



## Heat Treatment, Microstructure and Properties of Nonferrous Metals and Alloys

Guest Editors:

**Dr. Aihan Feng**

Department of Material Science  
and Engineering, Tongji  
University, Shanghai, China

**Dr. Zhenbo Zhang**

Center for Adaptive System  
Engineering, ShanghaiTech  
University, Shanghai, 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.





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, Ei Compendex, CAPus / 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](http://www.mdpi.com)

[mdpi.com/journal/metals](http://mdpi.com/journal/metals)  
[metals@mdpi.com](mailto:metals@mdpi.com)  
[X@Metals\\_MDPI](https://twitter.com/X@Metals_MDPI)