



Nanoparticles for Biosensor Application

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Message from the Guest Editor

Dear Collogues,

Biosensors based on nano-objects are now widespread and are used daily in many devices. Thanks to their optical and electrochemical properties, they have allowed for overcoming the barriers of conventional tests in many fields. Their applications have involved different fields, from biomedical to the detection of pollutants, from anticounterfeit to microelectronics.

This SI wants to lay the foundations for the definition of future detection systems. Potential topics include, but are not limited to, the following:

- Engineering nanomaterials: innovative development, synthesis, and fabrication methods;
- Biomedical applications of nanomaterials: nanoparticle functionalization for biomedical applications;
- Nano-biosensors for pollutant detection;
- Intracellular detection through nanoparticles;
- Few molecules and single molecule detection systems;
- Innovative nanomaterials, nanocomposites, and nanohybrids for biomedical applications;
- Integration of nanoparticles, microfluidic devices, and/or electronics;
- Nanotoxicity studies and models for the evaluation of innocuity.



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Guest Editor

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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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