Special Issue

Simulation and Optimization Methods in Machining and Structure/Material Design

Message from the Guest Editors

Compared with crystalline alloys, metallic glass (amorphous alloys) exhibit unique mechanical and physical properties, and thus has great application prospects in many fields. This Special Issue calls for papers (i.e., research articles, reviews and perspectives) which deal with the preparation, characterization, machining and application of metallic glass. **Priority areas of interest are:**

- Traditional machining techniques in theoretical model and experiments, such as turning, milling, grinding and drilling of metallic glass;
- Unconventional techniques in theoretical model and experiments, such as electrical discharge machining, laser beam machining, ultrasonic and ultrasonicassisted machining, abrasive water jet machining and other advanced non-traditional methods for machining of metallic glass;
- Finite element and other numerical simulation methods in traditional and unconventional machining of metallic glass.

Papers on process-related topics such as modeling, simulation and experiments for metallic glass design, preparation technology and process optimization, as well as those on the relationship between structure, properties and applications, will also be considered.

Guest Editors

Prof. Dr. Wuyi Ming

Dr. Xiaoke Li

Prof. Dr. Wenbin He

Deadline for manuscript submissions

closed (10 April 2025)



Metals

an Open Access Journal by MDPI

Impact Factor 2.5 CiteScore 5.3



mdpi.com/si/127010

Metals
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
metals@mdpi.com

mdpi.com/journal/ metals





Metals

an Open Access Journal by MDPI

Impact Factor 2.5 CiteScore 5.3





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).