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HIGHLIGHT	• Young Talents Support Program in Xi'an Jiaotong University.	2024
	• IWCMC Best Paper Award.	2024
	• Science and Technology Progress Award, 2nd Class, CSAA.	2022
	• Outstanding Doctoral Dissertation of Shaanxi Province.	2022
	• Outstanding Doctoral Dissertation of Xi'an Jiaotong University.	2021
	• Postdoctoral Innovation Talent Support Program.	2019
	• Elite Class Named After Tsien Hsue-shen, Xi'an Jiaotong University.	2007
	• 50+ IEEE Article Publications, Google Scholar Citation 2k+, H-index=26.	
EDUCATION	Xi'an Jiaotong University <i>Ph.D., Information and Communication Engineering</i>	Xi'an, China 2011–2018
	University of Houston <i>Visiting Scholar, Information and Communication Engineering</i>	Houston, United States 2015–2016
	Xi'an Jiaotong University <i>B.E., Information Engineering</i>	Xi'an, China 2007–2011
EMPLOYMENT	Xi'an Jiaotong University Xi'an 710049, China	<i>School of Information and Communication Engineering</i> 2024–
	• Distinguished Research Fellow Associate Professor • Joint w/ Research Institute of Wireless Communication • Joint w/ Research Institute of Advanced Computing & Intelligent Security • Joint w/ Research Institute of Aerospace Manufacturing & Information Engineering	
	Northwestern Polytechnical University Xi'an 710072, China	<i>School of Electronics and Information</i> 2018–2024
	• Associate Professor	
GRANTS (SEL.)	5G-Enabled Sensing and Positioning System for LANs in Urban Environments <i>Key Research & Development Project of Shaanxi Province</i>	Co-PI 2025–2028
	Information Security for Low-Altitude Wireless Networks <i>Young Talents Support Program of XJTU</i>	PI 2024–2030
	Robust Security Technologies in Uncertain Air-Ground Networks <i>Applied Basic Research Fund of Guangdong Province</i>	PI 2024–2026
	Game-Based Jamming Mitigation for UAV Communications <i>Open Fund of State Key Laboratory of Defense</i>	PI 2023–2024
	Anti-Jamming Strategies in UAV-Air-Ground Networks <i>Open Fund of State Key Laboratory of Defense</i>	PI 2023–2025

UAV-Assisted IoT Energy-Efficient Communications <i>Key Research & Development Project of Shaanxi Province</i>	PI 2023–2024
Research and Experiment on Flexible Antennas <i>Defense Research Institute Fund of China</i>	Co-PI 2022–2024
Resource Management in UAV-Assisted IoT <i>Open Fund of State Key Laboratory</i>	PI 2022–2023
Terminal Security Protection Theory for Massive Connections <i>National Natural Science Foundation of China</i>	Co-PI 2020–2021
Distributed Secure UAV Communications via Deep Learning <i>Postdoctoral Science Foundation of China</i>	PI 2020–2022
Physical Layer Security in UAV-Cellular Networks with Mobility-Awareness <i>National Natural Science Foundation of China</i>	PI 2020–2022
Deep Learning for Energy-Efficient UAV-Cellular Communications <i>Postdoctoral Innovation Talent Support Program of China</i>	PI 2019–2021
Game-Theoretic Physical Layer Security <i>Fundamental Research Funds for Central Universities</i>	PI 2019–2020

TEACHING

Xi'an Jiaotong University

- *Signal and Systems*

Spring, 2025–

Northwestern Polytechnical University

- *Principle of Communications (Chin./Eng., First-Class Course)*
- *Spread Spectrum Communications*

Spring, 2020–2024

Fall, 2021

CURRENT GROUP MEMBERS

1. Xunqiang Lan, PhD Student (Joint w/ Prof. Zhang)
2. Junfeng Wang, PhD Student (Joint w/ Prof. Liu)
3. Wei Luo, PhD Student (Joint w/ Prof. Du)
4. Zhaole Wang, MS Student (Joint w/ Prof. Liu)
5. Yudan Jiang, MS Student
6. Huirong Xiao, MS Student
7. Zhen Ma, MS Student
8. Tong Hui, MS Student
9. Jiaqi Hu, MS Student

ALUMNI

Graduate Students

7. Baigaliyeva Aiyim, M.S. NPU, 2024, from Kazakhstan, “Machine Learning-Based Routing Techniques for Flying Ad Hoc Networks.”

