

Zhi Lin: Curriculum Vitae

PERSONAL INFORMATION

Position: Associate Professor

Institution: National University of Defense Technology

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PROFESSIONAL ACTIVITIES

Research Area:

Wireless communications

Satellite communications

Physical layer security

Heterogeneous network

Internet of things

Editors:

1. [Physical Communication \(Elsevier\)](#)
2. [Wireless Communications and Mobile Computing](#)
3. [Telecommunication Engineering \(Chinese Journal\)](#)
4. [Journal of Data Acquisition & Processing \(Chinese Journal\)](#)

Guest Editors:

1. IET Communications, [Reconfigurable Intelligent Surfaces aided Physical Layer Security in 6G Wireless Networks](#) (Deadline: 15 November 2023)
2. Electronics, [Physical Layer Security in Future IoT Networks: Theories, Technologies, and Applications](#) (Deadline: 31 December 2023)
3. Electronics, [Recent Advances and Challenges of Satellite and Aerial Communication Networks](#) (Deadline: 31 January 2024)

Co-Chairs:

1. The 15th International Conference on Wireless Communications and Signal Processing (WCSP 2024), [Optical, Satellite, Aerial, and Underwater Communication Symposium](#)

2. The 14th International Conference on Wireless Communications and Signal Processing (WCSP 2022), [Satellite Communications Symposium](#)

TPCs:

1. 2019-2024 IEEE International Conference on Communications (ICC), SAC SSC Track: Satellite and Space Communications
2. 2019-2023 IEEE Global Communications Conference (GLOBECOM), SAC SSC: Satellite and Space Communications
3. 2024 IEEE Wireless Communications and Networking Conference (WCNC), Track 2: Medium Access Control and Networking
4. 2024 IEEE International Conference on Communications (ICC), SAC-10 AC Track: Aerial Communications
5. 2023 IEEE Global Communications Conference (GLOBECOM), Symposium: Wireless Communications
6. 2023 IEEE Global Communications Conference (GLOBECOM), SAC AC: Aerial Communications
7. 2022-2023 IEEE Global Communications Conference (GLOBECOM), 4th Workshop on Emerging Topics in 6G communications
8. 2021-2023 IEEE Global Communications Conference (GLOBECOM), Workshop on Cellular UAV and Satellite Communications
9. 2022-2023 IEEE International Conference on Communications (ICC), Workshop on Integrating UAV into 5G and Beyond
10. 2023 22nd International Symposium on Communications and Information Technologies
11. 2020-2023 IEEE International Conference on Communication, Networks and Satellite
12. 2023 International Wireless Communications and Mobile Computing (IWCMC): ET 5G-Adv and 6G
13. 2022 14th International Conference on Wireless Communications and Signal Processing
14. 2019 19th International Symposium on Communications and Information Technologies
15. 2015-2016 14th International Conference on Wireless Communications and Signal Processing

Awards:

1. August 2024, 14th EAI International Conference on Wireless and Satellite Systems (EAI WiSATS 2024), Best Paper Award
2. May 2024, 13th IEEE/CIC International Conference on Communications in China (ICCC 2024), Best Paper Award
3. November 2023, IEEE the 23rd International Conference on Communication Technology

- (ICCT 2023), Best Paper Award
4. June 2023, International Wireless Communications and Mobile Computing 2023 (IWCMC 2023), Best Paper Award
 5. February 2022, Outstanding Ph.D. Thesis Award from the Chinese Institute of Electronics in 2021
 6. December 2021, The First Prize of Youth Innovation Award from National University of Defense Technology
 7. December 2017, The Second Prize of National Post-Graduate Mathematical Contest in Modeling
 8. December 2016, The Second Prize of National Post-Graduate Mathematical Contest in Modeling
 9. December 2015, The Third Prize of National Post-Graduate Mathematical Contest in Modeling
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ACADEMIC BACKGROUND

Dec. 2022-Present: Associate Professor

College of Electronic Engineering, National University of Defense Technology,
Hefei, China

Dec. 2021-Dec. 2022: Assistant Professor

College of Electronic Engineering, National University of Defense Technology,
Hefei, China

