



an Open Access Journal by MDPI

## Novel Gold and Silver Nanomaterials

Guest Editor:

### Prof. Dr. Marcin Banach

Department of Inorganic  
Technology and Biotechnology  
Environment, Cracow University  
of Technology, 24 Warszawska  
St., 31-155 Cracow, Poland

Deadline for manuscript  
submissions:

**closed (31 December 2020)**

### Message from the Guest Editor

Silver and gold nanoparticles belong to one of the most widely used nanomaterials. The subject matter of the Special Issue applies to new developments in:

- Green synthesis for receiving novel gold and silver nanomaterials;
- Challenges and opportunities in the production of gold and silver nanomaterials;
- Processes for obtaining stable suspensions and powders of silver and gold nanoparticles with controlled physicochemical and functional properties;
- Reaction systems used in the processes of obtaining nanoparticles;
- Characterization of physicochemical and functional properties of nanoparticles, and the influence of process parameters on these properties;
- Assessment of antimicrobial and catalytic properties of nanoparticles and ecotoxicological evaluation of nanoparticles against organisms representing different trophic levels of the food chain;
- Presentation of measurement techniques for analyzing the degree of exposure of organisms to the action of nanomaterials;
- Practical applications of silver and gold nanoparticles;
- High-purity nanomaterials;
- Composites, oxide systems, and hybrid materials containing silver and gold nanoparticles.





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)