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Thulium-Doped Fiber Lasers—Advances and Applications

Guest Editor:

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Deadline for manuscript submissions:

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Message from the Guest Editor

The number of demonstrations of Thulium-doped fiber lasers (TDFLs) generated at a wavelength range of 2 μm has increased rapidly in recent years. The gain bandwidth of Tm3+-doped silica fibers, ranging from 1.8 to 2.1 μm , makes TDFLs one of the most promising sources of midinfrared coherent radiation for various applications, including medicine, spectroscopy, remote sensing, material processing, and frequency conversion. Due to the broadband gain bandwidth, thulium-doped fibers are also an excellent choice for an active medium in mode-locked fiber lasers and the generation of ultrashort pulses. However, our topics of interest are not only limited to fiber lasers operating in the 2 μm spectral region, and reports on TDFLs utilizing other laser transitions are also invited.

This Special Issue aims to present recent advances in the development of thulium-doped fiber lasers—different laser setups and generation regimes, including ultrafast modelocked fiber lasers as well as high-power continuous-wave (CW) lasers, new designs of thulium-doped fibers, and their applications.











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Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

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