刊论文, SCI 检索源, 影响因子: 11.4)
- [29] **Li-Bing Wu**, Ju H. Park, and Nan-Nan Zhao. Robust adaptive fault-tolerant tracking control for nonaffine stochastic nonlinear systems with full state constraints [J]. **IEEE Transactions on Cybernetics**, 2020, 50(8): 3793-3805. (TOP 期刊论文, SCI 检索源, 影响因子: 9.4)
- [30] **Li-Bing Wu**, Ju H. Park, Xing-Peng Xie, Ya-Juan Liu, and Zhi-Chun Yang. Event-triggered adaptive asymptotic tracking control of uncertain nonlinear systems with unknown dead-zone constraints [J]. *Applied Mathematics and Computation*, 2020, 386(1): 125528.
- [31] **Li-Bing Wu**, Ju H. Park*, Xing-Peng Xie, Yu-Wei Ren, and Zhi-Chun Yang. Distributed adaptive neural network consensus for a class of uncertain nonaffine nonlinear multi-agent systems [J]. *Nonlinear Dynamics*, 2020, 100(2): 1243-1255.
- [32] Nan-Nan Zhao, **Li-Bing Wu***, Xin-Yu Ouyang, Yan Yan, and Rui-Yan Zhang. Finite-time adaptive fuzzy tracking control for nonlinear systems with disturbances and dead-zone nonlinearities[J]. *Applied Mathematics and Computation*, 2019, 362: 124494.
- [33] **Li-Bing Wu**, Heng Wang*, Xi-Qin He, and Da-Qing Zhang. Decentralized adaptive fuzzy tracking control for a class of uncertain large-scale systems with actuator nonlinearities [J]. *Applied Mathematics and Computation*, 2018, 332(1): 390-405.
- [34] **Li-Bing Wu***, Xi-Qin He, Da-Qing Zhang and Hong-Wei Jia. Adaptive H_∞ fault-tolerant control for a class of uncertain switched nonlinear systems with multiple state time delays [J]. *International Journal of Systems Science*, 2018, 49(8): 1784-1794.
- [35] **Li-Bing Wu** and Guang-Hong Yang*, Adaptive output fuzzy fault accommodation for a class of uncertain nonlinear systems with multiple time delays [J]. **IEEE Transactions on Fuzzy Systems**, 2018, 26(2): 1052-1057. (TOP 期刊论文, SCI 检索源, 影响因子: 10.7)
- [36] **Li-Bing Wu**, Heng Wang, Xi-Qin He, Da-Qing Zhang, and Sheng-Juan Huang. Adaptive fault estimation and fault-tolerant tracking control for a class of non-linear systems with output constraints [J]. *IET Control Theory and Applications*, 2018, 12(4): 556-562.
- [37] **Li-Bing Wu** and Guang-Hong Yang. Adaptive output neural network control for a class of stochastic nonlinear systems with dead-zone nonlinearities [J]. **IEEE Transactions on Neural Networks and Learning Systems**, 2017, 28(3): 726-739. (TOP 期刊论文, SCI 检索源, 影响因子: 10.2)
- [38] **Li-Bing Wu**, Guang-Hong Yang, Hong Wang and Fuli Wang. Adaptive fuzzy asymptotic tracking control of uncertain nonaffine nonlinear systems with nonsymmetric dead-zone nonlinearities [J]. *Information Sciences*, 2016, 348(20): 1-14.
- [39] **Li-Bing Wu** and Guang-Hong Yang. Adaptive fuzzy tracking control for a class of uncertain nonaffine nonlinear systems with dead-zone inputs [J]. *Fuzzy Sets and Systems*, 2016, 290(1): 1-21.
- [40] **Li-Bing Wu** and Guang-Hong Yang. Robust adaptive fault-tolerant control for a class of uncertain nonlinear systems with multiple time delays [J]. *Journal of Process Control*, 2016, 41: 1-13.
- [41] **Li-Bing Wu** and Guang-Hong Yang. Decentralized adaptive fuzzy fault-tolerant tracking control of large-scale nonlinear systems with actuator failures [J]. *Neurocomputing*, 2016, 179(29): 307-317.

