

Special Issue

Advanced Optics and Photonics in Biosensing Applications

Message from the Guest Editor

Biosensors are becoming increasingly vital in fields such as diagnostics, environmental monitoring and biotechnology. The purpose of this Special Issue is to explore the latest research results and applications regarding the integration of advanced optical and photonics technologies in biosensors. By capitalizing upon the advantages of optics and photonics, such as their high sensitivity, rapid response and non-intrusion, the performance of modern biosensors has been enhanced in an unprecedented way. This Special Issue aims to compile a series of research articles and reviews that address the implementation of advanced optical and photonics technologies in biosensors, including surface plasmon resonance, photonic crystals, fiber optics, microcavity lasers, and fluorescent labeling. Studies including the design and manufacture of novel sensors, the development of optical materials, and the characterization of optical and biological interfaces are welcome. The purpose of this Special Issue is to provide a platform for researchers, engineers and clinicians to discuss the future opportunities and challenges of advanced optics and photonics in biodetection.

Guest Editor

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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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