Mar. 2019-Jun. 2020: Visiting Scholar, Supervisor: Prof. Benoit Champagne

Electrical and Computer Engineering Department, McGill University, Montreal,
Canada

EDUCATION BACKGROUND

Sep. 2016-Dec. 2020: Ph.D student, Supervisor Prof. Min Lin

College of Communications Engineering, Army Engineering University of PLA,
Nanjing, China

Sep. 2013-Sep. 2016: M. Sc student, Supervisor: Prof. Yueming Cai

College of Communications Engineering, PLA University of Science and Technology,
Nanjing, China

Sep. 2009-Sep. 2013: Undergraduate student, Supervisor: Prof. Yueming Cai

College of Communications Engineering, PLA University of Science and Technology,
Nanjing, China

RESEARCH INTERESTS

- Satellite Communications
- Satellite-Aerial-Terrestrial Integrated Networks
- Intelligent reflecting surface (IRS) for 6G
- Intelligent Transport System for 6G
- Artificial intelligence for wireless communication
- Physical Layer Security
- Rate-Splitting Multiple Access
- Non-Orthogonal Multiple Access
- Covert Communications
- Cooperative Communications

PROFESSIONAL

Reviewing activities

Journals:

IEEE Transactions on Information Forensics and Security
IEEE Transactions on Signal Processing
IEEE Journal of Selected Topics in Signal Processing
IEEE Journal on Selected Areas in Communications
IEEE Transaction on Wireless Communications
IEEE Transactions on Communications
IEEE Network
IEEE Transactions on Cognitive Communications and Networking
IEEE Internet of Things Journal
IEEE Transactions on Vehicular Technology
IEEE Transactions on Aerospace and Electronic Systems
IEEE Wireless Communications Letters
IEEE Communications Letters
IEEE Sensors Journal
China Communications
IET Communications
EURASIP Journal on Wireless Communications and Networking
International Journal of Distributed Sensor Networks

Conferences:

IEEE ICC, IEEE GLOBECOM, IEEE WCNC, IEEE IWCMC, IEEE WCSP, etc

PUBLICATIONS

- Citation: 2010
- ESI Top 0.1% Hot Papers: 5
- ESI Top 1% Highly Cited Papers: 10

Featured Article (* Corresponding author)

- [1] **Zhi Lin**, Min Lin*, Jun-Bo Wang, Tomaso de Cola, and Jiangzhou Wang, “Joint beamforming and power allocation for satellite-terrestrial integrated networks with non-orthogonal multiple access,” **IEEE Journal of Selected Topics in Signal Processing**, vol. 13, no. 3, pp. 657-670, June 2019. (SCI-Q1, IF: 7.5, **ESI Top 1% Highly Cited Paper**)
- [2] **Zhi Lin**, Min Lin*, Benoit Champagne, Wei-Ping Zhu, and Naofal Al-Dhahir, “Secrecy-energy efficient hybrid beamforming for satellite-terrestrial integrated networks,” **IEEE Transactions on Communications**, vol. 69, no. 9, pp. 6345-6360, Sep. 2021. (SCI-Q1, IF: 8.3, **ESI Top 0.1% Hot Paper**, **ESI Top 1% Highly Cited Paper**)
- [3] **Zhi Lin**, Min Lin*, Tomaso de Cola, Jun-Bo Wang, Wei-Ping Zhu, and Julian Cheng, “Supporting IoT with rate-splitting multiple access in satellite and aerial integrated networks,” **IEEE Internet of Things Journal**, vol. 8, no. 14, pp. 11123-11134, Jul. 2021. (SCI-Q1, IF: 10.6, **ESI Top 0.1% Hot Paper**, **ESI Top 1% Highly Cited Paper**)
- [4] **Zhi Lin**, Min Lin*, Wei-Ping Zhu, Jun-Bo Wang, and Julian Cheng, “Robust secure beamforming for wireless powered cognitive satellite-terrestrial networks,” **IEEE Transactions on Cognitive Communications and Networking**, vol. 7, no. 2, pp. 567-580, June 2021. (SCI-Q1, IF: 8.6, **ESI Top 1% Highly Cited Paper**)
- [5] **Zhi Lin**, Hehao Niu, Kang An*, Yong Wang, Gan Zheng, Symeon Chatzinotas, and Yihua Hu, “Refracting RIS aided hybrid satellite-terrestrial relay networks: Joint beamforming design and optimization,” **IEEE Transactions on Aerospace and Electronic Systems**, vol. 58, no. 4, pp. 3717-3724, Aug. 2022. (SCI-Q1, IF: 4.4, **ESI Top 0.1% Hot Paper**, **ESI Top 1% Highly Cited Paper**)
- [6] **Zhi Lin**, Kang An, Hehao Niu, Yihua Hu*, Symeon Chatzinotas, Gan Zheng, and Jiangzhou Wang, “SLNR-based secure energy efficient beamforming in multibeam satellite systems,” **IEEE Transactions on Aerospace and Electronic Systems**, vol. 59, no. 2, pp. 2085-2088, Apr. 2023. (SCI-Q1, IF: 4.4, **ESI Top 0.1% Hot Paper**, **ESI Top 1% Highly Cited Paper**)
- [7] **Zhi Lin**, Min Lin*, Benoit Champagne, Wei-Ping Zhu, and Naofal Al-Dhahir, “Secure and energy efficient transmission for RSMA-based cognitive satellite-terrestrial networks,” **IEEE**

