Special Issue

Microstructure and Mechanical Properties Analysis of Metallic Structural Materials

Message from the Guest Editors

Metallic structural materials have wide applications in automobiles, high-speed air or ground transportation, clean energy, or more advanced space exploration techniques. Designing and developing metallic structural materials for today's modern society demands a comprehensive understanding of the complex relationships among processing, microstructures and mechanical properties. Modern research significantly engages in engineering microstructures in order to improve their mechanical properties. The strengthening of mechanisms that contribute to mechanical properties can originate from very different length scales in microstructural features. The articles presented in this Special Issue will focus on, but are not limited to, the following topics: metallic materials design, materials processing, advanced characterization techniques, mechanical properties, and strengthening and deformation mechanisms. We kindly invite you to submit a manuscript for publication in this Special Issue. Full papers, communications, and reviews are all welcome.

Guest Editors

Dr. Hao Lu

Key Laboratory of Advanced Functional Materials, Ministry of Education of China, College of Materials Science and Engineering, Beijing University of Technology, Beijing 100124, China

Dr. Minghe Zhang

College of Metallurgy and Energy, North China University of Science and Technology, Tangshan 0631200, China

Deadline for manuscript submissions

closed (20 April 2023)

Materials

an Open Access Journal by MDPI

Impact Factor 3.2
CiteScore 6.4
Indexed in PubMed

mdpi.com/si/125694

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

MDPI

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)