Special Issue

Multifunctional Polymer Composite Materials

Message from the Guest Editors

This Special Issue will focus on the development of polymer composites, mainly from the elastomer family. These composites needed to be reinforced with new-generation nanofillers that can make them electrically conducting, mechanically tough, and stretchable. Moreover, further advancements in the literature and industries need further attention to develop the next frontiers for multifunctional applications from these polymer composites. So key aspects of this Special Issue include the following:

- Next frontiers for multifunctional applications like strain sensors, wearable electronic technologies, self-healing mechanisms, stimuli-responsive behaviors, and biological toxicity.
- New types of sensors like sensing aquatic life, real-time monitoring sensors, physical activity sensors.
- Self-powered wearable energy generators like piezoelectric and triboelectric mechanisms.
- Theoretical modeling and simulations based on their multiscale and multifunctional aspects.
- New frontiers for polymer composites, such as elastomers, thermoplastics, and thermosets, and new fabrication processes like 3D and 4D printing.

Guest Editors

Dr. Md Najib Alam

School of Mechanical Engineering, Yeungnam University, 280 Daehak-Ro, Gyeongsan 38541, Republic of Korea

Dr. Vineet Kumar

School of Mechanical Engineering, Yeungnam University, Gyeongbuk 38541, Republic of Korea

Deadline for manuscript submissions

closed (31 December 2024)

Polymers

an Open Access Journal by MDPI

Impact Factor 4.9
CiteScore 9.7
Indexed in PubMed

mdpi.com/si/206770

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

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)

MDPI