

Special Issue

Cellulose: Structure Characterization and Applications

Message from the Guest Editors

Cellulose, one of the most abundant organic polymers on earth, is a key component of lignocellulosic biomass and plays a key role in the advancement of sustainable materials and green technologies. Its biocompatibility, renewability, and chemical versatility make it highly attractive for use in a variety of applications, including bioplastics, hydrogels, membranes, composites, valuable chemical compounds, and energy storage materials. This Special Issue aims to review recent advances in the structural characterization and various applications of cellulose and its derivatives. Emphasis will be placed on emerging analytical techniques, chemical and enzymatic transformations, nanocellulose production, and the integration of cellulose into functional materials for environmental and energy-related uses. We welcome the submission of original research articles, reviews, and communications with an experimental, theoretical, or applied focus. Contributions discussing the role of cellulose in low-carbon material development and industrial applications are particularly encouraged.

Guest Editors

Prof. Dr. Halil Durak

Vocational School of Health Services, Van Yuzuncu Yil University, Van 65080, Turkey

Prof. Dr. Hu Li

State Key Laboratory Breeding Base of Green Pesticide and Agricultural Bioengineering, Key Laboratory of Green Pesticide and Agricultural Bioengineering, Ministry of Education, State Local Joint Engineering Laboratory for Comprehensive Utilization of Biomass, Center for R&D of Fine Chemicals, Guizhou University, Guiyang 550025, China

Deadline for manuscript submissions

31 July 2026



Polymers

an Open Access Journal
by MDPI

Impact Factor 4.9
CiteScore 9.7
Indexed in PubMed



mdpi.com/si/249192

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 4.9.

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)