6. Kexin Zhao (赵可欣), M.S. NPU, 2024, “Research on Graph Neural Network-Based Information Security Provisioning for UAV Air-Ground Networks.”
5. Zhihao Xiong (熊智豪), M.S. NPU, 2024, “Research on Reconfigurable Intelligent Surface-Assisted Physical Layer Security Techniques for Space-Air-Ground Integrated Networks”
4. Hongrui Zhang (张洪瑞), M.S. NPU, 2023, “Research on Robust Resource Allocation and Trajectory for Energy-Efficient UAV Edge Computing.”
3. Tianqi Jiang (江天奇), M.S. NPU, 2022, “Research on Deep Reinforcement Learning-Based Physical Layer Security Techniques via Aerial Reconfigurable Intelligent Surface.”
2. Xunqiang Lan (蓝驯强), M.S. NPU (Hons.), 2022, “Research on Lightweight Blockchain Technology for UAV-Assisted Internet of Things.”
1. Na Liu (刘娜), M.S. NPU, 2022, Joint w/ Prof. Zhang, “Research on Physical Layer Security Techniques for UAV-Assisted Communications.”

Undergraduate Students

- '24. Jiaqi Hu, Xingrui Wang
- '23. Zihan Zhou, Xingying Du, Wenqi Xin
- '22. Hongjie Zhou, Huirong Xiao, Yudan Jiang (Hons.)
- '21. Pingye Ren, Baolong Jian, Duo Zhang
- '20. Renjie Li, Changfei Zhao
- '19. Ting Tian, Tianqi Jiang, Xunqiang Lan

ACADEMIC SERVICES

Youth Editorial Board Member/青年编委

- 网络与信息安全学报 *Chin. J. Netw. Inf. Sec.* '23-'27
- 海军航空大学学报 *J. Nav. Aviat. Univ.* '24-'26

Symposium Co-Chair

- *Int'l Wireless Commun. Mob. Comput. Conf. (IWCMC)* '26

Workshop Co-Chair

- *Int'l Conf. Cyber-physical Social Intelligence (ICCSI)* '24, '25
- *IEEE Veh. Technol. Conf. (VTC)* '20, '23
- *IEEE Int'l Perform. Comput. Commun. Conf. (IPCCC)* '22
- *IEEE Int'l Conf. High Perform. Switch. Rout. (HPSR)* '19

Invited Talk

- *IEEE Int'l Conf. Commun., Circ., Syst. (ICCCAS)*, Wuhan, May '25
“Intelligent UAV Communications: Graph-Based Learning Approaches for Enhanced Security”
- *Int'l Conf. Electron. Commun. Engin. (ICECE)*, Xi'an, Dec. '25
“Graph Reinforcement Learning Enabled Security Enhancement for UAV Communication Networks”

TPC Member

- *IEEE Int'l Conf. Commun. (ICC)* '24, '25
- *IEEE Wireless Commun. Netw. Conf. (WCNC)* '24-'26
- *IEEE Ann. Int'l Symp. Person., Indoor, Mob. Radio Commun. (PIMRC)* '24, '25
- *IEEE Global Commun. Conf. (GLOBECOM)* '21-'23
- *IEEE Veh. Technol. Conf. (VTC)* '20, '22-'24
- *IEEE/CIC Int'l Conf. Commun. China (ICCC)* '17, '18, '21-'25

PUBLICATIONS
BOOK
CHAPT./TRANS.

