



an Open Access Journal by MDPI

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

Guest Editors:

Prof. Dr. Mingchun Zhao

School of Materials Science and Engineering, Central South University, Changsha, China

Dr. Ying-Chao Zhao

School of Mechanical Engineering, University of South China, Hengyang, China.

Deadline for manuscript submissions: 20 June 2024

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 highquality metal materials for abnormal environmental service, including alloy design, preparation, synthesis, processing, performance, characterization. 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



mdpi.com/si/188293







an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Maryam Tabrizian

 Department of Biomedical Engineering, Faculty of Medicine and Health Sciences, McGill University, Montreal, QC H3A 2B6, Canada
Faculty of Dentistry and Oral Health Sciences, McGill University, 3640 Rue University, Montreal, QC H3A 0C7, Canada

Message from the Editor-in-Chief

Materials (ISSN 1996-1944) was launched in 2008. The iournal covers twenty-five comprehensive topics: biomaterials, energy materials, advanced composites. advanced materials characterization, porous materials, manufacturing processes and svstems. 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.

Author Benefits

Open Access: free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility: indexed within Scopus, SCIE (Web of Science), PubMed, PMC, Ei Compendex, CaPlus / SciFinder, Inspec, Astrophysics Data System, and other databases.

Journal Rank: JCR - Q2 (*Metallurgy & Metallurgical Engineering*) / CiteScore - Q2 (*Condensed Matter Physics*)

Contact Us

Materials Editorial Office MDPI, St. Alban-Anlage 66 4052 Basel, Switzerland Tel: +41 61 683 77 34 www.mdpi.com mdpi.com/journal/materials materials@mdpi.com X@Materials_Mdpi