

Special Issue

Metallic Coatings for Corrosion Protection: Electroplating, Thermal Spray, and Cladding

Message from the Guest Editor

Corrosion continues to impose significant costs on society, most notably increased financial expenditure, wasted natural resources and premature component failure, which can be detrimental both to the environment as well as the health and safety of those affected. One way by which the life of a metallic component can be extended is through the use of coatings, for example by electroplating, thermal spray and cladding, to act as a barrier between the surface and its environment to resist material degradation. The purpose of this Special Issue is to present the latest developments in corrosion-resistant coatings to improve the performance of industrial components. Full papers, review articles and short communications are all welcome. The topics covered by this special issue may include, but are not limited to, the following:

- Coatings to improve the corrosion resistance of metallic components;
- Tribo-corrosion;
- Characterisation of claddings, thermal sprayed and electroplated coatings;
- New developments in coating deposition methods;
- Applications of thermal spraying, electroplating and cladding in corrosive environments.

Guest Editor

Dr. David W. Wheeler

Atomic Weapons Establishment, Reading RG7 4PR, Berkshire, UK

Deadline for manuscript submissions

20 May 2027



Materials

an Open Access Journal
by MDPI

Impact Factor 3.7
CiteScore 7.0
Indexed in PubMed



mdpi.com/si/282840

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 3.7
CiteScore 7.0
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.

Editors-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

Prof. Dr. Yuguang Ma

State Key Laboratory of Luminescent Materials and Devices, South China University of Technology, Guangzhou 510640, China

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 (Materials Science, Multidisciplinary) / CiteScore - Q1 (Condensed Matter Physics)