Special Issue

Biosensors in Nanotechnology

Message from the Guest Editors

Nanotechnological sensors have various applications in the real world including food quality control, medical engineering, diagnostics for healthcare, and environmental monitoring. New technologies always lead to new challenges; the solution of kinetic and transport equations which model sensors in nanoscale have been a challenging problem. Other challenges include stochastic modeling, homogenization, multiscale problems, efficient computational methods, sensitivity, stability and robustness, sensor configuration, optimal and reliable design, and uncertainty quantification. This Special Issue of Biosensors aims to provide a platform for the publication of original high-quality research papers covering the most recent advances as well as comprehensive reviews in the field of biosensors in nanotechnology, nanomaterials for sensors, and nano-based sensors. This includes (but is not limited to) theoretical development, mathematical models, variational formulations and numerical algorithms, inverse problems, optimization, machine learning approaches, probabilistic and stochastic approaches, and computational methods. Both original papers and reviews are welcome.

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About the Journal

Message from the Editor-in-Chief

Biosensors is a leading journal, devoted to fast publication of the latest achievements, technological developments and scientific research in the exciting multidisciplinary area of biosensors. Both experimental and theoretical papers are published, including all aspects of biosensor design, technology, proof of concept and application. Special issues are devoted to specific technologies and applications, and a selection of the most outstanding papers each year is recognized. Pushing the boundaries of the discipline, we invite original papers, as well as timely reviews on cutting edge fields within the subject area.

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