Special Issue

Additive Manufacturing in Alloy Design and Development

Message from the Guest Editors

Over recent years, additive manufacturing (AM) has proved to be the most promising emerging manufacturing technique for fabricating metallic materials due to its ability to fabricate components with high dimensional accuracy and complexity. While the development of new processes and materials is progressing very rapidly, and AM has been used in several industrial sectors such as aerospace, automobile, marine, construction, etc., design strategies for AM and structural optimization are lagging behind. In order to fully utilize the advantages of AM and optimize the development of this technology, several new considerations should be taken into account. This Special Issue entitled “Additive Manufacturing in Alloy Design and Development” provides a forum for publishing original papers and case studies that advance the comprehensive development of metal AM, comprising design, process, post-processing and testing. It also outlines the fundamental development trends and most recent advances in the field.

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Message from the Editor-in-Chief

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.

Editor-in-Chief

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