Special Issue

Modeling and Simulation of Metallurgical Process

Message from the Guest Editors

Metallurgy involves the art and science of extracting metals from their ores and modifying the metals for use. With thousands of years of development, many interdisciplinary technologies have been introduced into this traditional and large-scale industry. In modern metallurgical practices, modelling and simulation have been widely used to provide solutions for design, control, optimization, and visualization, and tend to be increasingly significant in the progress of digital transformation and intelligent metallurgy. In this Special Issue, both fundamental insights and practical foresights are greatly welcome in the form of research article or review. Research areas may include (but are not limited to) the following: thermodynamics, kinetics, physical modelling, numerical simulation, computational fluid dynamics, molecular simulation, 3D visualization, artificial intelligence, big data, and cloud computation. We look forward to receiving your contributions.

Guest Editors

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Deadline for manuscript submissions

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About the Journal

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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