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Recent Advances in Nanomaterials for Biosensing Applications

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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 TiO_2 , ZnO , WO_3 , V_2O_5 , 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



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Special Issue



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Message from the Editor-in-Chief

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