王金亮

教授（博士生导师）

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Contact

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Education

2010.09-2014.01	博士	北京航空航天大学	控制理论与控制工程专业

Work Experience

2020.01-今	天津工业大学	教授（博导）
2018.06-2019.12	天津工业大学	副教授（博导）
2017.06-2017.09	**Texas A & M University at Qatar**	副研究员
2017.01-2018.05	天津工业大学	副教授（硕导）
2016.07-2016.08	**Texas A & M University at Qatar**	博士后助手
2015.06-2015.07	**Texas A & M University at Qatar**	博士后助手
2014.07-2014.08	**Texas A & M University at Qatar**	项目助理
2014.01-2016.12	天津工业大学	讲师（硕导）

Research interests

- 单权重的复杂动态网络
- 多权重的复杂动态网络
- 多智能体系统
- 反应扩散神经网络
- 耦合反应扩散神经网络
- 拓扑识别
- 无源性
- 同步
- 稳定性
- 一致性
- 编队控制

Honours and Awards

2019.07	天津工业大学第三届“我最喜爱的研究生导师”
2019.06	天津市人才发展特殊支持计划“青年拔尖人才”
2018.06	天津市特聘教授青年学者
2017.11	入选天津市高校“中青年骨干创新人才培养计划”
2017.07	入选天津工业大学“杰出青年人才支持计划”（天工杰青）
2017.03	天津市“**131**”创新型人才培养工程第二层次人选
2015.07	北京航空航天大学优秀博士学位论文
2015.03	天津市“**131**”创新型人才培养工程第三层次人选
2012.12	教育部博士研究生学术新人奖
2012.12	博士研究生国家奖学金
2012.12	北京航空航天大学优秀研究生
2012.06	重庆市优秀硕士学位论文

Publications

近年来，在复杂动态网络的动力学行为分析与控制方面开展了深入、细致的研究工作，并取得了一些具有国际影响的研究成果。目前以第一作者身份在**Springer**上出版学术专著两本，在一些国际知名和重要的**SCI**期刊上发表学术论文**30**余篇，其中**ESI-Hot paper 1**篇，**ESI-Highly cited paper 9**篇。具体如下：

Monographs：

2. **Jin-Liang Wang**, Huai-Ning Wu, Tingwen Huang, Shun-Yan Ren, Analysis and control of output synchronization for complex dynamical networks, **Springer**, ISBN: 978-981-13-1352-3, 1-216, 2018

1. **Jin-Liang Wang**, Huai-Ning Wu, Tingwen Huang, Shun-Yan Ren, Analysis and control of coupled neural networks with reaction-diffusion terms, **Springer**, ISBN: 978-981-10-4907-1, 1-220, 2017

Representative Papers (IEEE Trans 24篇；Automatica 1篇)：

◇ **IEEE TNNLS (2018年影响因子: 11.683)**：

8. **Jin-Liang Wang**, Shui-Han Qiu, Wei-Zhong Chen, Huai-Ning Wu, Tingwen Huang, Recent advances on dynamical behaviors of coupled neural networks with and without reaction-diffusion terms, **IEEE Transactions on Neural Networks and Learning Systems**, doi: 10.1109/TNNLS.2020.2964843, 2020

7. **Jin-Liang Wang**, Zhen Qin, Huai-Ning Wu, Tingwen Huang, Passivity and synchronization of coupled uncertain reaction-diffusion neural networks with multiple time-delays, **IEEE Transactions on Neural Networks and Learning Systems**, 30(8), 2434-2448, 2019

6. **Jin-Liang Wang**, Huai-Ning Wu, Tingwen Huang, Shun-Yan Ren, Jigang Wu, Xiao-Xiao Zhang, Analysis and control of output synchronization in directed and undirected complex dynamical networks, **IEEE Transactions on Neural Networks and Learning Systems**, 29(8), 3326-3338, 2018 (**ESI-Highly cited paper**)

5. **Jin-Liang Wang**, Huai-Ning Wu, Tingwen Huang, Shun-Yan Ren, Jigang Wu, Passivity and output synchronization of complex dynamical networks with fixed and adaptive coupling strength, **IEEE Transactions on Neural Networks and Learning Systems**, 29(2), 364-376, 2018 (**ESI-Highly cited paper**)

