



Tom Linker

Associate Scientist, SLAC National Accelerator Laboratory

 Curriculum Vitae available Online

Bio

BIO

I am an Associate Scientist at SLAC National Lab. I utilize multiscale simulations and machine learning to understand light matter interaction for ultrafast X-ray experiments performed at X-ray light sources around the world.

I am currently interested in development of attosecond non-linear x-ray emission spectroscopy techniques with the ultimate goal of exploring photochemistry in biological and catalytic systems. I am also developing molecular dynamics frameworks and X-ray scattering/spectroscopy experiments for excited state chemistry at nanoparticle surfaces for new energy technologies.

Publications

PUBLICATIONS

- **Catalysis in Extreme Field Environments: A Case Study of Strongly Ionized SiO₂Nanoparticle Surfaces.** *Journal of the American Chemical Society*
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- **Tailoring the Angular Mismatch in MoS₂ Homobilayers through Deformation Fields.** *Small (Weinheim an der Bergstrasse, Germany)*
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- **Allegro-Legato: Scalable, Fast, and Robust Neural-Network Quantum Molecular Dynamics via Sharpness-Aware Minimization**
Ibayashi, H., Razakh, T., Yang, L., Linker, T., Olguin, M., Hattori, S., Luo, Y., Kalia, R. K., Nakano, A., Nomura, K., Vashishta, P.
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- **Squishing Skyrmions: Symmetry-Guided Dynamic Transformation of Polar Topologies Under Compression.** *The journal of physical chemistry letters*
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