Special Issue

Applications of Spectroscopy and Imaging in Environmental and Biomedical Studies, as Well as Clinical Diagnosis

Message from the Guest Editors

There is a continued interest in developing analytical techniques that can meet the demands of increasingly complex environmental and biomedical challenges, as well as clinical diagnosis. Spectroscopy and imaging present an opportunity to meet these demands. The low cost and rapidity of spectroscopic methods, combined with the availability of handheld spectrometers, have enhanced the capability of spectroscopy for in situ sample analysis and real-time field studies. This Special Issue seeks fundamental and applied research papers or review articles on the use of spectroscopy, imaging, and hyperspectral data analysis in environmental and biomedical studies, as well as clinical diagnosis. We welcome studies on the use of optical spectroscopy (Raman, SERS, UV-visible, FTIR, fluorescence, chemiluminescence) and microscopic imaging in nanoscience; materials science; photocatalysis; molecular recognition; nanotechnology; sensing; investigations of disease processes; cancer and pathogen detection; biological sample analysis; and detection of emerging contaminants (PFAS, radionuclides, heavy metal ions, pharmaceuticals, microplastics, etc.).

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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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