

Special Issue

Optical Fiber Lasers and Amplifiers. Practical Applications of Fiber-Based Laser Sources

Message from the Guest Editors

The development of new fiber structures and new glass matrices (silica-based and non-silica-based, such as tellurite, chalcogenide, and fluoride), the search for new active dopants, as well as the search and optimization of new fiber laser schemes have made it possible to significantly expand the spectral range of available laser sources that are covered, and at the same time, new laser technologies can be implemented. As a result, the global market for fiber laser systems is growing rapidly, and it already reached a value of about USD 3 billion in 2021. From Optech Consulting data, 52% of industrial lasers market in 2021 were fiber-based systems, and to date, the market trend does not indicate that any saturation has occurred. Currently, fiber lasers are key elements of material processing equipment, LIDARs, some medical equipment, telecommunications, and so on. The further development of fiber-based sources, optical fibers, and component bases will allow existing limitations to be overcome, create new possibilities for practical applications, and begin a new era of laser sources.

Guest Editors

Dr. Svetlana Aleshkina

Dr. Elena Anashkina

Dr. Serafima Filatova

Deadline for manuscript submissions

closed (1 September 2023)



Photonics

an Open Access Journal
by MDPI

Impact Factor 1.9
CiteScore 3.5



mdpi.com/si/124578

Photonics
Editorial Office
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 1.9
CiteScore 3.5



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



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 14.9 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).