



*materials*



an Open Access Journal by MDPI

## Corrosion of Metallic Alloys: Advances and Discoveries

Guest Editor:

**Dr. Soon-Hyeok Jeon**

Korea Atomic Energy Research  
Institute, Daejeon, Republic of  
Korea

Deadline for manuscript  
submissions:

**closed (10 August 2023)**

### Message from the Guest Editor

Dear Colleagues,

Corrosion is the root cause of deterioration in various metallic alloy structures and devices due to their interactions with the environment. It contributes to economic loss and environmental pollution and poses a threat to human health. This Special Issue focuses on all corrosion issues associated with the fundamentals of corrosion science, such as those relating to metallic alloys, corrosion protection, traditional and electrochemical test techniques to assess corrosion resistance, and corrosion simulation. Subjects of interest will include the corrosion behavior of iron and low-alloy steels, stainless steel, copper and its alloys, aluminum and its alloys, titanium and its alloys, nickel and its alloys, and others. Development methods aimed at preventing and controlling the corrosion of metallic alloys are also of interest. Furthermore, topics related to corrosion products caused by various corrosion phenomena are also welcomed. It is with great pleasure that I invite you to submit a manuscript for this Special Issue. Full papers, communications, and reviews are all welcome.



[mdpi.com/si/112105](https://mdpi.com/si/112105)

# Special Issue



an Open Access Journal by MDPI

## 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

## 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.

## 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)

## Contact Us

Materials Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland

Tel: +41 61 683 77 34  
[www.mdpi.com](http://www.mdpi.com)

[mdpi.com/journal/materials](http://mdpi.com/journal/materials)  
[materials@mdpi.com](mailto:materials@mdpi.com)  
[X@Materials\\_Mdpi](https://twitter.com/Materials_Mdpi)