Special Issue

Advanced High-Performance Metals and Alloys: Microstructural Evolution, Mechanical Properties, and Strengthening Mechanisms

Message from the Guest Editors

Advanced high-performance metals and alloys are essential in various engineering applications due to their outstanding mechanical properties and versatility. The microstructural evolution in these materials significantly influences their performance characteristics, making it vital to study these phenomena for the development of new alloys and the enhancement of existing ones. We are pleased to invite you to contribute to this important field of research. Our goal is to gather at least 10 articles, with the potential for the Special Issue to be printed in book form if this target is met. In this Special Issue, we welcome original research articles and comprehensive reviews. Research areas may include (but are not limited to) the following: - Microstructural characterization techniques; - Mechanical testing and property evaluation; - Strengthening mechanisms in metals and alloys; - Theoretical and computational modeling of microstructural changes; - Correlation between processing, microstructure, and performance. We look forward to receiving your contributions.

Guest Editors

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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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