

Special Issue

Advances in Optical Gas Sensing Techniques

Message from the Guest Editor

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 field-testing 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

Prof. Dr. Pietro Patimisco

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

Deadline for manuscript submissions

closed (31 May 2017)



Inventions

an Open Access Journal
by MDPI

Impact Factor 1.9
CiteScore 4.9



mdpi.com/si/7231

Inventions
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
inventions@mdpi.com

[mdpi.com/journal/
inventions](https://mdpi.com/journal/inventions)





Inventions

an Open Access Journal
by MDPI

Impact Factor 1.9
CiteScore 4.9



[mdpi.com/journal/
inventions](https://mdpi.com/journal/inventions)



About the Journal

Message from the Editorial Board

The unique journal *Inventions* is different from all other journals. Many scholars spend their lives publishing research papers in many different journals, but most of these journals do not help scholars collate and analyze their results or assist in promoting them to a relevant industry. However, *Inventions* will help authors not only to publish their papers in the journal, but also to promote their research results to industry and assist them in realizing the purpose of technology transfer. In the future, *Inventions* will help authors to evaluate their technology license fees based on the valuation theory and approaches and also help authors to show their patents and technologies on a network transaction platform.

Editors-in-Chief

Prof. Dr. Chien-Hung Liu

Department of Mechanical Engineering, National Chung Hsing University, 250 Kuo Kuang Rd., Taichung 402, Taiwan

Prof. Dr. Shouu-Jinn Chang

Department of Electrical Engineering, National Cheng Kung University, Tainan 701, Taiwan

Author Benefits

High Visibility:

indexed within Scopus, ESCI (Web of Science), Inspec, Ei Compendex and other databases.

Journal Rank:

JCR - Q2 (Engineering, Multidisciplinary) / CiteScore - Q1 (General Engineering)

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 21.8 days after submission; acceptance to publication is undertaken in 2.9 days (median values for papers published in this journal in the first half of 2025).