

SUMMARY LIST OF PUBLICATIONS

Last update: January 2023, for most recent papers check [Google Scholar](#), [ORCID](#) or [ASEP database](#)

PATENTS

- [1] P. Peterka, P. Koška, O. Podrazký, V. Matějec, and I. Kašík, "Amplifying module, method of making the same, and cladding pumped optical device incorporating the module," CZ Patent 305888, issued 9 March 2016, filed 5 Feb. 2015.
- [2] P. Koška, P. Peterka, and M. Písařík, "Mode field adapter for signal branch of pump and signal combiners, combiner, and optical device," CZ Patent 305868, issued 2 March 2016, filed 12 Dec. 2014.
- [3] P. Peterka, P. Honzátko, and R. Slavík, "All-fiber laser with passive Q-switching," CZ Patent 303333, issued 21 June 2012, filed 17 June 2011.
- [4] P. Peterka, I. Kašík, and V. Matějec, "Method and device for coupling the signal and pump into double-clad optical fiber for fiber amplifiers and lasers," CZ Patent 301215, issued 2 Nov. 2009, filed 12 April 2005.

BOOK CHAPTERS

- [1] B. Dussardier, W. Blanc, and P. Peterka, "Tailoring of the local environment of active ions in rare-earth-and transition-metal-doped optical fibres and potential applications," in *Selected Topics on Optical Fiber Technology*, S. W. Harun, Ed., IntechOpen, 2012, pp. 95-120.
<https://doi.org/10.5772/2429>
- [2] P. Peterka and J. Vojtěch, "Optical amplifiers," in *Handbook of Radio and Optical Networks Convergence*, Springer, Tetsuya Kawanishi. Ed., *in review*.

JOURNAL PUBLICATIONS

- [1] B. Jiříčková, M. Grábner, J. Aubrecht, O. Schreiber, C. Jauregui, and P. Peterka, "Temperature dependent thulium cross sections," *Opt. Lett.*, 2023, in print,
<https://doi.org/10.1364/OL.479313>
- [2] P. Vařák, I. Kašík, P. Peterka, J. Aubrecht, J. Mrázek, M. Kamrádek, O. Podrazký, I. Bartoň, M. Franczyk, R. Buczynski, and P. Honzátko, "Heat treatment and fiber drawing effect on the luminescence properties of RE-doped optical fibers (RE:Yb, Tm, Ho)," *Opt. Express*, vol. 30, no. 6, pp. 10050–10062, Mar. 2022, <https://doi.org/10.1364/OE.449643>
- [3] P. Vařák, M. Kamrádek, J. Mrázek, O. Podrazký, J. Aubrecht, P. Peterka, P. Nekvindová, and I. Kašík, "Luminescence and laser properties of RE-doped silica optical fibers: The role of composition, fabrication processing, and inter-ionic energy transfers," *Optical Materials: X*, vol. 15, p. 100177, Aug. 2022, <https://doi.org/10.1016/j.omx.2022.100177>

