



## Multifunctional Materials: Design, Synthesis and Properties

Guest Editor:

**Dr. Sergio González Sanchez**

Faculty of Engineering and  
Environment, University of  
Northumbria, Newcastle, UK

Deadline for manuscript  
submissions:

**closed (30 June 2021)**

### Message from the Guest Editor

Dear Colleagues,

There is currently a need to integrate multiple functions into one material in order to meet the increasing demands of our technological society. For example, in the healthcare sector, the combination of antimicrobial activity, biocompatibility, wear resistance, wettability, and other surface properties is important. Multiple functions can be realized either in the bulk or on the surface. In the bulk, multiple functions can be tailored by combining different materials to make composites. To create multifunctional surfaces, different technologies for surface modification/treatment can be used, including mechanical or/and chemical methods, such as shot-peening, laser-texturing, and chemical functionalization. Multifunctional materials (MMs) have a diverse range of applications in such areas as medicine, aerospace, energy, and defense.

This Special Issue will cover fundamental concepts in MMs, the manufacture of MMs, the application of MMs, including for sensors, catalysis, energy storage, and biological and antimicrobial surfaces, and future research directions.





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 - Q1 (Metallurgy and Metallurgical Engineering) / CiteScore - Q2 (*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)