

Design and Applications of Optical Amplifiers

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Message from the Guest Editor

Dear Colleagues,

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.

