

Special Issue

Polymer-Based Electrolytes for Solid-State Li/Na Ion Batteries

Message from the Guest Editors

The development of solid electrolytes is of crucial importance in order to avoid catastrophic fire or even explosion caused by the improper use and electrolyte leakage of commercial lithium batteries based on flammable organic liquid electrolytes. SPEs, consisting of polymer matrix and lithium salt, have the special merits of flexibility, lightweight, and good processability, beneficial for the fabrication of wearable and high energy density batteries. Moreover, their superior flexibility and plasticity are beneficial for reducing interface contact resistance. In order to further achieve prominent ionic conductivity and mechanical property simultaneously, developing composite polymer electrolytes by incorporating ceramic fillers into polymer matrix is also a prevailing solution. This Special Issue welcomes research articles and reviews related to polymer-based solid electrolytes for lithium or sodium ion batteries. The scope may include, but is not limited to, the preparation of polymer-based electrolytes, new types of polymer separators, performance-oriented design of polymer-based electrolytes, and interface modification of polymer electrolytes with electrodes.

Guest Editors

Dr. Chen Liu

Prof. Dr. Da-Zhu Chen

Prof. Dr. Robert K. Y. Li

Deadline for manuscript submissions

closed (20 April 2022)



Polymers

an Open Access Journal
by MDPI

Impact Factor 4.7
CiteScore 8.0
Indexed in PubMed



mdpi.com/si/99775

Polymers

MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
polymers@mdpi.com

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





Polymers

an Open Access Journal
by MDPI

Impact Factor 4.7
CiteScore 8.0
Indexed in PubMed



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



About the Journal

Message from the Editor-in-Chief

Since its foundation in 2009, *Polymers* has developed into an internationally renowned, extremely successful open access journal. The editorial team and the editorial board dedicatedly combine open-access publishing and high-quality rigorous peer reviewing. The performance of the journal has proven this strategy to be well-suited and highly successful. This is reflected in the increasing impact factor of *Polymers*, the most recent one being 4.7.

I would like to invite you to contribute to the success of the journal by sending us your high quality research papers. We would be pleased to welcome you as one of our authors.

Editor-in-Chief

Prof. Dr. Alexander Böker

Lehrstuhl für Polymermaterialien und Polymertechnologie, University of Potsdam, 14476 Potsdam-Golm, Germany

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), Ei Compendex, PubMed, PMC, FSTA, CAPlus / SciFinder, Inspec, and other databases.

Journal Rank:

JCR - Q1 (Polymer Science) / CiteScore - Q1 (General Chemistry)