Special Issue

Advances in the Applications of Conductive Polymers in Battery Technologies

Message from the Guest Editors

Conductive polymers have garnered significant attention in recent years due to their unique electrical, electrochemical, and mechanical properties, making them promising candidates for energy storage and conversion devices. This Special Issue focuses on the latest advances in the synthesis, characterization, and application of conductive polymers in battery technologies. Topics of interest include, but are not limited to, the development of novel conductive polymers, hybrid materials, and their integration into various battery systems such as lithium-ion, sodium-ion. and solid-state batteries. We also welcome studies on the mechanisms, performance optimization, and longterm stability of these materials. The aim of this Special Issue is to highlight innovative approaches that enhance the performance, sustainability, and cost-effectiveness of batteries through the use of conductive polymers. Researchers and practitioners from academia and industry are invited to contribute original research articles, reviews, and case studies that provide insights into the potential of conductive polymers in revolutionizing energy storage technologies.

Guest Editors

Dr. Jiunn Jer Hwang

Department of Health and Nutrition & Chemical Engineering, Army Academy, Chung-Li District, Taoyuan 320316, Taiwan

Prof. Dr. Jui-Ming Yeh

Department of Chemistry, Chung Yuan Christian University, Taoyuan City, Taiwan

Deadline for manuscript submissions

30 September 2025



Polymers

an Open Access Journal by MDPI

Impact Factor 4.9
CiteScore 9.7
Indexed in PubMed



mdpi.com/si/228505

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

mdpi.com/journal/polymers





Polymers

an Open Access Journal by MDPI

Impact Factor 4.9 CiteScore 9.7 Indexed in PubMed



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)