4. **Jin-Liang Wang**, Huai-Ning Wu, Tingwen Huang, Shun-Yan Ren, Jigang Wu, Passivity of directed and undirected complex dynamical networks with adaptive coupling weights, **IEEE Transactions on Neural Networks and Learning Systems**, 28(8), 1827-1839, 2017 (**ESI-Highly cited paper**)

3. **Jin-Liang Wang**, Huai-Ning Wu, Tingwen Huang, Shun-Yan Ren, Pinning control strategies for synchronization of linearly coupled neural networks with reaction-diffusion terms, **IEEE Transactions on Neural Networks and Learning Systems**, 27(4), 749-761, 2016 (**ESI-Highly cited paper**)

2. **Jin-Liang Wang**, Huai-Ning Wu, Lei Guo, Novel adaptive strategies for synchronization of linearly coupled neural networks with reaction-diffusion terms, **IEEE Transactions on Neural Networks and Learning Systems**, 25(2), 429-440, 2014

1. **Jin-Liang Wang**, Huai-Ning Wu, Lei Guo, Passivity and stability analysis of reaction-diffusion neural networks with Dirichlet boundary conditions, **IEEE Transactions on Neural Networks**, 22(12), 2105-2116, 2011

◇ **IEEE TCYB (2018年影响因子: 10.387)**:

9. **Jin-Liang Wang**, Qing Wang, Huai-Ning Wu, Tingwen Huang, Finite-time output synchronization and H_∞ output synchronization of coupled neural networks with multiple output couplings, **IEEE Transactions on Cybernetics**, doi: 10.1109/TCYB.2020.2964592, 2020

8. **Jin-Liang Wang**, Dong-Yang Wang, Huai-Ning Wu, Tingwen Huang, Finite-time passivity and synchronization of complex dynamical networks with state and derivative coupling, **IEEE Transactions on Cybernetics**, doi: 10.1109/TCYB.2019.2944074, 2019

7. **Jin-Liang Wang**, Dong-Yang Wang, Huai-Ning Wu, Tingwen Huang, Output synchronization of complex dynamical networks with multiple output or output derivative couplings, **IEEE Transactions on Cybernetics**, doi: 10.1109/TCYB.2019.2912336, 2019

6. **Jin-Liang Wang**, Xiao-Xiao Zhang, Huai-Ning Wu, Tingwen Huang, Qing Wang, Finite-time passivity of adaptive coupled neural networks with undirected and directed topologies, **IEEE Transactions on Cybernetics**, doi: 10.1109/TCYB.2018.2882252, 2018

5. **Jin-Liang Wang**, Zhen Qin, Huai-Ning Wu, Tingwen Huang, Finite-time synchronization and $\mathcal{H}_\infty$ synchronization of multiweighted complex networks with adaptive state couplings, **IEEE Transactions on Cybernetics**, 50(2), 600-612, 2020

4. **Jin-Liang Wang**, Xiao-Xiao Zhang, Huai-Ning Wu, Tingwen Huang, Qing Wang, Finite-time passivity and synchronization of coupled reaction-diffusion neural networks with multiple weights,

IEEE Transactions on Cybernetics, 49(9), 3385-3397, 2019

3. **Jin-Liang Wang**, Zhen Qin, Huai-Ning Wu, Tingwen Huang, Pu-Chong Wei, Analysis and pinning control for output synchronization and $\mathcal{H}_\infty$ output synchronization of multiweighted complex networks, **IEEE Transactions on Cybernetics**, 49(4), 1314-1326, 2019 (**ESI-Highly cited paper**)

2. **Jin-Liang Wang**, Huai-Ning Wu, Tingwen Huang, Shun-Yan Ren, Passivity and synchronization of linearly coupled reaction-diffusion neural networks with adaptive coupling, **IEEE Transactions on Cybernetics**, 45(9), 1942-1952, 2015

1. **Jin-Liang Wang**, Huai-Ning Wu, Synchronization and adaptive control of an array of linearly coupled reaction-diffusion neural networks with hybrid coupling, **IEEE Transactions on Cybernetics**, 44(8), 1350-1361, 2014

◇ **IEEE TSMCS (2018年影响因子: 7.351)**:

3. **Jin-Liang Wang**, Pu-Chong Wei, Huai-Ning Wu, Tingwen Huang, Meng Xu, Pinning synchronization of complex dynamical networks with multiweights, **IEEE Transactions on Systems, Man and Cybernetics: Systems**, 49(7), 1357-1370, 2019 (**ESI-Highly cited paper**)

