Special Issue

Zinc-Ion Batteries: Recent Progress and Prospects

Message from the Guest Editors

Zinc-ion batteries (ZIBs) are emerging as a compelling alternative in energy storage applications due to their inherent safety, environmental compatibility, and affordability and the natural abundance of zinc. This field has seen significant progress in recent years, including novel cathode materials and optimized electrolytes, as well as deeper insights into electrochemical processes.

This Special Issue is dedicated to offering comprehensive and insightful coverage of ongoing research efforts, current advancements, and future directions within this promising field. We warmly welcome original research articles, reviews, and perspectives covering topics including, but not limited to, the following

Design and synthesis of advanced cathode materials for ZIBs;
Development and optimization of aqueous and non-aqueous electrolytes for ZIBs;
Zinc metal interface engineering and dendrite suppression strategies;
In situ and operando characterization techniques for ZIBs;
Theoretical and computational studies of zinc-ion storage mechanisms;
Durability, safety, and recyclability of ZIB systems.

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Message from the Editor-in-Chief

Take the opportunity to publish your original scientific work or a review paper concerning battery materials, battery technology or battery application within this new open access journal. Along with material science, the journal also addresses engineering and multidisciplinary research topics, such as cell and system design or storage system integration. Publishing proffers visibility for the benefit of other experts and facilitates discussion of the research results within the field. You are invited to publish your work, read published papers and to participate in topical discussions.

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