Special Issue

Novel Advances in Optical Fiber Gratings

Message from the Guest Editors

The exploration of fiber Bragg gratings (FBGs) is a pivotal aspect of optical fiber technology, given their extensive applications in fiber sensing, optical communications, and laser systems. In sensing applications, FBGs are utilized to measure strain, temperature, vibration, pressure, and other physical parameters, as changes in these conditions cause shifts in the Bragg wavelength. This Special Issue, entitled 'Novel Advances in Optical Fiber Gratings', aims to showcase the latest innovations and advancements in FBG research. We invite manuscripts that provide novel insights or breakthroughs in either fabrication or applications. Topics of interest for this Special Issue include, but are not limited to, the following:

- Fiber grating inscription;
- Fiber grating sensors;
- Applications of fiber gratings in fiber lasers;
- New technologies and applications of grating sensors;
- Distributed and multiplexed sensing and sensor networking;
- Artificial intelligence (AI)-assisted grating applications;
- Performance-enhanced grating sensors in industrial applications.

We look forward to receiving your contributions.

Guest Editors

Dr. Jingxian Cui

Photonics Research Institute, Department of Electrical and Electronic Engineering, The Hong Kong Polytechnic University, Hong Kong 999077, China

Dr. Zhiyong Zhao

Wuhan National Lab for Optoelectronics (WNLO), School of Optical and Electronic Information, Huazhong University of Science and Technology, Wuhan 430074, China

Deadline for manuscript submissions

31 May 2025



Photonics

an Open Access Journal by MDPI

Impact Factor 2.1 CiteScore 2.6



mdpi.com/si/222050

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

mdpi.com/journal/ photonics





Photonics

an Open Access Journal by MDPI

Impact Factor 2.1 CiteScore 2.6



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 14.8 days after submission; acceptance to publication is undertaken in 2.6 days (median values for papers published in this journal in the first half of 2024).