- [4] D. C. Kirsch, A. Bednyakova, P. Varak, P. Honzatko, B. Cadier, T. Robin, A. Fotiadi, P. Peterka, and M. Chernysheva, "Gain-controlled broadband tuneability in self-mode-locked Thulium-doped fibre laser," *Commun. Phys.*, vol. 5, p. 219, Sep. 2022, <https://doi.org/10.1038/s42005-022-00989-x>
- [5] M. Franczyk, D. Pysz, R. Stepień, J. Cimek, R. Kasztelaniec, F. L. Chen, M. Klimczak, L. Zhao, I. Kasik, P. Peterka, and R. Buczynski, "Dual band active nanostructured core fiber for two-color fiber laser operation," *J. Lightwave Technol.*, vol. 40, no. 21, pp. 7180–7190, Nov. 2022, <https://doi.org/10.1109/JLT.2022.3199581>
- [6] P. Peterka, D. Pugliese, B. Jiříčková, N. G. Boetti, H. Turčičová, I. Mirza, A. Borodkin, and D. Milanese, "High-power laser testing of calcium-phosphate-based bioresorbable optical fibers," *Opt. Mater. Express*, vol. 11, no. 7, p. 2049, Jul. 2021, <https://doi.org/10.1364/OME.428490>
- [7] M. Grábner, K. Nithyanandan, P. Peterka, P. Koška, A. A. Jasim, and P. Honzátko, "Simulations of pump absorption in tandem-pumped octagon double-clad fibers," *IEEE Photonics J.*, vol. 13, no. 2, p. 1500314, 2021, <https://doi.org/10.1109/jphot.2021.3060857>
- [8] M. Kamrádek, J. Aubrecht, P. Vařák, J. Cajzl, V. Kubeček, P. Honzátko, I. Kašík, and P. Peterka, "Energy transfer coefficients in thulium-doped silica fibers," *Opt. Mater. Express*, vol. 11, no. 6, pp. 1805–1814, Jun. 2021, <https://doi.org/10.1364/ome.427456>
- [9] A. A. Jasim, P. Peterka, O. Podrazký, M. Kamrádek, F. Todorov, and P. Honzátko, "Efficient approach to designing low OH diffusion in the thermally shaped double-clad fibers," *Optical Fiber Technology*, vol. 63, p. 102513, May 2021, <https://doi.org/10.1016/j.yofte.2021.102513>
- [10] M. Grábner, P. Peterka, and P. Honzátko, "Formula for temperature distribution in multi-layer optical fibres for high-power fibre lasers," *Opto-Electron. Rev.*, vol. 29, pp. 126–132, 2021, <https://doi.org/10.24425/OPELRE.2021.139482>
- [11] F. Todorov, J. Aubrecht, P. Peterka, O. Schreiber, A. A. Jasim, J. Mrázek, O. Podrazký, M. Kamrádek, K. Nithyanandan, M. Grábner, Y. Baravets, J. Cajzl, P. Koška, A. Fišar, I. Kašík, and P. Honzátko, "Active optical fibers and components for fiber lasers emitting in the 2- μ m spectral range," *Materials*, vol. 13, no. 22, p. 5177, 2020, <https://doi.org/10.3390/ma13225177>
- [12] I. Kasik, V. Matejec, M. Hayer, M. Kamradek, O. Podrazky, J. Mrazek, P. Peterka, and P. Honzatko, "Glass materials for optical fibers," *Ceramics - Silikaty*, vol. 64, no. 1, pp. 29–34, 2020, <https://doi.org/10.13168/cs.2019.0045>
- [13] A. A. Jasim, O. Podrazký, P. Peterka, M. Kamrádek, I. Kašík, and P. Honzátko, "Impact of shaping optical fiber preforms based on grinding and a CO₂ laser on the inner-cladding losses of shaped double-clad fibers," *Opt. Express*, vol. 28, no. 9, pp. 13601–13615, Apr. 2020, <https://doi.org/10.1364/oe.386571>
- [14] 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*, vol. 28, no. 3, pp. 4340–4346, Feb. 2020, <https://doi.org/10.1364/oe.384550>
- [15] J. Aubrecht, P. Peterka, P. Honzatko, O. Moravec, M. Kamradek, and I. Kasik, "Broadband thulium-doped fiber ASE source," *Opt. Lett.*, vol. 45, no. 8, pp. 2164–2167, 2020, <https://doi.org/10.1364/OL.389397>
- [16] **O. Podrazký, P. Peterka, I. Kašík, S. Vytykáčová, J. Proboštová, J. Mrázek, M. Kuneš, V. Závalová, V. Radochová, O. Lyutakov, E. Ceci-Ginistrelli, D. Pugliese, N. G. Boetti, D. Janner, and D. Milanese, "In-vivo testing of a bioresorbable phosphate-based optical fiber," *J. Biophotonics*, vol. 12, no. 7, p. e201800397, 2019, <https://doi.org/10.1002/jbio.201800397>**
- [17] J. Mrázek, S. Vytykáčová, J. Buršík, V. Puchý, V. Girman, P. Peterka, and I. Kašík, "Sol-gel route to nanocrystalline Eu₂Ti₂O₇ films with tailored structural and optical properties," *J. Am. Ceram. Soc.*, vol. 102, no. 11, pp. 6713–6723, Nov. 2019, <https://doi.org/10.1111/jace.16524>
- [18] M. Kamrádek, I. Kašík, J. Aubrecht, J. Mrázek, O. Podrazký, J. Cajzl, P. Vařák, V. Kubeček, P. Peterka, and P. Honzátko, "Nanoparticle and solution doping for efficient holmium fiber lasers [Invited paper]," *IEEE Photonics J.*, vol. 11, no. 5, p. 7103610, 2019, <http://doi.org/10.1109/jphot.2019.2940747>

