

Special Issue

Optical Sensing Technologies, Devices and Their Data Applications

Message from the Guest Editors

This Special Issue on “Fiber Optic Sensing and Its Applications” welcomes contributions that address innovative aspects such as the design and deployment of advanced fiber optic sensors, the application of fiber sensing in non-destructive and ultrasonic detection, and enhancements in optical atmospheric remote sensing. Specific topics of interest include, but are not limited to, the following: 1) Development and validation of novel fiber optic sensors and sensing methodologies, especially those incorporating Lidar and other optical sensing technologies; 2) Applications of fiber optic sensing; 3) Integration of fiber optic sensors with other technologies; 4) Advancements in data processing, including machine learning and big data analysis; 5) Fiber optic sensing with AI applications, including boosting sensing performance with AI models, addressing AI security issues that introduced by fiber optic techniques, and other real-world applications that combine AI with fiber optic sensing technologies. 6) Exploration of microfluidics and optofluidic, and their applications in chemical, biological, and pharmaceutical industries.

Guest Editors

Dr. Yufei Chu

Dr. Hanqing Guo

Prof. Dr. Yuanxian Zhang

Dr. Abu Farzan Mitul

Deadline for manuscript submissions

31 December 2024



Photonics

an Open Access Journal
by MDPI

Impact Factor 2.1
CiteScore 2.6



mdpi.com/si/205633

Photonics

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 2.1
CiteScore 2.6



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



About the Journal

Message from the Editor-in-Chief

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,
CAPlus / SciFinder, and other databases.

Journal Rank:

JCR - Q2 (Optics)

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 2.6
days (median values for papers published in this journal in
the first half of 2024).