

Special Issue

Portable Optical Biosensor Devices

Message from the Guest Editors

The main topic of this Special Issue is portable optical biosensor devices for specific chemicals and biomolecules analysis in different fields of application, such as healthcare, food quality, and environmental and astrochemical analysis. For that, this Special Issue aims to collect original articles and reviews highlighting research advances, microfabrication and 3D technologies, innovative applications, new challenges, and future perspectives of portable optical biosensor devices in important areas such as health, agri-food, and the environment. Optical biosensors are one of the “fastest and cheapest” biosensors thank to their simplicity and immediacy of manufacture. Disposable (bio)sensors based on optical detection methods (colorimetry, (bio)chemiluminescence, fluorescence, plasmonic resonance, etc) are leading to new possibilities in the selective detection and sensitive quantification of a large number of chemicals and biomolecules. Portable optical biosensor devices, including wax-printed paper-based disposables, lateral flow strips, microfluidics, modified surfaces, and nanomaterials integrated within miniaturized optical detectors.

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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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