- [19] I. Kasik, M. Kamradek, J. Aubrecht, P. Peterka, O. Podrazky, J. Cajzl, J. Mrazek, and P. Honzatko, "Thulium-doped optical fibers for fiber lasers operating at around 2 μm ," *Bull. Pol. Acad. Sci.-Tech. Sci.*, vol. 67, no. 5, pp. 981–986, Oct. 2019, <https://doi.org/10.24425/bpasts.2019.130883>
- [20] N. Kanagaraj, A. Theodosiou, J. Aubrecht, P. Peterka, M. Kamradek, K. Kalli, I. Kasik, and P. Honzatko, "All fiber mode-locked thulium-doped fiber laser using a novel femtosecond-laser-inscribed 45°-plane-by-plane-tilted fiber grating," *Laser Phys Lett*, vol. 16, no. 9, p. 095104, Aug. 2019, <http://doi.org/10.1088/1612-202x/ab39db>
- [21] A. Theodosiou, J. Aubrecht, P. Peterka, I. Kasik, F. Todorov, O. Moravec, P. Honzatko, and K. Kalli, "Er/Yb double-clad fiber laser with fs-laser inscribed plane-by-plane chirped FBG laser mirrors," *IEEE Photonics Technol. Lett.*, vol. 31, no. 5, pp. 409–412, 2019, <https://doi.org/10.1109/lpt.2019.2896896>
- [22] S. Vytykáčová, J. Mrázek, V. Puchý, R. Džunda, R. Skála, P. Peterka, and I. Kašík, "Sol-gel route to highly transparent $(\text{Ho}_{0.05}\text{Y}_{0.95})_2\text{Ti}_2\text{O}_7$ thin films for active optical components operating at 2 μm ," *Opt. Mater.*, vol. 78, pp. 415–420, Apr. 2018, <https://doi.org/10.1016/j.optmat.2018.02.049>
- [23] S. Sujecki, L. Sojka, A. B. Seddon, T. M. Benson, E. Barney, M. C. Falconi, F. Prudenzano, M. Marciniak, H. Baghdasaryan, P. Peterka, and S. Taccheo, "Comparative Modeling of Infrared Fiber Lasers," *Photonics*, vol. 5, no. 4, Art. no. 4, Dec. 2018, <https://doi.org/10.3390/photonics5040048>
- [24] **P. Peterka, P. Koška, and J. Čtyroký, "Reflectivity of superimposed Bragg gratings induced by longitudinal mode instabilities in fiber lasers," *IEEE J. Sel. Topics Quantum Electron.*, vol. 24, no. 3, p. 0902608, May 2018, <https://doi.org/10.1109/jstqe.2018.2806084>**
- [25] P. Navratil, P. Peterka, P. Vojtisek, I. Kasik, J. Aubrecht, P. Honzatko, and V. Kubecek, "Self-swept erbium fiber laser around 1.56 μm ," *Opto-Electron. Rev.*, vol. 26, no. 1, pp. 29–34, Mar. 2018, <https://doi.org/10.1016/j.opelre.2017.11.004>
- [26] J. Mrázek, I. Kašík, L. Procházková, V. Čuba, V. Girman, V. Puchý, W. Blanc, P. Peterka, J. Aubrecht, J. Cajzl, and O. Podrazký, "YAG Ceramic Nanocrystals Implementation into MCVD Technology of Active Optical Fibers," *Appl. Sci.*, vol. 8, no. 5, p. 833, 2018, <https://doi.org/10.3390/app8050833>
- [27] J. Cajzl, P. Peterka, M. Kowalczyk, J. Tarka, G. Sobon, J. Sotor, J. Aubrecht, P. Honzátko, and I. Kašík, "Thulium-doped silica fibers with enhanced fluorescence lifetime and their application in ultrafast fiber lasers," *Fibers*, vol. 6, no. 3, p. 66, 2018, <https://doi.org/10.3390/fib6030066>
- [28] P. Navratil, P. Peterka, P. Honzatko, and V. Kubecek, "Reverse spontaneous laser line sweeping in ytterbium fiber laser," *Laser Phys. Lett.*, vol. 14, no. 3, p. 035102, Mar. 2017, <https://doi.org/10.1088/1612-202x/Aa548d>
- [29] **J. Aubrecht, P. Peterka, P. Koska, O. Podrazky, F. Todorov, P. Honzatko, and I. Kasik, "Self-swept holmium fiber laser near 2100 nm," *Opt. Express*, vol. 25, no. 4, pp. 4120–4125, Feb. 2017, <https://doi.org/10.1364/Oe.25.004120>**
- [30] **J. Sotor, M. Pawliszewska, G. Sobon, P. Kaczmarek, A. Przewolka, I. Pasternak, J. Cajzl, P. Peterka, P. Honzatko, I. Kasik, W. Strupinski, and K. Abramski, "All-fiber Ho-doped mode-locked oscillator based on a graphene saturable absorber," *Opt. Lett.*, vol. 41, no. 11, pp. 2592–2595, Jun. 2016, <https://doi.org/10.1364/Ol.41.002592>**
- [31] M. Písařík, P. Peterka, J. Aubrecht, J. Cajzl, A. Benda, D. Mareš, F. Todorov, O. Podrazký, P. Honzátko, and I. Kašík, "Thulium-doped fibre broadband source for spectral region near 2 micrometers," *Opto-Electron Rev*, vol. 24, no. 4, pp. 223–231, Dec. 2016, <https://doi.org/10.1515/oere-2016-0022>
- [32] P. Peterka, P. Honzatko, P. Koska, F. Todorov, J. Aubrecht, O. Podrazky, and I. Kasik, "Reflectivity of transient Bragg reflection gratings in fiber laser with laser-wavelength self-sweeping: erratum," *Opt. Express*, vol. 24, no. 14, pp. 16222–16223, Jul. 2016, <https://doi.org/10.1364/Oe.24.016222>

