Special Issue

Corrosion Damage Behavior and Mechanisms of Advanced Functional Metallic Materials

Message from the Guest Editors

This Special Issue aims to explore the corrosion damage behavior and mechanisms of advanced functional metallic materials, addressing a critical area of research with significant implications for various industries. As technological advancements lead to the development of innovative materials, understanding their corrosion resistance and degradation mechanisms becomes essential for ensuring reliability and longevity.

We invite contributions that cover a broad spectrum of topics, including traditional metallic materials, grid materials used in energy transmission, and energy storage materials. Articles may focus on the characterization of corrosion processes, the effects of environmental factors, and the development of protective coatings or treatments. Furthermore, the interplay between microstructure and corrosion behavior, as well as the application of advanced analytical techniques to study corrosion phenomena, will be emphasized.

Guest Editors

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About the Journal

Message from the Editor-in-Chief

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.

Editor-in-Chief

Prof. Dr. Yong Zhang
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