Special Issue

Colorimetric Sensing Technologies for Food Safety and Environment Monitoring

Message from the Guest Editors

The development of chemosensors and nanosensors for food safety and environmental monitoring has seen significant progress, with colorimetric detection standing out due to its simplicity, cost-effectiveness, and portability. The integration of miniaturized detectors and everyday devices like smartphones has further propelled this field, enabling non-conventional optical sensing.

This Special Issue focuses on innovations in colorimetric sensing, including the synthesis and application of molecular chromogens and plasmonic nanoparticles for food/environmental analysis. Key areas include multiplexed sensors, colorimetric arrays, and smart packaging films. Contributions leveraging smartphone-based detection with paper-based devices or lab-on-a-chip systems are encouraged. Original research and reviews advancing the field are welcome.

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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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