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Advances in Amplification Methods for Biosensors

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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 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, amplification, nanostructure-based enzymatic amplification, as well as combined strategies implying several amplifications.













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Message from the Editor-in-Chief

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