

## Special Issue

# Nanomaterials for Sensors, Actuators and Environmental Applications

### Message from the Guest Editor

The ability to finely manipulate matter at the nanometer level has opened up a new field of knowledge called "nanoscience and nanotechnology". The control of the size, structure, composition and morphology of inorganic, organic and hybrid nanostructures and nanocomposites allows us to compile, so to speak, a new periodic table of elements, still largely unexplored. The purpose of this Special Issue is to gather the latest results in modeling, simulation, synthesis, advanced characterization and potential applications of nanostructured materials, leading to a more eco-sustainable world. Topics will include, but are not limited to:

- The modeling, simulation and characterization of nanomaterials;
- Innovative preparation routes for nanomaterials with tailored spatial organization;
- Environmental monitoring;
- Healthcare;
- Food quality assessment;
- Sensing and biosensing devices;
- Energy harvesting, storage and conversion;
- Functional and smart materials;
- Recycling and renewable resources.

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### Guest Editor

Dr. Matteo Tonezzer

Institute of Materials for Electronics and Magnetism, National Research Council of Italy, Rome, Italy

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### Deadline for manuscript submissions

25 February 2025



## 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 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.

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### Editor-in-Chief

Prof. Dr. Shirley Chiang  
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