Special Issue

Metallurgical Process Simulation and Optimization

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. This Special Issue aims to provide an opportunity for researchers from both academia and industry to share their advances pertinent to the Special Issue "Metallurgical Process Simulation and Optimization," which covers the process of electric/oxygen steelmaking, secondary metallurgy, (continuous) casting, and processing. Both fundamental insights and practical foresights are greatly welcome in the form of research article or review, such as thermodynamics, kinetics, physical modelling, numerical simulation, CFD, 3D visualization, microstructural evolution, quality control, artificial intelligence, big data, and cloud computation.

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Message from the Editor-in-Chief

Materials (ISSN 1996-1944) was launched in 2008. The journal covers twenty-five comprehensive topics: biomaterials, energy materials, advanced composites, advanced materials characterization, porous materials, manufacturing processes and systems, advanced nanomaterials and nanotechnology, smart materials, thin films and interfaces, catalytic materials, carbon materials, materials chemistry, materials physics, optics and photonics, corrosion, construction and building materials, materials simulation and design, electronic materials, advanced and functional ceramics and glasses, metals and alloys, soft matter, polymeric materials, quantum materials, mechanics of materials, green materials, general. *Materials* provides a unique opportunity to contribute high quality articles and to take advantage of its large readership.

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