

Special Issue

Bio-Based Materials from Wood and Other Lignocellulosic Materials: Development, Properties and Design

Message from the Guest Editors

The use of renewable energies and the resource-saving use of renewable raw materials are the key to climate-friendly strategies in almost all areas of life. Bio-based materials play a central role in this context. They can be used in many areas and thus contribute to increased carbon storage. In addition to products made from solid wood or bamboo, a variety of other materials can be produced based on lignocelluloses, which are characterized by unique properties and possible applications. The Special Issue aims to cover all the aspects related to recent innovations in bio-based materials made from wood and other lingo-celluloses such as bamboo, rattan, miscanthus, straw, hemp, sea grass, and many others more. These materials' development, physico-mechanical, chemical, biological properties and design are appreciated. Besides, contributions analysing the effect of the inclusion of other natural biopolymers in composite materials are welcome.

Guest Editors

Prof. Dr. Christian Brischke

Thünen Institute of Wood Research, Hamburg, Germany

Prof. Dr. Miha Humar

Biotechnical Faculty, University of Ljubljana, Jamnikarjeva 101, 1000 Ljubljana, Slovenia

Dr. Ilze Irbe

Latvian State Institute of Wood Chemistry, Dzerbenes str. 27, LV-1006 Riga, Latvia

Deadline for manuscript submissions

closed (30 July 2025)



Materials

an Open Access Journal
by MDPI

Impact Factor 3.2
CiteScore 6.4
Indexed in PubMed



mdpi.com/si/193036

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

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





Materials

an Open Access Journal
by MDPI

Impact Factor 3.2
CiteScore 6.4
Indexed in PubMed



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



About the Journal

Message from the Editorial Board

Materials (ISSN 1996-1944) was launched in 2008. The journal covers twenty-five comprehensive topics: biomaterials, energy materials, advanced composites, advanced materials characterization, porous materials, manufacturing processes and systems, advanced nanomaterials and nanotechnology, smart materials, thin films and interfaces, catalytic materials, carbon materials, materials chemistry, materials physics, optics and photonics, corrosion, construction and building materials, materials simulation and design, electronic materials, advanced and functional ceramics and glasses, metals and alloys, soft matter, polymeric materials, quantum materials, mechanics of materials, green materials, general. *Materials* provides a unique opportunity to contribute high quality articles and to take advantage of its large readership.

Editors-in-Chief

Prof. Dr. Maryam Tabrizian

1. Department of Biomedical Engineering, Faculty of Medicine and Health Sciences, McGill University, Montreal, QC H3A 2B6, Canada
2. Faculty of Dentistry and Oral Health Sciences, McGill University, 3640 Rue University, Montreal, QC H3A 0C7, Canada

Prof. Dr. Yuguang Ma

State Key Laboratory of Luminescent Materials and Devices, South China University of Technology, Guangzhou 510640, China

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, Ei Compendex, CaPlus / SciFinder, Inspec, Astrophysics Data System, and other databases.

Journal Rank:

JCR - Q2 (Metallurgy and Metallurgical Engineering) /
CiteScore - Q1 (Condensed Matter Physics)