

## Special Issue

# Feature Papers in Welding & Joining

### Message from the Guest Editor

Welding is a technique dating from the pre-historic times, but the modern science and technology of welding and joining have seen a phenomenal growth in recent decades. The recent development of new lasers such as blue lasers and ultrafast lasers has made it possible to carry out laser welding of copper and glass. In the past decade, artificial intelligence and digital twins have been increasingly used for drastic improvements in welding automation and quality. The aim of this Special Issue is to publish high-impact papers featuring the latest technological development in welding and joining. Papers offering perspectives are also welcome. The authors must be well-recognized leading researchers in the subject areas of their papers. Topics of interest include but are not limited to:

- Applications of artificial intelligence to welding;
- Big data analytics of welding research trend;
- Brazing and soldering;
- Cold spray;
- Digital twins;
- Dissimilar metal joining;
- Friction stir welding;
- Laser welding or cladding;
- Micro- and nano-joining;
- Numerical modelling and simulation;
- Wire arc additive manufacturing

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### Guest Editor

Prof. Dr. Wei Zhou

School of Mechanical & Aerospace Engineering, Nanyang Technological University, 50 Nanyang Avenue, Singapore 639798, Singapore

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### Deadline for manuscript submissions

closed (30 September 2023)



## 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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Department of Materials Science and Engineering, College of Engineering & Applied Science, University of Wisconsin-Milwaukee, 3200 N. Cramer Street, Milwaukee, WI 53211, USA

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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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#### 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).