- [33] P. Koska, P. Peterka, and V. Doya, "Numerical modeling of pump absorption in coiled and twisted double-clad fibers," *IEEE J. Sel. Topics Quantum Electron.*, vol. 22, no. 2, p. 4401508, Apr. 2016, <https://doi.org/10.1109/Jstqe.2015.2490100>
- [34] 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*, vol. 24, no. 1, pp. 102–107, Jan. 2016, <https://doi.org/10.1364/oe.24.000102>
- [35] I. Kasik, P. Peterka, J. Mrazek, and P. Honzatko, "Silica optical fibers doped with nanoparticles for fiber lasers and broadband sources," *Curr Nanosci*, vol. 12, no. 3, pp. 277–290, 2016, <https://doi.org/10.2174/1573413711666150624170638>
- [36] P. Koska and P. Peterka, "Numerical analysis of pump propagation and absorption in specially tailored double-clad rare-earth doped fiber," *Opt Quant Electron*, vol. 47, no. 9, pp. 3181–3191, Sep. 2015, <http://doi.org/10.1007/s11082-015-0194-2>
- [37] P. Koska, Y. Baravets, P. Peterka, J. Bohata, and M. Pisarik, "Mode-field adapter for tapered-fiber-bundle signal and pump combiners," *Appl. Optics*, vol. 54, no. 4, pp. 751–756, Feb. 2015, <https://doi.org/10.1364/ao.54.000751>
- [38] M. Pisarik, P. Peterka, S. Zvanovec, Y. Baravets, F. Todorov, I. Kasik, and P. Honzatko, "Fused fiber components for 'eye-safe' spectral region around 2 μm ," *Opt Quant Electron*, vol. 46, no. 4, pp. 603–611, Apr. 2014, <https://doi.org/10.1007/s11082-013-9801-2>
- [39] P. Peterka, P. Honzatko, P. Koska, F. Todorov, J. Aubrecht, O. Podrazky, and I. Kasik, "Reflectivity of transient Bragg reflection gratings in fiber laser with laser-wavelength self-sweeping," *Opt Express*, vol. 22, no. 24, pp. 30024–30031, Dec. 2014, <https://doi.org/10.1364/oe.22.030024>
- [40] I. Kasik, O. Podrazky, J. Mrazek, J. Cajzl, J. Aubrecht, J. Probstova, P. Peterka, P. Honzatko, and A. Dhar, "Erbium and Al_2O_3 nanocrystals-doped silica optical fibers," *B Pol Acad Sci-Tech*, vol. 62, no. 4, pp. 641–646, Dec. 2014, <https://doi.org/10.2478/bpasts-2014-0070>
- [41] J. Mrázek, I. Kašík, L. Procházková, V. Čuba, J. Aubrecht, J. Cajzl, O. Podrazký, P. Peterka, and M. Nikl, "Active optical fibers doped with ceramic nanocrystals," *Advances in Electrical and Electronic Engineering*, vol. 12, no. 6, pp. 567–574, 2014, <https://doi.org/10.15598/aeer.v12i6.1191>
- [42] J. Bohata, M. Pisarik, S. Zvanovec, and P. Peterka, "Reliability of aircraft multimode optical networks," *Opt. Eng.*, vol. 53, no. 9, p. 096102, Sep. 2014, <https://doi.org/10.1117/1.oe.53.9.096102>
- [43] P. Peterka, P. Honzatko, M. Becker, F. Todorov, M. Pisarik, O. Podrazky, and I. Kasik, "Monolithic Tm-doped fiber laser at 1951 nm with deep-UV femtosecond-induced FBG pair," *IEEE Photonics Technol. Lett.*, vol. 25, no. 16, pp. 1623–1625, Aug. 2013, <https://doi.org/10.1109/lpt.2013.2272880>
- [44] 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. 095104, Sep. 2013, <https://doi.org/10.1088/1612-2011/10/9/095104>
- [45] P. Peterka, P. Navrátil, J. Maria, B. Dussardier, R. Slavík, P. Honzátka, and V. Kubeček, "Self-induced laser line sweeping in double-clad Yb-doped fiber-ring lasers," *Laser Phys. Lett.*, vol. 9, no. 6, pp. 445–450, 2012, <https://doi.org/10.7452/lapl.201210013>
- [46] P. Peterka, I. Kasik, A. Dhar, B. Dussardier, and W. Blanc, "Theoretical modeling of fiber laser at 810 nm based on thulium-doped silica fibers with enhanced $^3\text{H}_4$ level lifetime," *Opt. Express*, vol. 19, no. 3, pp. 2773–2781, Jan. 2011, <https://doi.org/10.1364/OE.19.002773>
- [47] B. Dussardier, J. Maria, and P. Peterka, "Passively Q-switched ytterbium- and chromium-doped all-fiber laser," *Appl. Optics*, vol. 50, no. 25, pp. E20–E23, Sep. 2011, <https://doi.org/10.1364/ao.50.000e20>

