



metals



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Laser Welding Innovations

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Deadline for manuscript
submissions:

closed (31 July 2021)

Message from the Guest Editor

Dear Colleagues,

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.



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Special Issue



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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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