Special Issue

Research Progress on Mechanical Behavior of Polymers

Message from the Guest Editors

Polymers offer a wide range of mechanical behaviours that profoundly affect their performance and determine their application in transforming healthcare, consumer goods, automotive, or aerospace industries, among others. Moreover, additive manufacturing has revolutionized polymer applications, allowing the creation of complex components with reduced waste and customized mechanical properties that depend on the materials used, process parameters, printing strategies, and post-processing. Therefore, prominent thermoplastics are now widely employed for prototyping and making functional parts of consumer products, e.g., for biomedical, aerospatial, oil, and gas applications. Hence, a thorough understanding of the mechanical properties of this class of engineering materials is crucial for designing durable polymer components. In this Special Issue, we invite researchers and practitioners to contribute their expertise and insights to further our understanding of topics such as the yield strength, tensile strength, hardness, ductility, fracture toughness, fatigue, creep deformation, and failure mechanisms of recently developed or newly applied polymers.

Guest Editors

Dr. Rui F. Martins

Dr. Ricardo Branco

Prof. Dr. Filippo Berto

Deadline for manuscript submissions

closed (30 September 2024)

Polymers

an Open Access Journal by MDPI

Impact Factor 4.9
CiteScore 9.7
Indexed in PubMed

mdpi.com/si/178985

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)