# Special Issue

# Electromagnetic Processing of Metals

# Message from the Guest Editor

The application of microwave energy to metallurgy can be traced back to the early 1960s, when a patent for microwave treatment of iron ores was granted. Since then, microwave processing of mineral ores, but also of metals, has been growing constantly, expecially during the last decade. This Special Issue will cover fundamental studies of microwave-metals interaction, as well as applications of microwaves to metallurgy (extractive metallurgy, preliminary operations, melting, sintering, metal powders production, thermochemical treatments,...) and emerging fields, like processing of intermetallics, high entropy alloys, metallic glasses and metal nanoparticles. Papers addressing dedicated equipment for microwave assisted metallurgy and environmethal aspects of microwave metallurgy are welcome as well. This special issue will be an update on the latest developments of the field, inlouding the current understanding of microwave-metal interactions.

#### **Guest Editor**

Assoc. Prof. Dr. Paolo Veronesi

Universita degli Studi di Modena e Reggio Emilia, Department of Engineering 'Enzo Ferrari', Modena, Italy

## Deadline for manuscript submissions

closed (31 January 2022)



# **Metals**

an Open Access Journal by MDPI

Impact Factor 2.5 CiteScore 5.3



mdpi.com/si/18614

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).