

Special Issue

New Advances in Freeform Optics Design

Message from the Guest Editors

Freeform surfaces have no rotation symmetry or translation symmetry, a high degree of freedom in optical design, and a flexible spatial layout. In the last 10 years, freeform optics have facilitated compact and high-performing optical systems, including space cameras, illumination optics, helmet displays, and other optical systems. Advancing the theory of optical design for freeform surfaces, improving the manufacturing precision and testing accuracy of freeform optical components, reducing the manufacturing costs, and expanding the application range of freeform optics are thus the goals of both the academic community and the related industry. This Special Issue invites manuscripts that introduce the recent advances in “Freeform Optics Design”. All theoretical, numerical, and experimental papers are accepted. Possible topics include, but are not limited to, the following:

- Freeform optics design theory;
- Freeform optics machining;
- Freeform optics inspection;
- Freeform optics installation;
- Optical freeform surface installation;
- Freeform surface type characterization;
- The applications of freeform optics.

Guest Editors

Dr. Zhengbo Zhu

School of Optical and Electronic Information, Huazhong University of Science and Technology, Wuhan, China

Dr. Shili Wei

Department of Optics and Electronics Engineering, Huazhong University of Science and Technology, Wuhan, China

Deadline for manuscript submissions

closed (20 May 2024)



Photonics

an Open Access Journal
by MDPI

Impact Factor 2.1
CiteScore 2.6



mdpi.com/si/162695

Photonics

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

[mdpi.com/journal/
photonics](https://mdpi.com/journal/photonics)





Photonics

an Open Access Journal
by MDPI

Impact Factor 2.1
CiteScore 2.6



[mdpi.com/journal/
photonics](https://mdpi.com/journal/photonics)



About the Journal

Message from the Editor-in-Chief

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,
CAPlus / SciFinder, and other databases.

Journal Rank:

JCR - Q2 (Optics)

Rapid Publication:

manuscripts are peer-reviewed and a first decision is
provided to authors approximately 14.9 days after
submission; acceptance to publication is undertaken in 1.9
days (median values for papers published in this journal in
the second half of 2024).