Special Issue

Paper-Based Microfluidic Devices and Applications

Message from the Guest Editors

Paper-based microfluidic analytical devices have improved substantially over the past decade by incorporating new components and materials for the point-of-care diagnosis of different diseases as well as the on-site sensitive detection of pollutants in the environment and contaminants and toxins in foods. The word “paper” in this context refers to any porous and flexible material. For this Special Issue we invite original research articles and comprehensive reviews on the following and related topics:

- New components for fluidic actuators for control of capillary flow and fluid mixing.
- Innovative detection methods and protocols at molecular and protein levels for biological and chemical reagents.
- Multiplexed detection methods.
- Innovative applications in point-of-care diagnostics, on-site environmental measurements, and clinical and demographic studies.
- Smart readers for quantitative measurements, communication and control of the ambient conditions at the reaction site.
- Coupled mathematical modeling of fluid flow with on-chip porous structures and biological or chemical reactions.
- Autonomous sensor operation for minimal user involvement.

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Deadline for manuscript submissions

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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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