



Emerging Trends in the Development of Inorganic Nanomaterials for Biomedicine, Agriculture and Environment

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Message from the Guest Editors

The advent of inorganic nanomaterials has triggered a revolution in several fields and yielded products that are used daily. In biomedicine, nanoparticles are used for drug/gene delivery, imaging and theranostics, to name a few examples. In agriculture, they are used, for instance, as biofertilizers, pesticides and nanosensors. On the other hand, nanoparticles have found numerous applications in the environment, for wastewater treatment, sensing and heavy cation removal.

The present Special Issue of *Nanomaterials* aims at expanding the current knowledge in terms of the synthesis, characterization and functionalization of various inorganic nanomaterials and their utilization in biomedicine, agriculture and the environment.

The scopes cover highlighting recent developments in inorganic nanomaterials, from their synthesis to their application, including their functionalization, unique properties, characterization, scalability and translational studies, for emerging applications in the fields of biomedicine, agriculture and the environment. These articles may also focus on the sustainability, fate and life cycle assessment of nanomaterials exploited in the abovementioned fields.





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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.

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