



Zijie Yan

Postdoctoral Scholar, Applied Physics

Bio

PROFESSIONAL EDUCATION

- Master of Science, University of California Los Angeles (2020)
- Doctor of Philosophy, Pennsylvania State University (2026)
- Bachelor of Science, Tsinghua University (2018)

STANFORD ADVISORS

- Ian Fisher, Postdoctoral Faculty Sponsor

Publications

PUBLICATIONS

- **Designing Magnetic Topological Insulator Trilayers for Highly Efficient Spin-Orbit Torque Switching** *NANO LETTERS*
Zhou, L., Zhuo, D., Tay, H., Yan, Z., Xiao, P., Liu, X., Zhang, B., Chang, C.
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- **Orbital-hybridization-induced Ising-type superconductivity in a confined gallium layer** *NATURE MATERIALS*
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- **Moiré engineering of Cooper-pair density modulation states** *NATURE*
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- **Stoichiometric FeTe is a superconductor** *NATURE*
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- **Interplay of Quantum Size Effect and Tensile Strain on Surface Morphology of β -Sn(100) Islands** *ACS NANO*
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- **Meissner Effect and Nonreciprocal Charge Transport in Non-Topological 1T-CrTe₂/FeTe Heterostructures** *ADVANCED MATERIALS*
Yan, Z., Chan, Y., Yuan, W., Wang, A. G., Yi, H., Wang, Z., Zhou, L., Rong, H., Zhuo, D., Wang, K., Singleton, J., Winter, L. E., Wu, et al
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- **Depth-resolved magnetic order in superconducting topological insulator/FeTe thin film heterostructures** *PHYSICAL REVIEW MATERIALS*
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- **Interlayer exchange coupling induced critical-metal-to-insulator phase transition in quantum anomalous Hall insulators** *PHYSICAL REVIEW B*
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- **Interlayer coupling induced quantum phase transition in quantum anomalous Hall multilayers** *PHYSICAL REVIEW B*
Zhou, L., Zhuo, D., Mei, R., Zhao, Y., Yang, K., Zhang, R., Yan, Z., Tay, H., Chan, M. H. W., Liu, C., Chang, C.
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- **Coexistence of Superconductivity and Antiferromagnetism in Topological Magnet $\text{MnBi}_{2-x}\text{Te}_x$ Films** *NANO LETTERS*
Yuan, W., Yan, Z., Yi, H., Wang, Z., Paolini, S., Zhao, Y., Zhou, L., Wang, A. G., Wang, K., Prokscha, T., Salman, Z., Suter, A., Balakrishnan, et al
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- **Engineering Plateau Phase Transition in Quantum Anomalous Hall Multilayers** *NANO LETTERS*
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- **Interface-induced superconductivity in magnetic topological insulators** *SCIENCE*
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- **Electrical switching of the edge current chirality in quantum anomalous Hall insulators** *NATURE MATERIALS*
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- **3D Quantum Anomalous Hall Effect in Magnetic Topological Insulator Trilayers of Hundred-Nanometer Thickness** *ADVANCED MATERIALS*
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- **Axion insulator state in hundred-nanometer-thick magnetic topological insulator sandwich heterostructures** *NATURE COMMUNICATIONS*
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- **Evolution of Dopant-Concentration-Induced Magnetic Exchange Interaction in Topological Insulator Thin Films** *NANO LETTERS*
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- **Confinement-Induced Chiral Edge Channel Interaction in Quantum Anomalous Hall Insulators** *PHYSICAL REVIEW LETTERS*
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- **Proximity-induced superconductivity in epitaxial topological insulator/graphene/gallium heterostructures** *NATURE MATERIALS*
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- **Creation of chiral interface channels for quantized transport in magnetic topological insulator multilayer heterostructures** *NATURE COMMUNICATIONS*
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- **Environmental Doping-Induced Degradation of the Quantum Anomalous Hall Insulators** *NANO LETTERS*
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- **Zero Magnetic Field Plateau Phase Transition in Higher Chern Number Quantum Anomalous Hall Insulators** *PHYSICAL REVIEW LETTERS*
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