Special Issue

Optical Design in Night Vision Imaging

Message from the Guest Editors

Night vision imaging technology plays a crucial role in various modern optics-related applications, such as night surveillance, assisted driving, and underwater detection. To capture high-quality images in low-light-level conditions, the refined optical design of low-illumination imaging is particularly important, including both vacuum device-based imaging (e.g., image intensifier) and solid state device-based imaging (e.g., EMCCD, ICMOS, qCOMS). Optical designs for other types of significant night vision imaging, such as infrared imaging and spectral imaging, are also encouraged. Of course, the design of new optical modules for night vision imaging is also welcome. In addition, optical signal and image processing technologies, which are closely related to night vision imaging, are included in the scope. This Special Issue (SI) is devoted to the above issues, and its relevant topics thus include (but are not limited to):

- optical design;
- illumination design;
- optical path design;
- imaging system optimization;
- optical material;
- optical coating;
- diffraction grating;
- freeform optics;
- night vision image processing and display.

Guest Editors

Prof. Dr. Guohua Gu

School of Electronic and Optical Engineering, Nanjing University of Science and Technology, Nanjing 210094, China

Dr. Minjie Wan

School of Electronic and Optical Engineering, Nanjing University of Science and Technology, Nanjing 210094, China

Deadline for manuscript submissions

closed (10 January 2024)

hv

Photonics

an Open Access Journal by MDPI

Impact Factor 1.9
CiteScore 3.5

mdpi.com/si/168207

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).