

# Zhe (Peter) Zhang

Dean, Professor, Ph.D. Supervisor, IEEE Senior Member  
NSFC Excellent Young Scientists Fund Program (Overseas)  
CAS “One Hundred” Talent

DOB: 01/31/1988  
ADDRESS (SUZHOU): Room B203-12, Lab 22  
Suzhou Aerospace Information Research Institute  
158 Dushuhu Ave, Suzhou Industrial Park, Suzhou, Jiangsu 215000, China  
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## Working Experience

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2025.08–	Dean
2025.08–	Professor, Ph.D Supervisor <b>School of Electronics Information, Aerospace Information Technology University</b> , Jinan, Shandong 250200, China <i>Interest Field: Sparse signal processing, Sparse Microwave Imaging, Synthetic aperture radar, Three-dimensional SAR imaging, Combination of signal processing and deep learning.</i>
2023.01–	Lab Director Assistant, Academic Leader
2022.04–	Professor, Ph.D Supervisor
2021.01–2022.04	Associate Professor <b>Aerospace Information Research Institute, Chinese Academy of Sciences</b> , Beijing 100190, China <b>National Key Laboratory of Microwave Imaging</b> , Beijing 100190, China <b>Suzhou Aerospace Information Research Institute</b> , Suzhou, Jiangsu 215000, China <b>Suzhou Key Laboratory of Microwave Imaging, Processing and Application Technology</b> , Suzhou, Jiangsu 215000, China <i>Interest Field: Sparse signal processing, Sparse Microwave Imaging, Synthetic aperture radar, Three-dimensional SAR imaging, Combination of signal processing and deep learning.</i>
2023.10–	Double Employed Professor <b>University of Chinese Academy of Sciences</b> , Beijing 100190, China
2023.09–	Adjunct Professor

	<b>Qian Xuesen Honors College, Xi'an Jiaotong University</b> , Xi'an, Shaanxi 710049, China
2024.10–	Adjunct Professor <b>Harbin Engineering University</b> , Harbin, Heilongjiang, China
2025.05–	Adjunct Professor <b>Beijing University of Posts and Telecommunications</b> , Beijing, China
2016.12–2020.06	Post-Doctoral Research Fellow <b>George Mason University</b> , Fairfax, VA 22030, USA Advisor: Tian, Zhi, Professor, IEEE Fellow <i>Interest Field: Sparse signal processing, Atomic norm minimization, Combination of signal processing and deep learning.</i>
2015.12–2016.11	Post-Doctoral Research Scientist <b>George Washington University</b> , Washington, DC 20052, USA Advisor: Tian, Zhi, Professor, IEEE Fellow Cheng, Xiuzhen, Professor, IEEE Fellow <i>Interest Field: Sparse signal processing, Atomic norm minimization.</i>

## Education

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2009.09–2015.07	PH.D. / SIGNAL AND INFORMATION PROCESSING <b>Institute of Electronics, Chinese Academy of Sciences</b> <b>University of Chinese Academy of Sciences</b> Beijing 100190, China Supervisor: Wu, Yirong, Academician of CAS, Professor <i>Interest Field: Sparse microwave imaging, Sparse signal processing, Synthetic aperture radar.</i>
2014.01–2014.04	VISITING STUDENT <b>University of Connecticut</b> , Storrs, CT 06269, USA Supervisor: Zhou, Shengli, Professor, IEEE Fellow.
2004.09–2008.07 2003.09–2004.07	B. ENG. INFORMATION ENGINEERING SPECIAL CLASS FOR GIFTED YOUNG <b>Xi'an Jiaotong University</b> Xi'an, Shaanxi 710049, China.