- [48] P. Peterka, J. Maria, B. Dussardier, R. Slavik, P. Honzatko, and V. Kubecek, "Long-period fiber grating as wavelength selective element in double-clad Yb-doped fiber-ring lasers," *Laser Phys. Lett.*, vol. 6, no. 10, pp. 732–736, Oct. 2009, <https://doi.org/10.1002/lapl.200910067>
- [49] Y. N. Zhu, R. T. Bise, J. Kanka, P. Peterka, and H. Du, "Fabrication and characterization of solid-core photonic crystal fiber with steering-wheel air-cladding for strong evanescent field overlap," *Opt. Commun.*, vol. 281, no. 1, pp. 55–60, Jan. 2008, <https://doi.org/10.1016/j.optcom.2007.08.071>
- [50] D. A. Simpson, W. E. K. Gibbs, S. F. Collins, W. Blanc, B. Dussardier, G. Monnom, P. Peterka, and G. W. Baxter, "Visible and near infra-red up-conversion in Tm³⁺/Yb³⁺ co-doped silica fibers under 980 nm excitation," *Opt. Express*, vol. 16, no. 18, pp. 13781–13799, Sep. 2008, <https://doi.org/10.1364/oe.16.013781>
- [51] M. Pospisilova, P. Adamek, P. Peterka, V. Kubecek, I. Kasik, and V. Matejec, "Influence of Si-Al-Ge-Sb Matrices on Tm³⁺ Excitation Levels," *Mater. Sci. Forum.*, vol. 587–588, p. 293, 2008, <https://doi.org/10.4028/www.scientific.net/MSF.587-588.293>
- [52] P. Peterka, J. Kanka, P. Honzatko, and D. Kacik, "Measurement of chromatic dispersion of microstructure optical fibers using interferometric method," *Opt. Appl.*, vol. 38, no. 2, pp. 295–303, 2008.
- [53] P. Peterka, I. Kasik, V. Matejec, W. Blanc, B. Faure, B. Dussardier, G. Monnom, and V. Kubecek, "Thulium-doped silica-based optical fibers for cladding-pumped fiber amplifiers," *Opt. Mater.*, vol. 30, no. 1, pp. 174–176, Sep. 2007, <https://doi.org/10.1016/j.optmat.2006.11.039>
- [54] P. Peterka, I. Kasik, V. Matejec, V. Kubecek, and P. Dvoracek, "Experimental demonstration of novel end-pumping method for double-clad fiber devices," *Opt. Lett.*, vol. 31, no. 22, pp. 3240–3242, Nov. 2006, <https://doi.org/10.1364/ol.31.003240>
- [55] V. Matejec, J. Mrazek, M. Hayer, I. Kasik, P. Peterka, J. Kanka, P. Honzatko, and D. Berkova, "Microstructure fibers for gas detection," *Mat. Sci. Eng. C-Bio. S*, vol. 26, no. 2–3, pp. 317–321, Mar. 2006, <https://doi.org/10.1016/j.msec.2005.10.043>
- [56] M. Karasek, P. Peterka, and J. Radil, "10 gigabit Ethernet long-haul transmission without in-line EDFAs," *Ann. Telecommun.*, vol. 61, no. 3–4, pp. 478–488, Apr. 2006, <https://doi.org/10.1007/Bf03219918>
- [57] P. Peterka, B. Faure, W. Blanc, M. Karasek, and B. Dussardier, "Theoretical modelling of S-band thulium-doped silica fibre amplifiers," *Opt. Quant. Electron.*, vol. 36, no. 1–3, pp. 201–212, Feb. 2004, <https://doi.org/10.1023/B:ooel.0000015640.82309.7d>
- [58] I. Martinec, D. Kacik, I. Turek, and P. Peterka, "The determination of the refractive index profile in alpha-profile optical fibres by intermodal interference investigation," *Optik*, vol. 115, no. 2, pp. 86–88, 2004, <https://doi.org/10.1078/0030-4026-00331>
- [59] M. Karasek, P. Peterka, and J. Radil, "202 km repeaterless transmission of 2x10 GE plus 2x1 GE channels over standard single mode fibre," *Opt. Commun.*, vol. 235, no. 4–6, pp. 269–274, May 2004, <https://doi.org/10.1016/j.optcom.2004.02.077>
- [60] M. Karasek, J. Kanka, P. Honzatko, and P. Peterka, "Time-domain simulation of power transients in Raman fibre amplifiers," *Int. J. Numer. Model.*, vol. 17, no. 2, pp. 165–176, Apr. 2004, <https://doi.org/10.1002/jnm.531>
- [61] M. Karasek, J. Kanka, P. Honzatko, and P. Peterka, "Modelling of a pump-power-controlled gain-locking system for multi-pump wideband Raman fibre amplifiers," *IEE Proc.-Optoelectron.*, vol. 151, no. 2, pp. 74–80, Apr. 2004, <https://doi.org/10.1049/ip-opt:20040391>
- [62] I. Kasik, V. Matejec, J. Kanka, P. Peterka, P. Honzatko, and A. Langrova, "Using aerosol-based techniques and solution-doping for the fabrication of optical fibers for fiber lasers," *Rev. Roum. Chim.*, vol. 47, no. 12, pp. 1241–1245, Dec. 2002.
- [63] P. Honzatko, P. Peterka, and J. Kanka, "Three- and four-wave model of modulation instability fibre laser," *J. Opt. Pure Appl. Opt.*, vol. 4, no. 5, pp. S135–S139, Sep. 2002, <https://doi.org/10.1088/1464-4258/4/5/360>

- [64] P. Peterka and J. Kanka, "Erbium-doped twin-core fibre narrow-band filter for fibre lasers," *Opt. Quant. Electron.*, vol. 33, no. 4–5, pp. 571–581, Apr. 2001, <http://doi.org/10.1023/A:1010875724394>
- [65] P. Honzatko, P. Peterka, and J. Kanka, "Modulational-instability sigma-resonator fiber laser," *Opt. Lett.*, vol. 26, no. 11, pp. 810–812, Jun. 2001, <http://doi.org/10.1364/ol.26.000810>
- [66] P. Peterka, I. Kasik, J. Kanka, P. Honzatko, V. Matejec, and M. Hayer, "Twin-core fiber design and preparation for easy splicing," *IEEE Photonics Technol. Lett.*, vol. 12, no. 12, pp. 1656–1658, Dec. 2000, <http://doi.org/10.1109/68.896339>
- [67] M. Hayer, V. Matejec, D. Berkova, I. Kasik, J. Kanka, P. Peterka, and P. Honzatko, "Effect of high-temperature treatment on optical properties of silica films doped with Al₂O₃, P₂O₅ and rare-earth elements," *J. Sol-Gel Sci. Technol.*, vol. 19, no. 1–3, pp. 293–296, Dec. 2000, <http://doi.org/10.1023/A:1008721329437>
- [68] J. Kanka, P. Peterka, P. Honzatko, V. Matejec, and I. Kasik, "Er-doped twin-core fibre coupler as a saturable-absorber-based narrow-band filter for fibre lasers," *Czechoslovak J. Phys.*, vol. 49, no. 5, pp. 889–894, May 1999, <http://doi.org/10.1023/A:1021213929381>

