

## Special Issue

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

### Message from the Guest Editor

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.

### 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

closed (15 July 2024)



## Batteries

an Open Access Journal  
by MDPI

Impact Factor 4.8  
CiteScore 6.6



[mdpi.com/si/173816](https://mdpi.com/si/173816)

*Batteries*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[batteries@mdpi.com](mailto:batteries@mdpi.com)

[mdpi.com/journal/  
batteries](https://mdpi.com/journal/batteries)





# Batteries

---

an Open Access Journal  
by MDPI

---

Impact Factor 4.8  
CiteScore 6.6



[mdpi.com/journal/  
batteries](https://mdpi.com/journal/batteries)



## About the Journal

### 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

---

### 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 - Q1 (Electrical and Electronic Engineering)