Special Issue

Nature Inspired Engineering: Biomimetic Sensors

Message from the Guest Editors

Nature provides a huge source of inspiration for designing sensors. Among them, electronic tongue and electronic nose are analytical devices based on a series of partially selective chemical sensors or biosensors and multivariate data processing tools. Since their design concepts are inspired by biological sensing systems, they are called biomimetic sensors. Over the past three decades, these sensors have been reported for a wide range of applications, including classification of samples by purpose, taste quantification, and flavor assessment. Biomimetic sensors simulate the human perception system, detect various external stimuli, and surpass the level of human senses in terms of sensitivity, selectivity, and accuracy, helping people to understand the unknown world and facilitating daily life.

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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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