

攻读博士学位期间代表性成果清单

SCI 检索源期刊:

1. H. F. Liu*, T. Hur*, S. T. Zhang*, L. Y. Che, X. Y. Long, X. Y. Wang, K. Y. Huang, Y.-A. Fan, Y. X. Zheng, Y. F. Feng, Y. Zhou, J. Ng, X. F. Nie, D. K. Park† and D. W. Lu†. Neural quantum embedding via deterministic quantum computation with one qubit. *Physical Review Letters*, **135**, 080603 (2025). (SCI 收录, IF=8.1, 对应学位论文第五章)
2. H. F. Liu*, Z. H. Liu*, S. Chen, X. F. Nie†, X. J. Liu†, and D. W. Lu†. Certifying quantum temporal correlation via randomized measurements: theory and experiment. *Physical Review Letters*, **134**, 040201 (2025). (SCI 收录, IF=8.1, 对应学位论文第三章)
3. Z. D. Lin*, H. F. Liu*, K. Tang*, Y. D. Liu*, L. Y. Che, X. Y. Long, X. Y. Wang, Y.-A. Fan, K. Y. Huang, X. D. Yang, T. Xin, X. F. Nie†, and D. W. Lu†. Hardware-efficient quantum principal component analysis for medical image recognition. *Frontiers of Physics*, **19**, 51202 (2024). (SCI 收录, IF=6.5)
4. Y. X. Zheng*, X. F. Nie*†, H. F. Liu*, Y. T. Luo, D. W. Lu† and X. J. Liu†. Experimental virtual quantum broadcasting. *Physical Review A*, **111**, L060402 (2025). (SCI 收录, IF=2.6)
5. Y. Q. Li, H. F. Liu, D. W. Lu†, and C. L. Ren†, Stable and high-precision 3D positioning via tunable composite-dimensional Hong-Ou-Mandel interference, *Phys. Rev. Lett.* **135**, 260804 (2025). (SCI 收录, IF=8.1)

专利、获奖:

1. 2025 年博士研究生国家奖学金
2. 2025 年南方科技大学比亚迪奖学金
3. 2024 年优秀研究生 (校级)

导师审查意见:

该生攻读博士期间的代表性成果, 数据准确无误、真实可靠, 无学术不端和学术失范行为。同意推荐其参评校级优秀博士学位论文评选。

导师签字:



日期: 2026 年 5 月 20 日