Yang Liu

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Education

2015 – now **Stanford University:** GLAM *Post-doctoral Research Fellow*
2014 – 2015 **Princeton University:** *Post-doctoral Research Associate*

2008 – 2014 **Princeton University**, Princeton, NJ; Adviser: Prof. Mansour Shayegan

- Ph.D. Electrical engineering,
  Thesis: Magneto-Transport Study of Quantum Phases in Wide GaAs Quantum Wells

2002 – 2008 **Tsinghua University**, Beijing, China; Adviser: Prof. Yanbiao Liao

- B.Sc. Electronic engineering
  Thesis: Modulation and Demodulation of Optical Interferometer Sensors
- M.Sc. Electronic engineering
  Thesis: Laser-induced Breakdown Spectroscopy for Analyzing Metal Pollutions in Soil

Honors

2015 GLAM Postdoctoral Fellowship, Stanford University
2015 Finalist of Blavatnik Regional Awards
2014 Princeton EE Outstanding Dissertation Awards
2013 Chinese Government Award for Outstanding Self-Financed Students Abroad
2012 Princeton University Charlotte Elizabeth Procter Honorific Fellowship

Experience

2018 – now **Peking University:** *Assistant professor*

- Measurements of novel quantum phases in ultra-high-mobility 2D systems

2015 – 2018 **Stanford University:** GLAM *Postdoctoral research associate*

- Scanning tunneling microscopy

2008 – 2015 **Princeton University:** *Ph.D* and *Postdoctoral research associate*

- Physics of interacting two-dimensional electron/hole systems in GaAs/AlAs quantum wells
- Expertise in low-temperature techniques: Maintenance and operation of ^{3}He/^{4}He dilution refrigerator, ^{3}He systems, superconducting magnets, *in situ* milli Kelvin sample rotator. Small-signal measurements, DC and AC (lock-in) techniques
- Expertise in high-vacuum and ultra-high vacuum systems
- Semiconductor processing experience: Photolithography, thermal and electron-beam evaporation of metal films, wet etching, wafer lapping and polishing, ohmic contacts, etc.
- Device modeling: Numerical simulations of semiconductor heterostructure devices

2006 – 2008 **Tsinghua University:** *B.Sc* and *M.Sc*

- Design and analysis of optical sensing systems
- Expertise in designing optical spectroscopy sensing system, including light source, optical path, spectroscopy and signal analysis
- Expertise in optical fiber interferometer sensing system, especially the system design, noise analysis, modulation and demodulation
- Analog and digital circuit analysis and design
- Signal processing and noise analysis