Special Issue

Digital Holography and 3D Imaging Technologies

Message from the Guest Editors

Digital holography and 3D imaging technologies have rapidly advanced, enabling novel applications in optical engineering, augmented/virtual reality (AR/VR), medical imaging, and secure displays. This Special Issue focuses on the latest developments in digital holography, 3D display systems, computational imaging, and optical materials, with an emphasis on innovations that improve display performance (e.g., resolution, depth of field, viewing angles), multidimensional data capture (e.g., depth, polarization, spectral imaging), and real-time processing algorithms (e.g., AI-enhanced reconstruction, compression, and rendering). We invite contributions on holographic displays, light field rendering, metasurface optics, and AI-driven 3D content generation, as well as emerging applications in metaverse environments and optical encryption. Both theoretical and experimental studies are welcome. This Special Issue aims to provide a platform for researchers to share cutting-edge discoveries and discuss future trends in next-generation 3D visualization technologies.

Guest Editors

Dr. Qiang Li

Dr. Zi Wang

Prof. Dr. Huan Deng

Deadline for manuscript submissions

30 October 2025

hv

Photonics

an Open Access Journal by MDPI

Impact Factor 1.9
CiteScore 3.5

mdpi.com/si/237766

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).