Special Issue

Biomimetic Sensors and Their Applications

Message from the Guest Editors

The field of biomimetic sensors refers to all sensors that use biomimetic elements or biomimetic approaches. The use of aptamers (synthetic nucleic acids or peptides ligands that bind to a specific target) or molecularly imprinted polymers (a class of engineered materials having the role of artificial receptors with a predetermined selectivity for a given target analyte) in biosensors design has successfully replaced natural bioelements, which have limitations and drawbacks. Both aptamers and molecularly imprinted polymers could also be defined as synthetic receptors that mimic natural recognized entities. Biomimetic means biologically inspired; therefore, focusing on bioinspired materials or processes that mimic biological functions and processes, from the human senses to more complicated pathways, this Special Issue is addressed to a wide audience: electrochemists, physicists, biologists, immunologists, materials specialists, etc. This Special Issue plans not only to provide an overview on recent achievements but also to stimulate ideas about the current and future research in the biomimetic sensors field. Both original papers and reviews are welcome.

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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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