Special Issue

Diode Laser Spectroscopy – Robust Sensing for Environmental and Industrial Applications

Message from the Guest Editors

The growth of many different techniques based on diode lasers in combination with spectroscopic methods, such as direct and wavelength modulation absorption, cavityenhanced absorption and photoacoustic spectroscopy, illustrates the variety of questions that can be addressed. There are already numerous mature devices and turn-key-systems available commercially. However, they are covering only a small fraction of applications, where the process of interest is accessible by optical diagnostics. In this Special Issue, we invite submissions on the use of state-of-the-art Diode Laser Spectroscopy for robust sensing in a wide field, from fundamental sciences, environmental physics and biomedical monitoring to its utilization in harsh industrial conditions. Original work highlighting the latest research and technical development is encouraged. Contributions should be focused on the scientific and practical challenges of implementing Diode Laser Spectroscopy, as well as on novel ideas to increase the robustness of the method for monitoring processes and investigating phenomena. Review papers are welcome.

Guest Editors

Dr. Steven Wagner

Reactive Flows and Diagnostics, Technical University of Darmstadt, Otto-Berndt-Straße 3, 64287 Darmstadt, Germany

Dr. Florian Schmidt

Department of Applied Physics and Electronics, Umeå University, Umeå. Sweden

Deadline for manuscript submissions

closed (31 August 2021)



Applied Sciences

an Open Access Journal by MDPI

Impact Factor 2.5 CiteScore 5.5



mdpi.com/si/47757

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

mdpi.com/journal/applsci





Applied Sciences

an Open Access Journal by MDPI

Impact Factor 2.5 CiteScore 5.5



About the Journal

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 multidimensional network.

Editor-in-Chief

Prof. Dr. Giulio Nicola Cerullo

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

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), Ei Compendex, Inspec, CAPlus / SciFinder, and other databases.

Journal Rank:

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

