



*materials*



an Open Access Journal by MDPI

## Study on Cyclic Mechanical Behaviors of Materials – 2nd Edition

Guest Editors:

**Prof. Dr. Halina Egner**

Mechanical Department, Cracow  
University of Technology,  
Kraków, Poland

**Prof. Dr. Stanisław Mroziński**

Faculty of Mechanical  
Engineering, UTP University of  
Science and Technology,  
Bydgoszcz, Poland

Deadline for manuscript  
submissions:  
**closed (10 October 2024)**

### Message from the Guest Editors

The increasing demand for high-performance construction materials evokes the development of adequate constitutive modelling, as well as the appropriate predictions of overall failure mechanisms under complex thermo-mechanical loads. Fatigue, resulting from cyclic loading, is one of the most common and important phenomenon encountered in mechanical structures for different industrial applications. A correct prediction of this phenomenon is usually closely related to safety in addition to economic aspects.

This Special Issue aims to present the latest achievements in the field of fatigue. We invite researchers to submit original research papers and review articles on the cyclic behaviours of various materials, including metals and geomaterials. Both experimental and theoretical studies related to different aspects of fatigue are warmly welcome.



[mdpi.com/si/147554](https://mdpi.com/si/147554)

# Special Issue



an Open Access Journal by MDPI

## 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

## 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.

## 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)

## Contact Us

Materials Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland

Tel: +41 61 683 77 34  
[www.mdpi.com](http://www.mdpi.com)

[mdpi.com/journal/materials](http://mdpi.com/journal/materials)  
[materials@mdpi.com](mailto:materials@mdpi.com)  
[X@Materials\\_Mdpi](https://twitter.com/Materials_Mdpi)