

Special Issue

Exploring Polymer Electrolytes for High-Performance Batteries and Supercapacitors

Message from the Guest Editors

We invite the submission of research papers to our Special Issue focusing on recent advances in the design and preparation of polymer electrolytes for supercapacitor and battery technologies. Innovative electrolyte materials are pivotal for the future of high-density rechargeable electrochemical storage systems. For instance, high-capacity systems such as lithium-sulfur and solid-state lithium metal batteries hold great promise; however, achieving the safety and commercial viability comparable to current lithium-ion batteries requires significant advancements in solid electrolyte development. Additionally, modern applications increasingly demand lightweight, miniaturized, robust, and flexible cells. In this context, polymer electrolytes offer substantial advantages, including enhanced safety, superior chemical stability, and ease of processing. This Special Issue seeks to provide new insights and foster innovation in the development of advanced polymer electrolytes and their composites for high-performance supercapacitors and batteries.

Guest Editors

Prof. Dr. Paulo Fernando Ribeiro Ortega

Departamento de Química, Universidade Federal de Viçosa, Av. Peter Henry Rolfs, s/n Campus Universitário, Viçosa CEP 36570-900, MG, Brazil

Prof. Dr. Garbas Anacleto Dos Santos Junior

Departamento de Química, Universidade Federal de Viçosa, Av. Peter Henry Rolfs, s/n Campus Universitário, Viçosa CEP 36570-900, MG, Brazil

Deadline for manuscript submissions

closed (31 January 2025)



Polymers

an Open Access Journal
by MDPI

Impact Factor 4.9
CiteScore 9.7
Indexed in PubMed



mdpi.com/si/205495

Polymers
Editorial Office
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 4.9
CiteScore 9.7
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)