



State-of-the-art Laser Gas Sensing Technologies

Guest Editors:

Prof. Dr. Yufei Ma

National Key Laboratory of
Science and Technology on
Tunable Laser, Harbin Institute of
Technology, Harbin 150006,
China

Dr. Aurore Vicet

Institute Of Electronics and
Systems, CNRS, University of
Montpellier, Montpellier, France

Dr. Karol Krzempek

Faculty of Electronics, Photonics
and Microsystem, Wrocław
University of Science and
Technology, 50-370 Wrocław,
Poland

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.

Prof. Dr. Yufei Ma
Dr. Vicet Aurore
Dr. Karol Krzempek
Guest Editors





an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Giulio Nicola Cerullo

Dipartimento di Fisica,
Politecnico di Milano, Piazza L.
da Vinci 32, 20133 Milano, Italy

Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

Author Benefits

Open Access: free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility: indexed within Scopus, SCIE (Web of Science), Inspec, CAPlus / SciFinder, and other databases.

Journal Rank: JCR - Q2 (*Engineering, Multidisciplinary*) / CiteScore - Q1 (*General Engineering*)

Contact Us

Applied Sciences Editorial Office
MDPI, St. Alban-Anlage 66
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/applsci
applsci@mdpi.com
[X@Applsci](https://twitter.com/Applsci)