Special Issue

Relaxation Phenomena in Polymers

Message from the Guest Editors

This Special Issue covers the relevant aspects of relaxation phenomena in polymers. The glassy state, viscoelasticity, and fracture mechanics are time-dependent phenomena that characterize the fundamental knowledge of polymers. Among the others, the following arguments of physical and engineering interest are still open to debate in the literature:

- The polymers' time dependence induced by strain changes and temperature variations is ordinarily reported.
- Structural relaxation effects during manufacturing operations generate the residual stresses in thermoplastic polymers.
- The residual stresses that arise during the manufacturing process, which involves chemical reactions, are the source of early flaw formation that triggers the development of other high-performance carbon/epoxy laminate damage mechanisms, influencing their lifetime.
- Determining the properties of glassy polymers confined at the nanometric length scale, where one sample dimension is much lower than the statistical macromolecular dimension, is challenging and represents an open literature dilemma.

Guest Editors

Dr. Luigi Grassia

Department of Engineering, Università della Campania "Luigi Vanvitelli", Via Roma 19, 81031 Aversa, Italy

Prof. Dr. Alberto D'Amore

Department of Engineering, University of Campania "Luigi Vanvitelli", Via Roma 19, 81031 Aversa, Italy

Deadline for manuscript submissions

closed (31 May 2025)

Polymers

an Open Access Journal by MDPI

Impact Factor 4.9
CiteScore 9.7
Indexed in PubMed

mdpi.com/si/200219

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)