Special Issue

Nanomaterial-Based Devices and Biosensors for Diagnostic Applications

Message from the Guest Editor

The growing popularity of health monitoring is driven by an increasingly health-conscious society. An ideal sensor is characterized by a superior detection range, high sensitivity, selectivity, resolution, reproducibility, repeatability, and a quick response time. Recently, biosensors incorporating nanomaterials have become highly popular due to their exceptional applications across various scientific and technological fields. Nanomaterials bridge the nanoscale gap between the converter and bioreceptor in biosensors. For instance, nanomaterial biowaste is both abundant and possesses interesting physical and chemical properties. More importantly, they are biocompatible and biodegradable, making them ideal for applications in biosensing, wastewater treatment, drug delivery, tissue engineering, and flexible electronics. Material engineering allows the chemical modification of these nanomaterials to enhance the properties needed for smart electronic biosensing and diagnosis applications.

- health monitoring
- self-powered electronics
- environmentally friendly
- nanomaterials
- biowaste
- sustainable technology
- smart biosensors
- diagnostic applications

Guest Editor

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Sensors is a leading journal devoted to fast publication of the latest achievements of technological developments and scientific research in the huge area of physical, chemical and biochemical sensors, including remote sensing and sensor networks. Both experimental and theoretical papers are published, including all aspects of sensor design, technology, proof of concept and application. Sensors organizes Special Issues devoted to specific sensing areas and applications each year.

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