Special Issue

Advanced Solid-State and Fiber Mid-IR Lasers: Novel Materils, Components, Systems and Applications

Message from the Guest Editors

Mid-IR sources and detectors operating at 2-30 micrometers have a number of applications in medicine, environmental monitoring, manufacturing process control, scientific research and special tasks. The issue addresses the development of high-efficiency, powerful and compact solid-state and fiber mid-IR lasers. Recent years have seen a significant progress in the materials and components for the mid-IR. A number of laser crystals and ceramics with improved parameters was presented. Novel high-purity optical fibers lead to promising results when creating mid-IR lasers and supercontinuum sources. Nonlinear devices operating in the mid-IR, such as optical parametric oscillators and generators have also rapidly progressed.

Characteristics and parameters of the mid-IR lasers and laser systems were improved. The novel applications of the mid-IR lasers and nonlinear optical devices were demonstrated. Papers in these research areas will be presented in the coming issue.

Guest Editors

Dr. Oleg Antipov Institute of Applied Physics of the Russian Academy of Science, Nizhnny Novgorod, Russia

Prof. Dr. Arkady Kim

Department of Nonlinear Dynamics and Optics, Russian Academy of Sciences, Moscow, Russia

Deadline for manuscript submissions

31 December 2024



Photonics

an Open Access Journal by MDPI

Impact Factor 2.1 CiteScore 2.6



mdpi.com/si/174118

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



photonics



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).

