

Huolin Xin

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Associate Professor & Principal Investigator of DeepEM Laboratory

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Biography:

Huolin Xin is an associate professor at UC Irvine. He graduated from the Physics Department of Cornell University in 2011 and joined the University of California, Irvine in 2018. Prior to becoming a professor at UCI, he worked at Brookhaven National Laboratory as a scientific staff member and a principal investigator from 2013 to 2018. His research has resulted in more than 270 peer-reviewed publications (h-index 65 and citations 20,600). He received the MRS Outstanding Early Career Investigator Award, MSA Burton Medal, DOE Early Career Award, and the UCI Distinguished Early-Career Faculty for Research in 2020. He is the Chair of the largest international electron microscopy conference, Microscopy and Microanalysis, in 2020. His work on battery materials has been selected as the 2020, 2019 and 2014's Top-10 Scientific Achievements by Brookhaven Lab.

UCI News

<https://news.uci.edu/2020/06/24/huolin-xin-receives-early-career-support-from-doe-office-of-science/>

<https://news.uci.edu/2018/11/14/huolin-xin-is-awarded-2-5-million-grant-to-research-next-generation-lithium-ion-batteries/>

<https://news.uci.edu/2019/01/15/clean-and-green-uci-physicist-helps-invent-novel-way-of-converting-nitrogen-to-ammonia/>

<https://news.uci.edu/2020/09/11/uci-physicist-aids-in-the-study-of-oxide-material-that-could-make-rechargeable-lithium-ion-batteries-safer/>

<https://news.uci.edu/2021/01/04/making-methane-on-mars/>

Research Interests and Topics of Presentation:

- Development of innovative operando and AI characterization techniques,
- CryoEM and CryoET for battery materials,
- Electron energy loss spectroscopy,
- Synchrotron-based imaging and spectroscopy techniques,
- Electron tomography,
- Artificial intelligence,
- Energy technology

Google Citations

<https://scholar.google.com/citations?user=IEMaXOMAAAAJ&hl=en>