

## Special Issue

# Noble-Metal Nanoparticles: Design, Characterization, and Biomedical Applications

### Message from the Guest Editors

Noble metals have gained increased interest in science since the discovery of new properties. Unique chemical-physic features have opened new paths and applications in all scientific and engineering fields. The high flexibility of nanoparticle design allows one to tune their morphology and surface chemistry. All these parameters are able to enhanced optical properties, and increase biological compatibility and targeting ability or antimicrobial efficacy. Therefore, there is a need to present the results of original research undertaken to develop innovative, green, and efficient noble-metal nanoparticle synthesis; to modify known processes for their preparation; to improve properties and morphology; or to develop innovative hybrid nanomaterials. Moreover, a stronger effort must be devoted to the fine characterization of both the metallic core as the engineered surface, with special attention paid to the bio/nano interface that can influence the nanoparticle activity in biomedical applications. This Special Issue aims to publish original research papers covering the recent advances as well as reviews, addressing topics of noble-metal nanoparticle.

### Guest Editors

Dr. Laura Polito

Institute of Science and Chemical Technologies "Giulio Natta" (SCITEC), Italian National Research Council (CNR), Milan, Italy

Dr. Marcello Marelli

Institute of Science and Chemical Technologies "Giulio Natta" (SCITEC), Italian National Research Council (CNR), Milan, Italy

### Deadline for manuscript submissions

closed (31 October 2021)



## Materials

an Open Access Journal  
by MDPI

Impact Factor 3.2  
CiteScore 6.4  
Indexed in PubMed



[mdpi.com/si/34112](https://mdpi.com/si/34112)

*Materials*  
Editorial Office  
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 3.2  
CiteScore 6.4  
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 - Q2 (Metallurgy and Metallurgical Engineering) /  
CiteScore - Q1 (Condensed Matter Physics)