Wireless Communications Letters, vol. 10, no. 2, pp. 251-255, Feb. 2021. (SCI-Q1, IF: 6.3, **ESI Top 1% Highly Cited Paper**)

- [8] **Zhi Lin**, Min Lin*, Benoit Champagne, Wei-Ping Zhu, and Naofal Al-Dhahir, "Secure beamforming for cognitive satellite terrestrial networks with unknown eavesdroppers," **IEEE Systems Journal**, vol. 15, no. 2, pp. 2186-2189, June 2021. (SCI-Q1, IF: 4.4, **ESI Top 1% Highly Cited Paper**)
- [9] Hehao Niu, **Zhi Lin***, Zheng Chu*, Zhengyu Zhu, Pei Xiao, Huan X. Nguyen, Inkyu Lee, and Naofal Al-Dhahir, "Joint beamforming design for secure RIS-assisted IoT networks," **IEEE Internet of Things Journal**, vol. 10, no. 2, pp. 1628-1641, Jan. 2023. (SCI-Q1, IF: 10.6, **ESI Top 0.1% Hot Paper, ESI Top 1% Highly Cited Paper**)
- [10] Hehao Niu, **Zhi Lin***, Kang An, Xiaohu Liang, Yihua Hu, Dong Li, and Gan Zheng, "Active RIS-assisted secure transmission for cognitive satellite terrestrial networks," **IEEE Transactions on Vehicular Technology**, vol. 72, no. 2, pp. 2609-2614, Feb. 2023. (SCI-Q1, IF: 6.8, **ESI Top 0.1% Hot Paper, ESI Top 1% Highly Cited Paper**)
- [11] **Zhi Lin**, Hehao Niu, Kang An, Yihua Hu*, Dong Li*, Jiangzhou Wang, and Naofal Al-Dhahir, "Pain without gain: Destructive beamforming from a malicious RIS perspective in IoT networks," **IEEE Internet of Things Journal**, vol. 11, no. 5, pp. 7619-7629, Mar. 2024. (SCI-Q1, IF: 10.6, **ESI Top 0.1% Hot Paper, ESI Top 1% Highly Cited Paper**)
- [12] **Zhi Lin**, Min Lin*, Yongming Huang, Tomaso de Cola, and Wei-Ping Zhu, "Robust multi-objective beamforming for integrated satellite and high altitude platform network with imperfect channel state information," **IEEE Transactions on Signal Processing**, vol. 67, no. 24, pp. 6384-6396, Dec. 2019. (SCI-Q1, IF: 5.4)
- [13] **Zhi Lin**, Min Lin*, Jun-Bo Wang, Yongming Huang, and Wei-Ping Zhu, "Robust secure beamforming for 5G cellular networks coexisting with satellite networks," **IEEE Journal on Selected Areas in Communications**, vol. 36, no. 4, pp. 932-945, Apr. 2018. (SCI-Q1, IF: 16.4)
- [14] Hehao Niu, **Zhi Lin***, Kang An, Jiangzhou Wang, Gan Zheng, Naofal Al-Dhahir, and Kai-Kit Wong, "Active RIS assisted rate-splitting multiple access network: Spectral and energy efficiency tradeoff," **IEEE Journal on Selected Areas in Communications**, vol. 41, no. 5, pp. 1452-1467, May 2023. (SCI-Q1, IF: 16.4)
- [15] Yifu Sun, **Zhi Lin***, Kang An, Dong Li, Cheng Li, Yonggang Zhu, Ying-Chang Liang, Derrick Wing Kwan Ng, Naofal Al-Dhahir, and Jiangzhou Wang, "Multi-functional RIS-assisted semantic anti-jamming communication and computing in integrated aerial-ground networks," **IEEE Journal on Selected Areas in Communications**, early access, Sep. 2024, doi: 10.1109/JSAC.2024.3459028. (SCI-Q1, IF: 16.4)
- [16] Min Lin, **Zhi Lin***, Wei-Ping Zhu, and Jun-Bo Wang, "Joint beamforming for secure

