

# 熊伟

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## 教育背景

2012. 09–2016. 07	博士研究生	复旦大学物理学系, 理学博士
2009. 09–2012. 07	硕士研究生	安徽大学物电学院, 理学硕士
2005. 09–2009. 07	本科	巢湖学院电气学院, 理学学士

## 工作经历

2012. 05–至今	讲师	温州大学数理学院, 硕导
2019. 08–2021. 01	讲师	合肥学院制工学院, 硕导
2018. 07–2019. 08	讲师	合肥学院数理系
2016. 08–2018. 07	博士后	北京计算科学研究中心(CSRC)

## 学术访问

2021. 05–2021. 08	访问学者	浙江大学光学研究所
2015. 11–2016. 01	助理研究员	香港理工大学应用物理系
2016. 12–2017. 02	助理研究员	香港理工大学应用物理系
2017. 11–2017. 02	助理研究员	香港理工大学应用物理系

## 课程教学

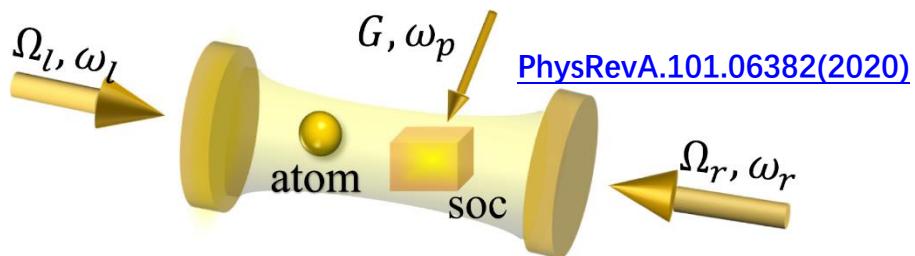
1. 本科生课程: (1) 大学物理 (2) 线性代数

2. 研究生课程: (1) 量子光学

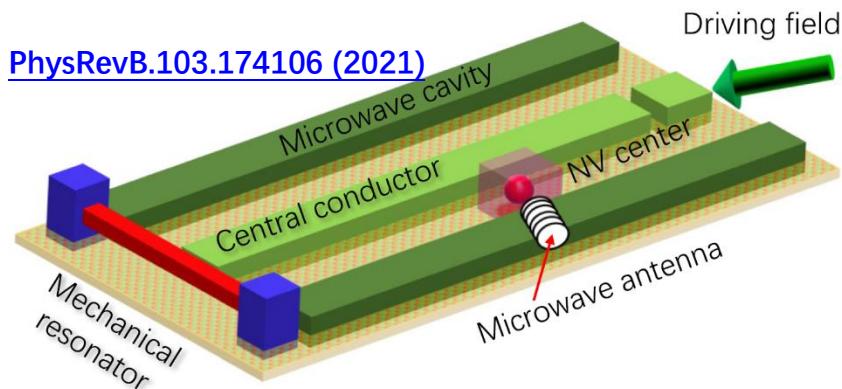
## 科学研究

本课题组主要致力于混合量子系统(Hybrid Quantum System)中的强相互作用实现及相关量子信息处理(Quantum Information Processing)和量子光学(Quantum Optics)的理论研究。具体方向为：

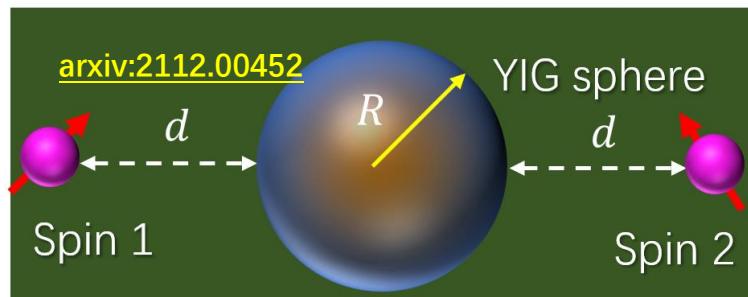
### 1. 腔量子电动力学(QED)下的光和物质强相互作用实现及应用



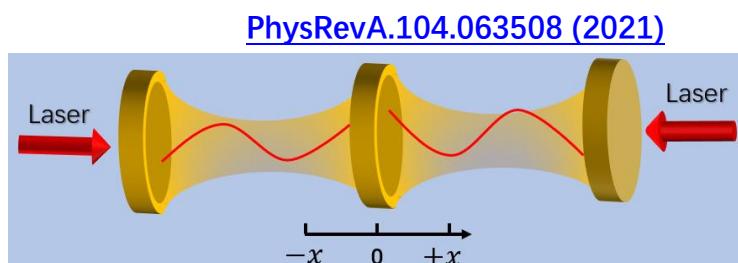
### 2. 光力界面(OM interface)诱导的光和物质强相互作用及应用



### 3. 磁振子(Magnon)界面诱导的光和物质强相互作用及应用



### 4. 基于混合光力系统中的量光现象的理论研究



## 科研项目

1. 混合光机械系统中光子和声子的调控及量子效应研究(11804074),  
国家自然科学青年基金, 主持
2. 基于纳米机械振子的固态混合量子器件的理论研究(2016M600905),  
第 60 批中国博士后科学基金面上资助二等资助, 主持

## 学术兼职及荣誉

### 1. 学术兼职

期刊审稿人: New Journal of Physics, Journal of Physics B, Materials Research Express, Physica Scripta, Journal of Optics, Scientific Reports.

[My peer reviews](#)

### 2. 荣誉

2018 年 JPB 优秀审稿人 [Journal of Physics B](#)

## 发表论文 (\*为通讯作者)

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- [25] 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). <https://doi.org/10.1103/PhysRevA.101.063822>
- [24] Gang Liu, Ya-Ni Wang, Li-Fen Yan, Nian-Quan Jiang, Wei Xiong, and Ming-Feng Wang\*, Spin squeezing via one- and two-axis twisting induced by a single off-resonance stimulated Raman scattering in a cavity, Phys. Rev. A 99 (4). 043840(2019). <https://doi.org/10.1103/PhysRevA.99.043840>
- [23] Xiao-Qing Luo, Zeng-Zhao Li, Tie-Fu Li, Wei Xiong, and J. Q. You\*, Tunable self-focusing and self-defocusing effects in a triple quantum dot via the tunnel-enhanced cross-Kerr nonlinearity, Optics Express 26 (25), 32585(2018).  
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## 课题组学生



李转霞 (2020) 田淼 (2021)

本课题组诚挚欢迎对量子光学和量子信息感兴趣的同学加入!