

Special Issue

Advances in Surface Corrosion Protection of Alloys

Message from the Guest Editor

Extensive research has been devoted to methods of preventing the corrosion of metallic alloys in the past few decades. Recently, several innovative approaches based on the evolution of surface treatments and coating materials have been discussed in the scientific community. This Special Issue will act as a forum for researchers to discuss the most recent advances in methods and materials for surface protection. We welcome both experimental and computational studies in the following areas: corrosion protection of light alloys (magnesium, aluminum and titanium alloys), steels (carbon steels, stainless steels, high-strength low-alloy steels, advanced high-strength steels), and multiprincipal element alloys, surface treatments (anodization, micro-arc oxidation), plasma-based coatings, organic coatings, graphene-based coatings, surface protection in the oil and gas industry, amorphous coatings, laser-assisted surface treatment methods, and corrosion mechanisms of alloys. Review articles are also encouraged.

Guest Editor

Dr. Mara Cristina Lopes De Oliveira

Center for Engineering, Modeling and Applied Social Sciences (CECS), Federal University of the ABC (UFABC), Santo André 09210-580, SP, Brazil

Deadline for manuscript submissions

20 October 2025



Materials

an Open Access Journal
by MDPI

Impact Factor 3.2
CiteScore 6.4
Indexed in PubMed



mdpi.com/si/195285

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

[mdpi.com/journal/
materials](https://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](https://mdpi.com/journal/materials)



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)