Special Issue

Evaluation of Advanced Metallic Materials Processed Using Laser-Based Additive Manufacturing

Message from the Guest Editors

Laser-based AM is a rebellious technique for fabricating a broad spectrum of materials, predominantly metallic materials used in end-use applications under industrial environments. Indeed, further research must be conducted to understand process physics better, optimise processes, and develop novel applications. Thus, this Special Issue strives to offer a forum for valuing state-of-the-art advances, encouraging and enabling the new development and applications of laser-based additive manufacturing of advanced metallic materials, including the characterisation and evaluation. Both original and review research papers are welcomed by scientists, researchers, engineers and all experts in this field. Topics include but are not limited to the following areas:

- Laser powder bed fusion AM;
- The laser-based direct energy deposition technique;
- Laser-based hybrid AM;
- Modelling and simulation of laser-based additive manufacturing.

Guest Editors

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Deadline for manuscript submissions

closed (31 January 2024)



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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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