Special Issue

Recent Advances in Photo(electro)chemical Sensing and Sensors

Message from the Guest Editor

In recent years, the electrochemical sensing platform has emerged as a promising alternative and real-time method for environmental monitoring. Its ability to detect various analytes, including pharmaceuticals, biomolecules, environmentally hazardous heavy metals, pesticides, and contaminants, has received much attention owing to its extended detection limit, high selectivity, excellent accuracy, stability, ease of fabrication and cost-effectiveness. The sensing performances and signal transduction depend on the catalyst/material surface and type of analytes. In this regard, different catalyst design strategies, including heterojunction formation, metal/non-metal doping, surface functionalization and defect engineering, are of interest to boost optoelectronic properties such as light absorption, charge migration, electron transferability, selectivity, and surface-redox properties. This Special Issue aims to showcase research works based on the recent advances and developments in photoelectrochemical and electrochemical sensing and sensors using a wide range of novel single and nanocomposite catalytic materials.

Guest Editor

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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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