Special Issue

Zinc-Ion Batteries: Issues and Opportunities

Message from the Guest Editors

This Special Issue on zinc-ion batteries focuses on the fundamentals, challenges, and the latest exciting developments in Zn-ion battery research. Zn-ion batteries with aqueous electrolytes featuring compelling price-points, competitive performance, and enhanced safety represent advanced energy storage chemistry as a promising alternative to current lithium-ion battery systems. This Special Issue will cover the key topics in cathode material development, electrolyte exploration, zinc anodes protection/modification, novel anode material development, understanding of battery mechanisms, and diverse applications in energy storage systems, portable electronics, and flexible devices.
Topics of interest include, but are not limited to:

- Novel design of highly reversible Zn anodes;
- Optimization of aqueous or organic electrolytes and additives;
- Cathode materials and their energy storage mechanisms;
- Mechanisms of electrochemical activation, insertion, and conversion;
- Cation mobility, electrode/electrolyte interface, and electrolyte decomposition;
- Safety failure analysis;
- High energy density and long-life operation;
- .....

Guest Editors

Dr. Wei Li

Department of Mechanical and Aerospace Engineering, Benjamin M. Statler College of Engineering and Mineral Resources, West Virginia University, Morgantown, WV 26506, USA

Dr. Hanchen Tian

Department of Mechanical and Aerospace Engineering, West Virginia University, Morgantown, WV 26506, USA

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Batteries
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
batteries@mdpi.com

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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

Prof. Dr. Karim Zaghib
Department of Chemical and Materials Engineering, Concordia University, Montréal, QC H3G 1M8, Canada

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