3. Francesco Paolo Chietera, **Xiao Tang**, Andrea Ria, *Advancements and Challenges in IoT Communication Technologies for a Connected World*, Basel, Switzerland: MDPI, 2025.
2. Qinghe Du, Houbing Song, **Xiao Tang**, Zixiao Zhao, Chungu Xu, Yuquan Xiao, and Zhongmin Ma, “Principles of 6G Wireless Networks,” in *The Road towards 6G: Opportunities, Challenges, and Applications: A Comprehensive View of the Enabling Technologies*, Switzerland: Springer Cham, 2024, pp. 27–49.
1. Zhu Han, Dusit Niyato, Walid Saad and Tamer Basar, *Game Theory for Next-Generation Wireless and Communication Networks: Modeling, Analysis, and Design*, Translated by Lixin Li, **Xiao Tang**, and Dawei Wang, Beijing, China: China Machine Press, 2021.

PUBLICATIONS
JOURNALS

67. Xunqiang Lan, **Xiao Tang***, Ruonan Zhang, Qinghe Du, Tony Q.S. Quek, “Time-Slotted Multi-Cluster UAV AirComp with Energy-Awareness: A Pointer Network-Assisted Soft Actor-Critic Learning Framework,” *IEEE Journal of Selected Topics in Signal Processing*, online access, 2026.
66. Zhaole Wang, **Xiao Tang***, Naijin Liu, Jinxin Liu, Qinghe Du, Lei Chen, Tingwu Lin, “Distributionally Robust Physical-Layer Security for Satellite Communication via Aerial Reconfigurable Intelligent Surface,” *IEEE Transactions on Communications*, vol. 74, pp. 9729-9741, 2026.
65. Yudan Jiang, **Xiao Tang***, Jinxin Liu, Qinghe Du, Dusit Niyato, Zhu Han, “Energy-Efficient Hybrid Data Computation via Coordinated AirComp and Edge Offloading,” *IEEE Transactions on Vehicular Technology*, online access, 2026.
64. **Xiao Tang**, Zhen Ma, Limeng Dong, Yichen Wang, Qinghe Du, Dusit Niyato, Zhu Han, “Uncertainty-Aware Jamming Mitigation With Active RIS: A Robust Stackelberg Game Approach,” *IEEE Transactions on Information Forensics and Security*, vol. 21, pp. 2858-2872, 2026.
63. 唐晓, 惠通, 杜清河, 刘金鑫, 张若南, 沈超, “基于时序信道预测与展开图神经网络的星间安全空中计算方法,” *中国科学: 信息科学*, vol. 56, no. 3, p. 684, 2026.
62. Tong Hui, **Xiao Tang***, Yichen Wang, Qinghe Du, Dusit Niyato, Zhu Han, “Channel-Aware Conditional Diffusion Model for Secure MU-MISO Communications,” *IEEE Transactions on Vehicular Technology*, online access, 2026.
61. Xunqiang Lan, **Xiao Tang***, Ruonan Zhang, Bin Li, Qinghe Du, Dusit Niyato, Zhu Han, “Distributionally Robust Game for Proof-of-Work Blockchain Mining Under Resource Uncertainties,” *IEEE Transactions on Information Forensics and Security*, vol. 21, pp. 1036-1049, 2026.
60. **Xiao Tang**, Zhen Ma, Bin Li, Cong Li, Qinghe Du, Dusit Niyato, Zhu Han, “Active RIS-aided anti-jamming wireless communications: a Stackelberg game perspective,” *IEEE Transactions on Communications*, 2025, online access.
59. Likang Zhang, Qinghe Du, Yijing Ren, **Xiao Tang**, Maged ElKashlan, Zhu Han, “RIS-assisted simultaneous legitimate monitoring and jamming for industrial wireless networks,” *IEEE Transactions on Vehicular Technology*, vol. 74, pp. 2612-2625, 2026.
58. **Xiao Tang**, Kexin Zhao, Chao Shen, Chenhao Lin, Shuai Liu, Bohui Wang, Dusit Niyato, Zhu Han, “Graph attention network-driven hierarchical learning for anti-jamming UAV communications,” *IEEE Transactions on Wireless Communications*, vol. 25, pp. 5432-5445, 2026.
57. Yuquan Xiao, Qinghe Du, Zixiao Zhao, Bin Li, **Xiao Tang**, Shijiao Zhang, “RF-Based Identification Framework Against Unauthorized UAV Networking in Low-Altitude Economy,” *IEEE Transactions on Network Science and Engineering*, vol. 13, pp. 6538-6555, 2026.

