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温州大学南湖学者、优秀教师、优秀党员、Quantum
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研究方向: 固态混合量子器件, 包括腔光力、腔磁学、
自旋界面及非厄米物理等。发表 SCI 论文 50 余篇, 总
引用 1400 余次。

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教育背景

- 2012.09-2016.07 理学博士 复旦大学
- 2009.09-2012.07 理学硕士 安徽大学
- 2005.09-2009.07 理学学士 巢湖学院

工作经历

- 2023.01-至今 副教授 温州大学数理学院
- 2021.05-2022.12 讲师 温州大学数理学院
- 2021.02-2021.08 访问 浙江大学光学研究所
- 2018.07-2021.01 讲师 合肥大学先进学院
- 2016.08-2018.07 博士后 中国工程物理研究院

项目情况

- 2025-2027 浙江省尖兵 《混合量子器件》 参与
- 2024-2026 开放课题 《金刚石自旋强耦合量子器件的理论研究》
- 2024-2026 浙江省基金 《金刚石自旋与固态磁振子强耦合界面的理论研究》
- 2019-2021 国青年基金 《混合光机械系统中光子和声子的调控及量子效应研究》
- 2017-2018 博士后基金 《基于纳米机械振子的固态混合量子器件的理论研究》

授课情况

- 本科生: (1) 大学物理 (2) 线性代数 (3) 前沿导航
- 研究生: (1) 量子光学 (2) 科学前沿 (3) 科技论文撰写

指导研究生

- 李转霞(2020) • 田淼(2021) • 樊晓红 刘明月 何文娣(2022)
- 陈雪纯 李紫薇 陈钦耿 彭马磊(2023) • 汪子杰 龚媛 郑圣博(2024)

代表性论著（更新于 2025/02/27）

- [1] Ma-Lei Peng, Miao Tian, Xue-Chun Chen, Ming-Feng Wang, Guo-Qiang Zhang, Hai-Chao Li, **Wei Xiong***, Cavity magnon-polariton interface for strong spin-spin coupling, *Optics Letters* 50 (5), 1516 (2025).
- [2] Miao-Xiang Liang, Yu-Xiang Qiu, Hai-Chao Li*, **Wei Xiong***, Coherent competition and control between three-wave mixing and four-wave mixing in superconducting circuits, *Phys. Rev. A* 111 (1), 013716 (2025).
- [3] Xiao-Hong Fan, Yi-Ning Zhang, Jun-Po Yu, Ming-Yue Liu, Wen-Di He, Hai-Chao Li, **Wei Xiong***, Nonreciprocal Unconventional Photon Blockade with Kerr Magnons, *Advanced Quantum Technologies* 7 (8), 2400043 (2024). [Selected as back cover]
- [4] Jiaojiao Chen, Xiao-Gang Fan, **Wei Xiong***, Dong Wang, Liu Ye*, Nonreciprocal Photon-Phonon Entanglement in Kerr-Modified Spinning Cavity Magnomechanics, *Phys. Rev. A* 109 (4), 043512 (2024).
- [5] Gang Liu, **Wei Xiong***, and Zu-Jian Ying*, Switchable superradiant phase transition with Kerr magnons, *Phys. Rev. A* 108 (3), 033704 (2023).
- [6] Jiaojiao Chen, Xiao-Gang Fan, **Wei Xiong***, Dong Wang, Liu Ye*, Nonreciprocal entanglement in cavity-magnon optomechanics, *Phys. Rev. B* 108 (2), 024105 (2023).
- [7] **Wei Xiong**, Mingfeng Wang, Guo-Qiang Zhang, Jiaojiao Chen, Optomechanical interface induced strong spin-magnon coupling, *Phys. Rev. A* 107 (3), 033516 (2023).
- [8] **Wei Xiong**, Zhuangxia Li, Guo-Qiang Zhang, Mingfeng Wang, Hai-Chao Li, Xiao-Qing Luo, Jiaojiao Chen, Higher-order exceptional point in a blue-detuned non-Hermitian cavity optomechanical system, *Phys. Rev. A* 106 (3), 033518 (2022).
- [9] **Wei Xiong**, Miao Tian, Guo-Qiang Zhang, and J. Q. You, Strong long-range spin-spin coupling with Kerr magnon interface, *Phys. Rev. B* 105 (24), 245310 (2022).
- [10] **Wei Xiong**, Zhuangxia Li, Yiling Song, Jiaojiao Chen, Guo-Qiang Zhang, and Mingfeng Wang, Higher-order exceptional point in a pseudo-Hermitian cavity optomechanical system, *Phys. Rev. A* 104 (6), 063508 (2021).
- [11] Jiaojiao Chen, Zhuangxia Li, Xiao-Qing Luo, **Wei Xiong***, Mingfeng Wang, and Hai-Chao Li, Strong single-photon optomechanical coupling in a hybrid quantum system, *Optics Express* 29 (20), 32639 (2021).
- [12] **Wei Xiong**, Jiaojiao Chen, Baolong Fang, Mingfeng Wang, Liu Ye, and J. Q. You, Strong tunable spin-spin interaction in a weakly coupled nitrogen vacancy spin-cavity electromechanical system, *Phys. Rev. B* 103 (17), 174106 (2021).
- [13] **Wei Xiong**, Jiaojiao Chen, Baolong Fang, Chi-Hang Lam, and J. Q. You, Coherent perfect absorption in a weakly coupled atom-cavity system, *Phys. Rev. A* 101 (6), 063822 (2020).
- [14] **Wei Xiong**, Yueyin Qiu, Lian-Ao Wu, and J. Q. You, Amplification of the coupling strength in a hybrid quantum system, *New Journal of Physics* 20, 043037 (2018).
- [15] **Wei Xiong**, Da-Yu Jin, Yueyin Qiu, Chi-Hang Lam, and J. Q. You, Cross-Kerr effect on an optomechanical system, *Phys. Rev. A* 93 (2), 023844 (2016).
- [16] **Wei Xiong**, Da-Yu Jin, Jun Jing, Chi-Hang Lam, and J. Q. You, Controllable coupling between a nanomechanical resonator and a coplanar-waveguide resonator via a superconducting flux qubit, *Phys. Rev. A* 92 (3), 032318 (2015).