



Advances in Nano-Bio Interactions: Nanosafety and Nanotoxicology

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Message from the Guest Editor

The broad application of nanomaterials (NMs) has raised concerns regarding potential environmental and human health risks associated with the exposure to NMs. The physicochemical properties of NM, such as size, shape, chemical composition, and surface modification, etc. determine how the NMs interact with biological medium, biomolecules, cells, organs, and organisms. With new nanomaterials based products being introduced in the market on daily bases, there is urgent need to reduce the knowledge gap between the physicochemical properties and their influence on the manifestation of toxicities issues.

This Special Issue will bring together the latest advances in nano-bio interactions at systemic, cellular, and molecular levels. Understanding the nano-bio interactions and the relationships between the nanomaterial properties/structure and activity will provide a conceptual basis for the rational design and safe use of NMs.





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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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