Special Issue

Microstructure and Mechanical Properties of Steels

Message from the Guest Editor

Steel is one of the most popular materials in the world. This alloy of iron and carbon has gone a long way in the past few centuries offering gradually better and better mechanical properties. New chemical composition strategies and new technologies of casting, metal forming and heat treatment allow us to obtain modern steel products, which satisfy the needs of the present industry. Steel is used in every part of the industry, beginning from low-carbon sheet steels for automotive applications, through structural steels for bridges, buildings, linepipes, ships, pressure vessels, etc., to engineering steels, stainless steels, specialty steels, and tool steels. This Special Issue aims at covering recent progress and new developments in relationships between the microstructure and mechanical properties of conventional and modern steel products. All aspects related to steel production, heat treatment, thermomechanical processing, physical and numerical simulation and structural characterization are covered. Review articles which describe the current state of the art are also welcomed.

Guest Editor

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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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