Special Issue

Nanozymes for Biosensing II

Message from the Guest Editors

Enzymes have played a central role in the development of biosensors. Their excellent substrate specificity and fast turnover rates make enzymes an ideal component in target recognition and/or signal transduction. However, protein enzymes are prone to irreversible denaturation, and it is difficult to perform enzyme-based assays under harsh conditions such as high temperature, extreme pH, or high ionic strength. To solve these problems, robust artificial enzymes have been developed to replace protein enzymes in the design of bioassays. A recent example is the use of nanomaterials with intrinsic enzyme-like activity (nanozymes). Compared to protein enzymes, nanozymes are more cost-effective, more stable, and show versatile surface functionalities. The research in this field will provide useful tools for biomedical and environmental applications. The Special Issue sincerely welcome original research papers, review articles, and perspectives with a focus on using nanozymes to develop biosensors for disease diagnosis, environmental monitoring, and food safety.

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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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