

## Special Issue

# New Challenges for Health and the Environment: The Role of Metal-Based Nanomaterials

### Message from the Guest Editor

Nanostructured metals are now widely used both in research and at an industrial level and in everyday use. In fact, their particular properties allow for advanced applications in the field of optoelectronics, sensors, and nanomedicine. Especially in recent years, their use has allowed leaps forward for the protection of the environment and health, yet many questions remain open regarding their safe use for humans and the environment. This Special Issue aims to serve as an opportunity to collect experimental and theoretical research works that see nanostructured metals as protagonists, especially gold, silver, oxides, and composites, giving space to the design, preparation, characterization, simulations, and applications of these innovative and promising materials. Studies on their effects in the environmental, biological, and medical fields will also be welcome, trying to stimulate careful and proactive reflection. I invite you to contribute to this opportunity for scientific discussion by sending a manuscript or a review to this Special Issue. Full papers, submissions, and reviews are all welcome.

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### Guest Editor

Prof. Dr. Iole Venditti

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### Deadline for manuscript submissions

closed (31 October 2022)



## Nanomaterials

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### 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. We are proud of our increasing impact factor and ability to provide rapid decisions to authors.

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### Editor-in-Chief

Prof. Dr. Eugenia Valsami-Jones

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