Special Issue

Development and Construction of High-Performance and High-Quality Metal Materials for Abnormal Environmental Service

Message from the Guest Editors

In this Special Issue, we will address the problem of the preparation, characterization, and operational service or practical applications of high-performance and high-quality metal materials for abnormal environmental service, including alloy design, preparation, synthesis, characterization, processing, performance, service applications of metal materials. Papers may explore a range of aspects of metal materials including (i) laboratory preparation, self-assembly behavior and their applications; (ii) different service applications; and (iii) new mechanisms, intriguing properties, and promising applications in abnormal environments. Our goal is to identify approaches to improve the performance of metal materials and facilitate their applications in this topic. By exploring the particularities of metal material applications in abnormal environments, the limitations and constraints of metal materials in responding to abnormal environmental challenges can be solved, the influence of various environmental factors on the performance of metal materials can be clarified, and performance changes in various environments can be elucidated.

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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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