56. Chen Wang, **Xiao Tang***, Zehui Xiong, Daosen Zhai, Ruonan Zhang, Dusit Niyato, Zhu Han, "UAV-assisted federated learning with robust resource and trajectory optimization under location uncertainties," *IEEE Transactions on Cognitive Communications and Networking*, vol. 12, pp. 1282-1296, 2026.
55. Peixuan Li, Yichen Wang, **Xiao Tang**, Moqi Liu, Haotian Liu, Julian Cheng, "Resource allocation for image transmission using adaptive semantic and bit communication," *IEEE Transactions on Wireless Communications*, vol. 25, pp. 3526-3540, 2026.
54. Zhaole Wang, Naijin Liu, **Xiao Tang**, Shuai Yuan, Chenxi Wang, Zhi Zhai, Qinghe Du, Jinxin Liu, "Secure satellite communications via multiple aerial RISs: joint optimization of reflection, association, and deployment", *IEEE Transactions on Wireless Communications*, vol. 25, pp. 3499-3513, 2026.
53. Junfeng Wang, **Xiao Tang***, Jinxin Liu, Zhi Zhai, Qinghe Du, Naijin Liu, "Multiple STAR-RISs-empowered multi-user communications with diversified QoS provisioning," *IEEE Transactions on Vehicular Technology*, vol. 75, no. 2, pp. 3406-3411, 2026.
52. Limeng Dong, Zihang Huang, **Xiao Tang**, Wei Cheng, Honggang Zhao, "Enhancing transmission of STAR-RIS-aided spectrum sharing CF - CR IoT system with element selection under insufficient power supply at RIS," *IEEE Internet of Things Journal*, vol. 12, no. 24, pp. 54201-54219, 2025.
51. Xunqiang Lan, **Xiao Tang***, Ruonan Zhang, Bin Li, Yichen Wang, Dusit Niyato, Zhu Han, "UAV-assisted integrated communication and over-the-air computation with interference awareness," *IEEE Transactions on Communications*, vol. 73, no. 11, pp. 10647-10661, 2025.
50. **Xiao Tang**, Yudan Jiang, Jinxin Liu, Qinghe Du, Dusit Niyato, Zhu Han, "Deep learning-assisted jamming mitigation with movable antenna array," *IEEE Transactions on Vehicular Technology*, vol. 74, no. 9, pp. 14865-14870, 2025.
49. Limeng Dong, Yiran Huo, Wanyu Yan, **Xiao Tang**, Yong Li, Wei Cheng, "Joint secure transmission enhancement of primary and secondary users in RIS aided spectrum sharing cognitive radio networks," *IEEE Transactions on Cognitive Communications and Networking*, vol. 11, no. 6, pp. 3744-3760, 2025
48. **Xiao Tang**, Huirong Xiao, Chao Shen, Li Sun, Qinghe Du, Dusit Niyato, Zhu Han, "Unfolded deep graph learning for networked over-the-air computation," *IEEE Transactions on Wireless Communications*, vol. 24, no. 11, pp. 9296-9310, 2025.
47. **Xiao Tang**, Kexin Zhao, Chao Shen, Qinghe Du, Yichen Wang, Dusit Niyato, Zhu Han, "Deep graph reinforcement learning for UAV-enabled multi-user secure communications," *IEEE Transactions on Mobile Computing*, vol.24, no. 9, pp. 8780-8793, 2025.
46. Peixuan Li, Yichen Wang, **Xiao Tang**, "Joint user association and resource allocation for multi-stream carrier aggregation and coordinated multi-point enabled MIMO networks," *IEEE Wireless Communications Letters*, vol. 14, no. 7, pp. 2054-2058, 2025.
45. **Xiao Tang**, Yudan Jiang, Ruonan Zhang, Qinghe Du, Jinxin Liu, Naijin Liu, "Energy-Efficient integrated communication and computation via non-terrestrial networks with uncertainty awareness," *IEEE Internet of Things Journal*, vol. 12, no. 17, pp. 35165-35178, 2025.
44. **Xiao Tang**, Zhihao Xiong, Limeng Dong, Ruonan Zhang, Qinghe Du, "UAV-enabled aerial active RIS with learning deployment for secured wireless communications," *Chinese Journal of Aeronautics*, vol. 38, no. 10, pp. 103383, 2025.
43. Chen Wang, **Xiao Tang***, Daosen Zhai, Ruonan Zhang, Nurzhan Ussipov, Yan Zhang, "Energy-efficient federated learning through UAV edge under location uncertainties," *IEEE Transactions on Network Science and Engineering*, vol. 12, no. 1, pp. 223-236, 2025.