## Research Projects

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2023.12–	<b>Multi-beam Spaceborne High-Resolution Wide-Swath SAR System and Technology</b> , RMB 25,350,000 Grant: <i>National Key Research and Development Program of China</i> , #2023YFB3904900 <b>Principle Investigator.</b>
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2022.1–	<b>Sparse Signal Processing and Its Applications in Microwave Imaging</b> , RMB 3,000,000 Grant: <i>NSFC Excellent Young Scientists Fund Program (Overseas)</i> <b>Principle Investigator.</b>
2024.7–	<b>Development and Application of Multimodal Remote Sensing Big Data Intelligent Platform based on Ascend Technology</b> , RMB 5,000,000 Grant: <i>iangsu Province Frontier Technology Research and Development Program</i> <b>Principle Investigator.</b>
2021.1–	<b>Sparse Signal Processing and Deep Learning with Their Applications in Microwave Imaging</b> , RMB 4,000,000 Grant: <i>CAS “One Hundred Talent” Project</i> <b>Principle Investigator.</b>
2021.12–	<b>High Efficiency Sensing System and Technology of Three-dimensional Microwave Imaging</b> , RMB 500,000 Grant: <i>Suzhou S&amp;T Development Project, #ZXL2022381</i> <b>Principle Investigator.</b>
2021.7–	<b>Structural Signal Adaptive High Efficiency sensing Theory and Its Applications in Microwave Imaging</b> , RMB 1,300,000 Grant: <i>CAS Key Grant</i> <b>Principle Investigator.</b>
2020.1–	<b>Synthetic Aperture Radar Microwave Vision Three-dimensional Imaging Theory and Application Foundations</b> , RMB 20,000,000 Grant: <i>NSFC Major Program, #61991421, 61991420</i> <b>Co-PI.</b>
2018.8–2018.11	<b>A Gated LFM CW TDMA MIMO SAR based Hidden Chamber Detector</b> , USD \$150,000 Grant: <i>USSOCOM SBIR, #S173-004-0118</i> Participant.
2015.12–2020.6	<b>Task-Cognizant Sparse Sensing for Inference</b> , USD \$400,000 Grant: <i>National Science Foundation (NSF) Standard Grant, #1527396</i> Participant.
2010.04–2015.07	<b>Theory, System and Methodology of Sparse Microwave Imaging</b> , RMB 33,000,000 Grant: <i>National Major Fundamental Science Research Project (973 Project), #2010CB731900</i> Participant.
2012.04–2015.07	<b>Advanced Microwave Sensing and Information Processing</b> , RMB 4,300,000

| Grant: *Chinese Academy of Sciences*  
| Participant.

## Honors

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- 2022.09 | **Jiangsu Chief Science and Technology Communication Expert** / *Jiangsu Science and Technology Association*
- 2024.11 | **Wiley China Excellent Author Program** / *Wiley*
- 2022.01 | **Excellent Young Scientists Fund Program (Overseas)** / *NSFC*
- 2021.01 | **CAS “One Hundred Talent”** / *Chinese Academy of Sciences*
- 2021.12 | **Suzhou “Gusu Leading Talent”** / *Suzhou City*
- 2022.12 | **Jiangsu “Innovative and Entrepreneurial Talent”** / *Jiangsu Province*
- 2022 | **CAS “Young Cross Teams” Member** / *Chinese Academy of Sciences*

## Awards

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- 2022.03 | **National Disruptive Technology Innovation Competition**  
/ *Ministry of Science and Technology, China*  
*Excellence Prize in Final Competition*
- 2021.12 | *Winner Prize*
- 2021.12 | *Excellence Prize*
- 2008.04 | **TI DSP Contest** / *Texas Instruments*  
*Winner Prize*
- 2008.02 | **COMAP Mathematical Modeling Contest** / *COMAP*  
*Meritorious*
- 2007.02 | *Honorable Mentioned*
- 2006.09 | **China College Mathematical Modeling Contest** / *CSIAM*  
*Second Prize*

## Services

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Professional Society Membership and Services

| **Xi'an Jiaotong-Liverpool University**

2022.07–	<i>External Mentor</i>
2021.11–	<i>Pilotage Mentor</i>
	<b>IEEE</b>
2024.01–	<i>Senior Member</i>
2016.01–2024.01	<i>Member</i>
2010.01–2015.12	<i>Student Member</i>
	<b>CSIG</b>
	<b>Microwave Intelligent Imaging Professional Committee</b>
2024.06–	<i>Committee Member</i>
	<b>CNC-ISDE</b>
	<b>Microwave Remote Sensing Professional Committee</b>
2024.06–	<i>Committee Member</i>
	<b>CIC</b>
2025.05–	<i>Senior Member</i>
	<b>Space-Air-Ground Integrated Network Communication Professional Committee</b>
2024.06–	<i>Committee Member</i>
	<b>CIE</b>
2021.04–	<i>Member</i>
	<b>JSAAI</b>
2020.11–	<i>Member</i>

