

Special Issue

Advances in Application of Electrospun Nanofibers for Tissue Engineering and Drug Delivery

Message from the Guest Editors

Electrospinning has emerged as a versatile and scalable technique for fabricating nanofibrous materials with exceptional tunability in mechanical, structural, and biochemical properties. These fibers mimic the extracellular matrix, making them ideal scaffolds for cell growth and tissue regeneration. In drug delivery, they offer controlled release profiles, high surface-area-to-volume ratios, and the potential for multi-drug incorporation. This Special Issue invites original research articles, comprehensive reviews, and insightful perspectives on the latest advancements in the design and application of electrospun nanofibers in tissue engineering and drug delivery. Topics of interest include, but are not limited to, innovative fabrication techniques, functionalization strategies, and the development of bioactive or stimuli-responsive nanofibers. We seek studies addressing challenges such as scalability, biocompatibility, and clinical translation. Research focusing on applications in regenerative medicine, wound healing, cancer therapy, and the integration of nanofibers with emerging technologies like 3D bioprinting or smart materials is highly encouraged.

Guest Editors

Dr. Mazeyar Parvinzadeh Gashti

Department of Chemistry, Pittsburg State University, 1701 South Broadway Street, Pittsburg, KS 66762, USA

Dr. Alessandro Francisco Martins

Department of Chemistry, Pittsburg State University, 1701 South Broadway Street, Pittsburg, KS 66762, USA

Deadline for manuscript submissions

31 August 2025



Polymers

an Open Access Journal
by MDPI

Impact Factor 4.9
CiteScore 9.7
Indexed in PubMed



mdpi.com/si/225110

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)