

## Special Issue

# Advancing Nanophotonic Materials: Fundamentals and Applications

### Message from the Guest Editors

We are pleased to invite you to contribute to our Special Issue. This Special Issue aims to curate a comprehensive collection of articles that not only contribute to our fundamental understanding of nanophotonic materials but also showcase their diverse applications. We welcome original research articles and reviews that delve into various aspects of nanophotonic materials. The scope of this Special Issue includes, but is not limited to, the following topics:

- The synthesis and characterization of novel nanophotonic materials;
- The theoretical and computational modelling of nanophotonic phenomena;
- Applications in renewable energy, such as advanced solar cells;
- The development of nanophotonic sensors and imaging techniques;
- Innovations in communication technologies using nanophotonic devices;
- Metamaterials and their unique optical properties.

We look forward to receiving your contributions and believe that together we can create a Special Issue that will serve as a valuable resource for the scientific community.

---

### Guest Editors

Dr. Xinyu Zhang

Key Laboratory of Precision and Intelligent Chemistry, CAS Key Laboratory of Materials for Energy Conversion, Department of Materials Science and Engineering, University of Science and Technology of China, Hefei 230026, China

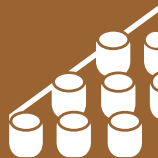
Dr. Jacob Wekalao

Department of Optics and Optical Engineering, University of Science and Technology of China, Hefei 230026, China

---

### Deadline for manuscript submissions

20 January 2026



## Materials

---

an Open Access Journal  
by MDPI

---

Impact Factor 3.2  
CiteScore 6.4  
Indexed in PubMed



[mdpi.com/si/242656](https://mdpi.com/si/242656)

*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)