communication in cognitive satellite terrestrial networks,” **IEEE Journal on Selected Areas in Communications**, vol. 36, no. 5, pp. 1017-1029, May 2018. (SCI-Q1, IF: 16.4)

- [17] Haotong Cao, **Zhi Lin***, Longxiang Yang*, Jiangzhou Wang, and Mohsen Guizani, “DT-SFC-6G: Digital twins assisted SFC in softwarized 6G networks for emerging V2X,” **IEEE Network**, vol. 37, no. 4, pp. 289-296, Aug. 2023. (SCI-Q1, IF: 9.3)
- [18] **Zhi Lin**, Min Lin*, Jian Ouyang, Wei-Ping Zhu, Athanasios D. Panagopoulos, and Mohamed-Slim Alouini. “Robust secure beamforming for multibeam satellite communication systems,” **IEEE Transactions on Vehicular Technology**, vol. 68, no. 6, pp. 6202-6206, June 2019. (SCI-Q1, IF: 6.8)
- [19] **Zhi Lin**, Min Lin*, Jian Ouyang, Wei-Ping Zhu, and Symeon Chatzinotas. “Beamforming for secure wireless information and power transfer in terrestrial networks coexisting with satellite networks”, **IEEE Signal Processing Letters**, vol. 25, no. 8, pp. 1166-1170, Aug. 2018. (SCI-Q2, IF: 3.9)
- [20] **Zhi Lin**, Hehao Niu, Zheng Chu, Yuanzhi He*, Xudong Zhong, Pei Xiao and Kang An*, “Self-powered absorptive reconfigurable intelligent surfaces for securing satellite-terrestrial integrated networks,” **China Communications**, vol. 21, no. 9, pp. 276-291, Sep. 2024. (SCI-Q2, IF: 4.1)
- [21] Yong Wang, **Zhi Lin***, Hehao Niu, Kang An, Yihua Hu, Dong Li, Gan Zheng, and Naofal Al-Dhahir, “Secure satellite transmission with active reconfigurable intelligent surface,” **IEEE Communications Letters**, vol. 26, no. 12, pp. 3029-3033, Feb. 2022. (SCI-Q2, IF: 4.1)
- [22] **Zhi Lin***, Yueming Cai, Weiwei Yang, and Xiaoming Xu, “Opportunistic relaying and jamming with robust design in hybrid full half-duplex relay system”, **EURASIP Journal on Wireless Communications and Networking**, vol. 2016, no. 127, pp. 1-10, 2016. (SCI-Q3, IF: 2.6)
- [23] **Zhi Lin**, Yueming Cai, Weiwei Yang*, and Lei Wang, “Robust secure switching transmission in MISO relaying systems: cooperative jamming or decode-and-forward beamforming”, **IET Communications**, vol. 10, no. 13, pp. 1673-1681, Aug. 2016. (SCI-Q3, IF: 1.6)
- [24] **Zhi Lin**, Li Lou, Bin Gao*, Fenggang Sun, Yuzhen Huang, Maoqiang Yang, and Mingfang Ni. “Joint beamforming and cooperative jamming for secure transmission in multi-antenna decode-and-forward relaying sensor networks: A greedy switching strategy,” **International Journal of Distributed Sensor Networks**, vol. 13, no. 5, pp. 1-9, May 2017. (SCI-Q4, IF: 2.3)
- [25] Mengzhao Guo, **Zhi Lin***, Ruiqian Ma, Kang An, Dong Li, Naofal Al-Dhahir, and Jiangzhou Wang, “Inspiring physical layer security with RIS: Principles, applications, and challenges,” **IEEE Open Journal of the Communications Society**, vol. 5, pp. 2903-2925, Apr. 2024. (IF: 7.9)

