Special Issue

Welding: State-of-the-Art 2021

Message from the Guest Editors

Although competitor manufacturing processes are increasing, welding remains a solid manufacturing technique, able to join similar and dissimilar materials, from small-scale to huge structures. The development of new materials encourages new studies about their ability to be joined by welding, stimulating continuous research in this field. Moreover, new joining processes are always being developed to respond to market demand, fostering new research development and excellent outcomes. This Special Issue intends to collect high-quality, high-level research studies about the most recent developments in this field, such as research into the weldability of new materials. characterization of weldments in new or already-existing materials and alloys, heat treatment characterization applied to weldments, research on solid-state weldments, simulation regarding welding processes, destructive and non-destructive testing, heat input effects, and everything that is related to welding processes.

Guest Editors

Dr. Francisco J. G. Silva

Department of Mechanical Engineering, ISEP–School of Engineering, Polytechnic of Porto, 4200-072 Porto, Portugal

Prof. Dr. António Bastos Pereira

Centre for Mechanical Technology and Automation, University of Aveiro, Campus Santiago, 3810-193 Aveiro, Portugal

Deadline for manuscript submissions

closed (28 February 2022)



Metals

an Open Access Journal by MDPI

Impact Factor 2.5 CiteScore 5.3



mdpi.com/si/77349

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).