

## Special Issue

# Multifunctional Coatings: From Protective to Bio-Applications

### Message from the Guest Editors

With the progress of nanotechnology and production methods, coatings today are becoming incredibly attractive materials due to the possibility for them to have a unique combination of very different properties, which may respond to a wide variety of demands and requirements, but also to an attractive set of characteristics that are economically desirable, e.g., being lighter, cheaper, more durable, and more versatile than most bulk materials. Excellent biocompatibility and thermal, electrical, chemical, and mechanical properties, together with tribological response optimization, are among some of the most attractive properties that it is possible to tailor into different kinds of coating systems and synthesis methods. Considering this growing need for multifunctionality in order to respond to the increasing demands of industry and materials/device responses, this Special Issue aims to collect articles reporting on recent developments dealing with preparative methods, design, properties, structure, characterization, as well as promising applications of multifunctional coatings.

---

### Guest Editors

Prof. Dr. Daniel Munteanu

Department of Materials Science, Transilvania University of Brasov - Romania, 29 Eroilor Blvd., 500036 Brasov, Romania

Prof. Dr. Filipe Vaz

Centre of Physics (CF-UM-UP), University of Minho, 4710-057 Braga, Portugal

---

### Deadline for manuscript submissions

closed (20 June 2023)



## Materials

---

an Open Access Journal  
by MDPI

---

Impact Factor 3.1  
CiteScore 5.8  
Indexed in PubMed



[mdpi.com/si/90165](https://mdpi.com/si/90165)

*Materials*

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 3.1  
CiteScore 5.8  
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 - Q1 (Metallurgy and Metallurgical Engineering) /  
CiteScore - Q2 (Condensed Matter Physics)