Special Issue

Polymer Semiconductors: Synthesis, Characterization, and Applications

Message from the Guest Editor

Polymeric semiconductor materials offer immense potential in flexible electronics, logic circuits, wearable tech, and bioelectronics due to their modifiable chemical structures, solution processability, flexibility, and biocompatibility. They complement traditional silicon-based semiconductors. Recent decades have seen significant advancements in their performance through novel structural designs and synthesis methods. Their performance relies on both chemical structure and solid-state multi-level microstructures. Polymeric semiconductors find wide applications in energy storage, conversion, and catalysis. Key applications include organic light-emitting diodes (OLEDs), organic field-effect transistors (OFETs), organic electrochemical transistors (OECTs), organic thermoelectric devices (OTEs), and organic photovoltaic cells (OPVs). This Special Issue focuses on the current application status of polymeric semiconductor materials in organic electronic devices, highlighting research progress in designing, synthesizing, characterizing, and exploring novel applications of new semiconductor polymers.

Guest Editor

Dr. Jianfeng Li
School of Materials Science and Engineering, Shaanxi Normal University, Xi'an 710119, China

Deadline for manuscript submissions

closed (15 April 2025)

Polymers

an Open Access Journal by MDPI

Impact Factor 4.9
CiteScore 9.7
Indexed in PubMed

mdpi.com/si/202218

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

mdpi.com/journal/polymers

MDPI

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)