Special Issue

Low-Carbon Metallurgy Technology towards Carbon Neutrality

Message from the Guest Editors

Carbon neutrality is mankind's initiative and common pursuit in the face of the climate change crisis. The iron and steel industry, as a global carbon dioxide emitter, is an important field of global carbon dioxide reduction, with a variety of low-carbon metallurgical technologies recently constantly being developed. Generally, the carbon dioxide reduction in the steel industry can be carried out with zero-carbon fuel utilization, improving the operation efficiency and ending treatment, such as the utilization of biomass and hydrogen in ironmaking, the utilization of recycled organic solid waste in ironmaking, the advanced operation technology of blast furnace ironmaking, the preparation and utilization of ferro-coke and bio-coke, new ironmaking processes, CCUS technology in steel plants, etc. This Special Issue of *Metals* focuses on low-carbon metallurgy technology towards carbon neutrality, seeking papers presenting an account of the recently scientific and technological state of the art of low-carbon innovations. Contributions to this Special Issue are highly valuable and appreciated.

Guest Editors

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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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