Pack More and Charge Faster: To Improve the Capacity Retention and the Rate Performance of Lithium Batteries

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The use of sulfur in a cathode for lithium batteries has garnered increasing attention in recent years for next-generation energy storage because of its high energy density and low cost. A rapid capacity degradation in Li-S cells has hindered their potential to power commercial electric vehicles. In this work, new materials were employed towards amending this issue through using conductive and polar additives in the sulfur host to storing lithium at an ideal potential.

Awards Won:

Third Award of $1,000