个人简历

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　　简介：东华大学信息科学与技术学院特聘研究员，博导。于 2016 年 7 月获得哈尔滨工业大学工科博士学位，期间受国家留学基金委资助在英国布鲁奈尔大学联合培养两年(2013 年 10 月至 2015 年 10 月)。主要从事复杂系统的状态估计与控制、测量野值下的状态估计、网络化系统的控制及滤波等相关问题的研究。截止日前（2021 年 12 月 7 日），在本领域发表或录用 SCI 论文共计 50 余篇（其中 10 篇论文入选 ESI 高被引论文），论文被引 1844 次（据 Web of Science 统计），h 指数 23。以第一作者发表或录用 SCI 论文 23 篇，其中包括公认的控制领域顶级期刊 IEEE Transactions on Automatic Control 及 Automatica 论文 9 篇，国内控制领域顶级 SCI 期刊 IEEE/CAA Journal of Automatica Sinica 1 篇，IEEE Trans 系列汇刊论文 8 篇。授权发明专利 2 项，主持国家自然科学基金青年项目、中国博士后基金面上资助（一等资助）、中国博士后基金特别资助等项目 5 项，参与国家自然科学基金重点项目 1 项。分别于 2018 年入选国际期刊 IET Control Theory & Applications 杰出审稿人、2015 年入选国际期刊 Asian Journal of Control 杰出审稿人、2014 年入选国际期刊 IET Control Theory & Applications 前 3%最活跃审稿人。目前担任 3 个 SCI 期刊编委、自动化学报（英文版）首届青年编委、国际电气电子工程师（IEEE）协会高级会员、TCCT 随机系统控制学组委员、中国自动化学会会员，曾担任 2 个国际期刊特刊客座编辑。2017 年在第 36 届中国控制会议（CCC2017）组织邀请组"Protocol-based stochastic filtering and control"。2018 年担任第 15 届国际控制，自动化，机器人技术和视觉会议（ICARCV 2018）程序委员会委员。现为东华大学信息科学与技术学院特聘研究员。

教育背景

2012.09-2016.07	哈尔滨工业大学	控制科学与工程	导师：王子栋（教授）副导师：高会军（教授）	博士学位
2008.09-2011.07	中国石油大学（北京）	控制科学与工程	导师：左信（教授）	硕士学位
2004.09-2008.07	北京石油化工学院	自动化		学士学位

学术任职及专业团体

➢ **IEEE 高级会员**

➢ **Neurocomputing 编委　(IF：4.438)**

➢ **International Journal of Systems Science 编委　(IF：2.149)**

➢ **International Journal of Control, Automation and Systems 编委　(IF：3.314)**

➢ **自动化学报（英文版）首届青年编委**

➢ 2016 年 Journal of Control Science and Engineering 特刊客座编辑

➢ 2020 年 Systems Science & Control Engineering 特刊客座编辑

➢ 第 36 届中国控制会议（CCC2017）邀请组组织人

➢ 第 15 届国际控制，自动化，机器人技术和视觉会议（ICARCV 2018）程序委员会委员

➢ 中国自动化学会会员

➢ TCCT 随机系统控制学组委员

部分期刊论文

目前在本领域发表及录用 SCI 论文共计 **50** 余篇，得到国内外学者大量引用，截止日前（2021 年 12 月 7 日），据 Web of Science 统计，目前研究成果 h 指数为 **23**，每篇论文平均被引 **33.539** 次，单篇最高被引 **169** 次。**部分以第一作者身份发表及录用论文列表如下：**

[1]. **Lei Zou**, Z. Wang, J. Hu et al., Ultimately bounded filtering subject to impulsive measurement outliers, *IEEE Transactions on Automatic Control*, In press, DOI: 10.1109/TAC.2021.3081256.

[2]. **Lei Zou**, Z. Wang, J. Hu et al., Moving horizon estimation with unknown inputs under dynamic quantization effects, *IEEE Transactions on Automatic Control*, vol. 65, no. 12, pp. 5368-5375, Dec. 2020. **(Highly Cited Paper)**

[3]. **Lei Zou**, Z. Wang, Q.-L. Han et al., Moving horizon estimation for networked time-delay systems under Round-Robin protocol, *IEEE Transactions on Automatic Control*, vol. 64, no. 12, pp. 5191-5198, Dec. 2019. **(Highly Cited Paper)**

[4]. **Lei Zou**, Z. Wang, Q.-L. Han et al., Recursive filtering for time-varying systems with random access protocol, *IEEE Transactions on Automatic Control*, vol. 64, no. 2, pp. 720-727, Feb. 2019. **(Highly Cited Paper)**

[5]. **Lei Zou**, Z. Wang, Q.-L. Han et al., Ultimate boundedness control for networked systems with Try-Once-Discard protocol and uniform quantization effects, *IEEE Transactions on Automatic Control*, vol. 62, no. 12, pp. 6582-6588, Dec. 2017.

