

Special Issue

Nanostructured Polymer Composites for Energy Conversion Applications

Message from the Guest Editors

Advances in energy conversion have always been a major driving force for the development of our society. As a result of recent progress in nanotechnology, polymers are widely used as matrices or binders for nanoparticles in nanocomposites. Leveraging unique properties of both polymers and nanoparticles, polymer nanocomposites offer great potential for enhanced material characteristics such as transport kinetics, conductivity, and mechanical properties. Therefore, they have been widely utilized for energy conversion applications including energetic materials, batteries, supercapacitors, thermoelectrics, photovoltaic devices, etc. The processing, modification, characterization, and structure–chemistry–function relationships of such hybrid materials have attracted significant research interest. This Special Issue aims to cover the applications of polymer nanocomposites within the broad landscape of energy conversion, especially the interplay between the structure and performance of materials. Manuscripts focused on all aspects of polymer nanocomposites are welcome.

Guest Editors

Dr. Feiyu Xu

Dr. Prithwish Biswas

Dr. Chen Zhao

Deadline for manuscript submissions

closed (1 December 2024)



Polymers

an Open Access Journal
by MDPI

Impact Factor 4.9
CiteScore 9.7
Indexed in PubMed



mdpi.com/si/188868

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)