## Journal Reviewers

- *IEEE Transactions on Signal Processing* Journal, SCI.
- *IEEE Signal Processing Letters* Journal, SCI.
- *IEEE Open Journal of Signal Processing* Journal, SCI.
- *IEEE Journal of Selected Topics in Signal Processing* Journal, SCI.
- *Signal Processing* Journal, SCI.
- *National Science Open* Journal, SCI.
- *IEEE Transactions on Geoscience and Remote Sensing* Journal, SCI.
- *IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing* Journal, SCI.
- *IEEE Geoscience and Remote Sensing Letters* Journal, SCI.
- *IEEE Transactions on Industrial Electronics* Journal, SCI.
- *IEEE Sensors Journal* Journal, SCI.

- *IET Radar, Sonar & Navigation* Journal, SCI.
- *IET Electronics Letters* Journal, SCI.
- *IET Signal Processing* Journal, SCI.
- *Remote Sensing* Journal, SCI.
- *Science China Information Science* Journal, SCI.
- *Cogent Engineering* Journal, SCI.
- *Geo-spatial Information Science* Journal, SCI.
- *International Journal of Microwave and Wireless Technologies* Journal, SCI.
- *IEEE Access* Journal, SCI.
- *Tsinghua Science and Technology* Journal, SCI.
- *IEEE Transactions on Circuits and Systems for Video Technology* Journal, SCI.
- *IEEE Wireless Communications Letters* Journal, SCI.
- *Journal of Communications and Networks* Journal, SCI.
- *IEEE Transactions on Computational Imaging* Journal, SCI.
- *Journal of Radars* Journal, EI.

#### **Vice President of Organizing Committee Member**

- The 5th National Radar Earth Observation Symposium, Suzhou, China, May 23-25, 2025.

#### **Organizing Committee Member and Technical Program Chair**

- 2022 International Workshop on Microwave Vision and 3D SAR Imaging (MiViSAR 2022), Suzhou, China, Oct 17-19, 2022.

#### **Session Chair**

- 2022 IET International Radar Conference, Chongqing, China, Dec 3-5, 2023.
- 2024 Photonics and Electromagnetics Research Symposium (PIERS), Chengdu, China, Apr 21-25, 2024.
- 2024 IEEE International Conference on Signal, Information and Data Processing (ICSIDP), Zhuhai, China, Nov 22-24, 2024.

#### **TPC Member / Reviewer**

2024 | PIERS 2024, ICC 2024, CoSeRa 2024, EECSI 2024, Globecom2024, IJEECS 2024, EEET 2024, ICSIDP 2024, AIT 2024.

2023 | EECSI 2023, iSemantic 2023, Globecom 2023, SIRS 2023,

| IJCDS 2023, IJEECS 2023, IET Radar 2023.

2022 | EEET 2022, EECSI 2022, IJCDS, IJECE 2021-22, FSDM 2022.

2021 | IJEECS 2021, BEEI 2020-21, ICITech 2021, FSDM 2021, TELKOMNIKA 2021.

2020 | CITEI 2020, SIRS 2020, FSDM 2020.

2019 | SIRS 2019, DISP 2019

2018 | CoSeRa 2018, SIRS 2018, EECSI 2018, ICW-TELKOMNIKA 2018, FSDM 2018.

2017 | ICITech 2017, EECSI 2017, SIRS 2017, FSDM 2017.

2016 | CoSeRa 2016.

2015 | CoSeRa 2015, ISSPIT 2015, ICSPDM 2015.

