

Special Issue

Recent Advances in Nanomaterials for Biosensing Applications

Message from the Guest Editor

This Special Issue is dedicated to articles on the application of various nanomaterials in biosensor design. Significant attention will be given to nanomaterials that improve charge transfer and are applied in the design of enzymatic biosensors. Some nanomaterials can play the role of redox mediators or even be involved in direct charge transfer. Articles that report application of conducting polymers, gold nanoparticles, various carbon-based nanomaterials (carbon nanotubes, fullerenes, graphene, reduced graphene, nanodiamond, etc.) and semiconducting metal oxides such as TiO₂, ZnO, WO₃, V₂O₅, and many others are invited. Research addressing development of immunosensors based on nanomaterials and/or nanotechnological approaches applied for site-directed immobilization of antibodies are also welcome to this Special Issue. DNA sensors and sensors based on DNA aptamers will also be accepted. Keywords

- biosensors
- enzymatic biosensors
- glucose biosensors
- charge transfer in enzymatic sensors
- nanomaterials as redox mediators
- gold nanoparticles
- metal-oxide-based nanostructures
- carbon-based nanostructures
- conjugated polymers
- affinity biosensors
- immunosensors

Guest Editor

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About the Journal

Message from the Editor-in-Chief

Materials (ISSN 1996-1944) was launched in 2008. The journal covers twenty-five comprehensive topics: biomaterials, energy materials, advanced composites, advanced materials characterization, porous materials, manufacturing processes and systems, advanced nanomaterials and nanotechnology, smart materials, thin films and interfaces, catalytic materials, carbon materials, materials chemistry, materials physics, optics and photonics, corrosion, construction and building materials, materials simulation and design, electronic materials, advanced and functional ceramics and glasses, metals and alloys, soft matter, polymeric materials, quantum materials, mechanics of materials, green materials, general. *Materials* provides a unique opportunity to contribute high quality articles and to take advantage of its large readership.

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