

## Special Issue

# Thulium-Doped Fiber Lasers— Advances and Applications

### Message from the Guest Editor

The number of demonstrations of Thulium-doped fiber lasers (TDFLs) generated at a wavelength range of 2  $\mu\text{m}$  has increased rapidly in recent years. The gain bandwidth of  $\text{Tm}^{3+}$ -doped silica fibers, ranging from 1.8 to 2.1  $\mu\text{m}$ , makes TDFLs one of the most promising sources of mid-infrared 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  $\mu\text{m}$  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 mode-locked fiber lasers as well as high-power continuous-wave (CW) lasers, new designs of thulium-doped fibers, and their applications.

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### Guest Editor

Dr. Maria Michalska

Institute of Optoelectronics, Military University of Technology in  
Warsaw, PL-00908 Warsaw, Poland

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### Deadline for manuscript submissions

closed (31 October 2022)



## Applied Sciences

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*Applied Sciences*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
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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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### Editor-in-Chief

Prof. Dr. Giulio Nicola Cerullo  
Dipartimento di Fisica, Politecnico di Milano, Piazza L. da Vinci 32,  
20133 Milano, Italy

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