- [42] **Li-Bing Wu** and Guang-Hong Yang. Robust adaptive fault-tolerant tracking control of multiple time-delays systems with mismatched parameter uncertainties and actuator failures [J]. International Journal of Robust and Nonlinear Control, 2015, 25(16): 2922-2938.
- [43] **Li-Bing Wu** and Guang-Hong Yang. Adaptive fault-tolerant control of a class of nonaffine nonlinear systems with mismatched parameter uncertainties and disturbances [J]. Nonlinear Dynamics, 2015, 82(3): 1281-1291.
- [44] **Li-Bing Wu**, Guang-Hong Yang, and Dan Ye. Robust adaptive fault-tolerant control for linear systems with actuator failures and mismatched parameter uncertainties [J]. IET Control Theory and Applications, 2014, 25(6): 2922-2938.
- [45] Jing-Yu Guo and **Li-Bing Wu***. Event-triggered optimal fault-tolerant control for a class of uncertain strict-feedback nonlinear systems[J]. European Journal of Control, 2025, 83: 101228.
- [46] Si-Yu Wang and **Li-Bing Wu***. Adaptive decentralised neural fault-tolerant control for nonlinear interconnected systems with input time delays and full state constraints[J]. International Journal of Systems Science, 2025: 1-17.
- [47] Yun-Fei Zhang and **Li-Bing Wu***. Observer-based output feedback H_∞ fault-tolerant consensus for a class of leader-follower multi-agent systems subject to actuator faults[J]. International Journal of Systems Science, 2025: 1-12.
- [48] Meng Li, **Li-Bing Wu***, Wei-Jun Yan, and Yu-Han Hu. Fixed-time adaptive consensus fault-tolerant control for stochastic nonlinear multi-agent systems with input delays[J]. Communications in Nonlinear Science and Numerical Simulation, 2025: 108990.
- [49] Jing-Yu Guo and **Li-Bing Wu***. Event-based optimal output feedback control for a class of switched nonlinear systems with input hysteresis[J]. Nonlinear Dynamics, 2025: 1-13.
- [50] Wen-Di Ci, **Li-Bing Wu***, and Ming-Rui Liu. Observer-based adaptive fuzzy fault-tolerant control for nonlinear systems with dead-zone inputs and output constraints[J]. International Journal of Systems Science, 2025: 1-15.

2. EI 期刊

- [51] Ying Yan, **Li-Bing Wu***, Xi-Qin He, and Ming Chen. Adaptive fault-tolerant tracking control of uncertain nonlinear systems with event-triggered inputs and full state constraints [J]. Journal of Control, Automation and Electrical Systems, 2022, 33(6): 1688-1699.
- [52] **Li-Bing Wu**, Xi-Qin He, and Da-Qing Zhang. Cooperative adaptive fuzzy control for a class of uncertain non-linear multi-agent systems with time delays [J]. Journal of Control and Decision, 2017, 4(3): 131-152.
- [53] Meng Li and **Li-Bing Wu***. Event-Triggered Adaptive Fault-Tolerant Control for Linear Multi-Agent Systems with Actuator Faults and Time Delays[J]. IAENG International Journal of Applied Mathematics, 2025, 55(5).
- [54] Meng Li and **Li-Bing Wu***. Fuzzy Adaptive Control for Strict-Feedback Uncertain Nonlinear Systems with Input Delays and Saturations[J]. Engineering Letters, 2025, 33(5).

3. 中文核心期刊

- [55] 陈琪, **武力兵***. 具有全状态约束的非线性系统固定时间自适应容错控制[J]. 系统科学与数学, 2024.
- [56] 阎岩, **武力兵***. 一类带有未知控制方向的非线性系统的模糊自适应事件触发容错控制[J]. 工程数学学报, 2022, 39(06): 886-898.
- [57] 慈文迪, **武力兵***, 刘明瑞. 具有传感器和执行器故障的非线性约束系统模糊自适应容错控制[J]. 系统科学与数学, 2025.

