Special Issue

Optical Spectroscopy Technology for Medical Applications

Message from the Guest Editor

Optical spectroscopic techniques provide a host of information about the properties of materials, ranging from their chemical composition to mechanical and dynamic characteristics. The application of optical spectroscopic techniques in medicine facilitates the development of methods to detect and interpret signals associated with health and disease, offering noninvasive and highly specific methods to probe biological systems. With a wide range of contrast mechanisms. these techniques enable detailed investigations across a range of micro- and macroscopic processes. advancing both our fundamental understanding of biology and the capabilities of diagnostic and screening technologies. This Special Issue aims to provide a comprehensive overview of the diverse optical spectroscopic methods used in medical applications, emphasizing recent advancements and novel applications that highlight their potential to enhance diagnostic accuracy and improve therapeutic outcomes.

Guest Editor

Dr. Mitchell B. Robinson

Massachusetts General Hospital, Harvard Medical School, Boston, MA, USA

Deadline for manuscript submissions

31 August 2025



Sensors

an Open Access Journal by MDPI

Impact Factor 3.5 CiteScore 8.2 Indexed in PubMed



mdpi.com/si/229416

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

mdpi.com/journal/ sensors





Sensors

an Open Access Journal by MDPI

Impact Factor 3.5 CiteScore 8.2 Indexed in PubMed



About the Journal

Message from the Editor-in-Chief

Sensors is a leading journal devoted to fast publication of the latest achievements of technological developments and scientific research in the huge area of physical, chemical and biochemical sensors, including remote sensing and sensor networks. Both experimental and theoretical papers are published, including all aspects of sensor design, technology, proof of concept and application. Sensors organizes Special Issues devoted to specific sensing areas and applications each year.

Editor-in-Chief

Prof. Dr. Vittorio M. N. Passaro

Dipartimento di Ingegneria Elettrica e dell'Informazione (Department of Electrical and Information Engineering), Politecnico di Bari, Via Edoardo Orabona n. 4, 70125 Bari, 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), PubMed, MEDLINE, PMC, Ei Compendex, Inspec, Astrophysics Data System, and other databases.

Journal Rank:

JCR - Q2 (Instruments and Instrumentation) / CiteScore - Q1 (Instrumentation)

