

Special Issue

Design, Synthesis and Application of Cellulose Materials

Message from the Guest Editors

In the context of growing environmental concerns and the quest for sustainable materials, cellulose, as the most abundant natural polymer, is gaining increased attention. Derived from renewable sources like plants, it offers biodegradability and eco-friendliness. This Special Issue aims to showcase the latest research in designing cellulose-based materials, including altering their molecular structures and architectures. It encompasses novel synthesis techniques, from chemical modifications to innovative processing methods. Additionally, we aim to explore the diverse applications of these materials. By presenting cutting-edge findings, this Special Issue will not only summarize the current state of cellulose material science but also inspire further exploration, fostering the development of sustainable alternatives and pushing the boundaries of this dynamic research area. Original research articles and reviews are welcome to be submitted. Research areas may include, but are not limited to, the following: energy storage, flexible electronics and sensors, catalysis, biomedical uses, food and agriculture, environmental and sustainable materials, and composite reinforcement.

Guest Editors

Prof. Dr. Jian Zhao

Microbial Technology Institute, Shandong Univeristy, Qingdao 266237, China

Dr. Yehan Tao

Liaoning Key Lab of Lignocellulose Chemistry and BioMaterials, Liaoning Collaborative Innovation Center for Lignocellulosic Biorefinery, College of Light Industry and Chemical Engineering, Dalian Polytechnic University, Dalian 116034, China

Deadline for manuscript submissions

closed (20 March 2026)



International Journal of Molecular Sciences

an Open Access Journal
by MDPI

Impact Factor 4.9
CiteScore 9.0
Indexed in PubMed



mdpi.com/si/238057

*International Journal of
Molecular Sciences*
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
ijms@mdpi.com

[mdpi.com/journal/
ijms](https://mdpi.com/journal/ijms)





International Journal of Molecular Sciences

an Open Access Journal
by MDPI

Impact Factor 4.9
CiteScore 9.0
Indexed in PubMed



[mdpi.com/journal/
ijms](https://mdpi.com/journal/ijms)



About the Journal

Message from the Editor-in-Chief

The *International Journal of Molecular Sciences (IJMS)* is an open access journal, which was established in 2000. The journal aims to provide a forum for scholarly research on a range of topics, including biochemistry, molecular and cell biology, and molecular biophysics. *IJMS* publishes both original research and review articles, and regularly publishes special issues to highlight advances at the cutting edge of research. We invite you to read recent articles published in *IJMS* and consider publishing your next paper with us.

Editor-in-Chief

Prof. Dr. José L. Quiles
Department of Physiology, Institute of Nutrition and Food Technology
"Jose Mataix", Biomedical Research Center, University of Granada,
Avda. Conocimiento s/n, 18100 Armilla, Granada, Spain

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), PubMed, PMC, MEDLINE, Embase, CAPus / SciFinder, and other databases.

Journal Rank:

JCR - Q1 (Biochemistry and Molecular Biology) / CiteScore - Q1 (Organic Chemistry)