

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.

Guest Editors

Dr. José Manuel M. M. de Almeida

1. CAP/INESC TEC—Technology and Science and FCUP—Faculty of Sciences, University of Porto, 4169-007 Porto, Portugal

2. Department of Physics, School of Sciences and Technology, University de Trás-os-Montes e Alto Douro, Vila Real, Portugal

Dr. Luís Carlos Costa Coelho

Institute for Systems and Computer Engineering, Technology and Science, Porto, Portugal

Deadline for manuscript submissions

closed (19 April 2024)



Sensors

an Open Access Journal
by MDPI

Impact Factor 3.5
CiteScore 8.2
Indexed in PubMed



mdpi.com/si/156503

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Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
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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.

Editor-in-Chief

Prof. Dr. Vittorio M. N. Passaro
Department of Electrical and Information Engineering, Politecnico di Bari, Via Orabona 4, 70126 Bari, Italy

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