Special Issue

Heat Treatment of Metallic Materials in Modern Industry—Volume II

Message from the Guest Editors

Steels, cast irons and non-ferrous metals are nowadays widely used in various industrial branches for manufacturing of components or tools. The tools or components must be subjected to different heat, thermo-chemical or surface treatments before being operated. These treatments either convert the initial annealed microstructures to hard martensitic or bainitic ones, or assist to form hard and wear resistant surface layers that protect the materials against various environmental attacks. A variety of techniques are used to generate these modifications such as hardening and tempering procedures, carburizing, nitriding, boriding or selective laser or electron beam thermal treatments. This Special Issue is devoted to the studies related (but not strictly limited) to the effects of different thermal or superficial treatments on microstructure, mechanical properties, wear performance and other important characteristics of iron-based and non-ferrous metals used in the today's industry.

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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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