POPULARISATION ARTICLES AND OTHER PUBLICATIONS

- [1] P. Peterka and J. Zavadil, "60 years of light in the Institute of Photonics and Electronics of the CAS," *Fine Mechanics and Optics* **60**, 200-203 (2015), in Czech. http://www.ufe.cz/sites/default/files/peterka/fjfi/15_peterka_jmopthulium_a_historie_ufe.pdf
- [2] P. Peterka, *Fiber lasers*, Ed. Science around us, Prague, Academia, 2014, in Czech. <http://www.academia.cz/edice/kniha/vlaknove-lasery>
- [3] P. Peterka, "Vláknové lasery dobývají svět," *Panorama 21. STOLETÍ* 16-19 (2012), in Czech. https://www.ufe.cz/sites/default/files/peterka/fjfi/12_peterka_21_stoleti-panorama.pdf
- [4] I. Kasik and P. Peterka, "Optical fibers - backbone of modern communications," *Czechoslovak J. Phys.* **61**, 4-7 (2011), in Czech.
- [5] P. Peterka and V. Matějec, "Optical fibers have come to Nobel prize for physics," *Progresses in mathematics, physics and astronomy (Pokroky MFA)* **55**, 1-11 (2010), published also in *Sdělovací technika* **59**, 16-20 (2010), in Czech. https://www.ufe.cz/sites/default/files/peterka/fjfi/10_peterka_matejec_pmfa_nobelovka_pro_opticka_vlakna.pdf
- [6] P. Peterka, "Fiber lasers," in *Proc. Open Science - practical courses in Physics*, Nové Hrady, South Bohemia, Czech Republic, 15-19 August 2005, pp. 165-177, in Czech.
- [7] P. Peterka, "Self-sweeping of laser wavelength in fiber lasers," Habilitation thesis, Faculty of Nuclear Sciences and Physical Engineering, Czech Technical University, Prague, 2018.
- [8] P. Peterka, "Twin-core optical fibres for fibre lasers," Ph.D. thesis, Faculty of Electrical Engineering, Czech Technical University, Prague, 1999, in Czech.
- [9] P. Peterka, "Modelling and measurement of active optical fibers," diploma thesis, Faculty of Nuclear Sciences and Physical Engineering, Czech Technical University, Prague, 1993, in Czech.

CONFERENCE PAPERS

- [1] P. Vařák, I. Kašík, P. Peterka, J. Mrázek, M. Kamrádek, J. Aubrecht, O. Podrazký, I. Bartoň, M. Franczyk, R. Buczynski, and P. Honzátko, "The effect of thermal and mechanical processing on the fluorescence lifetime of Yb-doped silica preforms and fibers for use in nanostructured-core fiber lasers," in Proc SPIE 11981, *SPIE Photonics West, Fiber Lasers XIX: Technology and Systems*, San Francisco, California, USA, 22-27 January 2022, p. 1198103.
- [2] P. Vařák, I. Kašík, P. Peterka, J. Aubrecht, J. Mrázek, M. Kamrádek, O. Podrazky, I. Bartoň, R. Buczynski, M. Franczyk, and P. Honzátko, "The effect of fiber fabrication process on the photoluminescence properties of RE-doped optical fiber preforms and fibers," in Proc SPIE 12140, *SPIE Photonics Europe, Micro-Structured and Specialty Optical Fibres VII*, Strasbourg, France, 3-7 April 2022, p. 1214005.
- [3] J. Pokorny, J. Aubrecht, and P. Peterka, "Broadband fiber-optic thulium-doped amplifier for wavelengths beyond the L-band," in Proc SPIE 12140, *SPIE Photonics Europe, Micro-Structured and Specialty Optical Fibres VII*, Strasbourg, France, 3-7 April 2022, p. 1214009.
- [4] A. Theodosiou, J. Aubrecht, P. Peterka, and K. Kalli, "Holmium monolithic fiber lasers: An investigation of the fiber Bragg grating spatial dimensions on fiber laser performance," in Proc. SPIE 11773 *SPIE Optics + Optoelectronics, online-only, Micro-Structured and Specialty Optical Fibres VII*, April 2021, p. 117730L.
- [5] P. Vařák, P. Vařák, I. Kašík, M. Kamrádek, O. Podrazký, J. Mrázek, P. Peterka, R. Buczynski, R. Buczynski, M. Franczyk, and P. Honzátko, "Heat treatment and fiber drawing effect on the fluorescence lifetime of RE³⁺-doped preforms and fibers," in Proc. *Advanced Solid State Lasers, online only*, Oct. 2021, p. JTU1A.38.
- [6] O. Podrazky, A. Jasim, P. Peterka, M. Kamradek, J. Aubrecht, I. Kasik, and P. Honzatko, "Double-clad active MOF and shaped optical fibers for fiber lasers and amplifiers," in Proc. *IEEE 22nd Int. Conf. on Transparent Opt. Networks (ICTON)*, online only, Jul. 2020, p. Mo.B6.5.
- [7] M. Kamrádek, M. Kamrádek, J. Aubrecht, M. Jelínek, M. Frank, P. Peterka, P. Honzátko, J. Mrázek, P. Vařák, P. Vařák, O. Podrazký, F. Todorov, V. Kubeček, and I. Kašík, "Holmium-doped fibers for efficient fiber lasers at 2100 nm," in *OSA High-brightness Sources and Light-driven Interactions Congress*, online only, Nov. 2020, p. MTh3C.5.
- [8] P. Peterka, "[Double-clad fibers for high-power fiber lasers](#)," presented at the 9th EPS-QEOD Europhoton Conf., Sep. 2020, Summer School Tutorial p. SS2.1.
- [9] A. A. Jasim, O. Podrazky, P. Peterka, F. Todorov, M. Kamradek, and P. Honzatko, "OH diffusion control in the shaped optical fiber preforms based on CO2 laser," in *OSA Advanced Photonics Congress, Specialty Optical Fibers*, online only, Jul. 2020, p. SoM3H.5.
- [10] M. Kamrádek, I. Kašík, J. Aubrecht, M. Jan, O. Podrazký, J. Cajzl, P. Varák, V. Kubeček, P. Peterka, and P. Honzátko, "Holmium-doped optical fibers for efficient fiber lasers," in Proc. SPIE 11355, *SPIE Photonics Europe, Micro-Structured and Specialty Optical Fibres VI*, online only, Apr. 2020, p. 113550C.
- [11] M. Grábner, K. Nithyanandan, P. Peterka, P. Koška, P. Honzátko, and A. A. Jasim, "Numerical modelling of pump absorption in coiled and twisted double-clad fiber: a prospect for tandem pumped fiber laser," in Proc. SPIE 11355, *SPIE Photonics Europe, Micro-Structured and Specialty Optical Fibres VI*, online only, Apr. 2020, p. 113550W.
- [12] P. Peterka, P. Koška, A. A. Jasim, N. Kanagaraj, J. Aubrecht, M. Kamrádek, O. Podrazký, F. Todorov, I. Kašík, and P. Honzátko, "Enhanced pump absorption efficiency in coiled and twisted double-clad fibers for fiber lasers," presented at the 21st Int. Conf. on Transparent Optical Networks (ICTON), Angers, France, 9-13 July 2019, p. Th.B6.1.
- [13] J. Mrázek, I. Kašík, J. Aubrecht, O. Podrazký, J. Cajzl, and P. Peterka, "Nanocrystalline ceramic phosphors for high-power lasers operating at 2 μm," presented at the 21st Int. Conf. on Transparent Optical Networks (ICTON), Angers, France, 9-13 July 2019, p. Th.D6.1

