

## Special Issue

# Research and Application of Lightweight Metals

### Message from the Guest Editor

Driven by global carbon neutrality policies, light metals, including magnesium, aluminum, and titanium, as well as their alloys and composite materials, have become crucial structural materials due to their high specific strength and lightweight properties. These materials are essential for reducing CO<sub>2</sub> emissions across various industries, including aerospace and automotive.

Extensive research on the manufacturing processes, microstructure, properties, and applications of these materials is of significant importance. This Special Issue aims to gather original research and review articles focusing on the manufacture, microstructure, properties, and applications of lightweight metals, their alloys, and composite materials. Manuscripts employing experimental or simulation methods are all welcome.

The goal is to explore innovative fabrication strategies, advanced characterization techniques, and real-world applications of these materials. Contributions that delve into the design, processing techniques, and performance optimization of lightweight metals, alloys, and composite materials are particularly encouraged.

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### Guest Editor

Dr. Bin Chen

School of Materials Science and Engineering, Shanghai Jiao Tong University, Shanghai 200240, China

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### Deadline for manuscript submissions

10 March 2026



## Metals

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*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/](https://mdpi.com/journal/)

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## 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.

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### 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

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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).