Special Issue

Electrochemical Sensors and Biotechnology for Sustainable Water Quality Monitoring and Bioenergy Solutions

Message from the Guest Editor

This Special Issue, “Electrochemical Sensors and Biotechnology for Sustainable Water Quality Monitoring and Bioenergy Solutions”, aims to address the critical intersections of environmental monitoring, sustainable water management, and renewable energy production. As global concerns over water contamination and energy sustainability rise, innovative solutions are required to ensure clean water and accessible energy. This issue will explore the advancements in electrochemical sensors and biotechnology applications that move these innovations to the next levels. We welcome contributions focusing on electrochemical sensors for detecting emerging contaminants such as heavy metals, toxins, pathogens, pesticides, and PFAS onsite in various water environments. In addition, submissions are encouraged on biotechnology-driven solutions that enhance water quality and bioenergy production such as microbial fuel cell (MFC) technology for bioenergy production. The integration of these technologies not only improves environmental monitoring practices but also enables sustainable approaches to energy recovery from wastewater and other organic resources.

Guest Editor

Dr. Woo Hyoung Lee

Department of Civil Environmental and Construction Engineering, University of Central Florida, Orlando, FL, USA

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Sensors
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
sensors@mdpi.com

mdpi.com/journal/sensors

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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.

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

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