Special Issue

Synthesis and Application of Metal/Metal-Oxide Nanomaterials

Message from the Guest Editors

Metal and metal-oxide nanomaterials are among the most versatile building blocks of nanoscience, offering exceptional optical, electronic, catalytic, and structural properties. Their potential is greatly influenced by synthesis conditions and morphological control, which govern parameters such as crystallinity, defect states, and surface chemistry. These characteristics make them ideal candidates for applications in photocatalysis, energy harvesting, sensing, optoelectronics, and biomedical devices. This Special Issue of Nanomaterials will focus on recent progress in the synthesis, structural tuning, and practical applications of metal and metal-oxide nanomaterials. Contributions exploring novel growth techniques, composite systems, and strategies for enhancing performance and stability are particularly encouraged. We cordially invite submissions, relevant topics may include (but are not limited to) the following:

- Characterization and fabrication:
- Sustainable materials and processes;
- Advances in the integration of metal/metal oxide nanomaterials;
- Applications in electronics, photocatalysis, sensing, energy harvesting, bioengineering, etc.

Guest Editors

Dr. Ana Rovisco

CENIMAT/i3N, Department of Materials Science, NOVA School of Science and Technology (NOVA-FCT) and CEMOP/UNINOVA, NOVA University Lisbon, Campus de Caparica, 2829-516 Caparica, Portugal

Dr. Ana Pimentel

CENIMAT/i3N, Department of Materials Science, NOVA School of Science and Technology (NOVA-FCT) and CEMOP/UNINOVA, NOVA University Lisbon, Campus de Caparica, 2829-516 Caparica, Portugal

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Nanomaterials
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
nanomaterials@mdpi.com

mdpi.com/journal/nanomaterials





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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 nanometerscale 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

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