Special Issue

Electromagnetic Metallurgy: Metallurgical Process, Materials Processing and Resource Utilization

Message from the Guest Editors

In recent years, with the increasing awareness of low-carbon and environmental protection, electromagnetic metallurgy technology has garnered growing attention and emphasis in the metallurgy and materials preparation fields due to its advantages such as high efficiency, environmental friendliness, and excellent controllability. It exhibits the following development trends: (1) Automation and process advancement in the field of steel metallurgy. (2) Continuous expansion of its applications in various areas, including the entire process of steel continuous casting, non-ferrous metal smelting and casting, and the preparation of non-metallic and new materials. (3) The emergence of new technologies such as suspension metallurgy, strong magnetic fields, and static magnetic fields. The metallurgical and materials preparation process involves the coupling of multiple physical fields, including energy transfer and conversion, momentum and mass transfer, and structural evolution.

Guest Editors

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Deadline for manuscript submissions

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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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