



metals



an Open Access Journal by MDPI

Mechanical Behavior of Nanoporous Metallic Materials

Guest Editor:

Dr. Jiejie Li

College of Mechanical and
Electrical Engineering, Central
South University, Changsha
410083, China

Deadline for manuscript
submissions:

closed (30 April 2024)

Message from the Guest Editor

Dear Colleagues,

Nanoporous metallic materials have emerged as a fascinating class of functional materials with diverse applications across various fields, including catalysis, energy storage, sensing, and biomedical engineering. The unique combination of high surface area, tunable pore size, and exceptional mechanical properties has spurred significant interest in understanding and manipulating their mechanical behavior. This Special Issue aims to showcase the latest advancements and discoveries in this rapidly evolving research area and to develop a set of structure–activity relationships between microstructure, mechanical properties, and deformation mechanisms through the exploration of the mechanical behavior of nanoporous metals, which is expected to provide important guidance for property prediction, structural orientation design, and functional optimization in practical applications.



mdpi.com/si/182818

Special Issue



an Open Access Journal by MDPI

Editors-in-Chief

Prof. Dr. Hugo F. Lopez

Department of Materials Science
and Engineering, College of
Engineering & Applied Science,
University of Wisconsin-
Milwaukee, 3200 N. Cramer
Street, Milwaukee, WI 53211, USA

Prof. Dr. Yong Zhang

Beijing Advanced Innovation
Center of Materials Genome
Engineering, State Key
Laboratory for Advanced Metals
and Materials, University of
Science and Technology Beijing,
30 Xueyuan Road, Beijing 100083,
China

Message from the Editorial Board

Metallic materials play a vital role in the economic life of modern societies; contributions are sought on fresh developments that enhance our understanding of the fundamental aspects related to the relationships between processing, properties and microstructure – disciplines in the metallurgical field ranging from processing, mechanical behavior, phase transitions and microstructural evolution, nanostructures, as well as unique metallic properties – inspire general and scholarly interest among the scientific community.

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)**, **Inspec**, **CAPLUS / SciFinder**, and **other databases**.

Journal Rank: JCR - Q2 (*Metallurgy & Metallurgical Engineering*) / CiteScore - Q1 (*Metals and Alloys*)

Contact Us

Metals Editorial Office
MDPI, St. Alban-Anlage 26
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/metals
metals@mdpi.com
[X@Metals_MDPI](https://x.com/Metals_MDPI)