Journal

- [1] **Zhi Lin**, Min Lin*, Jun-Bo Wang, Yongming Huang, and Wei-Ping Zhu, “Robust secure beamforming for 5G cellular networks coexisting with satellite networks,” **IEEE Journal on Selected Areas in Communications**, vol. 36, no. 4, pp. 932-945, Apr. 2018.
- [2] Yifu Sun, **Zhi Lin***, Kang An, Dong Li, Cheng Li, Yonggang Zhu, Ying-Chang Liang, Derrick Wing Kwan Ng, Naofal Al-Dhahir, and Jiangzhou Wang, “Multi-functional RIS-assisted semantic anti-jamming communication and computing in integrated aerial-ground networks,” **IEEE Journal on Selected Areas in Communications**, early access, Sep. 2024, doi: 10.1109/JSAC.2024.3459028.
- [3] Hehao Niu, **Zhi Lin***, Kang An, Jiangzhou Wang, Gan Zheng, Naofal Al-Dhahir, and Kai-Kit Wong, “Active RIS assisted rate-splitting multiple access network: Spectral and energy efficiency tradeoff,” **IEEE Journal on Selected Areas in Communications**, vol. 41, no. 5, pp. 1452-1467, May 2023.
- [4] Min Lin, **Zhi Lin***, Wei-Ping Zhu, and Jun-Bo Wang, “Joint beamforming for secure communication in cognitive satellite terrestrial networks,” **IEEE Journal on Selected Areas in Communications**, vol. 36, no. 5, pp. 1017-1029, May 2018.
- [5] **Zhi Lin**, Min Lin*, Jun-Bo Wang, Tomaso de Cola, and Jiangzhou Wang, “Joint beamforming and power allocation for satellite-terrestrial integrated networks with non-orthogonal multiple access,” **IEEE Journal of Selected Topics in Signal Processing**, vol. 13, no. 3, pp. 657-670, June 2019.
- [6] Kang An, Yifu Sun, **Zhi Lin**, Yonggang Zhu, Yong Li, Naofal Al-Dhahir, and Kai-Kit Wong, “Exploiting multi-layer refracting RIS-assisted receiver for HAP-SWIPT networks,” **IEEE Transaction on Wireless Communications**, vol. 23, no. 10, pp. 12638-12657, Oct. 2024.
- [7] Yifu Sun, Yonggang Zhu, Kang An, **Zhi Lin**, Cheng Li, Derrick Wing Kwan Ng, and Jiangzhou Wang, “Active-passive cascaded RIS-aided receiver design for jamming nulling and signal enhancing,” **IEEE Transaction on Wireless Communications**, vol. 23, no. 6, pp. 5345-5362, Jun. 2024.
- [8] Kefeng Guo, Min Wu, Xingwang Li, **Zhi Lin**, and Theodoros A. Tsiftsis, “Joint trajectory and beamforming optimization for federated DRL-aided space-aerial-terrestrial relay networks with RIS and RSMA,” **IEEE Transaction on Wireless Communications**, early access, Oct. 2024, doi: 10.1109/TWC.2024.3468298.
- [9] **Zhi Lin**, Min Lin*, Benoit Champagne, Wei-Ping Zhu, and Naofal Al-Dhahir, “Secrecy-energy efficient hybrid beamforming for satellite-terrestrial integrated networks,” **IEEE Transactions on Communications**, vol. 69, no. 9, pp. 6345-6360, Sep. 2021.
- [10] Min Wu, Kefeng Guo, Xingwang Li, **Zhi Lin***, Yongpeng Wu, Theodoros A. Tsiftsis, and

