

## Yuelang Chen

Ph.D. Student in Chemistry, admitted Autumn 2019

### Publications

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#### PUBLICATIONS

- **Fast-Charging of Hybrid Lithium-Ion/Lithium-Metal Anodes by Nanostructured Hard Carbon Host** *ACS ENERGY LETTERS*  
Gong, H., Chen, Y., Chen, S., Xu, C., Yang, Y., Ye, Y., Huang, Z., Ning, R., Cui, Y., Bao, Z.  
2022; 7 (12): 4417-4426
- **Formation Mechanism of Flower-like Polyacrylonitrile Particles.** *Journal of the American Chemical Society*  
Gong, H., Ilavsky, J., Kuzmenko, I., Chen, S., Yan, H., Cooper, C. B., Chen, G., Chen, Y., Chiong, J. A., Jiang, Y., Lai, J., Zheng, Y., Stone, et al  
2022
- **Tuning the Mechanical and Electric Properties of Conjugated Polymer Semiconductors: Side-Chain Design Based on Asymmetric Benzodithiophene Building Blocks** *ADVANCED FUNCTIONAL MATERIALS*  
Liu, D., Lei, Y., Ji, X., Wu, Y., Lin, Y., Wang, Y., Zhang, S., Zheng, Y., Chen, Y., Lai, J., Zhong, D., Cheng, H., Chiong, et al  
2022
- **Tuning Fluorination of Linear Carbonate for Lithium-Ion Batteries** *JOURNAL OF THE ELECTROCHEMICAL SOCIETY*  
Yu, Z., Yu, W., Chen, Y., Mondonico, L., Xiao, X., Zheng, Y., Liu, F., Hung, S. T., Cui, Y., Bao, Z.  
2022; 169 (4)
- **Reprocessable and Recyclable Polymer Network Electrolytes via Incorporation of Dynamic Covalent Bonds** *CHEMISTRY OF MATERIALS*  
Lin, Y., Chen, Y., Yu, Z., Huang, Z., Lai, J., Tok, J., Cui, Y., Bao, Z.  
2022; 34 (5): 2393-2399
- **Suspension electrolyte with modified Li<sup>+</sup> solvation environment for lithium metal batteries.** *Nature materials*  
Kim, M. S., Zhang, Z., Rudnicki, P. E., Yu, Z., Wang, J., Wang, H., Oyakhire, S. T., Chen, Y., Kim, S. C., Zhang, W., Boyle, D. T., Kong, X., Xu, et al  
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- **Rational solvent molecule tuning for high-performance lithium metal battery electrolytes** *NATURE ENERGY*  
Yu, Z., Rudnicki, P. E., Zhang, Z., Huang, Z., Celik, H., Oyakhire, S. T., Chen, Y., Kong, X., Kim, S., Xiao, X., Wang, H., Zheng, Y., Kamat, et al  
2022
- **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 Design Strategy for Intrinsically Stretchable High-Performance Polymer Semiconductors: Incorporating Conjugated Rigid Fused-Rings with Bulky Side Groups.** *Journal of the American Chemical Society*  
Liu, D., Mun, J., Chen, G., Schuster, N. J., Wang, W., Zheng, Y., Nikzad, S., Lai, J., Wu, Y., Zhong, D., Lin, Y., Lei, Y., Chen, et al  
2021
- **Potentiometric Measurement to Probe Solvation Energy and Its Correlation to Lithium Battery Cyclability.** *Journal of the American Chemical Society*  
Kim, S. C., Kong, X., Vila, R. A., Huang, W., Chen, Y., Boyle, D. T., Yu, Z., Wang, H., Bao, Z., Qin, J., Cui, Y.  
2021