

## Special Issue

# Biopolymer-Based Biomimetic Scaffolds

### Message from the Guest Editors

As is widely known, tissue engineering offers a unique alternative to current clinical treatments. With the aim of developing a complex living-tissue replacement, concerted efforts must be focused on creating extracellular-matrix-mimicking biomaterials that encourage interactions with host cells to unlock the body's innate powers of organization and self-repair.

Among the materials used in tissue engineering, naturally occurring biopolymers are often chosen as they show high biocompatibility, a favorable pro-remodeling host immune response and an instructive micro-environment for tissue remodeling. Their ability to mimic the chemical properties of native extracellular matrix represents a great advantage that allows the fabrication of biomimetic scaffolds for the evaluation of cellular responses to material cues.

This Special Issue covers current research (original research papers, review articles and short communications) that focuses on the development and characterization of innovative biomimetic scaffolds made of naturally occurring polymers, which are used to recapitulate tissue formation and repair mechanisms within a 3D functional microenvironment.

---

### Guest Editors

Dr. Chiara Emma Campiglio

Dr. Silvia J. Bidarra

Dr. Thomas Distler

---

### Deadline for manuscript submissions

closed (15 December 2023)



## Polymers

---

an Open Access Journal  
by MDPI

---

Impact Factor 4.9  
CiteScore 9.7  
Indexed in PubMed



[mdpi.com/si/115156](https://mdpi.com/si/115156)

*Polymers*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[polymers@mdpi.com](mailto: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)