

# Stanford

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## Helen Yao

- Ph.D. Student in Materials Science and Engineering, admitted Spring 2021
- Ph.D. Minor, Electrical Engineering

### Publications

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#### PUBLICATIONS

- **Tunable Phonon Polariton Hybridization in a van der Waals Hetero-Bicrystal.** *Advanced materials (Deerfield Beach, Fla.)*  
Wehmeier, L., Yu, S. J., Chen, X., Mayer, R. A., Xiong, L., Yao, H., Jiang, Y., Hu, J., Janzen, E., Edgar, J. H., Zheng, X., Heinz, T. F., Basov, et al  
2024: e2401349
- **Hidden phonon highways promote photoinduced interlayer energy transfer in twisted transition metal dichalcogenide heterostructures.** *Science advances*  
Johnson, A. C., Georgaras, J. D., Shen, X., Yao, H., Saunders, A. P., Zeng, H. J., Kim, H., Sood, A., Heinz, T. F., Lindenberg, A. M., Luo, D., da Jornada, F. H., Liu, et al  
2024; 10 (4): eadj8819
- **Hyperbolic Polaritonic Rulers Based on van der Waals #MoO<sub>3</sub> Waveguides and Resonators.** *ACS nano*  
Yu, S. J., Yao, H., Hu, G., Jiang, Y., Zheng, X., Fan, S., Heinz, T. F., Fan, J. A.  
2023
- **Ultrahigh-Quality Infrared Polaritonic Resonators Based on Bottom-Up-Synthesized van der Waals Nanoribbons.** *ACS nano*  
Yu, S., Jiang, Y., Roberts, J. A., Huber, M. A., Yao, H., Shi, X., Bechtel, H. A., Gilbert Corder, S. N., Heinz, T. F., Zheng, X., Fan, J. A.  
1800
- **Ultrahigh-quality van der Waals hyperbolic polariton resonators**  
Yu, S., Jiang, Y., Roberts, J. A., Huber, M. A., Yao, H., Shi, X., Bechtel, H. A., Corder, S. G., Heinz, T. F., Zheng, X., Fan, J. A., Chang-Hasnain, C. J., Fan, et al  
SPIE-INT SOC OPTICAL ENGINEERING.2022