Special Issue

Mechanics, Fatigue and Fracture of Metallic Materials

Message from the Guest Editor

Curiosity is the feature of humankind that pushes us to new unknown places; it causes a desire to learn unknown things. To meet these requirements and be able to break the limits, engineers and scientists design devices and machines to facilitate the conducting of research. Knowledge of materials, in particular fatigue and fracture mechanism, is necessary, and can be obtained from experiments. One of the main goals of materials research is to understand the nature of the behavior of materials subjected to various types of loads. Understanding the phenomena of failure allows scientists to improve mechanical properties using new manufacturing technologies, or by inventing new materials that meet the desired requirements. One of the broadest class of structural materials is the metallic materials group. These materials are of great interest to science, especially because of their applications, and permanently expands the spectrum of scientific research into the processes of fatigue failure mechanisms. The Special Issue is devoted to the development of experimental and theoretical methods of evaluation and description behavior of metallic materials subjected to fatigue loads.

Guest Editor

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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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