

Special Issue

Advances in Amplification Methods for Biosensors

Message from the Guest Editor

There is a rapidly growing demand for sensitive and selective biosensors in various domains, including environment monitoring such as (waste)water control, detection of pollution for personal/public safety, agricultural/food safety and quality control, veterinary and medical diagnostics, etc. The main challenge remains to detect a minute amount of analytes in complex samples. Thus, recent biosensors based on the biomolecular recognition between analyte targets and relevant probes require the use of amplification methods to produce a measurable signal.

This Special Issue will highlight recent advances in the design and development of novel amplification methods to improve the performance of biosensors. All the potential analyte targets will be considered ranging from molecules to larger objects. Biosensors based on optical, electrochemical, chemiluminescence, fluorescence, resonant or mechanical transduction methods are encouraged. Finally, the amplification methods are not restricted: nucleic acid amplification or logic gate circuits, enzymatic amplification, nanostructure-based amplification, as well as combined strategies implying several amplifications.

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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