Special Issue

Novel Biomedical Optical Spectroscopy, Microscopy and Imaging

Message from the Guest Editor

Advancements in optical technologies have profoundly impacted biomedical research, enabling breakthroughs in diagnostics, therapeutics, and fundamental biology. This Special Issue aims to highlight the latest research and technological advances in biomedical optical spectroscopy, microscopy, and imaging. We invite contributions that address novel methodological developments, the integration of optical techniques with other modalities, and their applications in biology and medicine. Topics of interest include, but are not limited to, the following: Advanced optical spectroscopy for biomolecular analysis; Novel microscopy techniques for high-resolution imaging; Multimodal imaging systems; Real-time optical diagnostics and theranostics; Computational approaches in optical imaging; Applications in disease detection, monitoring, and treatment; Innovations in fluorescence, Raman, and nonlinear optical methods; Emerging tools for 3D and in vivo imaging. We welcome original research articles, reviews, and case studies that provide insight into the evolving landscape of biomedical optics and its transformative potential in healthcare and life sciences.

Guest Editor

Dr. Pengfei Liu

State Key Laboratory of Advanced Medical Materials and Devices, Academy of Medical Engineering and Translational Medicine, Medical College, Tianjin University, Tianjin 300072, China

Deadline for manuscript submissions

30 September 2025



Photonics

an Open Access Journal by MDPI

Impact Factor 1.9 CiteScore 3.5



mdpi.com/si/227366

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

mdpi.com/journal/

photonics





Photonics

an Open Access Journal by MDPI

Impact Factor 1.9 CiteScore 3.5



photonics



About the Journal

Message from the Editor-in-Chief

You are invited to contribute a research article or a comprehensive review for consideration and publication in *Photonics* (ISSN 2304-6732). *Photonics* is an online open access journal covering both the fundamental and applications of optics and photonics. *Photonics* strives to provide an avenue to allow authors to disseminate their scientific findings—both theoretical/ simulations and experimental works—in highly accessible peer-reviewed journal publications. The manuscript in *Photonics* will be handled with quick turnaround production processing time. We welcome authors to submit their manuscripts for publications in *Photonics*. Our goal in *Photonics* is to enable fast dissemination of high impact works to the scientific community.

Editor-in-Chief

Prof. Dr. Nelson Tansu School of Electrical and Electronic Engineering (EEE), The University of Adelaide, Adelaide, SA 5005, Australia

Author Benefits

High Visibility:

indexed within Scopus, SCIE (Web of Science), Inspec, Ei Compendex, CAPlus / SciFinder, and other databases.

Journal Rank:

CiteScore - Q2 (Instrumentation)

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 14.8 days after submission; acceptance to publication is undertaken in 1.9 days (median values for papers published in this journal in the first half of 2025).