# **Special Issue**

# The Breakthrough of Traditional Electrochemical Energy Storage Systems

### Message from the Guest Editors

Novel-concept battery systems, such as dual-ion batteries, halogen batteries, ammonium-ion batteries, decoupled design batteries and others, have emerged in the past few years in an attempt to overcome the shortcomings of traditional battery systems or to achieve superior performance over them. In this Special Issue, entitled "Breakthroughs in Traditional Electrochemical Energy Storage Systems", various types of novel battery systems, their development history, reaction mechanism, and the electrodes and electrolytes involved will be summarized, aiming to a provide reference for new researchers entering this field. Moreover, the relevant optimization strategies, including the modification of electrodes, electrolytes and the configuration design, will be reported. Furthermore, the research challenges and possible development directions of novel-concept battery systems will be defined. This Special Issue provides an opportunity for researchers in the field to exchange ideas, to solve problems collaboratively, stimulate ideas and strengthen cooperation. Our aim is to contribute to the further development of novel-concept batteries.

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### Deadline for manuscript submissions

closed (10 June 2025)



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