Special Issue

Oxidation and Corrosion of Metals and Alloys

Message from the Guest Editors

Oxidation and corrosion are critical concerns in a wide range of industrial applications, particularly where metallic materials are exposed to harsh environments such as high temperatures, humidity, or aggressive chemical agents. Understanding the mechanisms of surface degradation and developing innovative protection strategies are essential for improving the durability and performance of metals and alloys in sectors such as automotive, aerospace, energy, and infrastructure. This Special Issue aims to bring together recent advances in the field of the oxidation and corrosion of metals and alloys, with a particular emphasis on surface modification techniques, corrosion and degradation behavior, and nanostructured coatings. We also welcome studies that explore the interplay between microstructure and corrosion behavior and new insights into high-temperature oxidation and advanced joining techniques.

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Message from the Editor-in-Chief

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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