Stanford

Xintong Xu

Ph.D. Student in Mechanical Engineering, admitted Autumn 2021

Publications

PUBLICATIONS

- **Electrochemically Controlled Metamaterials for Long-wave Infrared Gas Sensing**
  Wang, X., Xu, X., Lin, Y., Xu, K., Wan, G., Majumdar, A., IEEE
  IEEE.2025

- **Environmental damping and vibrational coupling of confined fluids within isolated carbon nanotubes.** *Nature communications*
  Tu, Y. M., Kuehne, M., Misra, R. P., Ritt, C. L., Oliaei, H., Faucher, S., Li, H., Xu, X., Penn, A., Yang, S., Yang, J. F., Sendgikoski, K., Chakraverty, et al
  2024; 15 (1): 5605

- **Imaging the electron charge density in monolayer MoS2 at the Ångstrom scale.** *Nature communications*
  Martis, J., Susarla, S., Rayabharam, A., Su, C., Paule, T., Pelz, P., Huff, C., Xu, X., Li, H. K., Jaikissoon, M., Chen, V., Pop, E., Saraswat, et al
  2023; 14 (1): 4363

- **A semi-continuous process for co-production of CO2-free hydrogen and carbon nanotubes via methane pyrolysis** *CELL REPORTS PHYSICAL SCIENCE*
  Sun, E., Zhai, S., Kim, D., Gigantino, M., Haribal, V., Dewey, O. S., Williams, S. M., Wan, G., Nelson, A., Marin-Quiros, S., Martis, J., Zhou, C., Oh, et al
  2023; 4 (4)

- **Photoabsorption Imaging at Nanometer Scales Using Secondary Electron Analysis.** *Nano letters*
  Zhang, Z., Martis, J., Xu, X., Li, H., Xie, C., Takasuka, B., Lee, J., Roy, A. K., Majumdar, A.
  2021

- **High-Safety and High-Energy-Density Lithium Metal Batteries in a Novel Ionic-Liquid Electrolyte.** *Advanced materials (Deerfield Beach, Fla.)*
  Sun, H., Zhu, G., Zhu, Y., Lin, M., Chen, H., Li, Y., Hung, W. H., Zhou, B., Wang, X., Bai, Y., Gu, M., Huang, C., Tai, et al
  2020: e2001741

- **A safe and non-flammable sodium metal battery based on an ionic liquid electrolyte.** *Nature communications*
  Sun, H., Zhu, G., Xu, X., Liao, M., Li, Y., Angell, M., Gu, M., Zhu, Y., Hung, W. H., Li, J., Kuang, Y., Meng, Y., Lin, et al
  2019; 10 (1): 3302