Special Issue

Advanced Optical Measurement Techniques and Applications

Message from the Guest Editors

This Special Issue, titled “Advanced Optical Measurement Techniques and Applications”, will explore a range of advanced optical technologies pertinent to scientific, chemical, biomedical, and environmental applications. It will provide a comprehensive overview of current trends, challenges, and future directions in these rapidly evolving fields. Various optical sensing technologies including spectroscopy and microscopy facilitate the detection of gases like CO2, NH3 and H2O, as well as proteins and biological tissues. These technologies employ diverse optical sources including optical comb sources, superluminescent light emitting diodes, supercontinuum sources, and short pulse laser sources. Thanks to advances in machine learning and computational algorithms, the performances of these techniques have been significantly enhanced, allowing for compact, non-contact, rapid and accurate measurement. Moreover, optical materials such as metamaterials, metasurfaces and photonics crystals are greatly useful to these applications.

Guest Editors

Prof. Dr. Won Kweon Jang

Department of Electric and Electronic Engineering, Hanseo University, Seosan-si 31962, Chungcheongnam-do, Republic of Korea

Dr. Ju Yong Cho

Department of Electronic Engineering, Hanseo University, Seosan 31962, Republic of Korea

Deadline for manuscript submissions

closed (30 May 2025)

Applied Sciences

an Open Access Journal by MDPI

Impact Factor 2.5
CiteScore 5.5

mdpi.com/si/217506

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

mdpi.com/journal/applsci

MDPI

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 multi-dimensional 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)