Houbing Song, “Deep reinforcement learning-based energy efficiency optimization for RIS-aided integrated satellite-aerial-terrestrial relay networks,” **IEEE Transactions on Communications**, vol. 72, no. 7, pp. 4163-4178, Jul. 2024.

- [11] Wentao Liu, Dong Li, Tianhao Liang, Tingting Zhang, [Zhi Lin](#), and Naofal Al-Dhahir, “Joint trajectory and scheduling optimization for age of synchronization minimization in UAV-assisted networks with random updates,” **IEEE Transactions on Communications**, vol. 71, no. 11, pp. 6633-6646, Nov. 2023.
- [12] [Zhi Lin](#), Min Lin*, Yongming Huang, Tomaso de Cola, and Wei-Ping Zhu, “Robust multi-objective beamforming for integrated satellite and high altitude platform network with imperfect channel state information,” **IEEE Transactions on Signal Processing**, vol. 67, no. 24, pp. 6384-6396, Dec. 2019. (SCI-Q1, IF: 5.4)
- [13] Yifu Sun, Kang An, Cheng Li, [Zhi Lin](#), Hehao Niu, Derrick Wing Kwan Ng, Jiangzhou Wang, and Naofal Al-Dhahir, “Joint transmissive and reflective RIS-aided secure MIMO systems design under spatially-correlated angular uncertainty and coupled PSEs,” **IEEE Transactions on Information Forensics and Security**, vol. 18, pp. 3606-3621, Jun. 2023.
- [14] Haotong Cao, [Zhi Lin](#)*, Longxiang Yang*, Jiangzhou Wang, and Mohsen Guizani, “DT-SFC-6G: Digital twins assisted SFC in softwarized 6G networks for emerging V2X,” **IEEE Network**, vol. 37, no. 4, pp. 289-296, Aug. 2023. (SCI-Q1, IF: 9.3)
- [15] [Zhi Lin](#), Hehao Niu, Kang An, Yihua Hu*, Dong Li*, Jiangzhou Wang, and Naofal Al-Dhahir, “Pain without gain: Destructive beamforming from a malicious RIS perspective in IoT networks,” **IEEE Internet of Things Journal**, vol. 11, no. 5, pp. 7619-7629, Mar. 2024.
- [16] [Zhi Lin](#), Min Lin*, Tomaso de Cola, Jun-Bo Wang, Wei-Ping Zhu, and Julian Cheng, “Supporting IoT with rate-splitting multiple access in satellite and aerial integrated networks,” **IEEE Internet of Things Journal**, vol. 8, no. 14, pp. 11123-11134, Jul. 2021.
- [17] Hehao Niu, [Zhi Lin](#)*, Zheng Chu*, Zhengyu Zhu, Pei Xiao, Huan X. Nguyen, Inkyu Lee, and Naofal Al-Dhahir, “Joint beamforming design for secure RIS-assisted IoT networks,” **IEEE Internet of Things Journal**, vol. 10, no. 2, pp. 1628-1641, Jan. 2023.
- [18] Yue Ma, Ruiqian Ma, [Zhi Lin](#)*, Ruoyu Zhang, Yueming Cai, Wen Wu, Jiangzhou Wang, “Improving age of information for covert communication with time-modulated arrays,” **IEEE Internet of Things Journal**, early access, Oct. 2024, doi: 10.1109/JIOT.2024.3466855.
- [19] Hao Xie, Bowen Gu, Dong Li, [Zhi Lin](#), Yongjun Xu, “Gain without pain: Recycling reflected energy from wireless powered RIS-aided communications,” **IEEE Internet of Things Journal**, vol. 10, no. 15, pp. 13264-13280, Aug. 2023.
- [20] [Zhi Lin](#), Min Lin*, Wei-Ping Zhu, Jun-Bo Wang, and Julian Cheng, “Robust secure beamforming for wireless powered cognitive satellite-terrestrial networks,” **IEEE Transactions on Cognitive Communications and Networking**, vol. 7, no. 2, pp. 567-580,

June 2021.

