



Additive Manufacturing of Ferrous Materials

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Message from the Guest Editors

Dear Colleagues,

Laser additive manufacturing (AM) is acknowledged as being a resource-efficient sustainable technology, providing the manufacturing of objects of complex shapes, containing internal channels and cavities, with less wastage of materials and shorter lead times. Ferrous materials are well-known structural, tool, automotive, and civil materials. In general, steels and cast irons are cheaper than nonferrous alloys, are widely used and cover very broad range of properties and applications.

This Special Issue is dedicated to all aspects of additive manufacturing of ferrous materials to show recent advances in this field. Original contributions related to development of process parameters, manufacturing strategies, development of new steel grades for AM, formation of microstructure, characterization of defects, microstructure-properties relationship in AM manufactured ferrous alloys are welcome in a form of short communications, full-length articles, and reviews.

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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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