[6]. **Lei Zou**, Z. Wang, J. Hu et al., On H-infinity finite-horizon filtering under stochastic protocol: dealing with high-rate communication networks, *IEEE Transactions on Automatic Control*, vol. 62, no. 9, pp. 4884-4890, Sep. 2017.

[7]. **Lei Zou**, Z. Wang and D. Zhou, Moving horizon estimation with non-uniform sampling under component-based dynamic event-triggered transmission, *Automatica*, vol. 120, art. no. 109154, 13 pages, Oct. 2020. **(Highly Cited Paper)**

[8]. **Lei Zou**, Zidong Wang and Huijun Gao, Set-membership filtering for time-varying systems with mixed time-delays under Round-Robin and Weighted Try-Once-Discard protocols, *Automatica*, vol. 74, pp. 341-348, Dec. 2016.

[9]. **Lei Zou**, Z. Wang and H. Gao, Observer-based H-infinity control of networked systems with stochastic communication protocol: the finite-horizon case, *Automatica*, vol. 63, pp. 366-373, Jan. 2016.

[10]. **Lei Zou**, Z. Wang, H. Geng et al., Set-membership filtering subject to impulsive measurement outliers: a recursive algorithm, *IEEE/CAA Journal of Automatica Sinica*, vol. 8, no. 2, pp. 377388, Feb. 2021.

[11]. **Lei Zou**, Z. Wang, H. Gao et al., State estimation for discrete-time dynamical networks with time-varying delays and stochastic disturbances under the Round-Robin protocol, *IEEE Transactions on Neural Networks and Learning Systems*, vol. 28, no. 5, pp. 1139-1151, May 2017. **(Highly Cited Paper)**

[12]. **Lei Zou**, Z. Wang, H. Dong et al., Energy-to-peak state estimation with intermittent measurement outliers: the single-output case, *IEEE Transactions on Cybernetics*, In press, DOI: 10.1109/TCYB.2021.3057545.

[13]. **Lei Zou**, Z. Wang, Q.-L. Han et al., Tracking control under Round-Robin scheduling: handling impulsive transmission outliers, *IEEE Transactions on Cybernetics*, In press, DOI: 10.1109/TCYB.2021.3115459.

[14]. **Lei Zou**, Z. Wang, H. Gao et al., Finite-horizon H-infinity consensus control of time-varying multi-agent systems with stochastic communication protocol, *IEEE*

Transactions on Cybernetics, vol. 47, no. 8, pp. 1830-1840, Aug. 2017.

[15]. **Lei Zou**, Z. Wang, H. Gao et al., Event-triggered state estimation for complex networks with mixed time delays via sampled data information: the continuous-time case, *IEEE Transactions on Cybernetics*, vol. 45, no. 12, pp. 2804-2815, Dec. 2015. **(Highly Cited Paper)**

[16]. **Lei Zou**, T. Wen, Z. Wang et al., State estimation for communication-based train control systems with CSMA protocol, *IEEE Transactions on Intelligent Transportation Systems*, vol. 20, no. 3, pp. 843-854, Mar. 2019.

[17]. **Lei Zou**, Z. Wang, H. Dong et al., Energy-to-peak state estimation with intermittent measurement outliers: the single-output case, *IEEE Transactions on Cybernetics*, In press, DOI: 10.1109/TCYB.2021.3057545

[18]. **Lei Zou**, Z. Wang, Q.-L. Han et al., Moving horizon estimation of networked nonlinear systems with random access protocol, *IEEE Transactions on Systems, Man, and Cybernetics: Systems*, vol. 51, no. 5, pp. 2937-2948, May 2021. **(Highly Cited Paper)**

[19]. **Lei Zou**, Z. Wang, Q.-L. Han et al., Full information estimation for linear time-varying systems with Round-Robin protocol: a recursive filter approach, *IEEE Transactions on Systems, Man, and Cybernetics: Systems*, vol. 51, no. 3, pp. 1904-1916, Mar. 2021. **(Highly Cited Paper)**

[20]. **Lei Zou**, Z. Wang, J. Hu et al., Moving horizon estimation meets multi-sensor information fusion: development, opportunities and challenges, *Information Fusion*, vol. 60, pp. 1-10, Aug. 2020.

部分非第一作者身份发表及录用期刊论文列表如下：

[1]. E. Tian, Z. Wang, **Lei Zou** et al., Chance-constrained H-infinity control for a class of time-varying systems with stochastic nonlinearities: the finite-horizon case, *Automatica*, vol. 107, pp. 296-305, Sep. 2019.

[2]. Y. Song, Z. Wang, **Lei Zou** et al., Endec-decoder-based N-step model predictive control: detectability, stability and optimization, *Automatica*, vol. 135, art. no. 109961, Jan. 2022.

[3]. X. Bai, Z. Wang, **Lei Zou** et al., Target tracking for wireless localization systems using set-membership filtering: a component-based event-triggered mechanism, *Automatica*, vol. 132, art. no. 109795, Oct. 2021.

