

Novel Materials and Technologies for Fiber Lasers

Guest Editor:

Dr. Alexey V. Andrianov

Institute of Applied Physics,
Russian Academy of Sciences,
Nizhny Novgorod, Russia

Deadline for manuscript
submissions:

closed (31 October 2021)

Message from the Guest Editor

The present Special Issue is dedicated to recent advances in materials and technologies for fiber lasers. Topics of interest include but are not limited to the following areas:

- Optical fibers based on new perspective materials (including doped glasses, soft glasses, and highly nonlinear glasses) and advanced laser systems (CW and pulsed, including systems with nonlinear light conversion stages) based on such fibers in various wavelength ranges, including mid-IR;
- Photosensitive fibers, fiber Bragg gratings, and their applications in advanced fiber lasers;
- Novel fiber designs for power/energy scaling of laser systems, including photonic crystal fibers and multi-core fibers, novel nonlinear propagation regimes in multimode fibers, and advanced high-power fiber amplifier designs;
- Gas- and liquid-filled fibers and their applications in advanced fiber lasers;
- Novel 2D materials for fiber lasers, the integration of such materials with fibers, and the applications of such integrations in fiber lasers, including mode-locking and Q-switching.

