# **Special Issue**

# High Performance Machining of Difficult-to-Process Metals

# Message from the Guest Editors

Mechanical machining or cutting, as a subtractive manufacturing operation, is one of the most widely used manufacturing processes. High-performance machining has attracted more and more attention in recent years as it can evaluate the machining process comprehensively. With the rapid development of advanced engineering materials, such as high-strength alloys and ceramic matrix composites, these have caused new challenges in the field of machining due to their difficult-to-process attributes. The scope of this Special Issue embraces original research and review articles in the field of high-performance machining of difficult-to-process materials. Manuscripts will be welcomed that aim to understand the machinability of different materials, modelling and simulation of material removal behavior, exploring the machined surface integrity and functionality, advancing the machining process and cutting tools, and mapping the relationships of "material property-machining processsurface quality and performance".

## **Guest Editors**

Prof. Dr. Zhanqiang Liu

Prof. Dr. Qinghua Song

Prof. Dr. Bing Wang

Prof. Dr. Yukui Cai.

## Deadline for manuscript submissions

closed (15 September 2024)



# **Metals**

an Open Access Journal by MDPI

Impact Factor 2.5 CiteScore 5.3



mdpi.com/si/159497

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 Editor-in-Chief

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.

#### Editor-in-Chief

## 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).