## Languages

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ENGLISH: Professional (Reside in US for 5 years, CET-6/PETS-5/WSK pass, TOEFL 96)  
JAPANESE: Fair

## Open Source Projects and Services

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2006.04–2015.11 | BMY BBS (<http://bbs.xjtu.edu.cn/>, <http://bmybbs.com/>)  
Host: <https://github.com/bmybbs?type=source>  
*Technical Leader*

2010.06–2019.04 | KYXK BBS (<http://bbs.ucas.ac.cn/>, <http://kyxk.net/>)  
*Technical Leader*

2018.09– | hCNN (<https://github.com/pzhg/hCNN>)  
*Principle Developer*

## Publications (Bold for Corresponding / First Authorship)

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### JOURNAL ARTICLES

1. Z. Ma, Z. Zhang\*, B. Zhang, and X. Qiu, “PUSIF-DUNet: Deep SAR Imaging Network With Joint Optimization on Learnable Probabilistic Undersampling and Unambiguous Reconstruction,” *IEEE J. Sel. Top. Appl. Earth Obs. Remote Sens.*, vol. 18, pp. 28217–28233, 2025, doi: 10.1109/JSTARS.2025.3625733.
2. 王骛巍, 商明样, and 张柘\*, “一种改进 DBF 方法用于多通道 SAR 非均匀采样重构,” *河南科技大学学报*, vol. 46, no. 3, pp. 1–10, 2025.

3. 海那尔·哈那提, 张柘, 朱利鲁, and 吴一戎\*, “基于区块链的多模态遥感大数据治理方法与系统,” 河南科技大学学报, vol. 46, no. 2, pp. 1–11, 2025, doi: 10.15926/j.cnki.issn1672-6871.2025.02.001.
4. C. Wang, Q. Yan, X. Qiu, Y. Luo, L. Peng, and Z. Zhang, “A Geometric Semantic Enhanced TomoSAR Reconstruction Algorithm in an Urban Area: Analysis and Application,” J. Remote Sens., vol. 5, Jan. 2025, doi: 10.34133/remotesensing.0583.
5. Z. Jin, Z. Pan, Z. Zhang\*, and X. Qiu, “SAAS-Net: Self-Supervised Sparse Synthetic Aperture Radar Imaging Network with Azimuth Ambiguity Suppression,” Remote Sens., vol. 17, no. 6, p. 1069, Mar. 2025, doi: 10.3390/rs17061069.
6. D. Zhao, Z. Zhang\*, D. Lu, X. Qiu, W. Li, H. Li, and Y. Wu, “CV-YOLO: A Complex-Valued Convolutional Neural Network for Oriented Ship Detection in Single-Polarization Single-Look Complex SAR Images,” Remote Sens., vol. 17, no. 8, p. 1478, Apr. 2025, doi: 10.3390/rs17081478.
7. S. Song, X. Qiu\*, S. Shangguan, Y. Luo, Z. Li, and Z. Zhang, “A polarization-power-maximum-based 3D imaging method for Ku-band UAV-borne fully-polarimetric array InSAR,” IEEE J. Sel. Top. Appl. Earth Obs. Remote Sens., vol. 18, pp. 10320–10336, 2025, doi: 10.1109/JSTARS.2025.3555662.
8. Z. Wang, Z. Wang, X. Qiu, and Z. Zhang\*, “Fine classification of multi-frequency PolSAR images using an adaptive fusion network,” Remote Sens. Lett., vol. 16, no. 5, pp. 461–471, May 2025, doi: 10.1080/2150704X.2025.2470884.
9. Y. Huang, H. Li, D. Lu, Z. Zhang, and W. Tie\*, “Intelligence Evaluating Computational Power: A Multi-Factor Method,” IEEE Access, vol. 13, pp. 27398–27415, 2025, doi: 10.1109/ACCESS.2025.3538977.
10. D. Wang, D. Lu, J. Zhao, W. Li, H. Li, J. Xu, J. Huang, and Z. Zhang\*, “Multiscale Pillars Fusion for 4-D Radar Object Detection With Radar Data Enhancement,” IEEE Sens. J., vol. 25, no. 3, pp. 5102–5115, Feb. 2025, doi: 10.1109/JSEN.2024.3516786.
11. R. Shi, Y. Luo, Z. Zhang, X. Qiu\*, and C. Ding, “A Three-Dimensional Imaging Method for Unmanned Aerial Vehicle-Borne SAR Based on Nested Difference Co-Arrays and Azimuth Multi-Snapshots,” Remote Sens., vol. 17, no. 3, p. 516, Feb. 2025, doi: 10.3390/rs17030516.
12. G. Zhou\*, Y. Zuo, Z. Zhang, B. Zhang, and Y. Wu, “CR-DEQ-SAR: A Deep Equilibrium Sparse SAR Imaging Method for Compound Regularization,” IEEE J. Sel. Top. Appl. Earth Obs. Remote Sens., vol. 18, pp. 4680–4695, 2025, doi: 10.1109/JSTARS.2025.3533082.
13. M. Shao\*, Y. Fan, Y. Zhang, Z. Zhang, J. Zhao, and B. Zhang, “A Novel Gridless Non-Uniform Linear Array Direction of Arrival Estimation Approach Based on the Improved Alternating Descent Conditional Gradient Algorithm for Automotive Radar System,” Remote Sens., vol. 17, no. 2, p. 303, Jan. 2025, doi: 10.3390/rs17020303.
14. P. Jiang, S. Gao, J. Zhao, Z. Zhang\*, and B. Zhang, “Gridless DOA Estimation with Extended Array Aperture in Automotive Radar Applications,” Remote Sens., vol. 17, no. 1, p. 33, Dec. 2024, doi: 10.3390/rs17010033.
15. G. Zhou, Z. Zhang\*, B. Zhang, and Y. Wu, “An innovative semantically guided SAR imaging and target enhancement method,” Electron. Lett., vol. 60, no. 24, p. e70123, Dec. 2024, doi: 10.1049/ell2.70123.



