

## Special Issue

# Laser Processing and Additive Manufacturing of Metallic Materials

### Message from the Guest Editors

Laser processing and additive manufacturing are revolutionary techniques for the advanced manufacturing of a broad range of materials, especially metallic materials used in structural applications. This Special Issue aims to provide a platform for appreciating state-of-the-art advances, inspiring and promoting the new development and applications of laser processing and the additive manufacturing of metallic materials. Topics include but are not limited to the following areas:

- Laser welding;
- Laser cladding;
- Laser cutting;
- Laser-arc hybrid welding and additive manufacturing;
- Laser-based additive manufacturing;
- Wire arc additive manufacturing (WAAM);
- Electron beam-based additive manufacturing;
- Modelling and simulation of laser processing and additive manufacturing;
- AI and machine learning for laser processing and additive manufacturing;
- Monitoring and control of laser processing and additive manufacturing;
- Quality inspection of laser processing and additive manufacturing;
- Micro and nano laser welding and additive manufacturing.

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### Guest Editors

Dr. Xin Chen

Dr. Tao Zhang

Dr. Yongle Sun

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### Deadline for manuscript submissions

closed (29 February 2024)



## Metals

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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

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#### High Visibility:

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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).