42. Limeng Dong, Zihang Huang, **Xiao Tang**, Tong-Xing Zheng, Jiale Shi, "Secure down-link transmission of active RIS aided cell-free system," *IEEE Wireless Communications Letters*, vol. 14, no. 1, pp. 168–172, 2025.
41. **Xiao Tang**, Hongrui Zhang, Ruonan Zhang, Deyun Zhou, Yan Zhang, Zhu Han, "Robust trajectory and offloading for energy-efficient UAV edge computing in industrial Internet of Things," *IEEE Transactions on Industrial Informatics*, vol. 20, no. 1, pp. 38–49, 2024.
40. Daosen Zhai, Huan Li, **Xiao Tang**, Ruonan Zhang, Haotong Cao, "Joint position optimization, user association, and resource allocation for load balancing in UAV-assisted wireless networks," *Digital Communications and Networks*, vol. 10, no. 1, pp. 25–37, 2024.
39. Nurzhan Ussipov, Sayat Akhtanov, Dana Turlykozhaeva, Symbat Temesheva, Almat Akhmetali, Marat Zaidyn, Timur Namazbayev, Aslan Bolysbay, Aigerim Akniyazova, **Xiao Tang**, "MEGA: maximum-entropy genetic algorithm for router nodes placement in wireless mesh networks," *Sensors*, vol. 24, no. 20, pp. 6735, 2024.
38. Nurzhan Ussipov, Sayat Akhtanov, Zeynulla Zhanabaev, Dana Turlykozhaeva, B Karibayev, Timur Namazbayev, D Almen, Almat Akhmetali, **Xiao Tang**, "Automatic modulation classification for MIMO system based on the mutual information feature extraction," *IEEE Access*, vol. 12, pp. 68463–68470, 2024.
37. Huan Li, **Xiao Tang***, Daosen Zhai, Ruonan Zhang, Bin Li, Haotong Cao, Neeraj Kumar, Ahmad Almogren, "Energy-efficient deployment and resource allocation for O-RAN-enabled UAV-assisted communication," *IEEE Transactions on Green Communications and Networking*, vol. 8, no. 8, pp. 1128–1140, 2024.
36. Congle Ge, Daosen Zhai, Yi Jiang, Ruonan Zhang, Xiaobo Yang, Bin Li, **Xiao Tang**, "Pathloss and airframe shadowing loss of air-to-ground UAV channel in the airport area at UHF-and L-band," *IEEE Transactions on Vehicular Technology*, vol. 72, no. 6, pp. 8094–8098, 2023.
35. **Xiao Tang**, Hongliang He, Limeng Dong, Lixin Li, Qinghe Du, Zhu Han, "Robust secrecy via aerial reflection and jamming: Joint optimization of deployment and transmission," *IEEE Internet of Things Journal*, vol. 10, no. 14, pp. 12562–12576, 2023.
34. Xunqiang Lan, **Xiao Tang***, Ruonan Zhang, Wensheng Lin, Zhu Han, "UAV-assisted computation offloading toward energy-efficient blockchain operations in internet of things," *IEEE Wireless Communications Letters*, vol. 12, no. 8, pp. 1469–1473, 2023.
33. **Xiao Tang**, Tianqi Jiang, Jinxin Liu, Bin Li, Daosen Zhai, F Richard Yu, Zhu Han, "Secure communication with UAV-enabled aerial RIS: Learning trajectory with reflection optimization," *IEEE Transactions on Intelligent Vehicles*, 2023, online access.
32. **Xiao Tang**, Na Liu, Ruonan Zhang, Zhu Han, "Deep learning-assisted secure UAV-relaying networks with channel uncertainties," *IEEE Transactions on Vehicular Technology*, vol. 71, no. 5, pp. 5048–5059, 2022.
31. Huan Li, Daosen Zhai, Ruonan Zhang, Chen Wang, **Xiao Tang**, "Joint ABS deployment and TBS antenna downtilt optimization for coverage maximization," *IEEE Wireless Communications Letters*, vol. 11, no. 7, pp. 1329–1333, 2022.
30. Zixiao Zhao, Qinghe Du, Dawei Wang, **Xiao Tang**, Houbing Song, "Overview of prospects for service-aware radio access towards 6G networks," *Electronics*, vol. 11, no. 8, pp. 1262, 2022.
29. **Xiao Tang**, Wei Wang, Hongliang He, Ruonan Zhang, "Energy-efficient data collection for UAV-assisted IoT: joint trajectory and resource optimization," *Chinese Journal of Aeronautics*, vol. 35, no. 9, pp. 95–105, 2022.
28. **Xiao Tang**, Xunqiang Lan, Lixin Li, Yan Zhang, Zhu Han, "Incentivizing proof-of-stake blockchain for secured data collection in UAV-assisted IoT: A multi-agent reinforcement learning approach," *IEEE Journal on Selected Areas in Communications*, vol. 40, no. 12, pp. 3470–3484, 2022.

