metals

an Open Access Journal by MDPI

IMPACT FACTOR 2.6

CITESCORE 4.9

Microstructure and Mechanical Property Relationships in Metallic Materials

Guest Editor:

Prof. Dr. Afsaneh Edrisy
Department of Mechanical, Automotive and Materials Engineering, University of Windsor, Windsor, ON N9A, Canada

Deadline for manuscript submissions:
closed (31 March 2024)

Message from the Guest Editor

Dear Colleagues,

The properties of metallic materials are influenced by their microstructures. The microstructure of metallic materials is described by grain size, types of phases present, and description of their structure, shape, and size distributions. The relation between fabrication and processing, microstructure and mechanical properties has been a topic of many studies. Clarification of the causes behind metal behavior under varying conditions and predicting the behavior of materials with certain structures can only be achieved through more in-depth knowledge of the metallic materials.

This Special Issue will include novel studies pertaining to the influences of processing technologies on the microstructural evolution; topics include but are not limited to conventional and new forms of fabrication techniques such as additive manufacturing and development of novel microstructures by means of thermomechanical treatments for required properties, as well as the analytical methods employed in elucidating the mechanical properties of metallic materials. Novel experimental and theoretical studies of the structure of the metallic material will also be considered.

metals

IMPACT FACTOR 2.6

CITESCORE 4.9

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 and Metallurgical Engineering*) / CiteScore - Q1 (Metals and Alloys)

Contact Us

Metals Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

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

mdpi.com/journal/metals
metals@mdpi.com
𝕏@Metals_MDPI