Special Issue

Heat Treatment of Metallic Materials in Modern Industry

Message from the Guest Editors

Metals are the most widely used materials in various branches of the modern industry. For proper functionality of components made of metallic materials, the components must be subjected to different heat, thermochemical or surface treatments. For these purposes, a variety of equipment, such as industrial furnaces, laser generators, electron beam, physical vapor deposition devices, 3D printers, and others, are used. Thermal or thermochemical treatments evoke changes in bulk or superficial microstructures of metals and thereby modify their properties. Changes in both the microstructures and properties of metallic materials should be carefully controlled. Different techniques and devices such as light, electron, or confocal microscopes, hardness testers, and machines for wear and mechanical properties testing are utilized in order to evaluate these alterations.

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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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