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BIO

I am a postdoctoral researcher at Stanford University in the Zong/Hwang group. I received my undergraduate and doctoral degrees from Shanghai Jiao Tong University (SJTU), where I specialized in pulsed laser deposition, the synthesis of complex oxide materials and MeV ultrafast electron diffraction (UED).

My research focuses on ultrafast structural dynamics in quantum materials using techniques such as MeV-UED, ultrafast electron microscopy (UEM), time-resolved X-ray diffraction, and pump–probe optical spectroscopy. These time-resolved probes are integrated with advanced and highly tunable sample environments, including in situ strain engineering and electrostatic gating, to actively control competing electronic, structural, and ferroic orders. This capability enables the design, discovery, and quantitative understanding of nonequilibrium phases, transient orders, and metastable states in quantum materials.

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- Harold Hwang, Postdoctoral Faculty Sponsor

LINKS

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Publications

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