

## Special Issue

# Gold and Silver Nanoparticles for Selective and Sensitive Sensing Applications

### Message from the Guest Editor

Gold and silver nanoparticles have become the most popular materials for sensing a wide range of target analytes, such as metal ions, anions, and molecules like saccharides, nucleotides, amino acids, proteins, toxins, etc. They offer numerous advantages including ease in preparation and functionalization, stability, biocompatibility, and size- and shape-dependent optical and electronic properties. Owing to these excellent properties, gold and silver nanoparticles can be utilized as smart nanosensors with a series of methodologies, including colorimetric, fluorescence, surface-enhanced Raman scattering (SERS), light scattering, and electrochemical methods. Therefore, this Special Issue focuses on current developments in the use of nanosensors based on gold and silver nanoparticles for selective and sensitive sensing approaches to various kinds of target analytes, as well as nanocomposites with gold and silver nanoparticles.

---

### Guest Editor

Dr. Tai-Chia Chiu

Department of Applied Science, National Taitung University, Taitung 95092, Taiwan

---

### Deadline for manuscript submissions

closed (15 August 2022)



## Nanomaterials

---

an Open Access Journal  
by MDPI

---

Impact Factor 4.3  
CiteScore 9.2  
Indexed in PubMed



[mdpi.com/si/89966](https://mdpi.com/si/89966)

*Nanomaterials*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[nanomaterials@mdpi.com](mailto:nanomaterials@mdpi.com)

[mdpi.com/journal/  
nanomaterials](https://mdpi.com/journal/nanomaterials)





# Nanomaterials

---

an Open Access Journal  
by MDPI

---

Impact Factor 4.3  
CiteScore 9.2  
Indexed in PubMed



[mdpi.com/journal/  
nanomaterials](https://mdpi.com/journal/nanomaterials)



## About the Journal

### Message from the Editor-in-Chief

Nanoscience and nanotechnology are exciting fields of research and development, with wide applications to electronic, optical, and magnetic devices, biology, medicine, energy, and defense. At the heart of these fields are the synthesis, characterization, modeling, and applications of new materials with lower nanometer-scale dimensions, which we call “nanomaterials”. These materials can exhibit unusual mesoscopic properties and include nanoparticles, coatings and thin films, metal–organic frameworks, membranes, nano-alloys, quantum dots, self-assemblies, 2D materials such as graphene, and nanotubes. Our journal, *Nanomaterials*, has the goal of publishing the highest quality papers on all aspects of nanomaterial science to an interdisciplinary scientific audience. All of our articles are published with rigorous refereeing and open access.

---

### Editor-in-Chief

Prof. Dr. Eugenia Valsami-Jones

School of Geography, Earth and Environmental Science, University of  
Birmingham, Birmingham B15 2TT, UK

---

### 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, CAPIus / SciFinder, Inspec, and other databases.

#### Journal Rank:

JCR - Q2 (Physics, Applied) / CiteScore - Q1 (General  
Chemical Engineering)