





an Open Access Journal by MDPI

Environmental Degradation of Multi-Principal-Element Alloys: Aspects of Corrosion and High-Temperature Oxidation

Guest Editor:

Prof. Dr. Carlos Alberto Della Rovere

Department of Materials Engineering (DEMa), Federal University of Sao Carlos (UFSCar), Rodovia Washington Luís, km 235, São Carlos 13565-905, SP, Brazil

Deadline for manuscript submissions:

closed (28 February 2023)

Message from the Guest Editor

Dear Colleagues,

Multi-principal-element alloys (MPEA) and high-entropy alloys (HEA) have attracted the attention of the metallurgy community because of the distinct and innovative concept on which their preparation is based. This concept involves the combination of several main elements in substantial concentrations, potentially resulting in metals with properties superior to those of traditional alloys. This Special Issue calls for high-quality papers, reports, and review articles on all aspects of corrosion and high-temperature oxidation behavior of MPEA in harsh environments, including but not limited to areas such as polarization behavior, passivity, selective leaching, corrosion mechanisms, testing, and protection, stress corrosion cracking as well as oxidation kinetics, selective and pest oxidation, scale formation, and coatings.











an Open Access Journal by MDPI

Editors-in-Chief

Prof. Dr. Hugo F. Lopez

Department of Materials Science and Engineering, College of Engineering & Applied Science, University of Wisconsin-Milwaukee, 3200 N. Cramer Street, Milwaukee, WI 53211, USA

Prof. Dr. Yong Zhang

Beijing Advanced Innovation Center of Materials Genome Engineering, State Key Laboratory for Advanced Metals and Materials, University of Science and Technology Beijing, 30 Xueyuan Road, Beijing 100083, China

Message from the Editorial Board

Metallic materials play a vital role in the economic life of modern societies; contributions are sought on fresh developments that enhance our understanding of the fundamental aspects related to the relationships between processing, properties and microstructure - disciplines in metallurgical field the ranging from processing. mechanical behavior. phase transitions and microstructural evolution, nanostructures, as well as unique metallic properties – inspire general and scholarly interest among the scientific community.

Author Benefits

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

High Visibility: indexed within Scopus, SCIE (Web of Science),

Inspec, CAPlus / SciFinder, and other databases.

Journal Rank: JCR - Q2 (Metallurgy & Metallurgical Engineering) / CiteScore - Q1 (Metals

and Alloys)

Contact Us

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