2. **Jin-Liang Wang**, Huai-Ning Wu, Tingwen Huang, Shun-Yan Ren, Jigang Wu, Passivity analysis of coupled reaction-diffusion neural networks with Dirichlet boundary conditions, **IEEE Transactions on Systems, Man and Cybernetics: Systems**, 47(8), 2148-2159, 2017

1. **Jin-Liang Wang**, Huai-Ning Wu, Tingwen Huang, Shun-Yan Ren, Jigang Wu, Pinning control for synchronization of coupled reaction-diffusion neural networks with directed topologies, **IEEE Transactions on Systems, Man and Cybernetics: Systems**, 46(8), 1109-1120, 2016 (**ESI-Highly cited paper**)

◇ **IEEE TCNS (2018年影响因子: 4.802)**:

1. **Jin-Liang Wang**, Huai-Ning Wu, Tingwen Huang, Meng Xu, Output synchronization in coupled neural networks with and without external disturbances, **IEEE Transactions on Control of Network Systems**, 5(4), 2049-2061, 2018

◇ **IEEE TNSE**:

3. **Jin-Liang Wang**, Qing Wang, Huai-Ning Wu, Tingwen Huang, Finite-time consensus and finite-time H_∞ consensus of multi-agent systems under directed topology, **IEEE Transactions on Network Science and Engineering**, doi: 10.1109/TNSE.2019.2943023, 2019

2. **Jin-Liang Wang**, Meng Xu, Huai-Ning Wu, Tingwen Huang, Passivity analysis and pinning control of multi-weighted complex dynamical networks, **IEEE Transactions on Network Science**

and Engineering, 6(1), 60-73, 2019

1. **Jin-Liang Wang**, Meng Xu, Huai-Ning Wu, Tingwen Huang, Finite-time passivity of coupled neural networks with multiple weights, **IEEE Transactions on Network Science and Engineering**, 5(3), 184-197, 2018

◇ **Automatica (2018年影响因子: 6.355)**:

1. **Jin-Liang Wang**, Huai-Ning Wu, Tingwen Huang, Passivity-based synchronization of a class of complex dynamical networks with time-varying delay, **Automatica**, 56, 105-112, 2015 (**ESI-Hot paper**, **ESI-Highly cited paper**)

Research Funds

◇ 国家级项目：

- 国家自然科学基金面上项目(主持，在研)

  复杂网络推广的无源性及其在多智能体系统中的应用(76万)

  2018.01-2021.12

- 国家自然科学基金青年基金(主持，已结题)

  耦合反应扩散神经网络的同步分析与控制(23万)

  2015.01-2017.12

◇ 省部级项目：

- 天津市自然科学基金一般项目(主持，在研)

  输入和输出维数不同的复杂网络的有限时间无源性(10万)

  2019.04-2022.03

- 天津市自然科学基金青年基金(主持，已结题)

  复杂网络的无源性分析、控制与应用(6万)

  2015.04-2018.03

Professional Activities

◇ 2019.09-今	中国人工智能学会神经网络与计算智能专业委员会	
◇ 2019.09-今	中国指挥与控制学会网络科学与工程专业委员会	
◇ 2019.08-今	中国自动化学会青年工作委员会	
◇ 2019	**IEEE SSCI 2019**	**Symposium Chair**
◇ 2018	**IEEE-CYBER 2018**	**Session Chair**
◇ 2018.04-今	**IEEE**	**Member**
◇ 2018.04-今	**IEEE SMC**	**Member**
◇ 2016.01-2016.11	**Neurocomputing**	**Managing Guest Editor**
◇ 2015.06-今	**Neurocomputing**	**Associate Editor**

Graduate Admissions

◇ 欢迎有较高学术追求，数学基础较好且勤奋刻苦的有志青年报考我的博士和硕士研究生：

1. 博士研究生	1名/年	机械工程学院 机械工程专业 硕博连读、普博均可
2. 硕士研究生	2名/年	计算机学院 学硕、专硕均可
3. 硕士研究生	1名/年	数学科学学院 学硕

◇ 欢迎对我的研究方向感兴趣的大二和大三的学生联系我开展学术研究。

◇ 欢迎计算机学院大四的学生联系我撰写本科毕设。