

## Special Issue

# Advances in Electromagnetic Processing of Metallic Materials

### Message from the Guest Editor

We would like to invite you to provide submissions for publication in this Special Issue on the effect of external electromagnetic fields on the behaviour of metals and alloys. During recent years, there has been increasing interest in developing processes based on high external electric or magnetic fields to attain improved properties in metals and alloys. Much of this research has focused on the application of electromagnetic fields to materials in the solid state. Preference has been given to the use of pulsed fields as they can minimize energy consumption as well as treatment time. This Special Issue aims to present the latest research concerning the use of external electric and magnetic fields in materials processing. Papers should aim to introduce new knowledge which can allow for progression in this important research topic for both the scientific and technical communities.

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### Guest Editor

Prof. Dr. Andreas Chrysanthou

School of Physics, Engineering and Computer Science, University of Hertfordshire, College Lane, Herts, Hatfield AL10 9AB, UK

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### Deadline for manuscript submissions

closed (31 December 2024)



## Metals

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*Metals*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[metals@mdpi.com](mailto:metals@mdpi.com)

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## 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.

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### 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

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#### 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).