





an Open Access Journal by MDPI

Solid Electrolytes for All-Solid-State Batteries: Recent Progress and Future Perspectives

Guest Editor:

Prof. Dr. Masashi Kotobuki

Battery Research Center of Green Energy, Ming Chi University of Technology, 84 Gungjuan Road, Taishan District, New Taipei City 24301 Taiwan

Deadline for manuscript submissions:

15 July 2024

Message from the Guest Editor

Dear Colleagues,

The organic electrolytes used in Li-ion batteries have sometimes caused safety issues such as fire hazards and electrolyte leakage. Therefore, less flammable solid electrolytes and all-solid-state batteries have been intensively researched; this Special Issue, therefore, focuses on these two technologies.

The fundamental and practical research in this issue will cover solid electrolytes (i.e., ceramic electrolytes, polymer electrolytes, and ceramic–polymer composite electrolytes) and all-solid-state batteries. The scope is not limited to novel materials; research on synthetic and characterization techniques, as well as theoretical research, is also welcome.

We invite submissions in the following areas:

- Ceramic electrolytes;
- Polymer electrolytes;
- Composite electrolytes;
- Ion conduction mechanism;
- Novel synthetic techniques;
- Novel characterization techniques;
- All-solid-state batteries.

Prof. Dr. Masashi Kotobuki Guest Editor











an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Andreas Jossen

Institute for Electrical Energy Storage Technology (EES), Technical University München (TUM), Arcisstrasse 21, 80333 Munich, Germany

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.

Author Benefits

Open Access:— free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility: indexed within Scopus, SCIE (Web of Science), Inspec,

Ei Compendex, CAPlus / SciFinder, and other databases.

Journal Rank: JCR - Q2 (Electrochemistry) / CiteScore - Q2 (Electrochemistry)

Contact Us