



## Nanoparticles and Nanomaterials for Medicine and Biology

Guest Editor:

**Dr. Sylwia Męczyńska-  
Wielgosz**

Centre for Radiobiology and  
Biological Dosimetry, Institute of  
Nuclear Chemistry and  
Technology, Warsaw, Poland

Deadline for manuscript  
submissions:

**closed (20 April 2022)**

### Message from the Guest Editor

Dear Colleagues,

A rapid development of nanotechnology causes increased exposure of humans and the natural environment to the potentially adverse effect of. Despite increasing studies indicating benefits from the use of nanomaterials in daily life, relatively little is known about the risk for human health. Due to the size and mobility of nanoparticles, they may overcome barriers in the body, and accumulate in the brain or other organs, leading probably to their damage. Nanoparticles have been reported to induce oxidative stress, DNA damage, inflammation, and many other adverse effects which are known to be crucial for the development of lifestyle diseases.

This Special Issue focuses on the use of organic/inorganic nanomaterials for health care applications (diagnosis and treatment) and also on the in vitro and in vivo interactions of nanomaterials with biological systems from biological macromolecules through to cells, tissues, and up to the whole organism.

It is my pleasure to invite you to submit manuscripts for this Special Issue.

Dr. Sylwia Męczyńska-Wielgosz

*Guest Editor*





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)