Curriculum Vitae

Xin Zhang

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Education

- B.S. in Optical Engineering, Zhejiang University, June 2016
- M.S. in Physics, University of Science and Technology of China, June 2017
- Ph.D. in Physics, University of Science and Technology of China, June 2021 (expected)

Appointments

- Graduate Research Assistant, University of Science and Technology of China, August 2016 -June 2021 (expected)

Honors

- First-Class Scholarship for Outstanding Students (top 3%), Zhejiang University, 2013
- Outstanding Student Leader Awards, Zhejiang University, 2013
- Outstanding Graduate of Zhejiang University, 2016
- Outstanding Graduate of Zhejiang Province, 2016
- National Scholarship, 2020
- Oxford Instruments Rising Star China Scholarship, 2020

Publications

1. *Qubits Based on Semiconductor Quantum Dots*, **X. Zhang**, H.-O. Li and K. Wang, G. Cao, M. Xiao and G. P. Guo., Chin Phys B **27**: 020305 (2018).
2. *Semiconductor Quantum Computation*, **X. Zhang**, H.-O. Li, G. Cao, M. Xiao, G. C. Guo and G. P. Guo., National Science Review **6**, 32 (2019).
3. *Improving Mobility of Silicon Metal-oxide–semiconductor Devices for Quantum Dots by High Vacuum Activation Annealing*, K. Wang, H.-O. Li, G. Luo, **X. Zhang**, F. M. Jing, R. Z. Hu, Y. Zhou, H. Liu, G. Luo. Wang, G. Cao, H. W. Jiang and G. P. Guo et al. EPL. **130**, 27001 (2019)
4. *Giant Anisotropy of Spin Relaxation and Spin-valley Mixing in a Silicon Quantum Dot*, **X. Zhang**, R. Z. Hu, H.-O. Li, F. M. Jing, Y. Zhou, R. L. Ma, M. Ni, G. Luo, G. Cao, G. L. Wang, X. Hu, H. W. Jiang, G. C. Guo and G. P. Guo., Phys. Rev. Lett. **124**, 257701 (2020)
5. *Controlling Spins in Silicon Quantum Dots*, H.-O. Li, **X. Zhang** and G. P. Guo., Journal of Semiconductors **41**, 7, 070402-3 (2020)
6. *Ultrafast Operations of a Hole Spin Qubit in Ge Quantum Dot*, K. Wang, G. Xu, F. Gao, H. Liu, R. L. Ma, **X. Zhang**, T. Zhang, G. Cao, T. Wang, J. J. Zhang, X. Hu, H. W. Jiang, H. –O. Li, G. C. Guo and G. P. Guo., arXiv:2006.12340 (2020)
7. *Magnetically Tuned Synthetic Spin-Orbit Coupling in a Silicon Quantum Dot*, X. Zhang, Y. Zhou, R. Z. Hu, R. L. Ma, M. Ni, K. Wang, G. Luo, G. Cao, G. L. Wang, P. Huang, X. Hu, H. W. Jiang, H. –O. Li, G. C. Guo and G. P. Guo., arXiv:XXXX.XXXXX (2020)

Colloquia and Seminars:

1. "Giant Anisotropy of Spin Relaxation and Spin-valley Mixing in a Silicon Quantum Dot" (Oral), Silicon Quantum Electronics Workshop, San Sebastian, Spain, October 14. 2019.
2. "Anisotropy of Single-Spin Relaxation and Spin-valley Mixing in Silicon Quantum Dots" (Poster), The 22nd National

Semiconductor Physics Conference, Hangzhou, China, July 9. 2019.

3. “A Two Channel Silicon Quantum Dot and an Experimental Setup for Spin Qubits” (Poster), China-Japan International Workshop on Quantum Technologies, Hefei, China, August 24. 2018.
4. “Charge Sensing and Controllable Coupling in a Si MOS Double Quantum Dot” (Poster), International Workshop on Recent Experimental Progress in Semiconductor Qubits, Hefei, China, September 13. 2017.