

## Special Issue

# Properties and Behavior Control of Metallic Materials at High Temperatures

### Message from the Guest Editor

The majority of metallic materials have a history of high temperature treatment. Either through liquid to solid transformation or high-temperature deformation, and this history controls the properties and behavior of these materials. This Special Issue aims to present the latest research related to advanced techniques for controlling the properties of metallic materials, by controlling the high-temperature treatment of them. Our aim is to have a collection of papers that talk about how we can enhance the properties of metallic alloys through controlling the casting, solidification, high-temperature deformation, and/or high-temperature treatment of metallic materials. Also, we are keen to look at the performance of metallic materials in high-temperature atmospheres, and how we can enhance this performance.

---

### Guest Editor

Dr. Farshid Pahlevani

Centre for Sustainable Materials Research & Technology, School of Materials Science and Engineering, UNSW Sydney, Sydney, Australia

---

### Deadline for manuscript submissions

closed (31 October 2020)



## Metals

---

an Open Access Journal  
by MDPI

---

Impact Factor 2.5  
CiteScore 5.3



[mdpi.com/si/32056](https://mdpi.com/si/32056)

*Metals*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[metals@mdpi.com](mailto:metals@mdpi.com)

[mdpi.com/journal/  
metals](https://mdpi.com/journal/metals)





# Metals

---

an Open Access Journal  
by MDPI

---

Impact Factor 2.5  
CiteScore 5.3



[mdpi.com/journal/  
metals](https://mdpi.com/journal/metals)



## About the Journal

### 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.

---

### 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

---

### Author Benefits

#### High Visibility:

indexed within Scopus, SCIE (Web of Science), Inspec, Ei Compendex, CAPlus / SciFinder, and other databases.

#### Journal Rank:

JCR - Q2 (Metallurgy and Metallurgical Engineering) /  
CiteScore - Q1 (Metals and Alloys)

#### Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 18 days after submission; acceptance to publication is undertaken in 2.6 days (median values for papers published in this journal in the first half of 2025).