metals

an Open Access Journal by MDPI

IMPACT FACTOR 2.6

CITESCORE 4.9

Additive Manufacturing of Ferrous Materials

Guest Editors:

Prof. Dr. Pavel Krakhmalev
Department of Engineering and Physics, Karlstad University, SE-651 88 Karlstad, Sweden

Prof. Igor Yadroitsev
Department of Mechanical and Mechatronic Engineering, Bloemfontein, Central University of Technology, Free State 9300, South Africa

Deadline for manuscript submissions:
closed (31 July 2018)

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.

Prof. Dr. Pavel Krakhmalev
Prof. Dr. Igor Yadroitsev
Guest Editors

metals

IMPACT FACTOR 2.6

CITESCORE 4.9

an Open Access Journal by MDPI

Editors-in-Chief

Prof. Dr. Hugo F. Lopez
Department of Materials Science and Engineering, College of Engineering & Applied Science, University of Wisconsin-Milwaukee, 3200 N. Cramer Street, Milwaukee, WI 53211, USA

Prof. Dr. Yong Zhang
Beijing Advanced Innovation Center of Materials Genome Engineering, State Key Laboratory for Advanced Metals and Materials, University of Science and Technology Beijing, 30 Xueyuan Road, Beijing 100083, China

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.

Author Benefits

Open Access: free for readers, with article processing charges (APC) paid by authors or their institutions.
High Visibility: indexed within Scopus, SCIE (Web of Science), Inspec, CAPlus / SciFinder, and other databases.
Journal Rank: JCR - Q2 (*Metallurgy and Metallurgical Engineering*) / CiteScore - Q1 (Metals and Alloys)

Contact Us

Metals Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/metals
metals@mdpi.com
𝕏@Metals_MDPI