

Huaxin Gong

Ph.D. Student in Chemical Engineering, admitted Autumn 2018

Publications

PUBLICATIONS

- **Perovskite superlattices with efficient carrier dynamics.** *Nature*
Lei, Y., Li, Y., Lu, C., Yan, Q., Wu, Y., Babbe, F., Gong, H., Zhang, S., Zhou, J., Wang, R., Zhang, R., Chen, Y., Tsai, et al
2022; 608 (7922): 317-323
- **A Solution-Processable High-Modulus Crystalline Artificial Solid Electrolyte Interphase for Practical Lithium Metal Batteries** *ADVANCED ENERGY MATERIALS*
Yu, Z., Seo, S., Song, J., Zhang, Z., Oyakhire, S. T., Wang, Y., Xu, R., Gong, H., Zhang, S., Zheng, Y., Tsao, Y., Mondonico, L., Lomeli, et al
2022
- **Molecular Layer Deposition of a Hafnium-Based Hybrid Thin Film as an Electron Beam Resist.** *ACS applied materials & interfaces*
Shi, J., Ravi, A., Richey, N. E., Gong, H., Bent, S. F.
2022
- **Effects of Polymer Coating Mechanics at Solid-Electrolyte Interphase for Stabilizing Lithium Metal Anodes** *ADVANCED ENERGY MATERIALS*
Huang, Z., Choudhury, S., Paul, N., Thienenkamp, J., Lennartz, P., Gong, H., Muller-Buschbaum, P., Brunklaus, G., Gilles, R., Bao, Z.
2021
- **Steric Effect Tuned Ion Solvation Enabling Stable Cycling of High-Voltage Lithium Metal Battery.** *Journal of the American Chemical Society*
Chen, Y., Yu, Z., Rudnicki, P., Gong, H., Huang, Z., Kim, S. C., Lai, J., Kong, X., Qin, J., Cui, Y., Bao, Z.
2021
- **A Nickel-Decorated Carbon Flower/Sulfur Cathode for Lean-Electrolyte Lithium-Sulfur Batteries** *ADVANCED ENERGY MATERIALS*
Tsao, Y., Gong, H., Chen, S., Chen, G., Liu, Y., Gao, T. Z., Cui, Y., Bao, Z.
2021
- **High-frequency and intrinsically stretchable polymer diodes.** *Nature*
Matsuhisa, N., Niu, S., O'Neill, S. J., Kang, J., Ochiai, Y., Katsumata, T., Wu, H., Ashizawa, M., Wang, G. N., Zhong, D., Wang, X., Gong, X., Ning, et al
2021; 600 (7888): 246-252
- **A Cation-Tethered Flowable Polymeric Interface for Enabling Stable Deposition of Metallic Lithium.** *Journal of the American Chemical Society*
Huang, Z., Choudhury, S., Gong, H., Cui, Y., Bao, Z.
2020
- **Dense Carbon Nanoflower Pellets for Methane Storage** *ACS APPLIED NANO MATERIALS*
Chen, S., Gong, H., Dindoruk, B., He, J., Bao, Z.
2020; 3 (8): 8278-85
- **A Carbon Flower Based Flexible Pressure Sensor Made from Large-Area Coating** *ADVANCED MATERIALS INTERFACES*
O'Neill, S. K., Gong, H., Matsuhisa, N., Chen, S., Moon, H., Wu, H., Chen, X., Chen, X., Bao, Z.
2020
- **F4-TCNQ as an Additive to Impart Stretchable Semiconductors with High Mobility and Stability** *ADVANCED ELECTRONIC MATERIALS*
Mun, J., Kang, J., Zheng, Y., Luo, S., Wu, Y., Gong, H., Lai, J., Wu, H., Xue, G., Tok, J., Bao, Z.
2020
- **On-demand production of hydrogen by reacting porous silicon nanowires with water** *NANO RESEARCH*

Ning, R., Jiang, Y., Zeng, Y., Gong, H., Zhao, J., Weisse, J., Shi, X., Gill, T. M., Zheng, X.
2020