Special Issue

Nanomaterials for Biosensor and Bioassay Applications

Message from the Guest Editor

Nanomaterial-based biosensors are an instrument that is sensitive to biological substances and converts their concentration into electrical signals for detection, having broad applications in many fields. During the past few years, there has been an increasing amount of research on the use of nanomaterials in diverse areas of biomedical research, including biological sensing, labeling, medical imaging, and therapy. The introduction of nanotechnology into medical diagnosis has led to a significant enhancement in the detection performance of biosensors and development of new biosensors.

We invite you to submit a manuscript in the form of a review, full paper, or communication, with potential topics including but not limited to:

- Innovative nanomaterials and nanocomposites for biomedical applications;
- Biosensor fabrication and characterization;
- Nanobioprobe for biomedical uses;
- Thin film transistors (TFTs) and field effect transistors (FET) for biosensing;
- Biochips for biomedical testing;
- Biosafety of nanomaterials used for clinical therapy;
- Other studies of nanomaterials for biosensor and bioassay applications.

Guest Editor

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Deadline for manuscript submissions

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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 nanometerscale 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.

Editor-in-Chief

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