Special Issue

Optical Biosensors and Their Applications

Message from the Guest Editor

Chemical structures are capable of forming clusters by interaction, which by external stimuli (temperature, light, pH. etc.) change the physical properties of substances. When designing the architecture of molecular groupings of these materials, it is necessary to address issues related to the method of generating information at the molecular level. In most cases, the supramolecular unit consists of subunits, resp. "functional" molecules; therefore it is necessary to optimize their number, type, order of units, and also solve their mutual interconnection and coordination. New knowledge in the field of processes taking place in the cells of living organisms and their mechanisms, new knowledge in medicine and chemistry, and advances in the development of new technologies (e.g., nanotechnology, biotechnology, new light sources), together with smart applications and the current global pandemic, create the conditions and requirements for the development and improvement of optical biosensors. Optical biosensors thus achieve higher stability and specificity, higher sensitivity, reproducibility, and miniaturization, and a quick return on production costs.

Guest Editor

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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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