

Xintong Xu

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

Publications

PUBLICATIONS

- **Electrochemically Controlled Metamaterials for Long-wave Infrared Gas Sensing**
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- **Environmental damping and vibrational coupling of confined fluids within isolated carbon nanotubes.** *Nature communications*
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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
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- **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.
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- **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
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- **A safe and non-flammable sodium metal battery based on an ionic liquid electrolyte.** *Nature communications*
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2019; 10 (1): 3302