



Metallic Nanostructured Materials for Environmental and Biosensing Application

Guest Editor:

Dr. Laura Rodriguez-Lorenzo
International Iberian
Nanotechnology Laboratory-INL,
Braga, Portugal

Deadline for manuscript
submissions:

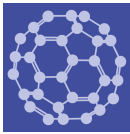
closed (20 October 2021)

Message from the Guest Editor

This Special Issue aims to highlight the highly interdisciplinary character of the selective environmental and bio-sensing of (bio)molecules (e.g., pollutants, biomarkers), heavy metals, and ions using functionalized metallic nanostructured materials. This major research area involves chemistry, biology, engineering, and material science.

This Special Issue is focused on noble metal nanomaterials, especially gold and silver, which exhibit unique and tunable plasmonic properties as a function of their size, shape, and dielectric layer. This allows us their utilization as sensors based on colorimetric assays, surface-enhanced vibrational spectroscopies (e.g., SEF, SERS, SERRS), and Rayleigh scattering spectroscopies (e.g., dark-field), among others. Finally, the Special Issue is focused also on the combination of different metallic nanostructures that provide specific properties (e.g., magnetic, electric, plasmonic and mechanicals), which opens the possibility of the enhancement of flexible handling and efficient analytical capabilities of these hybrid nanomaterials.





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, CAPlus / SciFinder, Inspec, and other databases.

Journal Rank: JCR - Q2 (*Chemistry, Multidisciplinary*) / CiteScore - Q1 (General Chemical Engineering)

Contact Us

Nanomaterials Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/nanomaterials
nanomaterials@mdpi.com
[X@nano_mdpi](https://x.com/nano_mdpi)