



an Open Access Journal by MDPI

Heat Treatment, Microstructure and Properties of Nonferrous Metals and Alloys

Guest Editors:

Dr. Aihan Feng

School of Materials Science and Engineering, Tongji University, Shanghai 201804, China

Dr. Zhenbo Zhang

Center for Adaptive System Engineering, ShanghaiTech University, Shanghai 201210, China

Prof. Dr. Hao Wang

School of Materials and Chemistry/Interdisciplinary Center for Additive Manufacturing, University of Shanghai for Science and Technology, Shanghai, China

Deadline for manuscript submissions:

closed (31 August 2023)

Message from the Guest Editors

Nonferrous metals and alloys are groups of high-performance materials with outstanding physical and mechanical properties, and they are widely used in the aerospace, automotive, marine, chemical and biomedical industrial sectors. The microstructure and properties of nonferrous alloys are mainly governed by their fabrication and thermomechanical processing routes, among which, heat treatment is known to be an imperative step in tailoring their microstructures and optimizing their properties. In this Special Issue, we will accept papers that cover both experimental and simulation work regarding heat treatment and the microstructures and properties of nonferrous alloys, including but not limited to Ti alloys, Al alloys, Mg alloys, Ni alloys, Zr alloys, Cu alloys, etc. We aim to collect a wide array of articles regarding the effect of heat treatment on microstructures and mechanical properties and the relationship between the microstructures and properties of these alloys processed via casting, forging, rolling, sintering and additive manufacturing.



mdpi.com/si/127470

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 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](https://twitter.com/Metals_MDPI)