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Publications

PUBLICATIONS

- **Ultralight and fire-extinguishing current collectors for high-energy and high-safety lithium-ion batteries** *NATURE ENERGY*
Ye, Y., Chou, L., Liu, Y., Wang, H., Lee, H., Huang, W., Wan, J., Liu, K., Zhou, G., Yang, Y., Yang, A., Xiao, X., Gao, et al
2020; 5 (10): 786–93
- **Electrode Design with Integration of High Tortuosity and Sulfur-Philicity for High-Performance Lithium-Sulfur Battery** *MATTER*
Chen, H., Zhou, G., Boyle, D., Wan, J., Wang, H., Lin, D., Mackanic, D., Zhang, Z., Kim, S., Lee, H., Wang, H., Huang, W., Ye, et al
2020; 2 (6): 1605–20
- **Tortuosity Effects in Lithium-Metal Host Anodes** *JOULE*
Chen, H., Pei, A., Wan, J., Lin, D., Vila, R., Wang, H., Mackanic, D., Steinruck, H., Huang, W., Li, Y., Yang, A., Xie, J., Wu, et al
2020; 4 (4): 938–52
- **Dynamic Covalent Synthesis of Crystalline Porous Graphitic Frameworks** *CHEM*
Li, X., Wang, H., Chen, H., Zheng, Q., Zhang, Q., Mao, H., Liu, Y., Cai, S., Sun, B., Dun, C., Gordon, M. P., Zheng, H., Reimer, et al
2020; 6 (4): 933–44
- **Highly Dispersed Cobalt Clusters in Nitrogen-Doped Porous Carbon Enable Multiple Effects for High-Performance Li-S Battery** *ADVANCED ENERGY MATERIALS*
Wang, R., Yang, J., Chen, X., Zhao, Y., Zhao, W., Qian, G., Li, S., Xiao, Y., Chen, H., Ye, Y., Zhou, G., Pan, F.
2020
- **Theoretical Calculation Guided Design of Single-Atom Catalysts toward Fast Kinetic and Long-Life Li-S Batteries.** *Nano letters*
Zhou, G. n., Zhao, S. n., Wang, T. n., Yang, S. Z., Johannessen, B. n., Chen, H. n., Liu, C. n., Ye, Y. n., Wu, Y. n., Peng, Y. n., Liu, C. n., Jiang, S. P., Zhang, et al
2020
- **Electrochemical generation of liquid and solid sulfur on two-dimensional layered materials with distinct areal capacities** *Nature Nanotechnology*
Yang, A., Zhou, G., et al
2020
- **Electrochemical generation of liquid and solid sulfur on two-dimensional layered materials with distinct areal capacities.** *Nature nanotechnology*
Yang, A. n., Zhou, G. n., Kong, X. n., Vilá, R. A., Pei, A. n., Wu, Y. n., Yu, X. n., Zheng, X. n., Wu, C. L., Liu, B. n., Chen, H. n., Xu, Y. n., Chen, et al
2020
- **Uniform High Ionic Conducting Lithium Sulfide Protection Layer for Stable Lithium Metal Anode** *ADVANCED ENERGY MATERIALS*
Chen, H., Pei, A., Lin, D., Xie, J., Yang, A., Xu, J., Lin, K., Wang, J., Wang, H., Shi, F., Boyle, D., Cui, Y.
2019; 9 (22)
- **Ultrathin, flexible, solid polymer composite electrolyte enabled with aligned nanoporous host for lithium batteries.** *Nature nanotechnology*
Wan, J., Xie, J., Kong, X., Liu, Z., Liu, K., Shi, F., Pei, A., Chen, H., Chen, W., Chen, J., Zhang, X., Zong, L., Wang, et al
2019
- **Fast lithium growth and short circuit induced by localized-temperature hotspots in lithium batteries** *NATURE COMMUNICATIONS*
Zhu, Y., Xie, J., Pei, A., Liu, B., Wu, Y., Lin, D., Li, J., Wang, H., Chen, H., Xu, J., Yang, A., Wu, C., Wang, et al
2019; 10
- **In Situ X-ray Absorption Spectroscopic Investigation of the Capacity Degradation Mechanism in Mg/S Batteries** *NANO LETTERS*

Xu, Y., Ye, Y., Zhao, S., Feng, J., Li, J., Chen, H., Yang, A., Shi, F., Jia, L., Wu, Y., Yu, X., Glans-Suzuki, P., Cui, et al
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● **In Situ X-ray Absorption Spectroscopic Investigation of the Capacity Degradation Mechanism in Mg/S Batteries.** *Nano letters*

Xu, Y., Ye, Y., Zhao, S., Feng, J., Li, J., Chen, H., Yang, A., Shi, F., Jia, L., Wu, Y., Yu, X., Glans-Suzuki, P., Cui, et al
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● **An Interconnected Channel-Like Framework as Host for Lithium Metal Composite Anodes** *ADVANCED ENERGY MATERIALS*

Wang, H., Lin, D., Xie, J., Liu, Y., Chen, H., Li, Y., Xu, J., Zhou, G., Zhang, Z., Pei, A., Zhu, Y., Liu, K., Wang, et al
2019; 9 (7)

● **Wrinkled Graphene Cages as Hosts for High-Capacity Li Metal Anodes Shown by Cryogenic Electron Microscopy.** *Nano letters*

Wang, H., Li, Y., Li, Y., Liu, Y., Lin, D., Zhu, C., Chen, G., Yang, A., Yan, K., Chen, H., Zhu, Y., Li, J., Xie, et al
2019

● **Nanostructural and Electrochemical Evolution of the Solid-Electrolyte Interphase on CuO Nanowires Revealed by Cryogenic-Electron Microscopy and Impedance Spectroscopy** *ACS NANO*

Huang, W., Boyle, D. T., Li, Y., Li, Y., Pei, A., Chen, H., Cui, Y.
2019; 13 (1): 737–44

● **A Two-Dimensional MoS₂ Catalysis Transistor by Solid-State Ion Gating Manipulation and Adjustment (SIGMA).** *Nano letters*

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