# Special Issue

# Structural Dynamics and Health Monitoring of Engineering Materials

## Message from the Guest Editors

Structural integrity plays a pivotal role in guaranteeing the safety, reliability, and durability of engineering materials across diverse industries. The intricate relationship between structural dynamics and health monitoring not only underscores the complexity of material behavior, but also offers an intriguing avenue for researchers to delve into innovative solutions that could profoundly impact our comprehension and management of these materials. This Special Issue aspires to act as a hub for a cutting-edge collection of research, assembling contributions that not only confront existing challenges, but also introduce groundbreaking methodologies. The scope includes, but is not limited to, the following:

- Advanced Sensing Technologies for Structural Health Monitoring
- Computational Methods in Structural Dynamics
- Non-Destructive Testing and Evaluation of Engineering Materials
- Health Monitoring of Composite Materials
- Structural Dynamics in Civil Engineering Applications
- Aerospace Structural Health Monitoring
- Machine Learning and Artificial Intelligence in Structural Dynamics
- Case Studies and Practical Applications

## Guest Editors

Dr. Yang Yu

Dr. Zhenghao Ding

Dr. Jie Wu

## Deadline for manuscript submissions

closed (20 July 2024)

Materials

an Open Access Journal by MDPI

Impact Factor 3.2
CiteScore 6.4
Indexed in PubMed

mdpi.com/si/193413

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

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

## 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)