

Special Issue

Trends and Prospects of New Lithium Batteries

Message from the Guest Editors

Li-S batteries have great potential to be high-energy-density devices due to their ultrahigh theoretical energy density of 2600 Wh kg⁻¹. However, there are still several significant technological challenges, including their low sulfur utilization; the “shuttle effect” of soluble polysulfides; and the irreversible, large volume expansion of the cathode structure during cycling, which hinders the commercialization of Li–S batteries. This Special Issue aims to publish a collection of papers on electrode/electrolyte design, binder/separator modification, and metallic Li protection for boosting the electrochemical performance of advanced Li-S batteries. Meanwhile, this collection is not limited to the above topics, and also can be extended to areas of computational chemistry or machine learning.

Guest Editors

Dr. Lin Sun

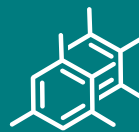
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Deadline for manuscript submissions

closed (30 April 2024)



Molecules

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