

## Special Issue

# Synthesis, Optimization, and Reuse of Sustainable Bio-Based Materials

### Message from the Guest Editors

One of the main strategies to contain global warming is the bottom-up approach, focusing on the application of renewable resources to avoid preparing emerging products using the substrates generated from fossil fuels. However, it is also necessary to implement a top-down approach as well, focusing on the utilization of renewable bio-based matrices (which are considered CO<sub>2</sub>-neutral). Consequently, the application of bio-based materials appears to be a promising solution in order to overcome issues of environmental deterioration and help reduce the overall carbon footprint generated by the chemical industry. Therefore, for this Special Issue, we would like to invite researchers to submit original research works as well as review articles focused on the synthesis, modification, optimization, and reuse of bio-based materials. The biorefining of lignocellulosic materials to obtain useful fine chemicals is within the scope of this Special Issue as well. Moreover, research centered around applications of such bio-based, advanced materials will also be appreciated.

### Guest Editors

Prof. Dr. Zhongmin Wang

Guangxi Academy of Sciences, Nanning 530007, China

Prof. Dr. Guiyin Li

College of Chemistry, Guangdong University of Petrochemical Technology, Guandu Road, Maoming 525000, China

### Deadline for manuscript submissions

closed (15 December 2024)



## Materials

---

an Open Access Journal  
by MDPI

---

Impact Factor 3.2  
CiteScore 6.4  
Indexed in PubMed



[mdpi.com/si/140671](https://mdpi.com/si/140671)

*Materials*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[materials@mdpi.com](mailto: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 Editor-in-Chief

*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.

---

### Editor-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

---

### 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)