



## Noble Metal-Based Nanostructures: Optical Properties and Applications

Guest Editors:

**Prof. Dr. Carlos Lodeiro**

Inorganic Chemistry and  
NanoChemistry, NOVA School Of  
Science And Technology, FCT  
NOVA, NOVA University Lisbon,  
2829-516 Caparica, Portugal

**Dr. Adrián Fernández Lodeiro**

Department of Electrical and  
Computer Engineering,  
Nanotechnology Imaging and  
Detection Laboratory University  
of Cyprus, Nicosia, Cyprus

**Dr. Javier Fernandez Lodeiro**

LAQV-REQUIMTE—Chemistry  
Department, NOVA School of  
Science and Technology, NOVA  
University Lisbon, Caparica,  
Portugal

### Message from the Guest Editors

Noble metal-based nanostructures delve into the fascinating realm of nanotechnology, specifically focusing on gold, silver, palladium, platinum, ruthenium, rhodium, and iridium. These noble metals exhibit unique optical properties at the nanoscale, making them pivotal in various applications.

In summary, this Special Issue underscores the significance of noble metal-based nanostructures in leveraging their optical properties for a spectrum of applications. The comprehensive exploration of gold, silver, palladium, platinum, rhodium, and iridium nanostructures provides insights into their diverse roles, paving the way for advancements in fields ranging from medicine to sustainable energy. We would like to invite specialists in the field to submit both original research papers as well as review articles on basic aspects of and future directions in this fantastic field.

Deadline for manuscript  
submissions:

**10 August 2024**



[mdpi.com/si/194645](https://mdpi.com/si/194645)

# Special Issue



an Open Access Journal by MDPI

## Editor-in-Chief

### **Prof. Dr. Shirley Chiang**

Department of Physics, University  
of California Davis, One Shields  
Avenue, Davis, CA 95616-5270,  
USA

## 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.

## 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](#), [CAPus / SciFinder](#), [Inspec](#), and [other databases](#).

**Journal Rank:** JCR - Q1 (*Physics, Applied*) / CiteScore - Q1 (*General Chemical Engineering*)

## Contact Us

*Nanomaterials* Editorial Office  
MDPI, St. Alban-Anlage 66  
4052 Basel, Switzerland

Tel: +41 61 683 77 34  
[www.mdpi.com](http://www.mdpi.com)

[mdpi.com/journal/nanomaterials](http://mdpi.com/journal/nanomaterials)  
[nanomaterials@mdpi.com](mailto:nanomaterials@mdpi.com)  
[X@nano\\_mdpi](#)