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Functional Nanomaterials for Sensing Devices: Synthesis, Characterization and Applications (2nd Edition)

Guest Editor:

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Deadline for manuscript
submissions:

31 December 2024

Message from the Guest Editor

Dear Colleagues,

Functional nanomaterials exhibit peculiar properties, enabling their employment in the design and development of sensors for the detection of numerous targets, such as heavy metals, organic pollutants, pathogenic microbes, biomarkers, metabolites, narcotics, explosives, etc. Depending on nanomaterial properties and specific targets, a plethora of sensing techniques (from electrochemical to optical detection, fluorescence, surface plasmon resonance, colorimetry, etc.) could be employed for the design of the sensing device. In light of the above considerations, this Special Issue is addressed to scholars who aim to share their recent findings in the synthesis and characterization of functional nanomaterials and their application sensing devices. The purpose is to gather the latest results in modeling, simulation, synthesis, advanced characterization, and sensing applications.

The submission of reviews, mini-reviews, original articles, and short communications highlighting the potential of functional nanomaterials to improve sensing applications is kindly encouraged.



mdpi.com/si/202250

Special Issue



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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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