Special Issue

Biodegradable Polymer-Based Nanocarriers for Biomedical Applications

Message from the Guest Editor

Biodegradable polymers are well-suited for a broad range of biomedical applications due to their biocompatibility and biodegradability. Biodegradable polymers break down into non-toxic byproducts and these can be naturally metabolized and cleared through normal physiological processes within the body, reducing patient risk. Biodegradable polymers can incorporate a diverse range of therapeutics through encapsulation or chemical conjugation, protecting the drugs from degradation and enhancing their stability and bioavailability, while reducing cytotoxicity through targeted delivery, thereby amplifying their therapeutic efficacy. The chemical versatility and nanoscale dimensions of biodegradable polymer-based nanocarriers enable enhanced circulation times and efficient transport across various biological barriers. These features, coupled with the possibility of functionalization for active targeting, make them ideal candidates for smart drug delivery systems.

Guest Editor

Dr. Basavaraj Rudragouda Patil

Department of Bionano Technology, Gachon University, 1342 Seongnam-daero, Sujeong-gu, Seongnam-si 13120, Republic of Korea

Deadline for manuscript submissions

20 January 2026

Polymers

an Open Access Journal by MDPI

Impact Factor 4.9
CiteScore 9.7
Indexed in PubMed

mdpi.com/si/245009

Polymers
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
polymers@mdpi.com

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

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)

MDPI