

Sarah E Holmes

Ph.D. Student in Chemistry, admitted Autumn 2020

Publications

PUBLICATIONS

- **A New Lithium Thioborate-Lithium Iodide Solid-State Electrolyte with High Ionic Conductivity for Lithium Metal Batteries** *ACS ENERGY LETTERS*
Holmes, S. E., Zhang, W., Kim, S., Cui, Y.
2024
- **Recovery of isolated lithium through discharged state calendar ageing.** *Nature*
Zhang, W., Sayavong, P., Xiao, X., Oyakhire, S. T., Shuchi, S. B., Vilá, R. A., Boyle, D. T., Kim, S. C., Kim, M. S., Holmes, S. E., Ye, Y., Li, D., Bent, et al
2024; 626 (7998): 306-312
- **Experimental Discovery of a Fast and Stable Lithium Thioborate Solid Electrolyte, $\text{Li}_{6+2x}[\text{B}_{10}\text{S}_{18}]\text{S}_x$ (x approximate to 1)** *ACS ENERGY LETTERS*
Ma, Y., Wan, J., Xu, X., Sendek, A. D., Holmes, S. E., Ransom, B., Jiang, Z., Zhang, P., Xiao, X., Zhang, W., Xu, R., Liu, F., Ye, et al
2023; 8 (6): 2762-2771
- **Dissolution of the Solid Electrolyte Interphase and Its Effects on Lithium Metal Anode Cyclability.** *Journal of the American Chemical Society*
Sayavong, P., Zhang, W., Oyakhire, S. T., Boyle, D. T., Chen, Y., Kim, S. C., Vilá, R. A., Holmes, S. E., Kim, M. S., Bent, S. F., Bao, Z., Cui, Y.
2023
- **Correlating the Formation Protocols of Solid Electrolyte Interphases with Practical Performance Metrics in Lithium Metal Batteries** *ACS ENERGY LETTERS*
Oyakhire, S. T., Zhang, W., Yu, Z., Holmes, S. E., Sayavong, P., Kim, S., Boyle, D. T., Kim, M., Zhang, Z., Cui, Y., Bent, S. F.
2023: 869-877
- **Investigating the Cyclability and Stability at the Interfaces of Composite Solid Electrolytes in Li Metal Batteries.** *ACS applied materials & interfaces*
Holmes, S. E., Liu, F., Zhang, W., Sayavong, P., Oyakhire, S. T., Cui, Y.
2022