

## Special Issue

# Innovative Material Design and Nondestructive Testing Applications for Infrastructure Materials

### Message from the Guest Editors

We focus on topics such as advanced materials for sustainable infrastructure, nondestructive evaluation techniques, structural health monitoring and intelligent systems, nanotechnology applications, 3D printing and additive manufacturing, and renewable energy integration in transportation infrastructure. The scope of this Special Issue includes but is not restricted to:

- Novel and sustainable materials for transportation infrastructure;
- Development and characterization of nanocomposites and their applications in infrastructure materials;
- Advancements in 3D printing and additive manufacturing for material design and fabrication in infrastructure;
- Innovations in nondestructive evaluation techniques for assessing and monitoring infrastructure materials;
- Structural health monitoring and damage diagnosis with a focus on material properties and performance;
- Innovative material-based maintenance and rehabilitation methods for transportation infrastructure;
- Material-centric resilience and life-cycle assessment of transportation infrastructure components.

### Guest Editors

Dr. Honglei Chang

Dr. Li Ai

Dr. Feng Guo

Dr. Xinxiang Zhang

### Deadline for manuscript submissions

closed (10 June 2024)



## Materials

an Open Access Journal  
by MDPI

Impact Factor 3.2  
CiteScore 6.4  
Indexed in PubMed



[mdpi.com/si/169033](https://mdpi.com/si/169033)

*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)