# **Special Issue**

# Design and Applications of Optical Amplifiers

### Message from the Guest Editor

Fibre optic amplifiers have become one of the basic elements of the modern worldwide telecommunications system, and powerful solid-state amplifiers have made it possible to use lasers to ignite nuclear fusion. For these reasons, the design of optical amplifiers is a crucial area from both scientific and technical points of view. And besides amplification media, amplifiers also come in the form of media for nonlinear conversion. As a result, the output radiation can be controlled according to the gain level of the amplifier. For this reason, many scientific groups are working on developing new amplifying optical materials and investigating nonlinear effects. gain saturation effects, thermo-optical effects, etc. This Special Issue on "Design and Applications of Optical Amplifiers" will welcome fundamental, experimental, and applied cutting-edge research in the form of both regular articles and reviews concerning the following:

- Fiber amplifiers;
- Solid-state amplifiers;
- Hybrid amplification system;
- Nonlinear effects in optical amplifiers;
- New optical materials;
- Supercontinuum generation;
- Stimulated Brillouin scattering;
- Stimulated Raman scattering.

### **Guest Editor**

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### Deadline for manuscript submissions

closed (1 April 2024)



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### 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 peerreviewed 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**

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