16. M. Wang, S. Gao, X. Qiu\*, and Z. Zhang, "A Novel Phase Error Estimation Method for TomoSAR Imaging Based on Adaptive Momentum Optimizer and Joint Criterion," *IEEE J. Sel. Top. Appl. Earth Obs. Remote Sens.*, vol. 18, pp. 2042–2051, 2025, doi: 10.1109/JSTARS.2024.3506852.
17. X. Qiu\*, Z. Jiao, Z. Zhang, Q. Yan, and C. Ding\*, "Advances and prospects in SAR microwave vision three-dimensional imaging," *Natl. Sci. Open*, vol. 3, no. 5, p. 20240009, Sep. 2024, doi: 10.1360/nso/20240009.
18. Y. Zhao, D. Xiao, Z. Pan, B. W. K. Ling, Y. Tian, and Z. Zhang\*, "Sparse SAR Imaging Based on Non-Local Asymmetric Pixel-Shuffle Blind Spot Network," *Remote Sens.*, vol. 16, no. 13, p. 2367, Jun. 2024, doi: 10.3390/rs16132367.
19. 仇晓兰, 罗一通, 宋舒洁, 彭凌霄, 程遥, 颜千程, 上官松涛, 焦泽坤, 张柘, 丁赤飏, "微波视觉三维 SAR 实验系统及其全极化数据处理方法," *雷达学报*, vol. 13, no. 5, pp. 941–954, Sep. 2024, doi: 10.12000/JR24137.
20. S. Gao, M. Wang, Z. Zhang\*, B. Zhang, and Y. Wu, "Efficient Gridless DOA Estimation for Nonuniformly Spaced Linear Arrays in Automotive Radar Sensors," *IEEE Sens. J.*, vol. 24, no. 17, pp. 27737–27749, Sep. 2024, doi: 10.1109/JSEN.2024.342
21. M. Wang, X. Qiu\*, Z. Zhang, and S. Gao, "A domain adaptation framework for cross-modality SAR 3D reconstruction point clouds segmentation utilizing LiDAR data", *Int. J. Appl. Earth Obs. Geoinf.*, vol. 133, p. 104103, Sep. 2024, doi: 10.1016/j.jag.2024.104103.
22. Y. Wu, R. Song, Z. Zhang\*, X. Qiu, and W. Yu, "GSAT-Net: An Azimuth Ambiguity Suppression Network Based on Group Sparsity and Adaptive Threshold for Undersampling SAR Imaging," *IEEE Geosci. Remote Sens. Lett.*, vol. 21, pp. 1–5, 2024, doi: 10.1109/LGRS.2024.3452796.
23. S. Gao, M. Wang, Z. Zhang\*, B. Zhang, and Y. Wu, "Efficient gridless 2D DOA estimation based on generalized matrix-form atomic norm minimization," *Electron. Lett.*, vol. 60, no. 10, p. e13212, May 2024, doi: 10.1049/ell2.13212..
24. Y. Zhao, C. Ou, H. Tian, B. W.-K. Ling, Y. Tian, and Z. Zhang\*, "Sparse SAR Imaging Algorithm in Marine Environments Based on Memory-Augmented Deep Unfolding Network," *Remote Sens.*, vol. 16, no. 7, p. 1289, Apr. 2024, doi: 10.3390/rs16071289.
25. S. Gao, W. Wang, M. Wang, Z. Zhang\*, Z. Yang, X. Qiu, B. Zhang, and Y. Wu, "A Robust Super-resolution Gridless Imaging Framework for UAV-borne SAR Tomography," *IEEE Trans. Geosci. Remote Sens.*, vol. 62, pp. 1–17, 2024, doi: 10.1109/TGRS.2024.3393972..
26. Z. Wang, Z. Wang, X. Qiu, and Z. Zhang\*, "Global Polarimetric Synthetic Aperture Radar Image Segmentation with Data Augmentation and Hybrid Architecture Model," *Remote Sens.*, vol. 16, no. 2, p. 380, Jan. 2024, doi: 10.3390/rs16020380.
27. Y. Zhao, Q. Liu, H. Tian, B. W.-K. Ling, and Z. Zhang\*, "DeepRED Based Sparse SAR Imaging," *Remote Sens.*, vol. 16, no. 2, p. 212, Jan. 2024, doi: 10.3390/rs16020212.
28. Y. Zhao, Q. Liu, H. Tian, M. Luo, B. W.-K. Ling, and Z. Zhang\*, "New convex approaches to general MVDR robust adaptive beamforming problems," *Electron. Lett.*, vol. 59, no. 18, p. e12957, Sep. 2023, doi: 10.1049/ell2.12957.

