Special Issue

Recent Progress in Optical Gyroscopes

Message from the Guest Editor

Optical gyroscope is an inertial sensor that uses the Sagnac effect to measure the rotation rate. Compared to traditional mechanical gyroscopes, it has the characteristics of a fully solid-state structure, high precision, low power, and ease of integration. It is widely used in fields such as aerospace, navigation, land navigation, robotics, simulation training, and scientific research. Currently, classical optical gyroscopes are mainly divided into interferometric optical/fiber gyroscopes, laser gyroscopes, resonant optical/fiber gyroscopes, and Brillouin optical/fiber gyroscopes, as well as some new types of optical gyroscopes, such as optomechanical gyroscopes and optical gyroscopes based on non-Hermitian systems with exceptional point (EP). Researchers are invited to contribute papers to this Special Issue. Topics include, but are not limited to, the followina:

- Fiberoptic gyroscope (FOG);
- Ring-laser gyroscope (RLG);
- Resonant optical gyroscope;
- Integrated optical gyroscope;
- Brillouin optical gyroscope;
- Optomechanical gyroscope.

Guest Editor

Dr. Liu Yang College of Intellengent of Harbin Engineering University, Harbin Engineering University, Harbin 150001, China

Deadline for manuscript submissions

closed (10 January 2025)



Photonics

an Open Access Journal by MDPI

Impact Factor 1.9 CiteScore 3.5



mdpi.com/si/204062

Photonics Editorial Office 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 1.9 CiteScore 3.5



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 14.8 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).