Special Issue

Laser Additive Manufacturing of Alloys

Message from the Guest Editors

Laser Additive Manufacturing (LAM) of alloys represents a transformative advancement in the field of manufacturing. This innovative technology offers unparalleled precision in material deposition, enabling the creation of complex geometries and customized alloy properties. The significance of LAM lies in its potential to revolutionize industries by enhancing the performance and capabilities of manufactured components. By providing fine control over microstructure and properties, LAM is poised to address critical challenges in aerospace, automotive, biomedical, and other high-performance sectors.

This Special Issue seeks to explore the intersection of materials' development, process optimization, microstructural characterization, and mechanical performance within the context of LAM. By focusing on these key areas, this Special Issue will highlight the latest innovations, practical applications, and future directions in LAM, contributing to the broader field of advanced manufacturing technologies.

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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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