

## Special Issue

# Advanced Materials for Zinc-Based Battery: Development and Challenges

### Message from the Guest Editors

This Special Issue provides insights and new directions in the development of electrolytes (aqueous, non-aqueous, hybrid) for Zn batteries. In addition to sustainable electrolyte solutions, innovations in cell architectures for Zn batteries are welcome. Various challenges pertaining to the development of zinc-based batteries will be addressed and possible means of overcoming these challenges will be delineated. In this Special Issue, we are looking for contributions to provide insights on advanced nanomaterials (cathode and anode), understanding the electrochemical mechanism to enhance the cycling stability of the Zn-based batteries, inhibiting Zn dendrite formation, the development of robust multivalent Zn electrolyte systems, and innovative design of battery architectures to prolong their lifespans. Topics of interest include, but are not limited to:

- Advanced nanomaterials for Zn-based batteries;
- Recent advancements in the development of multivalent Zn electrolyte systems;
- Inhibition of Zn dendrite formation;
- Solid-state Zn batteries;
- The Holy Grail of Zn-air batteries.

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### Guest Editors

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Dr. Lulu Xu

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### Deadline for manuscript submissions

closed (10 April 2023)



## Batteries

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CiteScore 9.8



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