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Advances in Optical Gas Sensing Techniques

Guest Editor:

Prof. Dr. Pietro Patimisco

PolySense Lab, Physics Department, University and Politecnico of Bari, 70126 Bari, Italy

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Message from the Guest Editor

Dear Colleagues,

Optical gas sensing techniques fill a crucial gap between low cost sensors with limited performance, such as calorimetric, semiconductor and electrochemical gas sensors, and expensive laboratory equipment, such as gas chromatographs and mass spectrometers. To-date, several high-resolution optical techniques have been largely investigated. These are based on non-dispersive sensing, spectrophotometry, and tunable diode laser spectroscopy. The latter includes several detection schemes, based on high finesse optical cavities, multi-pass cells, optical fibres and photo-acoustic effect. This Special Issue, entitled "Advances in Optical Gas Sensing Techniques", will focus on original papers reporting recent developments in these techniques, new insights in gas-sensing methods, as well as on the important key sensing components and on fieldtesting applications. Reviews should provide an up-to-date overview of the current state-of-the-art of a particular optical gas sensing technique corroborated with results from other research groups. We look forward to, and welcome, your participation in this Special Issue.

Guest Editor









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