Special Issue

Advances in Ironmaking and Steelmaking Processes (2nd Edition)

Message from the Guest Editor

Ironmaking and steelmaking involve various processes and technologies that can be operated and organized in different combinations depending on the charging materials' properties and the final required products. The Special Issue will describe the main approaches to produce and synthesize iron and steel through hydrogen-based technologies. Depending on the processing route and on the energy demand, the best available techniques and the futuristic solutions will be described. The issue will be edited with contributions belonging to universities and industries in order to evaluate the industrial feasibility of each selected technology. It is planned to describe the most efficient solutions applied by ironmaking and steelmaking factories all around the world.

The potential contributions will include the following main issues:

Traditional ironmaking and steel making routes;
Direct reduction of iron ores;
Hydrogen ironmaking.

Guest Editor

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Deadline for manuscript submissions

closed (31 March 2025)

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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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Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 18 days after submission; acceptance to publication is undertaken in 2.6 days (median values for papers published in this journal in the first half of 2025).

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