- [21] **Zhi Lin**, Hehao Niu, Kang An*, Yong Wang, Gan Zheng, Symeon Chatzinotas, and Yihua Hu, "Refracting RIS aided hybrid satellite-terrestrial relay networks: Joint beamforming design and optimization," **IEEE Transactions on Aerospace and Electronic Systems**, vol. 58, no. 4, pp. 3717-3724, Aug. 2022.
- [22] **Zhi Lin**, Kang An, Hehao Niu, Yihua Hu*, Symeon Chatzinotas, Gan Zheng, and Jiangzhou Wang, "SLNR-based secure energy efficient beamforming in multibeam satellite systems," **IEEE Transactions on Aerospace and Electronic Systems**, vol. 59, no. 2, pp. 2085-2088, Apr. 2023.
- [23] **Zhi Lin**, Min Lin*, Jian Ouyang, Wei-Ping Zhu, Athanasios D. Panagopoulos, and Mohamed-Slim Alouini. "Robust secure beamforming for multibeam satellite communication systems," **IEEE Transactions on Vehicular Technology**, vol. 68, no. 6, pp. 6202-6206, June 2019.
- [24] Hehao Niu, **Zhi Lin***, Kang An, Xiaohu Liang, Yihua Hu, Dong Li, and Gan Zheng, "Active RIS-assisted secure transmission for cognitive satellite terrestrial networks," **IEEE Transactions on Vehicular Technology**, vol. 72, no. 2, pp. 2609-2614, Feb. 2023.
- [25] Min Wu, Kefeng Guo, **Zhi Lin**, Xingwang Li, Kang An, and Yuzhen Huang, "Joint optimization design of RIS-assisted hybrid FSO SAGINs using deep reinforcement learning," **IEEE Transactions on Vehicular Technology**, vol. 73, no. 3, pp. 3025-3040, Mar. 2023.
- [26] **Zhi Lin**, Min Lin*, Benoit Champagne, Wei-Ping Zhu, and Naofal Al-Dhahir, "Secure beamforming for cognitive satellite terrestrial networks with unknown eavesdroppers," **IEEE Systems Journal**, vol. 15, no. 2, pp. 2186-2189, June 2021.
- [27] **Zhi Lin**, Hehao Niu, Zheng Chu, Yuanzhi He*, Xudong Zhong, Pei Xiao and Kang An, "Self-powered absorptive reconfigurable intelligent surfaces for securing satellite-terrestrial integrated networks," **China Communications**, vol. 21, no. 9, pp. 276-291, Sep. 2024.
- [28] Yue Ma, Ruiqian Ma, **Zhi Lin**, Weiwei Yang, Yueming Cai, Chen Miao, and Wen Wu, "Age of information for short-packet covert communication with time modulated retrodirective array," **China Communications**, vol. 21, no. 4, pp. 23-37, Apr. 2024.
- [29] **Zhi Lin**, Min Lin*, Jian Ouyang, Wei-Ping Zhu, and Symeon Chatzinotas. "Beamforming for secure wireless information and power transfer in terrestrial networks coexisting with satellite networks", **IEEE Signal Processing Letters**, vol. 25, no. 8, pp. 1166-1170, Aug. 2018.
- [30] **Zhi Lin**, Min Lin*, Benoit Champagne, Wei-Ping Zhu, and Naofal Al-Dhahir. "Secure and energy efficient transmission for RSMA-based cognitive satellite-terrestrial networks," **IEEE Wireless Communications Letters**, vol. 10, no. 2, pp. 251-255, Feb. 2021.
- [31] Pengcheng Guo, Miao Yu, Lei Shen, **Zhi Lin**, Kang An, and Jiangzhou Wang. "Single-channel blind source separation in wireless communications: A complex-domain deep

learning approach,” **IEEE Wireless Communications Letters**, vol. 13, no. 6, pp. 1645-1649, Jun. 2024.

