Special Issue

Shape Memory Polymer Materials

Message from the Guest Editors

In recent years, 4D printing based on shape memory materials has been extensively investigated for the increased need for intelligent additive manufacturing. Furthermore, the developed finite element modeling and COMSOL simulation of shape memory polymer materials and 4D printing structures are expected to be instrumental in optimizing and simplifying their design. For example, shape memory large deformation structures of hinges, antennas, stents and other deformable structures can be applied in the fields of aerospace, biological medicine, robotics, flexible electronics, marine resource utilization, energy, and photocatalysis. In this Special Issue, we call for academic publications on scientific advancements in the area of the shape memory polymer materials. Topics may include, but are not limited to, shape memory polymers and composites, multifunctional shape memory polymers with self-healing, self-sensing, and/or other behaviours, 4D printing smart structures and devices, finite element simulation of self-adaptive devices and reversible shape changing components. Both original research manuscripts and reviews are accepted.

Guest Editors

Dr. Wenxin Wang

Dr. Fang Xie

Dr. Fengfeng Li

Deadline for manuscript submissions

31 December 2024



Polymers

an Open Access Journal by MDPI

Impact Factor 4.7 CiteScore 8.0 Indexed in PubMed



mdpi.com/si/158412

Polymers 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 4.7 CiteScore 8.0 Indexed in PubMed



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)