27. Yue Yu, Dawei Chen, **Xiao Tang**, Tiecheng Song, Choong Seon Hong, Zhu Han, “Incentive framework for cross-device federated learning and analytics with multiple tasks based on a multi-leader-follower game,” *IEEE Transactions on Network Science and Engineering*, vol. 9, no. 5, pp. 3749–3761, 2022.
26. **Xiao Tang**, Ruonan Zhang, Wei Wang, Lin Cai, Zhu Han, “Robust secrecy competition with aggregate interference constraint in small-cell networks,” *IEEE Transactions on Wireless Communications*, vol. 20, no. 4, pp. 2325–2340, 2021.
25. Li Sun, Yuwei Wang, A Lee Swindlehurst, **Xiao Tang**, “Generative-adversarial-network enabled signal detection for communication systems with unknown channel models,” *IEEE Journal on Selected Areas in Communications*, vol. 39, no. 1, pp. 47–60, 2021.
24. Yixin He, Daosen Zhai, Fanghui Huang, Dawei Wang, **Xiao Tang**, Ruonan Zhang, “Joint task offloading, resource allocation, and security assurance for mobile edge computing-enabled UAV-assisted VANETs,” *Remote Sensing*, vol. 13, no. 8, pp. 1547, 2021.
23. **Xiao Tang**, Dawei Wang, Ruonan Zhang, Zheng Chu, Zhu Han, “Jamming mitigation via aerial reconfigurable intelligent surface: Passive beamforming and deployment optimization,” *IEEE Transactions on Vehicular Technology*, vol. 70, no. 6, pp. 6232–6237, 2021.
22. **Xiao Tang**, Xunqiang Lan, Daosen Zhai, Ruonan Zhang, Zhu Han, “Securing wireless transmissions with RIS-receiver coordination: Passive beamforming and active jamming,” *IEEE Transactions on Vehicular Technology*, vol. 70, no. 6, pp. 6260–6265, 2021.
21. Daosen Zhai, Qiqi Shi, Ruonan Zhang, **Xiao Tang**, Haotong Cao, “Coverage maximization for heterogeneous aerial networks,” *IEEE Wireless Communications Letters*, vol. 11, no. 1, pp. 91–95, 2021.
20. Dawei Wang, Yang Zhao, Yixin He, **Xiao Tang**, Lixin Li, Ruonan Zhang, Daosen Zhai, “Passive beamforming and trajectory optimization for reconfigurable intelligent surface-assisted UAV secure communication,” *Remote Sensing*, vol. 13, no. 21, pp. 4286, 2021.
19. Tianqi Jiang, Lirong Niu, Xu Tang, **Xiao Tang***, Daosen Zhai, “Aerial reconfigurable intelligent surface-assisted secrecy: A learning approach,” *IEEE Communications Letters*, vol. 26, no. 1, pp. 18–22, 2021.
18. Hongliang He, **Xiao Tang**, Dawei Wang, “Achieving positive secrecy rate in wireless multiple access wiretap channels,” *IEEE Transactions on Vehicular Technology*, vol. 69, no. 8, pp. 9121–9125, 2020.
17. Yue Yu, Chunxia Su, **Xiao Tang**, BaekGyu Kim, Tiecheng Song, Zhu Han, “Hierarchical game for networked electric vehicle public charging under time-based billing model,” *IEEE Transactions on Intelligent Transportation Systems*, vol. 22, no. 1, pp. 518–530, 2020.
16. Lixin Li, Qianqian Cheng, **Xiao Tang**, Tong Bai, Wei Chen, Zhiguo Ding, Zhu Han, “Resource allocation for NOMA-MEC systems in ultra-dense networks: A learning aided mean-field game approach,” *IEEE Transactions on Wireless Communications*, vol. 20, no. 3, pp. 1487–1500, 2020.
15. Lixin Li, Donghui Ma, Huan Ren, Dawei Wang, **Xiao Tang**, Wei Liang, Tong Bai, “Enhanced reconfigurable intelligent surface assisted mmWave communication: A federated learning approach,” *China Communications*, vol. 17, no. 10, pp. 115–128, 2020.
14. Daosen Zhai, Huan Li, **Xiao Tang***, Ruonan Zhang, Zhiguo Ding, Fei Richard Yu, “Height optimization and resource allocation for NOMA enhanced UAV-aided relay networks,” *IEEE Transactions on Communications*, vol. 69, no. 2, pp. 962–975, 2020.

