

Topical Collection

Biopolymers and Biopolymer Based Composites: Processing, Properties, Durability

Message from the Collection Editors

This is to present a collection of papers regarding processing, properties, durability of biopolymers including microcomposites, nanocomposites, and blends. There is a growing interest toward the development and applications of polymeric materials, derived from oil or from natural resources, which display specific characteristics such as biodegradability, compostability, and biocompatibility. As well as other polymeric systems, adding a second phase, rigid or flexible, may improve some specific properties (e.g., mechanical properties in the case of rigid fillers) or provide the material with new ones (e.g., by adding functional additives). The aim of this collection is to explore the often unknown relationships between processing variables, the macro–micro–nanomorphology of the materials prepared, and their final properties. The durability of biopolymers is one of the weak spots of these materials. Therefore, contributions dealing with this aspect, including thermomechanical, environmental, photooxidative degradation, and the related stabilization strategies are more than welcome.

Collection Editors

Prof. Dr. Roberto Scaffaro

Department of Engineering, University of Palermo, 90128 Palermo, Italy

Dr. Andrea Maio

Department of Engineering, University of Palermo, Viale delle Scienze, Ed. 6, 90128 Palermo, Italy



Polymers

an Open Access Journal
by MDPI

Impact Factor 4.9
CiteScore 9.7
Indexed in PubMed



mdpi.com/si/59869

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 4.9.

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

Fraunhofer-Institut für Angewandte Polymerforschung, Lehrstuhl für Polymermaterialien und Polymertechnologie, Universität Potsdam, Geiselbergstraße 69, 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, CAPIus / SciFinder, Inspec, and other databases.

Journal Rank:

JCR - Q1 (Polymer Science) / CiteScore - Q1 (General Chemistry)