

Special Issue

Preparation, Properties, Computational Simulations of Precious and Rare Metal Materials and Their Compounds

Message from the Guest Editor

Although precious and rare metals are rare, they play an important role in modern industry, such as manufacturing special steel, super cemented carbide, and high-temperature-resistant alloy, and are indispensable in the electrical industry, chemical industry, ceramic industry, atomic energy industry, and rocket technology. Therefore, this Special Issue focuses on the development and application of new precious and rare metal alloys and devices. We invite articles related to the preparation, processing, and characterization of precious and rare metals and the computational simulation of precious and rare metal compounds, such as the development of titanium, refractory metals, precious metals, rare and scattered metals and rare earth metals; processing technology of rare metal materials; chemical analysis and mechanical and physical property test of rare metal materials. This is an excellent opportunity for precious and rare metal material scientists and engineers all over the world, who can publish their latest work in all aspects of precious and rare metal performance characterization and processing technology.

Guest Editor

Prof. Dr. Yonghua Duan

Faculty of Material Science and Engineering, Kunming University of Science and Technology, Kunming 650093, China

Deadline for manuscript submissions

closed (31 August 2022)



Metals

an Open Access Journal
by MDPI

Impact Factor 2.5
CiteScore 5.3



mdpi.com/si/99324

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).