

Stanford

Yecun Wu

Ph.D. Student in Electrical Engineering, admitted Autumn 2017

Bio

BIO

I am a senior Ph.D. candidate at Stanford University supervised in Electrical Engineering by Prof. Yi Cui, while working closely with Prof. Harold Y. Hwang. My research focuses on the engineering of two-dimensional materials by electrochemical methods (e.g., intercalation) for quantum hardware (low-dimensional magnetism and superconductivity), AI hardware (neuromorphic computing), and renewable energy (e.g., hydrogen production).

Ph.D., Stanford University, Stanford, CA, USA. (09/2017 – present)

MS., Stanford University, Stanford, CA, USA. (09/2017 – 04/2020)

LINKS

- Google Scholar: <https://scholar.google.com/citations?user=ZvCSzR8AAAAJ&hl=en>

Research & Scholarship

LAB AFFILIATIONS

- Yi Cui (9/25/2017)

Publications

PUBLICATIONS

- **Cold-Starting All-Solid-State Batteries from Room Temperature by Thermally Modulated Current Collector in Sub-Minute.** *Advanced materials (Deerfield Beach, Fla.)*
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- **Heat Conductor-Insulator Transition in Electrochemically Controlled Hybrid Superlattices.** *Nano letters*
Zhou, J., Wu, Y., Kwon, H., Li, Y., Xiao, X., Ye, Y., Ma, Y., Goodson, K. E., Hwang, H. Y., Cui, Y.
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Zhang, Z., Li, Y., Xu, R., Zhou, W., Li, Y., Oyakhire, S. T., Wu, Y., Xu, J., Wang, H., Yu, Z., Boyle, D. T., Huang, W., Ye, et al
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- **Supercooled liquid sulfur maintained in three-dimensional current collector for high-performance Li-S batteries.** *Science advances*
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- **Tortuosity Effects in Lithium-Metal Host Anodes** *JOULE*
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2020; 4 (4): 938–52
- **Theoretical Calculation Guided Design of Single-Atom Catalysts toward Fast Kinetic and Long-Life Li-S Batteries.** *Nano letters*
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- **Enhanced Shubnikov-De Haas Oscillation in Nitrogen-Doped Graphene** *ACS NANO*
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