

## Special Issue

# Antibacterial and Corrosion-Resistant Coatings for Marine Application

### Message from the Guest Editors

This Special Issue focuses on coating technology that enhance the antibacterial and corrosion-resistant performance of marine engineering equipment, covering various types of coatings such as organic matrix coatings, metal-based coatings, hydrogel coatings, nanostructured surface coatings, etc. One approach is to incorporate bactericidal substances into the coatings to impart antibacterial properties. Another research area involves creating low-surface-energy surfaces by nanostructuring the surface or adding fluorinated and silicified surfactants to polymers to inhibit bacterial adhesion. Additionally, low-surface-energy coatings containing biocides have gained widespread attention for improving the antibacterial and antifouling performance of traditional corrosion-resistant coatings, which is crucial for practical applications. Original research articles, reviews, and communications are welcome. We hope this Special Issue will promote research and technological advancements in the field of antibacterial and corrosion-resistant coatings, addressing practical protection issues for marine engineering equipment.

### Guest Editors

Dr. Jinlong Zhao

Institute of Metal Research, Chinese Academy of Sciences, Shenyang 110016, China

Dr. Hongwei Liu

School of Chemical Engineering and Technology, Sun Yat-sen University, Guangzhou 510275, China

### Deadline for manuscript submissions

closed (20 July 2025)



## Materials

an Open Access Journal  
by MDPI

Impact Factor 3.2  
CiteScore 6.4  
Indexed in PubMed



[mdpi.com/si/210574](https://mdpi.com/si/210574)

*Materials*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[materials@mdpi.com](mailto: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)