



Metallic and Metal Oxide Nanoparticles and Their Applications

Guest Editors:

**Prof. Dr. Alexandru
Grumezescu**

Faculty of Chemical Engineering
and Biotechnologies, National
University of Science and
Technology Politehnica
Bucharest, 011061 Bucharest,
Romania

Dr. Oana Gherasim

1. Department of Science and
Engineering of Oxide Materials
and Nanomaterials, Faculty of
Applied Chemistry and Materials
Science, University Politehnica of
Bucharest, 011061 Bucharest,
Romania

2. Lasers Department, National
Institute for Laser, Plasma and
Radiation Physics, 077125
Magurele, Romania

Message from the Guest Editors

Metallic and metal oxide nanoparticles possess genuine size- and morphology-related tunable features, including physicochemical versatility, particular reactivity and surface chemistry, unique intrinsic functionality (mechanical behavior, thermal and magnetic features, optical and electric properties, catalytic activity), and specific biological effects (biocompatibility and non-immunogenicity, antioxidant and anti-inflammatory activity, antimicrobial and antitumor efficiency, restorative and regenerative potential). Such characteristics are beneficial for using metallic and metal oxide nanoparticles in environmental applications, the electronics and energy industry, the textile and the food industry, pharmaceutical and cosmetic products, anti-infective and anti-cancer therapy wound healing, and tissue engineering.

We warmly invite you to contribute to this Special Issue with your most recent findings on nanosized and nanostructured systems based on noble metals, transition metals and metallic oxides, and quantum dots.

Deadline for manuscript
submissions:

closed (31 December 2021)



mdpi.com/si/78736

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](#), [Inspecc](#), 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

mdpi.com/journal/nanomaterials
nanomaterials@mdpi.com
[X@nano_mdpi](#)