13. Yixin He, Daosen Zhai, Dawei Wang, **Xiao Tang**, Ruonan Zhang, “A relay selection protocol for UAV-assisted VANETs,” *Applied Sciences*, vol. 10, no. 23, pp. 8762, 2020.
 12. Hongliang He, Pinyi Ren, **Xiao Tang**, “Joint network coding and ARQ design toward secure wireless communications,” *IEEE Transactions on Communications*, vol. 67, no. 5, pp. 3351–3362, 2019.
 11. Yichen Wang, **Xiao Tang**, Tao Wang, “A unified QoS and security provisioning framework for wiretap cognitive radio networks: A statistical queueing analysis approach,” *IEEE Transactions on Wireless Communications*, vol. 18, no. 3, pp. 1548–1565, 2019.
 10. Saeed Ahmadian, **Xiao Tang**, Heidar A Malki, Zhu Han, “Modelling cyber attacks on electricity market using mathematical programming with equilibrium constraints,” *IEEE Access*, vol. 7, no. , pp. 27376–27388, 2019.
 9. Yue Yu, **Xiao Tang**, Jun Wu, BaekGyu Kim, Tiecheng Song, Zhu Han, “Multi-leader-follower game for mec-assisted fusion-based vehicle on-road analysis,” *IEEE Transactions on Vehicular Technology*, vol. 68, no. 11, pp. 11200–11212, 2019.
 8. Yixin He, **Xiao Tang**, Ruonan Zhang, Xiaojiang Du, Deyun Zhou, Mohsen Guizani, “A course-aware opportunistic routing protocol for FANETs,” *IEEE Access*, vol. 7, no. , pp. 144303–144312, 2019.
 7. **Xiao Tang**, Pinyi Ren, Zhu Han, “Jamming mitigation via hierarchical security game for IoT communications,” *IEEE Access*, vol. 6, no. , pp. 5766–5779, 2018.
 6. **Xiao Tang**, Pinyi Ren, Zhu Han, “Hierarchical competition as equilibrium program with equilibrium constraints towards security-enhanced wireless networks,” *IEEE Journal on Selected Areas in Communications*, vol. 36, no. 7, pp. 1564–1578, 2018.
 5. Pinyi Ren, **Xiao Tang**, “A Review on Physical Layer Security Techniques for 5G,” *Journal of Beijing University of Posts and Telecommunications*, vol. 41, no. 5, pp. 69–77, 2018.
 4. **Xiao Tang**, Pinyi Ren, Zhu Han, “Distributed power optimization for security-aware multi-channel full-duplex communications: A variational inequality framework,” *IEEE Transactions on Communications*, vol. 65, no. 9, pp. 4065–4079, 2017.
 3. **Xiao Tang**, Pinyi Ren, Feifei Gao, Qinghe Du, “Interference-aware resource competition toward power-efficient ultra-dense networks,” *IEEE Transactions on Communications*, vol. 65, no. 12, pp. 5415–5428, 2017.
 2. **Xiao Tang**, Pinyi Ren, Zhu Han, “Power-efficient secure transmission against full-duplex active eavesdropper: A game-theoretic framework,” *IEEE Access*, vol. 5, no. , pp. 24632–24645, 2017.
 1. **Xiao Tang**, Pinyi Ren, Yichen Wang, Zhu Han, “Combating full-duplex active eavesdropper: A hierarchical game perspective,” *IEEE Transactions on Communications*, vol. 65, no. 3, pp. 1379–1395, 2016.
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46. Zhaole Wang, Naijin Liu, Shuai Yuan, Xiao Tang, Zhi Zhai, Chenxi Wang, Jinxin Liu, “Aerial Reconfigurable Intelligent Surfaces-Assisted Secure Multi-Beam Satellite Communications,” in *Proceeding of IEEE Global Communications Conference (GLOBECOM)*, 2025.
 45. **Xiao Tang**, Jingyi Zhang, Kexin Zhao, Huirong Xiao, Qinghe Du, “Graph Neural Network-Assisted Air-Ground Anti-Jamming Communications with Multiple UAVs,” in *Proceeding of IEEE Cyber Science and Technology Congress (CyberSciTech)*, 2025.
 44. Chen Wang, **Xiao Tang**, Zehui Xiong, Daosen Zhai, Ruonan Zhang, Bo Wang, Zhu Han, “Joint resource and trajectory optimization in uav-assisted federated learning”,

