Special Issue

Structural Phenomena in Modern Metallic Materials

Message from the Guest Editor

Dear Colleagues and Researchers,

The ever-increasing requirements of industry and commerce on the performance and longevity of components produced from metallic materials have encouraged the research and development of innovative engineering materials based on iron/steel, and other nonferrous metals. The properties of modern materials and alloys ensue from their structures, which can primarily be affected by their chemical composition and the distribution of the individual elements/phases, as well as by applied preparation/production technologies.

A favourable way to effectively enhance the properties of metallic materials is grain refinement. However, other structural phenomena, such as substructure development, volumes and types of grains boundaries, texture formation, as well as the possible occurrence of residual stress and mutual diffusion of the individual phases non-negligibly affect the final mechanical and utility properties, too.

It is my pleasure to invite you to submit your scientific manuscripts to the presented Special Issue. Full papers, communications, and reviews are all welcome.

Guest Editor

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Deadline for manuscript submissions

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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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