

Resume

Updated at September 11, 2026

I. Personal Information

Jian Zhou, Ph.D.

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II. Education

Ph.D. in Mechanics, COE, Peking University 2008–2013

Thesis: *Simulation Studies on the Property Modulations and Applications of Single Atomic Sheets.*

Supervisor: Prof. Qiang Sun

B.Sc. in Theoretical Mechanics, COE, Peking University 2004–2008

III. Academic Appointments

Professor, School of MSE, Xi'an Jiaotong University 2018–Present

Postdoc (Prof. Ju Li), RLE, Massachusetts Institute of Technology 2017–2018

Postdoc (Prof. Puru Jena), Physics Dept, Virginia Commonwealth University 2013–2017

IV. Recent Research Interests

Light-matter interaction–*nonlinear optically-driven ionic, electronic, spin, and orbital responses*–in quantum materials from perturbative approach

V. Honors and Recongnitions

Teaching Award for Graduate, Teaching and Education Society of Shaanxi Province 2025

World's Top 2% Scientists, both career life and yearly lists (Stanford) 2023–

Reviewer of the Year, *npj Computational Materials* 2023

Xiaomi Young Scholarship (Xiaomi Inc.) 2022

Most Cited Chinese Researcher, Elsevier 2020

Outstanding Editorial Youth Committee Member of *Acta Physico-Chimica Sinica* 2019

National One-Thousand Young Talent Program 2018

DMP Post-Doctoral Travel Award, American Physical Society 2017

Excellent Ph. D. Thesis, Peking University 2013

Excellent Graduate Student, Beijing, China 2013

Excellent Graduate Student, Peking University 2013

“Top-10 Academic” Award, Peking University 2012

VI. Teaching Experience

I have been teaching various courses in both Chinese and English, including the undergraduate *Materials Physics* and graduate *Solid State Physics* since 2019. In addition, I co-teach an undergraduate course *Introduction to Quantum Mechanics*. My teaching evaluations are consistently high, with an average score of over 99/100 during the past five years.

VII. Supervising Students

Research Assistant

- Yiwei Zhao (Jan 2023–Dec 2023), to National University of Singapore for postdoc, now at City University of Hong Kong.

Ph.D. Students

- Hafiz Muhammad Rizwan Ahmad (2017–2025), Finished study.
- Kun Liu (2019–2024), to Rocket Force University of Engineering
- Qianqian Xue (2021–2025), to Guizhou Minzu University
- Xingchi Mu (2022–2026), to PengXinWei Corporation at Shenzhen
- Hanli Cui (2023–)
- Huimin Gao (2025–)
- Yiqian Zhang (2026–)

Master Students

- Yiming Pan (2018–2021), to Kiel University
- Xiao Li (2019–2022), to Xi'an Aero-Engine Corporation, now at University of Science and Technology of China
- Yan Sun (2020–2023), to Huawei Technologies Co., Ltd. at Xi'an
- Zihang Wu (2020–2023), to TP-Link Technologies Co., Ltd. at Shenzhen
- Cong Zhou (2021–2024), to Max Planck Institute for Polymer Research under Prof. Mischa Bonn
- Haoxiang Dong (2021–2024), to ZTE Corporation, now at Yangtze Memory Technologies Co., Ltd. at Wuhan
- Xiantuo Zhao (2022–2025), to Yangtze Memory Technologies Co., Ltd. at Wuhan
- Zhiyuang Li (2024–)
- Hao Zuo (2024–)
- Yanrui Xu (2026–)

Undergraduate Students

- Jiashu Zheng, 2019
- Xilai Bao, 2021
- Zedong Huang, 2022
- Yurui Xu, 2025

VIII. Ad hoc Reviewer for Scientific Journals

Nature, Nature Physics, Proceedings of National Academy of Sciences of the United State of the America, Physical Review Letters, Nature Communications, Advanced Materials, Advanced

Science, Journal of the American Chemical Society, Nano Letters, Advanced Functional Materials, ACS Nano, npj Computational Materials, npj 2D Materials & Applications, Chemistry of Materials, Journal of Materials Chemistry A, Physical Review, The Journal of Physical Chemistry Letters, Inorganic Chemistry, ACS Applied Materials & Interfaces, Nano Research, Carbon, Small, Nanoscale, Chemical Communications, Journal of Materials Chemistry C, Scientific Reports, Physical Chemistry Chemical Physics, The Journal of Physical Chemistry, Applied Physics Letters, Chinese Physics B, New Journal of Physics, ACS Applied Electronic Materials, Nanomaterials, ChemPhysChem, AIP Advances, RSC Advances, Nanotechnology, International Journal of Hydrogen Energy, New Journal of Chemistry, Journal of Applied Physics, Journal of Magnetism and Magnetic Materials, Physics Letters A, Chemical Physics Letters, Physica Status Solidi, etc.

Selected as Outstanding Reviewer (Reviewer of the Year) at *npj Computational Materials* in 2023

IX. Recent Selected 10 Publications

See my full publication at [Google Scholar](#), which includes over 150 publications with a total citation of $\sim 10,000$ times and h-index of 45.

- Yiwei Zhao, Qianqian Xue, Xingchi Mu, Hanli Cui, Jian Zhou, Recent Advances of Bulk Photovoltaic Effect in Exotic Quantum Materials: Progress and Challenges. [Advanced Materials](#) 38, e17783 (2026).
- Qianqian Xue, Jian Zhou, Reversing Néel Vector in Parity-Time Antiferromagnets by Non-reciprocal Light Scattering. [Nano Letters](#) 25, 9054 (2025).
- Jian Zhou, Chunmei Zhang, Contrasting Light-Induced Spin Torque in Antiferromagnetic and Altermagnetic Systems. [Physical Review Letters](#) 134, 176902 (2025).
- Qianqian Xue, Yan Sun, Jian Zhou, Nonlinear Optics-Driven Spin Reorientation in Ferromagnetic Semiconductors. [ACS Nano](#) 18, 24317 (2024).
- Cong Zhou, Jian Zhou, Light-Induced Topological Phase Transition with Tunable Layer Hall Effect in Axion Antiferromagnets. [Nano Letters](#) 24, 7311 (2024).
- Chunmei Zhang, Hanqi Pi, Jian Zhou, Bulk photovoltaic effects in helimagnets. [Physical Review B \(Letter\)](#) 110, L041104 (2024).
- Qianqian Xue, Xingchi Mu, Yan Sun, Jian Zhou, Valley contrasting bulk photovoltaic effect in a $\mathcal{PT}$ -symmetric MnPSe₃ monolayer. [Physical Review B](#) 107, 245404 (2023).
- Xingchi Mu, Qianqian Xue, Yan Sun, Jian Zhou, Magnetic proximity enabled bulk photovoltaic effects in van der Waals heterostructures, [Physical Review Research](#) 5, 013001 (2023).
- Chunmei Zhang, Ping Guo, Jian Zhou, Tailoring Bulk Photovoltaic Effects in Magnetic Sliding Ferroelectric Materials. [Nano Letters](#) 22, 9297 (2022).
- Jian Zhou, Haowei Xu, Yongliang Shi, Ju Li, Terahertz Driven Reversible Topological Phase Transition of Monolayer Transition Metal Dichalcogenides. [Advanced Science](#) 8, 2003832 (2021).