PUBLICATIONS
CONFERENCES

- in *Proceedings of IEEE International Conference on Communications (ICC)*, pp. 1–6, 2025.
43. Zihang Huang, Limeng Dong, **Xiao Tang**, Yiran Huo, Jiale Shi, “Artificial noise aided secure transmission in active RIS-assisted CF system without eavesdroppers’ CSI,” in *Proceedings of IEEE Wireless Communications and Networking Conference (WCNC)*, pp. 1–6, 2025.
 42. Yudan Jiang, **Xiao Tang**, Bin Li, Ruonan Zhang, Jinxin Liu, Naijin Liu, “Energy-efficient UAV edge computing for space-air-ground integrated networks,” in *Proceedings of IEEE Wireless Communications and Networking Conference (WCNC)*, pp. 1–6, 2025.
 41. Kexin Zhao, **Xiao Tang**, Limeng Dong, Ruonan Zhang, Qinghe Du, “Graph neural network for multi-user MISO secure wireless communications,” in *Proceedings of IEEE Wireless Communications and Networking Conference Workshop (WCNC WKSP)*, pp. 1–6, 2025.
 40. Xunqiang Lan, **Xiao Tang**, Ruonan Zhang, Bin Li, Qinghe Du, Zhu Han, “UAV-assisted integrated communication and aircomp with interference awareness,” in *Proceedings of IEEE Global Communications Conference Workshop (GLOBECOM WKSP)*, pp. 1–6, 2024.
 39. Huirong Xiao, **Xiao Tang**, Wei Liang, Bin Li, Dusit Niyato, “UAV-assisted integrated communication and aircomp with interference awareness,” in *Proceedings of IEEE Global Communications Conference Workshop (GLOBECOM WKSP)*, pp. 1–6, 2024.
 38. Xinhua Liu, Yi Jiang, Ruonan Zhang, Bin Li, Daosen Zhai, **Xiao Tang**, “Clutter loss prediction models for satellite-ground communication based on neural networks,” in *Proceedings of IEEE Wireless Communications and Networking Conference (WCNC)*, pp. 1–6, 2024.
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