

王明锋

博士，副教授，硕导

温州大学数理学院

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教育背景

2012.09-2015.07	博士研究生	复旦大学物理系	理学博士
2006.09-2009.07	硕士研究生	温州大学物理系	理学硕士
2002.09-2006.07	本科	温州大学物理系	理学学士

工作经历

2020.01-至今	副教授	温州大学数理学院
2017.01-2019.12	高级实验师	温州大学数电学院
2012.01-2017.12	实验师	温州大学物电学院
2009.07-2011.12	助理实验师	温州大学物电学院

教学经历

- 量子力学
- 量子光学
- 量子信息
- 流体力学
- 近代物理实验
- 大学物理实验

研究方向

- 量子光学（光与原子相互作用）
- 量子通信（连续变量量子通信）
- 量子计算（连续变量量子计算）
- 量子精密测量（集体自旋体系）

主持项目

- 《基于原子频率梳技术的光量子信息存储研究》，浙江省教育厅科研项目，2011-2013 主持
- 《原子频率梳光子回声技术的研究》，浙江省自然科学基金一般项目，2012-2014 主持
- 《原子系综中高度自旋压缩态产生的研究》，国家自然科学基金青年基金项目，2016-2019 主持

发表论文

- [1] Han Bao, Junlei Duan, Shenchao Jin, Xingda Lu, Pengxiong Li, Weizhi Qu, **Mingfeng Wang**, Irina Novikova, Eugeny E. Mikhailov, Kai-Feng Zhao, Klaus Mølmer*, Heng Shen*, Yanhong Xiao*, Spin squeezing of 1011 atoms by prediction and retrodiction measurements, **Nature** **581**, 159 (2020).
- [2] Shenchao Jin, Han Bao, Junlei Duan, Xingda Lu, **Mingfeng Wang**, Kaifeng Zhao, Heng Shen*, Yanhong Xiao*, Adiabaticity in state preparation for spin squeezing of large atom ensembles, **Photonics Research** **11**, 2296 (2021).
- [3] Lingxia Wang, Yani Wang, Yujing Cheng, Zhiqi Yan, Lei Xie, Gang Liu, Jinmin Fan, Di Wang, Yiling Song, Linli He*, Wei Xiong*, **Mingfeng Wang***, Entangling spins using cubic nonlinear dynamics, **arXiv:2301.04520**.
- [4] Wei Xiong*, **Mingfeng Wang***, Guo-Qiang Zhang*, Jiaojiao Chen*, Optomechanical interface induced strong spin-magnon coupling, **arXiv:2208.12988**.
- [5] Wei Xiong*, Zhuaxia 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).
- [6] Yiling Song, Yuelan Chen, Wei Xiong, and **Mingfeng Wang**, Flexible light manipulation in non-Hermitian frequency SSH lattice, **Optics Letters** **47** (7), 1646-1649 (2022).
- [7] Wei Xiong, Zhuaxia Li, Yiling Song, Jiaojiao Chen*, GuoQiang Zhang*, and **Mingfeng Wang***, Higher-order exceptional point in a pseudo-Hermitian cavity optomechanical system, **Phys. Rev. A** **104** (6), 063508 (2021).
- [8] Jiaojiao Chen, Zhuaxia 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).
- [9] 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 lectromechanical system, **Phys. Rev. B** **103** (17), 174106 (2021).
- [10] Spin squeezing via one- and two-axis twisting induced by a singleoff-resonance stimulated Raman scattering in a cavity, G. Liu, Y. Wang, L. Yan, N. Jiang, W. Xiong, **M. F. Wang**, **Physical reviewA** **99**, 043840 (2019).
- [11] Two-axis-twisting spin squeezing by multipass quantumerasure, **M. F. Wang**, W. Qu, P. Li, H. Bao, V. Vuletic and Y. Xiao, **Phys. Rev. A** **96**, 013823 (2017).

- [12] Photon-echo-based quantum memory for optical squeezed states, M. X. Wu, **M. F. Wang** and Y. Z. Zheng, **JOURNAL OF PHYSICS B** **48**, 15 (2015).
- [13] Continuous-variable quadratic phase gate via Faraday interaction, **M. F. Wang**, N. Q. Jiang and Y. Z. Zheng, **Optics Express** **22**, 9182 (2014).
- [14] Continuous-variable controlled-Z gate using an atomic ensemble, **M. F. Wang**, N. Q. Jiang, Q. L. Jin and Y. Z. Zheng, **Phys. Rev. A** **83** 062339 (2011).
- [15] Generation of two-color EPR-entangled optical beams in macroscopic atomic ensembles, **M. F. Wang**, W. J. Gu, Q. L. Jin, and Y. Z. Zheng, **Phys. Rev. A** **82**, 042323 (2010).
- [16] Efficient two-mode squeezing and quantum-state teleportation of macroscopic atomic ensembles, **M. F. Wang**, Y. Zhang, N. Q. Jiang, and Y. Z. Zheng, **Phys. Rev. A** **79**, 012327 (2009).
- [17] Quantum telecloning of an optical coherent state to atomic ensembles, **M. F. Wang**, Y. W. Wang, M. M. Ni, and Y. Z. Zheng, **J. Phys. B** **41**, 225504 (2008).

指导硕士生

- 2016 级 刘 刚 (男)
- 2018 级 王 娅 妮 (女)
- 2020 级 王 玲 霞 (女)、闫智奇 (男)
- 2021 级 谢 蕾 (女)
- 2022 级 王 迪 (女)