- [14] A. A. Jasim, J. Aubrecht, P. Peterka, M. Kamrádek, O. Podrazký, F. Todorov, I. Kašík, and P. Honzátko, "Efficient pump absorption in twisted double clad thulium-doped fibers drawn of CO₂ laser shaped preform," in Proc. *Conference on Lasers and Electro-Optics Europe and European Quantum Electronics Conference (CLEO-Eu)*, 23-27 June 2019, p. CJ.P.8.
- [15] A. Theodosiou, J. Aubrecht, P. Peterka, and K. Kalli, "Femtosecond laser plane-by-plane Bragg gratings for monolithic Thulium-doped fibre laser operating at 1970 nm," in Proc. SPIE 11029, *SPIE Optics+Optoelectronics, Micro-Structured and Specialty Optical Fibres VI*, Prague, Czechia, 1-4 April 2019, p. 110290F.
- [16] A. Theodosiou, J. Aubrecht, N. Kanagaraj, P. Peterka, K. Kalli, I. Kasik, P. Honzatko, and IEEE, "All-Fiber Mode-Locked Thulium Doped Fiber Laser Using a Novel Femtosecond Laser Inscribed 45 degrees Tilted Fiber Grating," in Proc. SPIE 11029, *SPIE Optics+Optoelectronics, Micro-Structured and Specialty Optical Fibres VI*, Prague, Czechia, 1-4 April 2019, p. 110290F.
- [17] P. Peterka, M. Písařík, H. Turčíčová, J. Černohorská, O. Podrazký, P. Honzátko, P. Vařák, D. Pugliese, N. G. Boetti, D. Gallichi-Nottiani, D. Janner, and D. Milanese, "High-power laser tests of phosphate glass-based bioresorbable optical fibers transmission," in Proc. SPIE 11029, *SPIE Optics + Optoelectronics, Micro-Structured and Specialty Optical Fibres VI*, Prague, Czechia, 1-4 April 2019, p. 1102911.
- [18] A. A. Jasim, O. Podrazký, P. Peterka, F. Todorov, and P. Honzátko, "Experimental investigation and characterization of fabrication shaped clad optical fiber by thermally polishing optical fiber preforms with CO₂ laser," in Proc. SPIE 11029, *SPIE Optics + Optoelectronics, Micro-Structured and Specialty Optical Fibres VI*, Prague, Czechia, 1-4 April 2019, p. 1102909.
- [19] Pavel Peterka, Jan Aubrecht, Jakub Cajzl, Ondřej Podrazký, Filip Todorov, Ivan Kašík, and Pavel Honzátko, "Dynamic gratings induced by mode instabilities in fiber lasers [invited]," in Proc. 10976, *21st Czech-Polish-Slovak Optical Conference on Wave and Quantum Aspects of Contemporary Optics*, Lednice, Czechia, 3-7 Sep. 2018, p. 109760H.
- [20] Slawomir Sujecki, Lukasz Sojka, Angela Seddon, Trevor Benson, Mario Christian Falconi, Francesco Prudenzano, Marian Marciniak, Hovik Baghdasary, Pavel Peterka, and Stefano Taccheo, "Comparative study of infrared fiber laser models," in Proc SPIE 10683, *SPIE Photonics Europe*, Strasbourg, France, 22-26 April 2018, p. 106832A.
- [21] M. Kamradek, I. Kasik, P. Peterka, J. Aubrecht, O. Podrazky, P. Honzatko, J. Mrazek, and V. Kubecek, "Silica and germanate-based rare-earth doped glasses for fiber lasers," in Proc SPIE 10683, *SPIE Photonics Europe*, Strasbourg, France, 22-26 April 2018, p. 106832L.
- [22] J. Cernohorska, M. Pisarik, P. Peterka, J. Aubrecht, R. Amani, O. Novak, M. Smrz, M. Jelinek, A. Lucianetti, A. Endo, and T. Mocek, "High-energy subpicosecond 2.1- μ m fiber laser," in Proc SPIE 10683, *SPIE Photonics Europe*, Strasbourg, France, 22-26 April 2018, p. 1068315.
- [23] Jan Aubrecht, Antreas Theodosiou, Pavel Peterka, Ivan Kašík, Filip Todorov, Ondřej Moravec, Pavel Honzátko, and Kyriacos Kalli, "Monolithic Er/Yb double-clad fibre laser with FBG inscribed using the direct-write plane-by-plane fs-laser inscription method," in Proc SPIE 10683, *SPIE Photonics Europe*, Strasbourg, France, 22-26 April 2018, p. 1068304.
- [24] Romain Dalidet, Pavel Peterka, Valérie Doya, Jan Aubrecht, and Pavel Koška, "Pump absorption in coiled and twisted double-clad hexagonal fiber: effect of launching conditions and core location," in Proc. SPIE 10512, *SPIE Photonics West: Fiber Lasers XV*, San Francisco, USA, 27 January–1 February 2018, p. 105122P.
- [25] O. Podrazký, P. Peterka, S. Vytykáčová, J. Proboštová, M. Kuneš, O. Lyutakov, E. Ceci-Ginistrelli, D. Pugliese, N. G. Boetti, D. Janner, and D. Milanese, "Biomedical and sensing applications of a multi-mode biodegradable phosphate-based optical fiber," in Proc. SPIE 10488, *SPIE Photonics West: Optical Fibers and Sensors for Medical Diagnostics and Treatment Applications XVIII*, San Francisco, USA, 27 January–1 February 2018, p. 104880H.
- [26] O. Podrazký, P. Peterka, S. Vytykáčová, J. Proboštová, M. Kuneš, O. Lyutakov, E. Ceci-Ginistrelli, D. Pugliese, N. G. Boetti, D. Janner, and D. Milanese, "Biomedical and sensing applications of a multi-mode biodegradable phosphate-based optical fiber," in Proc. SPIE

