

## Special Issue

# Biopolymers for Regenerative Medicine Applications

### Message from the Guest Editor

Significant research progress in regenerative medicine, tissue engineering, and 3D-bioprinting technology resulted in the development and clinical application of novel approaches in bone and cartilage tissue restoration. Diverse biomedical applications of natural and synthetic polymeric scaffolds and bone graft materials are based on the self-regenerative capacity of the human body. Cells, growth factors, and vasculature are essential components of any tissue type regeneration. The combination of tissue engineering and reconstructive surgery techniques, including bioactive scaffolds and axial vascularization as in vivo bioreactor, is a promising interdisciplinary approach. The development of new effective biodegradable, biocompatible scaffolds, cellular technologies, along with individual bionic products, is one of the priorities of modern regenerative medicine and tissue engineering. This special issue highlights current research progress, advances, and prospects in biopolymers applications in tissue engineering and regenerative medicine.

---

### Guest Editor

Dr. Larisa T. Volova

Department Research and Production Center "Samara Tissue Bank", Samara State Medical University, 443079 Samara, Russia

---

### Deadline for manuscript submissions

closed (15 March 2024)



## Polymers

---

an Open Access Journal  
by MDPI

---

Impact Factor 5.8  
CiteScore 11.0  
Indexed in PubMed



[mdpi.com/si/111390](https://mdpi.com/si/111390)

*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 5.8  
CiteScore 11.0  
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 (Polymers and Plastics)