[4]. H. Geng, Z. Wang, **Lei Zou** et al., Protocol-based tobit Kalman filter under integral measurements and probabilistic sensor failures, *IEEE Transactions on Signal Processing*, in press, DOI: 10.1109/TSP.2020.3048245.

[5]. Y. Wang, Z. Wang, **Lei Zou** et al., Multi-loop decentralized H-infinity fuzzy PID-like control for discrete time-delayed fuzzy systems under dynamical event-triggered schemes, *IEEE Transactions on Cybernetics*, in press, DOI: 10.1109/TCYB. 2020.3025251.

[6]. Y. Wang, Z. Wang, **Lei Zou** et al., H-infinity proportional-integral state estimation for T-S fuzzy systems over randomly delayed redundant channels with partly known probabilities, *IEEE Transactions on Cybernetics*, in press, DOI: 10.1109/TCYB.2020.3036364.

[7]. Z. Zhao, Z. Wang, **Lei Zou** et al., Finite-time state estimation for delayed neural networks with redundant delayed channels, *IEEE Transactions on Systems, Man, and Cybernetics: Systems*, vol. 51, no. 1, pp. 441-451, Jan. 2021. **(Highly Cited Paper)**

[8]. E. Tian, Z. Wang, **Lei Zou** et al., Probabilistic -constrained filtering for a class of nonlinear systems with improved static event-triggered communication, *International Journal of Robust and Nonlinear Control*, vol. 29, no. 5, pp. 1484-1498, Mar. 2019. **(Highly Cited**

Paper)

[9]. L. Sheng, Z. Wang, **Lei Zou** et al., Event-based H-infinity state estimation for time-varying stochastic dynamical networks with state- and disturbance- dependent noises, *IEEE Transactions on Neural Networks and Learning Systems*, vol. 28, no. 10, pp. 2382-2394, Oct. 2017.

[10]. Y. Zhang, Z. Wang, **Lei Zou** et al., Event-based finite-time filtering for multirate systems with fading measurements, *IEEE Transactions on Aerospace and Electronic Systems*, vol. 53, no. 3, pp. 1431-1441, Jun. 2017.

[11]. X. Bai, Z. Wang, **Lei Zou** et al., Target tracking for wireless localization systems with degraded measurements and quantization effects, *IEEE Transactions on Industrial Electronics*, vol. 65, no. 12, pp. 9687-9697, Dec. 2018.

学术荣誉

[1]. 国际期刊 IET Control Theory & Applications 杰出审稿人，2018

[2]. 国际期刊 Asian Journal of Control 杰出审稿人，2015

[3]. 国际期刊 IET Control Theory & Applications 前 3%最活跃审稿人，2014

部分科研项目

[1]. 2018.01—2020.12，协议影响下几类网络化时变系统的递推滤波问题研究，**中国国家自然科学基金青年项目**，25 万，61703245，主持

[2]. 2016.09—2018.09，基于通信调度的网络化系统滚动时域估计问题，**中国博士后科学基金特别资助**，15 万，2018T110702，主持

[3]. 2016.09—2018.09，基于通信协议的网络化系统控制及滤波问题研究，**中国博士后基金面上资助（一等）**，8 万，2016M600547，主持

[4]. 2017.07—2018.08，基于通信约束的时变系统递推状态估计问题研究，**山东省博士后创新项目专项资金（一等资助）**，10 万，201701015，主持

[5]. 2020.01—2024.12，网络攻击情形下矿山物理信息融合系统的分布式故障诊断研究，**中国国家自然科学基金重点项目**，292 万，61933007，参与

专利申请

[1]. **邹磊**，王子栋，白星振，赵忠义。一种间歇异常测量检测下系统的状态估计方法（已授权），专利号：ZL 2020 1 1058827.X

[2]. **邹磊**，王子栋，白星振，赵忠义。 一种野值检测下时滞复杂网络的状态估计方法（已授权），专利号：ZL 2021 1 0853538.7

部分特邀学术报告

[1]. 2020.12.21，湖南大学国家超级计算长沙中心及英国 Brunel 大学双边学术研讨会〝AI meets Industry 4.0〞，报告题目：基于 EM 算法的增材制造过程时间序列建模

[2]. 2020.08.12，汕头大学重点实验室系列学术报告会，报告题目：Moving Horizon Estimation with Engineering-oriented Complexities

[3]. 2019.04.19，哈尔滨理工大学理学院学术交流会，报告题目：基于工业复杂性的滚动时域估计

[4]. 2019.04.21，东北石油大学电气信息工程学院学术交流会，报告题目：输出异常下的滤波问题

[5]. 2018.05.21，中国石油大学（华东）信控学院青年学者交流会，报告题目：基于工业复杂性的滚动时域状态估计

[6]. 2018.04.21，中国地质大学（武汉）自动化学院学术交流会，报告题目：基于工业复杂性的滚动时域状态估计