Special Issue

Developments of Steels and Alloys for Structural and Functional Applications

Message from the Guest Editors

Steel and its alloys form the largest group of engineering materials. Their desirable mechanical and physical properties are their principal attributes. Modern construction must meet the function for which it has been made and be safe and cost-effective to maintain. To accomplish the above, a structure's design should seek the best possible solution. Such a design is usually based on the optimal material mechanical, physical, and chemical parameters. In order to select the optimal material for the manufacture of structural elements, it is necessary to have data on the behavior of the material in different conditions. This Special Issue will focus on experimental research and analysis of steel, and in particular, the topics will touch on not only experimental findings, but also microstructural and mechanical investigations, surface properties, numerical approaches, and analytical models for mechanical behavior.

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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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