Special Issue

Laser Welding Innovations

Message from the Guest Editor

Papers focusing of investigation, development, and innovations related to laser beam welding (LBW) and also its hybridization processes, such as LAHW, will be very welcome to this Special Issue of *Metals*. Studies dealing with LBW/LAHW of metallic alloys (aluminum, titanium, magnesium, carbon steel, stainless steel, superalloys, etc.) with industrial applications in sectors such as naval, automotive, and aeronautical will be covered. Both experimental studies and simulations covering the relationship between laser processing parameters, microstructure, and properties (hardness, strength, corrosion resistance, etc.) will be covered in this issue. In addition, innovative laser welding methods and/or equipment will be welcomed. New approaches providing solutions to actual challenges of this technology are especially interesting in this Special Issue. Comparative studies of LBW with other conventional welding technologies (in terms of process velocity, reproducibility, quality, weld microstructure and properties, and impact on productivity) are highly encouraged for submission.

Guest Editor

Prof. Dr. Jose Maria Sánchez-Amaya

Universidad de Cadiz, Departamento de Ciencia de los Materiales e Ingenieria Metalúrgica y Química Inorgánica, Cadiz, Spain

Deadline for manuscript submissions

closed (31 July 2021)



Metals

an Open Access Journal by MDPI

Impact Factor 2.5 CiteScore 5.3



mdpi.com/si/31332

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).