Special Issue

Advances in Laser Materials Processing

Message from the Guest Editors

Laser processing becomes more relevant today due to its fast adaptation to the most critical technological tasks, ability to provide processing in the most rarefied and aggressive mediums (vacuum conditions), wide field of potential applications, and green aspects related to the absence of industrial cutting chips and dust. With the development of 3D technologies of production, laser processing has received a new round of interest associated with its ability of pointed high-precision powder melting or sintering. New technologies and equipment, which improve and modify laser optic parameters, contribute to better absorption of laser energy by metals or powder surface and allow an increase of laser power up to a few kilowatts. That can positively influence the industrial spread of the laser in mass production and advance the existing manufacturing methods. Advances in laser processing have received multiple awards in the most prestigious competitions and exhibitions worldwide and at international scientific events. The Special Issue is devoted to the most recent achievements in the field of laser processing of metals and innovative manufacturing methods based on laser.

Guest Editors

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Deadline for manuscript submissions

closed (31 December 2021)



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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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