List of publications

Author	Ing. Martin Vaněk Czech Technical University in Prague Faculty of Nuclear Sciences and Physical Engineering Department of Physical Electronics
Title of Dissertations	Use of diffractive optical elements in high power fiber lasers
Degree Programme	Doctoral Degree Study
Field of study	Physical Engineering
Academic Year	2020/2021

Articles

[1] M. Vanek, J. Vanis, Y. Baravets, F. Todorov, J. Ctyroky, and P. Honzatko, "High-power fiber laser with a polarizing diffraction grating milled on the facet of an optical fiber," *Opt. Express* **24**, pp. 30225-30233, Dec 2016.

[2] M. Vanek M., et. al., "Leaky-mode resonant gratings on fibre facet," *Optical and Quantum Electronics* **50**, pp. 50, 2018.

Conferences

[1] M. Vanek, P. Honzatko, F. Todorov, and J. Vanis, "Focused Ion Beam Micromachining of Fiber Facet Photonic Structures", *20th Slovak - Czech - Polish Optical Conference On Wave and Quantum Aspects of Contemporary Optics*, Jasna, Slovakia, 2016.

[2] M. Vanek, J. Vanis, Y. Baravets, F. Todorov, J. Ctyroky, and P. Honzatko, "Anti-reflection and polarizing photonic structures for high power fiber applications," in *Proc. SPIE 10232, Micro-structured and Specialty Optical Fibres V*, Proceedings of SPIE The International Society for Optical Engineering, May 2017.

[3] M. Vanek, J. Ctyroky, and P. Honzatko, "Leaky-mode resonant gratings on a fiber facet", *Optical Wave and Waveguide Theory and Numerical Modelling workshop*, Proceedings of the 25th International Workshop on Optical Wave & Waveguide Theory and Numerical Modelling, ISBN: 978-90-386-4318-2.

[4] M. Vanek, J. Vanis, Y. Baravets, F. Todorov, J. Ctyroky, and P. Honzatko, "Fiber facet gratings for use in high-power fiber lasers," *Proceedings WSOF2017*, 2017

[5] M. Vanek, and P. Honzatko, "Polarizing Fibre Facet Grating with High Modal Reflectance," *The 21st Czech-Polish-Slovak Optical Conference On Wave and Quantum Aspects of Contemporary Optics*, 2018, Lednice, Czech Republic, 2018.

[6] M. Vanek, J. Vanis, Y. Baravets, F. Todorov, J. Ctyroky, and P. Honzatko, "Fiber facet gratings for high power fiber lasers," *Proc. SPIE 10603, Photonics, Devices, and Systems VII*, Dec 2017, https://doi.org/10.1117/12.2293605.

Others

[1] M. Vanek, J. Tomko and P. Honzatko, "Design, fabrication and testing of polarization insensitive diffraction grating for high power fiber laser application at 2 μm wavelength," *Siegman International School on Lasers*, Amberg, Germany, 2015.

[2] M. Vanek, Y. Baravets, P. Honzatko, and P. Gladkov, "Narrow band CW MIR generator based on the difference frequency generation in KTP crystal," *Summer school of silicon photonics*, Gent, Belgium, 2014.