# Special Issue

# Advances in High-Performance Solid-State Lithium–Sulfur Batteries and Sodium-Ion Batteries

## Message from the Guest Editors

This Special Issue focus on solid-state lithium-sulfur (Li-S) and sodium-ion (Na-ion) batteries, addressing critical commercialization hurdles: mitigating the polysulfide shuttle effect and anode dendrites in Li-S systems, and developing high-performance, stable electrodes for Na-ion batteries. Emphasizing interdisciplinary innovation, it features research on novel solid-state electrolytes, advanced cathode architectures, and interface engineering to improve ionic conductivity, mechanical durability, and cycle life. By consolidating cutting-edge original research and reviews, this platform showcases advancements toward safer, high-energy-density, and sustainable energy storage solutions. **Submission topics include, but are not limited to, the following:**

- **Novel Solid Electrolyte Materials**
- **Interface Engineering**
- **Cathode Design and Optimization**
- **Anode Compatibility**
- **Understanding Degradation Mechanisms**
- **Manufacturing and Scalability**
- **Fundamental Ion Transport Studies**

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## Deadline for manuscript submissions

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