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## Porous Carbon-Based Composites for Lithium-Sulfur Batteries

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# **Propositions**

Accompanying the dissertation

## **Porous Carbon-Based Composites for Lithium-Sulfur Batteries**

Yinyu Xiang

1. Energy storage devices with high energy density and low cost make a better life. (This thesis)
2. Porous carbon and its composites hold great potential in the application of energy storage. (Chapter 1 & Chapter 2)
3. The optimization of composite cathodes is indispensable in realizing energy storage devices with desirable capacity, which should abide by “short board effect”. (Chapter 3 & Chapter 4)
4. Small changes of the experimental sequence make a big difference in properties and performance of materials, just like in our lives: doing the right things in the right order. (Chapter 5)
5. Dendrite-free alkali metal anodes with high stability are the future of battery development, which can be enabled by three-dimensional current collectors. (Chapter 6)
6. Doing PhD and writing a convincing thesis are challenging, but the experience is exciting and all hard work is worthwhile.
7. "Don't be afraid. Be focused. Be determined. Be hopeful. Be empowered."  
- Michelle Obama