4. EI 会议

- [58] Pu Wang, **Li-Bing Wu***, Si-Yu Wang, Qi-Ke Yu, Lu-Yao Zhang, and Mei-Qiao Li. Adaptive control of strict-feedback nonlinear systems with output constraints and input delays[C]. Chinese Control and Decision Conference(CCC), 2024: 4742-4747.
- [59] **Li-Bing Wu**, Dan Ye, and Xin-Gang Zhao. Adaptive fault identification for a class of nonlinear dynamic systems[C]. IEEE Symposium Series on Adaptive Dynamic Programming and Reinforcement Learning (ADPRL), 2014.
- [60] **Li-Bing Wu**, Zhi-Guo Zhang, Da-Qing Zhang, and Gui-Zhi Li. Robust adaptive H_∞ fault-tolerant control for uncertain linear systems against actuator faults[C]. Control and Decision Conference(CDC), 2014: 2847-2852.

	5. 中文期刊 [61] 张云飞, 武力兵*. 一类线性多智能体系统的鲁棒 H_∞ 事件触发容错控制[J]. 兰州工业学院学报, 2024. [62] 石琳, 武力兵*. 具有输入量化和执行器故障的非线性多智能体系统的自适应包容控制[J]. 高师理科学刊, 2024, 44(07): 15-27. [63] 刘函, 武力兵*. 一类带有输入时滞的非线性关联大系统的分散自适应控制[J]. 辽宁科技大学学报, 2023, 46(06): 434-439. [64] 马文超, 武力兵*. 一类非线性系统的故障估计和预设性能控制[J]. 高师理科学刊, 2023, 43(10): 9-15. [65] 杨帆, 武力兵*. 柔性关节机械臂系统的鲁棒自适应跟踪控制[J]. 高师理科学刊, 2023, 43(05): 39-45. [66] 李萌, 武力兵*. 一类线性多智能体系统的自适应容错控制[J]. 辽宁科技大学学报, 2022, 45(06): 425-430. [67] 郭静宇, 武力兵*. 一类切换非线性系统的事件触发最优控制[J]. 兰州工业学院学报, 2025, 32(03): 99-105+116.
学术兼职	1. 中国自动化学会信息物理系统控制与决策专委会委员; 2. 受邀担任《<i>IEEE Transactions on Fuzzy Systems</i>》、《<i>IEEE Transactions on Systems, Man, and Cybernetics: Systems</i>》、《<i>Fuzzy Sets and Systems</i>》、《<i>ISA Transactions</i>》、《<i>Applied Mathematics and Computation</i>》、《<i>Neurocomputing</i>》、《<i>Nonlinear Dynamics</i>》、《<i>Asian Journal of Control</i>》、《<i>Communications in Nonlinear Science and Numerical Simulation</i>》等多个 SCI 期刊杂志期刊审稿人; 3. 华北理工大学兼职硕士生导师; 4. 全国研究生数学建模竞赛评审专家; 5. 教育部学位中心博硕论文评审专家。
主要荣誉	1. 2016 年获评辽宁科技大学优秀教师; 2. 2017 年获评辽宁省自然科学学术成果奖三等奖; 3. 2018 年获评辽宁省自然科学学术成果奖三等奖; 4. 2019 年获评辽宁科技大学优秀共产党员; 5. 2021 年获评本科生毕业论文校优秀指导教师; 6. 2021 年获评辽宁科技大学优秀研究生指导教师; 7. 2023 年获评辽宁省自然科学学术成果奖二等奖; 8. 入选 2024 年科睿唯安全球“高被引学者”名录; 9. 2024 年获评辽宁省数学建模竞赛优秀组织工作者; 10. 2024 年获评辽宁省自然科学学术成果奖三等奖; 11. 2024 年入围科睿唯安全球前 2% 顶尖科学家; 12. 2025 年入围科睿唯安全球前 2% 顶尖科学家; 13. 2025 年获评辽宁省自然科学奖三等奖; 14. 2025 年获评(2024 届)辽宁省优秀硕士学位论文指导教师; 15. 2025 年获评辽宁科技大学优秀科技工作者; 16. 2025 年获评(2025 届)辽宁科技大学优秀硕士学位论文指导教师。

注：各二级培养单位可根据各单位实际情况，略微调整表格内容。