Special Issue

Laser Application in Life Sciences 2022

Message from the Guest Editor

Due to their specific properties, including focusing, spectral bandwidth, or coherence, lasers have become indispensable diagnostic and therapeutic tools in Biomedical Optics, Light absorption, elastic or inelastic (Raman) scattering, and autofluorescence or Optical Coherence Tomography (OCT) are used increasingly for label-free diagnostics of cells or tissues. In addition, numerous fluorescent dyes and fluorescent proteins are available for the detection of diseases or for measuring interactions of pharmaceutical agents. Depending on their power, wavelength, and pulse duration, lasers are also used for coagulation, tissue cutting, or even lithotripsy of bile or kindney stones. This specific volume is dedicated to the large field of biological and medical applications of lasers including spectroscopy and microscopy, light propagation, as well as diagnostic and therapeutic applications.

Guest Editor

Prof. Dr. Herbert Schneckenburger Institute of Applied Research, Aalen University, Beethovenstr. 1, 73430 Aalen, Germany

Deadline for manuscript submissions

closed (30 September 2023)



International Journal of Molecular Sciences

an Open Access Journal by MDPI

Impact Factor 4.9 CiteScore 9.0 Indexed in PubMed



mdpi.com/si/116878

International Journal of Molecular Sciences Editorial Office MDPI, Grosspeteranlage 5 4052 Basel, Switzerland Tel: +41 61 683 77 34 ijms@mdpi.com

mdpi.com/journal/ ijms





International Journal of Molecular Sciences

an Open Access Journal by MDPI

Impact Factor 4.9 CiteScore 9.0 Indexed in PubMed





Message from the Editor-in-Chief

The International Journal of Molecular Sciences (*IJMS*, ISSN 1422-0067) is an open access journal, which was established in 2000. The journal aims to provide a forum for scholarly research on a range of topics, including biochemistry, molecular and cell biology, molecular biophysics, molecular medicine, and all aspects of molecular research in chemistry. *IJMS* publishes both original research and review articles, and regularly publishes special issues to highlight advances at the cutting edge of research. We invite you to read recent articles published in *IJMS* and consider publishing your next paper with us.

Editor-in-Chief

Prof. Dr. Maurizio Battino

Department of Odontostomatologic and Specialized Clinical Sciences, Sez-Biochimica, Faculty of Medicine, Università Politecnica delle Marche, Via Ranieri 65, 60100 Ancona, 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, PMC, MEDLINE, Embase, CAPlus / SciFinder, and other databases.

Journal Rank:

JCR - Q1 (Biochemistry and Molecular Biology) / CiteScore - Q1 (Organic Chemistry)

