

Special Issue

Advancements in Metallic Materials for Industrial Applications and Developing Medical Implants

Message from the Guest Editor

This Special Issue will explore the latest research on how different classes of materials are obtained, characterized, and applied in fields ranging from industrial applications to biomedical implants with embedded real-time data sensors. We encourage submissions that focus on developing advanced metallic materials, including studies on their structural, microstructural, and mechanical properties; corrosion resistance; biocompatibility; and sensor integration. Contributions that address the challenges and opportunities associated with innovations in the field of metallic biomaterials, and their potential impacts on patient care and implant safety, are particularly welcome. Metallic biomaterials have become key elements in human well-being. Embedding real-time data sensors within both traditional and innovative materials opens new possibilities for the development of medical implants, allowing for the continuous monitoring of implant performance and patient health. The metallic materials used also play important roles in antenna performance, especially in dielectric resonator antennas, which very much depend upon the type of material and the geometry used.

Guest Editor

Prof. Dr. Ildiko Peter

Department of Industrial Engineering and Management, Faculty of Engineering and Information Technology, "George Emil Palade" University of Medicine, Pharmacy, Science and Technology of Târgu Mureș, 540139 Târgu Mureș, Romania

Deadline for manuscript submissions

25 January 2026



Metals

an Open Access Journal
by MDPI

Impact Factor 2.5
CiteScore 5.3



mdpi.com/si/227080

Metals

Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
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).