Special Issue

Technology Trends in Fluorescence Detection Based on Biosensor

Message from the Guest Editors

Fluorescence-based sensors have been a growing research field for many years. Among fluorescent sensors, biosensors have progressed remarkably, and many researchers have developed superior sensors that can measure not only biological macromolecules such as proteins and nucleic acids, but also small molecules such as amino acids, sugars, and pharmaceuticals. Therefore, these are becoming an indispensable measurement technology in the fields of pharmaceuticals, agriculture, and the environment. If fluorescent probes are also considered a category of sensors, fluorescent imaging techniques using these probes are very useful for solving unknown biological processes in tissues or cells. On the other hand, sensors for on-site analysis must be usable by anyone, anywhere, at any time, and therefore measurement operation must be not only very simple but also quick. Increasing the sensitivity of these sensors is an important mission, and an approach to solving this problem has been reported using the phenomenon of fluorescence intensity enhancement through the use of inorganic metal nanomaterials.

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Sensors is a leading journal devoted to fast publication of the latest achievements of technological developments and scientific research in the huge area of physical, chemical and biochemical sensors, including remote sensing and sensor networks. Both experimental and theoretical papers are published, including all aspects of sensor design, technology, proof of concept and application. Sensors organizes Special Issues devoted to specific sensing areas and applications each year.

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