Special Issue

Emerging Technology in Laser Scanning

Message from the Guest Editors

Laser scanning technology is at the forefront of highprecision data acquisition and imaging, data writing, display, and material processing, transforming industries such as architecture, autonomous navigation, precision metrology, and advanced manufacturing. State-of-the-art laser scanners deliver unparalleled precision in high-resolution point cloud generation, advanced imaging, and processing, enabling intricate 3D modeling, real-time analysis, and seamless integration in diverse applications. These innovations eclipse conventional techniques by providing rapid, noncontact data acquisition, superior visualization, and enhanced accuracy across fields such as precision metrology, autonomous navigation, and advanced manufacturing. This Special Issue aims to present a comprehensive overview of cutting-edge research visions, results, and their applications. Topics of interest include, but are not limited to, the following:

- Precision metrology;
- Nanomanufacturing;
- Lidar;
- Frequency combs;
- Optical encoder;
- Confocal laser scanning;
- Silicon photonics;
- Femtosecond laser:
- Al-driven optical metrology;
- Machine vision.

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Deadline for manuscript submissions

30 June 2026



Photonics

an Open Access Journal by MDPI

Impact Factor 1.9 CiteScore 3.5



mdpi.com/si/253988

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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 peerreviewed 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.

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