

Special Issue

Recent Advancements in Optical Coherence Tomography

Message from the Guest Editor

This Special Issue, titled “Recent Advancements in Optical Coherence Tomography”, aims to bring together cutting-edge contributions that push the boundaries of both the instrumentation and application. We invite original research articles, technical notes, reviews, and perspective pieces that address topics including, but not limited to, the following:

- Novel OCT platforms and light-source developments (e.g., microcomb-based swept sources, supercontinuum, and extended-depth optics).
- Functional OCT methods (angiography, Doppler flowmetry, and optical coherence elastography).
- Computational innovations (AI-driven segmentation, compressed sensing, and real-time reconstruction).
- Multimodal and hybrid systems (OCT–photoacoustic, OCT–multiphoton, and OCT–fluorescence).
- Preclinical and clinical studies highlighting OCT’s role in neuroimaging, neurooncology, ophthalmology, cardiology, and beyond.
- Emerging probes and miniaturized/endoscopic implementations for in vivo and translational research.

Guest Editor

Dr. Pavel Nikitin

Biomedical Engineering, University of Houston, Houston, TX 770025, USA

Deadline for manuscript submissions

1 February 2026



Photonics

an Open Access Journal
by MDPI

Impact Factor 1.9
CiteScore 3.5



mdpi.com/si/241242

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

[mdpi.com/journal/
photonics](https://mdpi.com/journal/photonics)





Photonics

an Open Access Journal
by MDPI

Impact Factor 1.9
CiteScore 3.5



[mdpi.com/journal/
photonics](https://mdpi.com/journal/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).