

## Special Issue

# Advanced Electrode Materials and Electrolytes for Next-Generation Rechargeable Batteries

### Message from the Guest Editor

Designing effective electrolytes and electrodes is key to the success of emerging battery systems. Electrode materials play an important role in the energy density, power density, and cycling life of batteries, and the design of reasonable electrode materials is essential for promoting the development of novel battery technologies. As the only component that interfaces with every other component in the batteries, the electrolyte must simultaneously satisfy several criteria, including rapid ion and mass transportation, effective electron insulation, and electrochemical inertness. The associated electrolyte–electrode interfacing chemistry is the essence of electrolyte engineering, dictating the power, energy, and reversibility of a battery during its entire service life. This Special Issue will cover the key topics in next-generation “beyond Li-ion” battery technologies, including electrolytes, electrodes, and interphases.

### Guest Editor

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### Deadline for manuscript submissions

20 October 2026



## Batteries

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Impact Factor 4.8  
CiteScore 6.6



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