

Jméno, Příjmení, Titul Žadatele:

Given Name, Surname, Academic Degree Of Student:

Yauhen Baravets, Ing.

Seznam Publikovaných Prací:

List Of Publications:

1. **Y. Baravets**, P. Dvorak, F. Todorov, J. Ctyroky, P. Peterka, And P. Honzatko. Broadly Tunable laser based on novel metallic resonant leaky-mode diffraction grating. *Opt. Express*, 28(3):4340–4346, Feb 2020.
2. Pavel Honzatko, **Yauhen Baravets**, And Ashwin Kumar Myakalwar. Single-frequency fiber laser based on a fiber ring resonator filter tunable in a broad range from 1023nm to 1107nm. *Opt. Lett.*, 43(6):1339–1342, Mar 2018.
3. V. Puchy, F. Kovac, L. Falat, I. Petryshynets, R. Dzunda, M. Fides, M. Podobova, J. Mrazek, **Y. Baravets**, P. Honzatko, And S. Vytykacova. The effects of CO₂ laser and Thulium-doped fibre laser scribing on magnetic domains structure, coercivity, and nanohardness of Fe-3.2Si grain-oriented electrical steel sheets. *Kovove Materialy*, 56(6):389–395, 2018.
4. M. Vanek, J. Vanis, **Y. Baravets**, F. Todorov, J. Ctyroky, and P. Honzatko, Antireflection and polarizing photonic structures for high-power fiber applications, **in** *Proceedings of SPIE - The International Society for Optical Engineering*, vol. 10232, 2017.
5. Martin Vanek, Jan Vanis, **Yauhen Baravets**, Filip Todorov, Jiri Ctyroky, Pavel Honzatko, Fiber facet gratings for high power fiber lasers, *Proc. SPIE 10603, Photonics, Devices, And Systems VII*, 106030J, 2017.
6. **Baravets, Y.**, Honzatko, P., Todorov, F., & Gladkov, P., Narrowband widely tunable CW mid-infrared generator based on difference frequency generation in periodically poled KTP and KTA crystals, *Optical and Quantum Electronics*, 48(5), p. 286, 2016.
7. 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*, vol. 24, no. 26, pp. 30225-30233, Dec. 2016.
8. **Y. Baravets**, F. Todorov, P. Honzatko, High-power thulium-doped fiber laser in an all-fiber configuration, 20th Slovak-Czech-Polish Optical Conference on Wave and Quantum Aspects of Contemporary Optics, in *Proc. SPIE*, vol. 10142, p. 101420G, 2016.

9. P. Honzátka, **Y. Baravets**, S. Mondal, P. Peterka, F. Todorov, Coherent sources for mid-infrared laser spectroscopy, 20th Slovak-Czech-Polish Optical Conference on Wave and Quantum Aspects of Contemporary Optics, *Proc. SPIE*, vol. 10142, p. 1014202, 2016.
10. Aubrecht, J., Peterka, P., Honzatko, P., **Baravets, Y.**, Jelínek, M., Kubecek, V., & Kasik, I., Characterization of holmium fibers with various concentrations for fiber laser applications around 2.1 μm , in *SPIE Photonics Europe*, International Society for Optics and Photonics, pp. 988607-988607, 2016.
11. P. Koska, P. Peterka, J. Aubrecht, O. Podrazky, F. Todorov, M. Becker, **Y. Baravets**, P. Honzatko, and I. Kasik, Enhanced pump absorption efficiency in coiled and twisted double-clad thulium-doped fibers, *Opt. Express*, 24(1), pp. 102–107, 2016.
12. P. Koska, **Y. Baravets**, P. Peterka, M. Pisarik, and J. Bohata. Optimized mode-field adapter for low-loss fused fiber bundle signal and pump combiners. In *Proceedings of SPIE - The International Society for Optical Engineering*, volume 9344, 2015.
13. Koska, Pavel; **Baravets, Yauhen**; Peterka, Pavel; Bohata, Jan; Pisarik, Michael, "Mode-field adapter for tapered-fiber-bundle signal and pump combiners", *Applied Optics* 54 (4), p. 751-756, 2015.
14. Aubrecht, Jan; Cajzl, Jakub; Peterka, Pavel; Honzatko, Pavel; Koska, Pavel; **Baravets, Yauhen**; Becker, Martin; Podrazky, Ondrej; Todorov, Filip; Kasik, Ivan, Characterization of double-clad thulium-doped fiber with increased quantum conversion efficiency, *Proc. SPIE 9507*, Micro-structured and Specialty Optical Fibres IV, 95070P, 2015.
15. M. Písařík, P. Peterka, S. Zvánovec, **Y. Baravets**, F. Todorov, I. Kašík, P. Honzátka, Fused fiber components for "eye-safe" spectral region around 2 μm , *Optical and Quantum Electronics*, vol. 46, pp. 603-611, 2014;
16. Pavel Honzatko, **Yauhen Baravets**, Ivan Kasik, and Ondrej Podrazky, "Wideband thulium–holmium-doped fiber source with combined forward and backward amplified spontaneous emission at 1600–2300 nm spectral band," *Opt. Lett.* 39, 3650-3653, 2014.
17. P. Honzatko, **Y. Baravets**, F. Todorov, P. Peterka, and M. Becker, "Coherently combined power of 20 W at 2000 nm from a pair of thulium-doped fiber lasers," *Laser Phys. Lett.*, vol. 10, no. 9, p. 95104, Sep. 2013.
18. P. Honzatko, **Y. Baravets**, and F. Todorov, A Mode-locked Thulium-doped fiber laser based on a nonlinear loop mirror, *Laser Phys. Lett.*, Vol. 10, No. 7, P. 75103, Jul. 2013.