

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)



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

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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

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