Special Issue

Electrochemical Sensors in the Food Industry

Message from the Guest Editors

The need to develop high-throughput systems for food analysis is driving interest in electrochemical sensors based on voltammetry, amperometry, and coulometry. Their main advantages over conventional techniques are their sensitivity, rapidity, simplicity, and the capacity to directly measure the number of electrons transferred by a substance. In addition, electronic nose and electronic tongue are particularly suitable for carrying out rapid and objective sensory measurements, which are important in food production. They are common electrochemical sensor systems responding to flavor or odor (volatiles) or taste (solubles), using an array of simple and non-specific sensors and a pattern recognition software system. Contrary to traditional analytical methods, the response of electrochemical sensors can be used as a digital fingerprint of the typical food products. This Special Issue focuses on the current advancement in electrochemical sensors for application in food quality, safety, and authenticity. We look forward to receiving your contributions.

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Message from the Editor-in-Chief

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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