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

Prof. Dr. Hongliang Zhang

National Engineering Research Center of Low-Carbon Nonferrous Metallurgy, Central South University, Changsha, 410083, China

Prof. Dr. Hesong Li

School of Energy science and Engineering, Central South University, Changsha 410083, China

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Metals
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
metals@mdpi.com

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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.

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

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