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Electrochemical Sensors in the Food Industry

Guest Editors:

Dr. Ksenia Morozova

Faculty of Science and Technology, Free University of Bozen-Bolzano, Piazza Università 5, 39100 Bozen-Bolzano, Italy

Prof. Dr. Matteo Mario Scampicchio

Faculty of Science and Technology, Free University of Bozen-Bolzano, Piazza Università 5, 39100 Bozen-Bolzano, Italy

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Message from the Guest Editors

Dear Colleagues,

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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Editor-in-Chief

Prof. Dr. Vittorio M. N. Passaro

Dipartimento di Ingegneria Elettrica e dell'Informazione (Department of Electrical and Information Engineering), Politecnico di Bari, Via Edoardo Orabona n. 4, 70125 Bari, Italy

Message from the Editor-in-Chief

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