



Progress of Computational Metal Science and Technology

Guest Editor:

Prof. Dr. Xing-Qiu Chen

Shenyang National Laboratory
for Materials Sciences, Institute of
Metal Research, Chinese
Academy of Sciences, Shenyang,
China

Deadline for manuscript
submissions:

closed (31 October 2021)

Message from the Guest Editor

The investigation of metals and alloys has been carried out for hundreds of years. However, there are still many problems that warrant further study and attention. Adopting advanced computational methods to reconsider and reinvestigate the traditional problems in metals and designing high-performance metallic alloys has always been the focus of academic attention. This Special Issue will focus on computational progresses related to the science and technology of metals and alloys. Topics of interest include but are not limited to multi-scale computational methods bridging from first-principle density functional theory to macroscopic finite element computation; machine learning and big data applications in metals and alloys; computational design of new types of metal and alloy; systematically computational simulation of the relationship among composition–structure–properties–service of metals and alloys, and metal processing and forming simulation. Special attention will also be paid to the research of metal structure–function integration, high-entropy alloys, high-performance structural material, new metallic functional materials, etc.





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, CAPlus / 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

mdpi.com/journal/metals
metals@mdpi.com
[X@Metals_MDPI](https://twitter.com/Metals_MDPI)