Special Issue

Corrosion, Fatigue and Corrosion Protection of Metals and Their Alloys in Various Environments

Message from the Guest Editor

Metallic materials are widely used in various industries and are often exposed to aggressive corrosive environments. Corrosion and wear costs are significant concerns in manufacturing structures. Many investigations have been conducted to find ways to reduce corrosion and wear costs. Acidic and alkaline solutions used in technological processes can cause severe corrosion of metal structures and equipment. Composite coatings have been found to be the most effective and simple way to protect metallic materials from corrosion. Other techniques such as the use of inhibitors, cathodic and anodic defenses. electropolymerization, and nanostructured coatings are also used for anticorrosion protection. This Special Issue aims to gather research on corrosion, fatigue, and corrosion protection techniques for metals and their alloys in different environments. The focus is on surface protection of various materials in corrosive environments. The Special Issue welcomes original research articles and reviews.

Guest Editor

Dr. Florina Branzoi

Institute of Physical Chemistry-Ilie Murgulescu of Romanian Academy, Bucharest, Romania

Deadline for manuscript submissions

closed (20 February 2025)



an Open Access Journal by MDPI

Impact Factor 3.2 CiteScore 6.4 Indexed in PubMed



mdpi.com/si/182913

Materials
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
materials@mdpi.com

mdpi.com/journal/ materials





an Open Access Journal by MDPI

Impact Factor 3.2 CiteScore 6.4 Indexed in PubMed





About the Journal

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.

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

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 and Metallurgical Engineering) / CiteScore - Q1 (Condensed Matter Physics)