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Heat Treatment of Metallic Materials in Modern Industry—Volume II

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Message from the Guest Editors

Dear Colleagues,

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, thermochemical 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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Special Issue



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Message from the Editor-in-Chief

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