

Special Issue

Narrow Linewidth Laser Sources and Their Applications

Message from the Guest Editors

Due to the superior spectral coherence, laser sources with a narrow linewidth have found widespread applications in a range of areas, from fundamental physical research to biomedical diagnosis to military defense. With the development of advanced laser materials, devices and techniques, laser linewidth has been significantly narrowed to a level of mHz in recent years. Narrow-linewidth lasers can now be obtained with almost all prevalent laser techniques. The improved performance of these laser sources, accompanied by their output power, operation wavelength and systematical stability, has attracted sustained attention. This Special Issue invites manuscripts detailing the latest advances in “narrow linewidth laser sources and their applications”. Theoretical, numerical and experimental papers are welcome. Topics of interest include, but are not limited to, the following:

- Physics of laser linewidth broadening;
- Narrow-linewidth laser oscillators;
- High-power narrow-linewidth laser amplifiers;
- Novel laser linewidth narrowing techniques;
- Laser linewidth characterization techniques;
- Applications of narrow-linewidth laser sources.

Guest Editors

Dr. Shijie Fu

School of Precision Instrument and Optoelectronics Engineering,
Tianjin University, Tianjin, China

Prof. Dr. Huadong Lu

State Key Laboratory of Quantum Optics and Quantum Optics Devices,
Collaborative Innovation Center of Extreme Optics, Institute of Optoelectronics, Shanxi University, Taiyuan 030006, China

Deadline for manuscript submissions

closed (10 August 2024)



Photonics

an Open Access Journal
by MDPI

Impact Factor 1.9
CiteScore 3.5



mdpi.com/si/148368

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 15 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 2025).