Special Issue

Film Composition and Characteristics on Non-ferrous Corroded Metals and Alloys

Message from the Guest Editor

The corrosion behavior of materials in corrosive media depends critically on the nature of the passive film and corrosion products formed during the corrosion process. In this Special Edition, the emphasis will be on these passive film and corrosion products which form during the corrosion process in aqueous media. Mild steel and stainless steels are popular materials in a number of industries and applications, and their corrosion behavior is often reported. However, there are a wide variety of other non-ferrous metals and alloys, which find application in numerous products and processes. The focus in this Special Edition will be on these different non-ferrous alloys and metals, e.g., titanium, magnesium, and aluminum alloys, copper, brass, and bronze alloys, cermet and metal matrix composites, high-entropy alloys, and any material not containing iron as a major element and the nature and composition of passive film and corrosion products formed on them during any aqueous corrosion process. Information obtained by any surface analysis technique, or combination thereof, which can provide such information and is utilized in the study, can be described.

Guest Editor

Prof. Dr. Herman Potgieter

School of Chemical and Metallurgical Engineering, Unversity of the Witwatersrand, Private Bag X3, P.O. Wits 2050, South Africa

Deadline for manuscript submissions

closed (20 October 2023)

Materials

an Open Access Journal by MDPI

Impact Factor 3.2
CiteScore 6.4
Indexed in PubMed

mdpi.com/si/60223

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

mdpi.com/journal/materials

Materials

an Open Access Journal by MDPI

Impact Factor 3.2
CiteScore 6.4
Indexed in PubMed

mdpi.com/journal/materials

MDPI

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
1. Department of Biomedical Engineering, Faculty of Medicine and Health Sciences, McGill University, Montreal, QC H3A 2B6, Canada
2. 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)