

# Stanford

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## Yecun Wu

Postdoctoral Scholar, Physics

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#### BIO

Dr. Yecun Wu is a postdoctoral scholar in the physics department at Stanford University, working with Prof. Steven Chu. His research interests encompass a range of interdisciplinary fields, including quantum sensing, quantum materials, energy storage, and sustainability. Dr. Wu's current research aims to tackle the pressing issues and challenges in the energy field by utilizing quantum technology. He received his Ph.D. in Electrical Engineering from Stanford University, where he worked with Prof. Yi Cui and collaborating closely with Prof. Harold Y. Hwang. During his doctoral studies, he developed innovative methods to control the properties of two-dimensional materials using guest species, which opened new avenues for their use in quantum and energy applications.

#### PROFESSIONAL EDUCATION

- Doctor of Philosophy, Stanford University , EE-PHD (2023)
- Master of Science, Stanford University , EE-MS (2020)
- Bachelor of Science, Beijing Institute of Technology , EE-BS (2016)

#### STANFORD ADVISORS

- Steven Chu, Postdoctoral Faculty Sponsor

#### LINKS

- Personal Site: <https://yecunwu.sites.stanford.edu/>
- Google Scholar: <https://scholar.google.com/citations?user=ZvCSzR8AAAAJ&hl=en>

### Publications

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#### PUBLICATIONS

- **A hydrogen-molecule-mediated proton-exchange membrane with near-complete permselectivity** *NATURE CHEMICAL ENGINEERING*  
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Zhou, J., Chen, T. G., Tsurimaki, Y., Hajj-Ahmad, A., Fan, L., Peng, Y., Xu, R., Wu, Y., Assaworrorarit, S., Fan, S., Cutkosky, M. R., Cui, Y.  
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- **Heat Conductor-Insulator Transition in Electrochemically Controlled Hybrid Superlattices.** *Nano letters*  
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- **Tortuosity Effects in Lithium-Metal Host Anodes** *JOULE*  
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● **Filter-based compressed sensing MRI reconstruction** *INTERNATIONAL JOURNAL OF IMAGING SYSTEMS AND TECHNOLOGY*

Wu, Y., Du, H., Mei, W.

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● **Surface enhanced Raman scattering of monolayer MX<sub>2</sub> with metallic nano particles** *SCIENTIFIC REPORTS*

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