Special Issue

Zinc-Based Batteries: Recent Progress and Future Perspectives

Message from the Guest Editors

Rechargeable zinc-based batteries are attractive candidates for energy storage systems owning to their safety, low cost, etc. However, the hazards caused by uncontrollable zinc dendrite growth and side reactions hinder their practical application. Therefore, fundamental investigations, advances and future perspectives on zinc-based batteries are necessary for improving the practical applications.

In this Special Issue, we will focus on innovative design strategies, performance improvements, mechanism analyses and novel electrode materials for zinc-based batteries. We would like to invite original research articles and comprehensive reviews, providing innovative research work and deep insights into zinc-based batteries. These research areas may include (but are not limited to) the following:

The design of highly stable aqueous Zn-batteries; The design of highly stable solid-state Zn-batteries; Advanced characterizations;

Mechanism analysis,

Zn-air batteries;

Zinc-based flow battery;

Hybrid zinc-ion batteries;

Dendrites formation, growth, and prevention.

We look forward to receiving your contributions.

Guest Editors

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Deadline for manuscript submissions

closed (25 January 2024)



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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.

Editor-in-Chief

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