- [32] Yong Wang, **Zhi Lin***, Hehao Niu, Kang An, Yihua Hu, Dong Li, Gan Zheng, and Naofal Al-Dhahir, “Secure satellite transmission with active reconfigurable intelligent surface,” **IEEE Communications Letters**, vol. 26, no. 12, pp. 3029-3033, Feb. 2022.
- [33] Chao Zou, Kang An, **Zhi Lin**, Yuanzhi He, Xudong Zhong, Gan Zheng, and Naofal Al-Dhahir, “Multi-layer RIS-assisted anti-jamming communications: A hierarchical game learning approach,” **IEEE Communications Letters**, vol. 27, no. 11, pp. 2998-3002, Nov. 2023.
- [34] Chengyang Liang, Dong Li, **Zhi Lin**, Haotong Cao, “Selection-based image generation for semantic communication systems,” **IEEE Communications Letters**, vol. 28, no. 1, pp. 34-38, Jan. 2024.
- [35] Mengzhao Guo, **Zhi Lin***, Ruiqian Ma, Kang An, Dong Li, Naofal Al-Dhahir, and Jiangzhou Wang, “Inspiring physical layer security with RIS: Principles, applications, and challenges,” **IEEE Open Journal of the Communications Society**, vol. 5, pp. 2903-2925, Apr. 2024.
- [36] **Zhi Lin**, Yueming Cai, Weiwei Yang*, and Lei Wang, “Robust secure switching transmission in MISO relaying systems: cooperative jamming or decode-and-forward beamforming”, **IET Communications**, vol. 10, no. 13, pp. 1673-1681, Aug. 2016.
- [37] Yan Zhang, Yong Wang, Haotong Cao, Yihua Hu, **Zhi Lin**, Kang An, Dong Li, Gan Zheng, “Self-similar traffic prediction for LEO satellite networks based on LSTM”, **IET Communications**, pp. 1-10, Aug. 2024.
- [38] **Zhi Lin***, Yueming Cai, Weiwei Yang, and Xiaoming Xu, “Opportunistic relaying and jamming with robust design in hybrid full half-duplex relay system”, **EURASIP Journal on Wireless Communications and Networking**, vol. 2016, no. 127, pp. 1-10, 2016.
- [39] **Zhi Lin**, Li Lou, Bin Gao*, Fenggang Sun, Yuzhen Huang, Maoqiang Yang, and Mingfang Ni. “Joint beamforming and cooperative jamming for secure transmission in multi-antenna decode-and-forward relaying sensor networks: A greedy switching strategy,” **International Journal of Distributed Sensor Networks**, vol. 13, no. 5, pp. 1-9, May 2017.
- [40] Guoqiang Cheng, Qingquan Huang, **Zhi Lin**, Xiangshuai Tao, Jian Ouyang, and Guodong Wu, “On the performance of hybrid satellite-terrestrial cooperative networks with different combining schemes,” **IEICE Transactions on Communications**, vol. E102B, no. 2, pp. 2006-2013, Jan. 2022.
- [41] Yan Zhang, Yong Wang, Yihua Hu, **Zhi Lin**, Yadi Zhai, Lei Wang, Qingsong Zhao, Kang Wen and Linshuang Kang, “Security performance analysis of LEO satellite constellation networks under DDoS attack,” **Sensors**, vol. 22, no. 19, Sep. 2022.
- [42] Yong Wang, Hehao Niu, Qingsong Zhao, Lei Wang, Yue Gao and **Zhi Lin***, “NC-OFDM satellite communication based on compressed spectrum sensing,” **Sensors**, vol. 22, no. 10,

May 2022.

- [43] Dongming Lin, Hongjun Wang, [Zhi Lin](#), Kang An, Zhexion Shen and Jiangzhou Wang, “An effective scheme of building electromagnetic map for spectrum sensing,” **Wireless Communications and Mobile Computing**, Jul. 2022.
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