

## Special Issue

# Advances in Synthesis and Multiscale Characterization of Functional Polymeric Materials

### Message from the Guest Editor

We are pleased to invite you to contribute to this Special Issue, entitled “Advances in Synthesis and Multiscale Characterization of Functional Polymeric Materials.” Functional polymers are increasingly important in energy, electronics, environmental technologies, and biomedicine due to their versatility and tunable properties. Advances in synthesis and multiscale characterization now enable the precise design and correlation of molecular structures with macroscopic performance, fostering both fundamental insights and practical innovations. This Special Issue aims to present recent developments in the synthesis, design, and multiscale analysis of functional polymeric materials. Emphasis will be placed on the relationship between structure, properties, and performance, highlighting contributions that demonstrate both methodological advances and application-oriented outcomes. The topic aligns with the journal’s scope by integrating interdisciplinary research across chemistry, materials science, and engineering.

### Guest Editor

Dr. Alexandra-Ileana Portoaca

Mechanical Engineering Department, Petroleum-Gas University of Ploiesti, 100680 Ploiesti, Romania

### Deadline for manuscript submissions

20 September 2026



## Materials

an Open Access Journal  
by MDPI

Impact Factor 3.2  
CiteScore 6.4  
Indexed in PubMed



[mdpi.com/si/253422](https://mdpi.com/si/253422)

*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 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)