

Special Issue

Spectroscopic Chemical Sensing

Message from the Guest Editors

Spectroscopy is of paramount importance in sensing for the detection of chemical components or the quantification of their concentration. Spectroscopic sensing depends on phenomena such as electronic absorption and emission, elastic scattering and reflection, inelastic scattering (Raman and Compton scattering) and nuclear magnetic resonance (NMR), among many others. The objective of this Special Issue is to present the advances in fundamental research and the development of technologies, including different sensing mechanisms and implementations, as well as innovative specific applications. Reviews must offer a critical overview of the state-of-the-art fundamentals, technologies, and applications that are pertinent to spectroscopic chemical sensing. Topics include, but are not limited to, the following:

- Complexity matrixes, including biological systems and biomedical and food industry applications;
- Harsh environments, including electromagnetic interference, ionizing radiation, high pressure and vibration and extreme temperatures;
- Remote sensing measurements;
- Natural environment monitoring, including the atmosphere and oceans.

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Deadline for manuscript submissions

closed (19 April 2024)



Sensors

an Open Access Journal
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Impact Factor 3.5
CiteScore 8.2
Indexed in PubMed



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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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