

Stanford



Yecun Wu

Postdoctoral Scholar, Physics

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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

PUBLICATIONS

- **Epitaxial Electrodeposition of Zinc on Different Single Crystal Copper Substrates for High Performance Aqueous Batteries.** *Nano letters*
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- **Onboard early detection and mitigation of lithium plating in fast-charging batteries.** *Nature communications*
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- **Enhanced Shubnikov-De Haas Oscillation in Nitrogen-Doped Graphene** *ACS NANO*
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