

Special Issue

Research on Aqueous Rechargeable Batteries

Message from the Guest Editor

Aqueous rechargeable batteries have attracted growing interest for energy storage due to their advantages of low price and high safety. The ionic conductivity of aqueous electrolytes is generally one order of magnitude higher than non-aqueous electrolytes, which endow high-power capability in aqueous batteries. Furthermore, aqueous batteries can also demonstrate high voltage and high energy density, thanks to the development of highly concentrated electrolytes and aqueous/non-aqueous hybrid electrolytes. To better promote the development of aqueous batteries, we invite research articles, reviews, and perspectives from researchers all over the world. Topics include but are not limited to:

- Aqueous batteries with various charge carriers (monovalent, multivalent, and anions).
- Novel working mechanisms or configuration of aqueous batteries.
- Electrode materials, electrolytes, separators, etc.
- Difference between non-aqueous and aqueous batteries.
- Pitfalls in aqueous battery research.
- Challenges that hinder aqueous battery development.

Guest Editor

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closed (15 January 2025)



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