# Article information:

Improvement of 2-μm Thulium-Doped Fiber Lasers via ASE Suppression Using All-Solid Low-Pass Photonic Bandgap Fibers
[https://opg.optica.org/jlt/abstract.cfm?uri=jlt-37-22-5686=search](https://opg.optica.org/jlt/abstract.cfm?uri=jlt-37-22-5686&origin=search)

# Article summary:

1. All-solid low-pass photonic bandgap fibers can be used to suppress amplified spontaneous emission (ASE) in 2-μm thulium-doped fiber lasers.

2. Various studies have been conducted on the design and fabrication of all-solid silicate photonic bandgap fibers with large mode area cores.

3. Thulium doped fiber lasers have been developed for use in the 1.7 μm and 1.8 μm bands, as well as for generating passive Q-switched pulses in the two-micron region.

# Article rating:

May be slightly imbalanced: The article presents the information in a generally reliable way, but there are minor points of consideration that could be explored further or claims that are not fully backed by appropriate evidence. Some perspectives may also be omitted, and you are encouraged to use the research topics section to explore the topic further.

# Article analysis:

The article provides a comprehensive overview of research into the improvement of 2-μm thulium-doped fiber lasers via ASE suppression using all-solid low-pass photonic bandgap fibers. The article is based on a range of studies from various sources, which are referenced throughout the text, providing evidence to support its claims and conclusions. The article does not appear to be biased or one sided, as it presents both sides of the argument equally and explores counterarguments where appropriate. Furthermore, it does not contain any promotional content or partiality towards any particular viewpoint or opinion.

The article does not appear to be missing any points of consideration or evidence for its claims, although there is some scope for further exploration into potential risks associated with this technology that could be noted in future versions of the article. Additionally, while the article provides an overview of research into this topic, it does not provide an in depth analysis or discussion of each study mentioned; this could be included in future versions to provide more detail and insight into each study's findings and implications for further research into this field.

# Topics for further research:

* Thulium-doped fiber laser applications
* Potential risks of ASE suppression
* Photonic bandgap fiber properties
* All-solid low-pass photonic bandgap fibers
* 2-μm thulium-doped fiber laser performance
* Recent advances in 2-μm thulium-doped fiber laser research

# Report location:

<https://www.fullpicture.app/item/b80ba0d608d2ba453f022dfe2b7121e6>