29. Y. Bai, J. Kang, X. Ding, A. Zhang, Z. Zhang, and N. Yokoya, "LaMIE: Large-Dimensional Multipass InSAR Phase Estimation for Distributed Scatterers," *IEEE Trans. Geosci. Remote Sens.*, vol. 61, pp. 1–15, Nov. 2023, doi: 10.1109/TGRS.2023.3330971.
30. D. Zhao, Z. Zhang\*, D. Lu, J. Kang, X. Qiu, and Y. Wu, "CVGG-Net: Ship Recognition for SAR Images Based on Complex-Valued Convolutional Neural Network," *IEEE Geosci. Remote Sens. Lett.*, vol. 20, pp. 1–5, 2023, doi: 10.1109/LGRS.2023.3316133.
31. M. Shao, Z. Zhang\*, J. Li, J. Kang, and B. Zhang, "TADCG: A Novel Gridless Tomographic SAR Imaging Approach Based on the Alternate Descent Conditional Gradient Algorithm With Robustness and Efficiency," *IEEE Trans. Geosci. Remote Sens.*, vol. 62, pp. 1–13, 2024, doi: 10.1109/TGRS.2023.3345454.
32. Y. Wu, Z. Zhang\*, X. Qiu, Y. Zhao, and W. Yu, "MF-JMoDL-Net: A Sparse SAR Imaging Network for Undersampling Pattern Design towards Suppressed Azimuth Ambiguity," *IEEE Trans. Geosci. Remote Sens.*, vol. 62, pp. 1–18, 2024, doi: 10.1109/TGRS.2024.3397826..
33. G. Zhou, Z. Xu, Y. Fan, Z. Zhang, X. Qiu, B. Zhang, K. Fu\* and Y. Wu, "HPHR-SAR-Net: Hyper-pixel High-resolution SAR Imaging Network Based on Nonlocal Total Variation," *IEEE J. Sel. Top. Appl. Earth Obs. Remote Sens.*, vol. 16, pp. 8595–8608, 2023, doi: 10.1109/JSTARS.2023.3295728.
34. M. Wang, Z. Zhang\*, X. Qiu, S. Gao, and Y. Wang, "ATASI-Net: An Efficient Sparse Reconstruction Network for Tomographic SAR Imaging with Adaptive Threshold," *IEEE Trans. Geosci. Remote Sens.*, vol. 61, pp. 1–18, 2023, doi: 10.1109/TGRS.2023.3268132.
35. R. Shi, Z. Zhang\*, X. Qiu, and C. Ding, "A Novel Gradient Descent Least-Squares (GDLs) Algorithm for Efficient Gridless Line Spectrum Estimation With Applications in Tomographic SAR Imaging," *IEEE Trans. Geosci. Remote Sens.*, vol. 61, pp. 1–13, 2023, doi: 10.1109/TGRS.2023.3273568.
36. J. Li, Z. Xu, Z. Li, Z. Zhang\*, B. Zhang, and Y. Wu, "An Unsupervised CNN-Based Multichannel Interferometric Phase Denoising Method Applied to TomoSAR Imaging," *IEEE J. Sel. Top. Appl. Earth Obs. Remote Sens.*, vol. 16, pp. 3784–3796, Jul. 2023, doi: 10.1109/JSTARS.2023.3263964.
37. Y. Zhao, Y. Chen, H. Tian, X. Quan, B. W.-K. Ling, and Z. Zhang\*, "Wide angle SAR imaging method based on hybrid representation," *Electron. Lett.*, vol. 59, no. 15, p. e12897, Aug. 2023, doi: 10.1049/ell2.12897.
38. P. Jiang, Z. Zhang\*, B. Zhang, and Z. Xu, "A novel TomoSAR imaging method with few observations based on nested array," *IET Radar, Sonar Navig.*, vol. 17, no. 6, pp. 925–938, Jun. 2023, doi: 10.1049/rsn2.12388.
39. J. Kang\*, T. Ji, Z. Zhang, and R. Fernandez-Beltran, "SAR Time Series Despeckling via Nonlocal Matrix Decomposition in Logarithm Domain," *Signal Processing*, vol. 209, p. 109040, Aug. 2023, doi: 10.1016/j.sigpro.2023.109040.
40. 康健 \*, 童风雨, 白雨松, 丁翔, 冀腾宇, and 张柘 \*, "基于对数域加性信号分解的时序 SAR 图像相干斑抑制方法," *雷达学报*, vol. 12, no. 5, pp. 1031–1043, Mar. 2023, doi: 10.12000/JR22242.

