QIAOCHU WAN

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EDUCATION

SHANGHAITECH UNIVERSITY, Shanghai, China Jun. 2020

Bachelor of Science, Physics

- GPA: *3.68/4.0* in Physics major (Rank top 10 in Major)
- Scholarship of Academic Excellence (for top 15% of students) for 2 times.
  - Language: TOEFL: 100,(Reading 28 Listening 28 Speaking 23 Writing 21)； GRE: Verbal Reasoning 146 Quantitative Reasoning 167 Analytical Writing 3.0

UNIVERSITY OF PITTSBURGH, PA, USA expected Jun. 2025

Doctor of Philosophy, Physics

- GPA: *3.912/4.0* in Physics major
- Scholarship of Graduate Research
- Research focus on optical measurement of exotic state in 2 dimensional heterostructure.

PUBLICATIONS

Nano Letters *Feb.2021,Oct.2023*

- Sun Z, Beaumariage J, Wan Q, et al. Charged bosons made of fermions in bilayer structures with strong metallic screening[J]. Nano Letters, 2021, 21(18): 7669-7675.
- Chen, X., Alnatah, H., Mao, D., Xu, M., Fan, Y., Wan, Q., ... & Wu, J. (2023). Bose condensation of upper-branch exciton-polaritons in a transferable microcavity. Nano Letters, 23(20), 9538-9546.

ACS Photonics *May.2024*

Fan Y, Wan Q, Yao Q, et al. High Efficiency of Exciton-Polariton Lasing in a 2D Multilayer Structure[J]. ACS Photonics, 2024.

arXiv *July.2024*

Alnatah H, Yao Q, Wan Q, et al. Bose-Einstein condensation of polaritons at room temperature in a GaAs/AlGaAs structure[J]. arXiv preprint arXiv:2406.13689, 2024.

EXPERIENCE

SHANGHAITECH UNIVERSITY, Shanghai, China: Undergraduate 2015 – 2019

UNIVERSITY OF CALIFORNIA, BERKELEY, CA, USA :Exchange Aug.2019 – Aug. 2020

UNIVERSITY OF PITTSBURGH, PA, USA : PhD Candidate Aug.2020– Present

Researcher, Prof. Cheng Baile , Assistant Professor ,School of Information Science and Technology *Sept. 2017-Jan.2018*

- Researched reference papers about local excess noise equation and used Markov Chain Monte Carlo method to simulate the excess noise in APD (Avalanche Photodiode).

Research Assistant, Prof. Yulin Chen & Prof. Prabhakaran, Clarendon Laboratory, University of Oxford, UK *July. 2019– Aug.2019*

- Trained to use XRD and XRR machine and learn about ARPES and Magnetron sputtering including data analysis
- Synthetized heavy fermion material and Weyl semi metal Mg_3Pr,Mg_3Sm,CuAgSe and other two compounds using different method including Bridgeman and Bi-flux method
- Utilized the XRD and XRR machine to successfully verify the samples we prepared is single crystal

Research Assistant, Prof. FengWang , Department of physics, University of California, Berkeley, USA *Aug. 2019– Aug2020*

- Measuring the Valley Hall effect in WSe_2/ WS_2 hetero-bilayer
- Trained to do mechanical exfoliation and poly ethylene terephthalate

Teaching Assistant, Department of physics, University of Pittsburgh, PA, USA *Aug. 2019– Aug2020*

- Assisting the teaching for modern physics experiment courses for undergraduate
- Teaching experiment classes twice a week for 30 undergraduate