Special Issue

High-Temperature Corrosion and Oxidation of Metallic Materials

Message from the Guest Editor

As we delve into the realm of advanced materials science, the study of High-Temperature Corrosion and Oxidation of Metallic Materials emerges as a critical area of focus. This Special Issue is dedicated to exploring the resilience and performance of metallic materials when subjected to high-temperature environments, which are prevalent in various industries such as aerospace, automotive, and energy production. The challenge of high-temperature corrosion and oxidation is multifaceted, involving the chemical degradation of materials due to exposure to extreme heat, oxygen, and other corrosive agents. The integrity and longevity of metallic components are significantly affected by these processes, which can lead to material failure if not properly managed. We welcome submissions that provide novel perspectives, experimental data, theoretical analyses, and practical solutions that can contribute to the development of more durable and reliable metallic materials for high-temperature applications. Join us in this exploration of material science, where every discovery brings us closer to overcoming the challenges posed by high-temperature environments.

Guest Editor

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About the Journal

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 the metallurgical field 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.

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