



*metals*



an Open Access Journal by MDPI

## Innovative Mechanical Processing Technology of Metals

Guest Editors:

**Prof. Dr. Quang-Cherng Hsu**

Department of Mechanical Engineering, National Kaohsiung University of Science and Technology, Kaohsiung 80778, Taiwan

**Prof. Dr. Kunio Hayakawa**

Department of Mechanical Engineering, Graduate School of Integrated Science and Technology, Shizuoka University, Shizuoka 422-8017, Japan

Deadline for manuscript submissions:

**closed (31 March 2023)**

### Message from the Guest Editors

Dear Colleagues,

The mechanical processing of metal materials is an essential manufacturing process that affects the performance of materials. The technology for processing metal materials is undergoing a profound transformation driven by digitalization. The development and introduction of innovative technologies can optimize processing methods to produce products with enhanced performance and higher quality so as to meet the requirements of the industry. This Special Issue aims to present the latest research on the innovative processing of metal materials. The Special Issue includes—but is not limited to—the following topics:

- Innovative metal processing technologies;
- Innovative metal forming, including forging, rolling, extrusion, sheet-metal forming, etc.;
- Innovative metal cutting, including turning, milling, broaching, grinding, etc.;
- Innovative metallic product design, process analysis, and experiments;
- Novel design methods and the optimization of processing technology;
- Industry 4.0, IoT, and 5G-related applications on metals.



[mdpi.com/si/90160](https://mdpi.com/si/90160)

# Special Issue



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, Ei Compendex, CAPus / 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](http://www.mdpi.com)

[mdpi.com/journal/metals](http://mdpi.com/journal/metals)  
[metals@mdpi.com](mailto:metals@mdpi.com)  
[X@Metals\\_MDPI](https://twitter.com/X@Metals_MDPI)