

Special Issue

Advanced Solid-State and Fiber Mid-IR Lasers: Novel Materials, 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,
Nizhny Novgorod, Russia

Prof. Dr. Arkady Kim

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

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Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
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Prof. Dr. Nelson Tansu

School of Electrical and Electronic Engineering (EEE), The University of Adelaide, Adelaide, SA 5005, Australia

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