

## Zhuoyu Chen

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### Bio

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#### PROFESSIONAL EDUCATION

- Doctor of Philosophy, Stanford University , APLPH-PHD (2018)

### Publications

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#### PUBLICATIONS

- **Universal behavior of the bosonic metallic ground state in a two-dimensional superconductor** *NPJ QUANTUM MATERIALS*  
Chen, Z., Wang, B., Swartz, A. G., Yoon, H., Hikita, Y., Raghu, S., Hwang, H. Y.  
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- **Freestanding crystalline YBa<sub>2</sub>Cu<sub>3</sub>O<sub>7-x</sub> heterostructure membranes** *PHYSICAL REVIEW MATERIALS*  
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- **Publisher Correction: Carrier density and disorder tuned superconductor-metal transition in a two-dimensional electron system.** *Nature communications*  
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2018; 9 (1): 4570
- **Superconducting Tunneling Spectroscopy of Spin-Orbit Coupling and Orbital Depairing in Nb :SrTiO<sub>3</sub>** *PHYSICAL REVIEW LETTERS*  
Swartz, A. G., Cheung, A. C., Yoon, H., Chen, Z., Hikita, Y., Raghu, S., Hwang, H. Y.  
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- **Carrier density and disorder tuned superconductor-metal transition in a two-dimensional electron system** *NATURE COMMUNICATIONS*  
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- **Carrier density and disorder tuned superconductor-metal transition in a two-dimensional electron system.** *Nature communications*  
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- **Gate-Induced Interfacial Superconductivity in 1T-SnSe<sub>2</sub>** *NANO LETTERS*  
Zeng, J., Liu, E., Fu, Y., Chen, Z., Pan, C., Wang, C., Wang, M., Wang, Y., Xu, K., Cai, S., Yan, X., Wang, Y., Liu, et al  
2018; 18 (2): 1410–15
- **Imaging and tuning polarity at SrTiO<sub>3</sub> domain walls** *NATURE MATERIALS*  
Frenkel, Y., Haham, N., Shperber, Y., Bell, C., Xie, Y., Chen, Z., Hikita, Y., Hwang, H. Y., Salje, E. H., Kalisky, B.  
2017; 16 (12): 1203–+
- **Gated tuned superconductivity and phonon softening in monolayer and bilayer MoS<sub>2</sub>** *NPJ QUANTUM MATERIALS*  
Fu, Y., Liu, E., Yuan, H., Tang, P., Lian, B., Xu, G., Zeng, J., Chen, Z., Wang, Y., Zhou, W., Xu, K., Gao, A., Pan, et al  
2017; 2
- **Se.** *Nature nanotechnology*  
Wu, J., Yuan, H., Meng, M., Chen, C., Sun, Y., Chen, Z., Dang, W., Tan, C., Liu, Y., Yin, J., Zhou, Y., Huang, S., Xu, et al  
2017; 12 (6): 530-534

- **Ubiquitous strong electron-phonon coupling at the interface of FeSe/SrTiO<sub>3</sub>** *NATURE COMMUNICATIONS*  
Zhang, C., Liu, Z., Chen, Z., Xie, Y., He, R., Tang, S., He, J., Li, W., Jia, T., Rebec, S. N., Ma, E. Y., Yan, H., Hashimoto, et al  
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- *Nature communications*  
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- **Dual-Gate Modulation of Carrier Density and Disorder in an Oxide Two-Dimensional Electron System** *NANO LETTERS*  
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- **Anisotropic Transport at the LaAlO<sub>3</sub>/SrTiO<sub>3</sub> Interface Explained by Microscopic Imaging of Channel-Flow over SrTiO<sub>3</sub> Domains** *ACS APPLIED MATERIALS & INTERFACES*  
Frenkel, Y., Haham, N., Shperber, Y., Bell, C., Xie, Y., Chen, Z., Hikita, Y., Hwang, H. Y., Kalisky, B.  
2016; 8 (19): 12514-12519
  
- **Direct Imaging of Nanoscale Conductance Evolution in Ion-Gel-Gated Oxide Transistors.** *Nano letters*  
Ren, Y., Yuan, H., Wu, X., Chen, Z., Iwasa, Y., Cui, Y., Hwang, H. Y., Lai, K.  
2015; 15 (7): 4730-4736