



metals



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Advanced Welding Technology in Metals III

Guest Editors:

Prof. Dr. João Pedro Oliveira

CENIMAT/13N, Department of
Materials Science, NOVA School
of Science and Technology,
Universidade NOVA de Lisboa,
2829-516 Caparica, Portugal

Prof. Dr. Zhi Zeng

School of Mechanical and
Electrical Engineering, University
of Electronic Science and
Technology of China, No.2006,
Xiyuan Ave, West Hi-Tech Zone,
Chengdu, China

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Message from the Guest Editors

Welding and joining technologies are fundamental in advanced engineering alloys to expand their applications. At present, we often observe significant developments in the areas of welding and joining, with more complex and sophisticated variants available. Another key area of interest is related to welding metallurgy: The microstructural changes induced by welding and joining techniques can drastically modify the joints' mechanical behavior. For that reason, it is necessary to correlate process parameters, microstructure, and mechanical response in welded joints. Finally, simulation and modelling of the thermomechanical behavior during welding and the predictions of existing phases due to the weld thermal cycle are critical to optimize welding parameters.

For this Special Issue, we invite our colleagues to submit papers in the areas of welding and joining. The topics of interest include but are not limited to similar and dissimilar joining, fusion and solid-state processes, modeling and simulation, process development, and advanced characterization. Review papers and short communications are also of interest to this Special Issue.



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Special Issue



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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

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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Contact Us

Metals Editorial Office
MDPI, St. Alban-Anlage 26
4052 Basel, Switzerland

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