

Special Issue

Mechanical and Dynamic Characteristics of Polymers and Polymer Composites

Message from the Guest Editor

Polymers exhibit substantial internal degrees of freedom and pronounced multiscale behavior, complicating our understanding of the mechanisms behind their thermomechanical and rheological properties. This complexity is further amplified when polymers are reinforced, as seen in Carbon-Fiber-Reinforced Polymers (CFRPs). This Special Issue aims to present the latest insights into the correlation between the structure and properties of polymers and polymer composites. We invite submissions on studies related to polymer synthesis and molding characteristics, the measurement of thermo-mechanical properties of structural materials, and research involving numerical simulations such as molecular dynamics and finite element methods.

Guest Editor

Dr. Yutaka Oya

Department of Materials Science and Technology, Graduate School of Advanced Engineering, Tokyo University of Science, Tokyo, Japan

Deadline for manuscript submissions

closed (25 July 2025)



Polymers

an Open Access Journal
by MDPI

Impact Factor 4.9
CiteScore 9.7
Indexed in PubMed



mdpi.com/si/207004

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)