Special Issue

Laser as a Detection: From Spectral Imaging to LiDAR for Remote Sensing Applications

Message from the Guest Editors

Laser spectral imaging techniques (single-pixel imaging, hyperspectral, resonance fluorescence spectroscopy, etc.) are important tools for studying the interaction between light and matter. LiDAR (Light detection and ranging) is a remote sensing technology that makes accurate measurements by emitting a laser that shines at an object and reflects or scatters it over a period of time. This Special Issue invites manuscripts that introduce the recent advances in “Laser as a detection: from spectral imaging to LiDAR for remote sensing applications”. All theoretical, numerical and experimental papers are accepted. Topics include, but are not limited to, the following:

- Laser detection technology;
- LiDAR detection technology;
- Laser Spectroscopy;
- Atmospheric Detection and Remote Sensing;
- Single-pixel imaging;
- Hyperspectral technology;
- Resonance fluorescence spectroscopy;
- Fiber optic sensing technology;
- Optical waveguide resonant cavity design;
- Optical machine system design;
- High average-power laser technology;
- Progress in high-quality optics.
- Image processing.

Guest Editors

Dr. Jianfeng Chen

Dr. Ming Zhao

Dr. He Tian

Deadline for manuscript submissions

closed (31 March 2025)

hv

Photonics

an Open Access Journal by MDPI

Impact Factor 1.9
CiteScore 3.5

mdpi.com/si/154158

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

mdpi.com/journal/photonics

MDPI

Photonics

an Open Access Journal by MDPI

Impact Factor 1.9
CiteScore 3.5

mdpi.com/journal/photonics

MDPI

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).