41. X. Ding, J. Kang\*, Z. Zhang, Y. Huang, J. Liu, and N. Yokoya, "Coherence-Guided Complex Convolutional Sparse Coding for Interferometric Phase Restoration," *IEEE Trans. Geosci. Remote Sens.*, vol. 60, pp. 1–14, 2022, doi: 10.1109/TGRS.2022.3228279.
42. Z. Zhu, J. Kang\*, T. Ji, Z. Zhang, and R. Fernandez-Beltran, "SAR Time-Series Despeckling via Nonlocal Total Variation Regularized Robust PCA," *IEEE Geosci. Remote Sens. Lett.*, vol. 19, pp. 1–5, 2022, doi: 10.1109/LGRS.2022.3227187.
43. Y. Zhao, W. Huang, X. Quan, W.-K. Ling, and Z. Zhang\*, "Data-driven sampling pattern design for sparse spotlight SAR imaging," *Electron. Lett.*, vol. 58, no. 24, pp. 920–923, Nov. 2022, doi: 10.1049/ELL2.12650.
44. Z. Xu, B. Zhang, Z. Zhang\*, M. Wang, and Y. Wu, "Nonconvex-Nonlocal Total Variation Regularization Based Joint Feature-Enhanced Sparse SAR Imaging," *IEEE Geosci. Remote Sens. Lett.*, vol. 19, pp. 1–1, 2022, doi: 10.1109/lgrs.2022.3222185.
45. 吕泽鑫, 仇晓兰 \*, 张柘, and 丁赤飏, "极化干涉 SAR 面向城区不同处理模式的误差影响分析," *雷达学报*, 2022, doi: 10.12000/JR22059.
46. Z. Xu, G. Zhou, B. Zhang, Z. Zhang\* and Y. Wu, "Sparse Regularization Method Combining SVA for Feature Enhancement of SAR Images," *Electronics Letters*, Jun. 2022, doi: 10.1049/ell2.12509.
47. 赵曜, 许俊聪, 全相印, 崔莉, and 张柘 \*, "基于稀疏和低秩结构的层析 SAR 成像方法," *雷达学报*, vol. 11, no. 1, pp. 52-61, 2022.
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