

Special Issue

Printing of Polymer-Based Systems for Medical and Healthcare Applications

Message from the Guest Editors

Three-dimensional printing of bionic scaffolds, cells, bioactive compounds and printing of polymer-based systems have flourished over the past ten years. Three-dimensional printing techniques have developed fast, including micro-extrusion bioprinting, inkjet bioprinting, laser-assisted bioprinting, and scaffold-free spheroid-based bioprinting, which offer great promise in the field of regenerative medicine and drug delivery. Meanwhile, new functional bio-inks and materials have also been developed. Furthermore, the 3D bioprinting of stem cells, such as human-induced pluripotent stem cells, is driving a paradigm shift in tissue regeneration and the modeling of human disease, representing an unlimited cell source for tissue regeneration and the study of human disease. Thus, an in-depth understanding of 3D printing processes and physical, biological, and/or digital cues is highly relevant to the performance and development of 3D bio-printed products and the printing of polymer-based systems for medical and healthcare applications. Both original contributions and comprehensive reviews are welcome

Guest Editors

Prof. Dr. Wenjun (Chris) Zhang

Department of Mechanical Engineering, University of Saskatchewan, Saskatoon, SK S7N 5A9, Canada

Prof. Dr. Hongbo Zhang

School of Mechanical and Power Engineering, East China University of Science and Technology, Shanghai 200237, China

Deadline for manuscript submissions

closed (20 April 2024)



Polymers

an Open Access Journal
by MDPI

Impact Factor 4.9
CiteScore 9.7
Indexed in PubMed



mdpi.com/si/169493

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 4.7.

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)