



State-of-the-art Laser Gas Sensing Technologies

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Deadline for manuscript
submissions:

closed (30 May 2019)

Message from the Guest Editors

Dear Colleagues,

Trace gas sensing technologies are widely used in many applications, such as environmental monitoring, life science, medical diagnostics, and planetary exploration. Hence, gas sensors with high detection sensitivity and robust design are needed urgently. Gas sensing techniques with the advantages of high sensitivity, non-invasiveness and in situ, real-time observation fill a distinct gap between low-cost sensors with limited performance, such as electrochemical and semiconductor gas sensors, and expensive laboratory equipment, such as gas chromatographs and mass spectrometers. Therefore, in this Special Issue, papers about laser gas sensing techniques, in particular advanced methods, are welcomed. Potential topics include, but are not limited to, the following: photoacoustic spectroscopy; tunable diode laser spectroscopy; cavity-enhanced spectroscopy; laser-induced fluorescence spectroscopy; laser Raman spectroscopy; heterodyne laser spectroscopy; photothermal spectroscopy; optical sensing technique; optical gas sensors applications.

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Guest Editors





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Message from the Editor-in-Chief

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