- 10488, *SPIE Photonics West: Optical Fibers and Sensors for Medical Diagnostics and Treatment Applications XVIII*, San Francisco, USA, 27 January–1 February 2018, p. 104880H.
- [27] R. Dalidet, P. Peterka, V. Doya, J. Aubrecht, and P. Koška, "Pump absorption in coiled and twisted double-clad hexagonal fiber: effect of launching conditions and core location," in Proc. SPIE 10512, *SPIE Photonics West*, San Francisco, USA, 27 Jan.–1 Feb. 2018, p. 105122P.
- [28] P. Peterka, P. Honzatko, J. Aubrecht, P. Navratil, P. Koska, F. Todorov, O. Podrazky, J. Ctyroky, and I. Kasik, "Self-sweeping of laser wavelength and associated mode instabilities in fiber lasers [Invited]," in Proc. 19th Int. Conf. on Transparent Opt. Networks (ICTON), Girona, Catalonia, Spain, 2-6 July 2017, p. Tu.B6.2.
- [29] T. Nemecek, M. Komanec, D. Suslov, P. Peterka, D. Pysz, R. Buczynski, B. Nelsen, and S. Zvanovec, "Development and characterization of highly nonlinear multicomponent glass photonic crystal fibers for mid-infrared applications," in Proc. SPIE 10232, *SPIE Optics+Optoelectronics: Micro-Structured and Specialty Optical Fibres V*, Prague, Czech Republic, 24–27 April 2017, p. 1023204.
- [30] P. Koska, P. Peterka, V. Doya, J. Aubrecht, I. Kasik, and O. Podrazky, "Enhancement of pump absorption efficiency by bending and twisting of double clad rare earth doped fibers (Conference Presentation) [Invited]," in Proc. SPIE 10232, *SPIE Optics+Optoelectronics: Micro-Structured and Specialty Optical Fibres V*, Prague, Czechia, 24–27 April 2017, p. 102320E.
- [31] P. Koska, V. Doya, and P. Peterka, "Modal-field spectra analysis of pump absorption efficiency in double-clad rare-earth doped fibers (Conference Presentation)," in Proc. SPIE 10083, *SPIE Photonics West*, San Francisco, USA, 28 January–2 February 2017, p. 100830U.
- [32] M. Kamradek, J. Aubrecht, P. Peterka, O. Podrazky, P. Honzatko, J. Cajzl, J. Mrazek, V. Kubecek, and I. Kasik, "Spectral properties of thulium doped optical fibers for fiber lasers around 2 micrometers," in Proc. SPIE 10232, *SPIE Optics+Optoelectronics: Micro-Structured and Specialty Optical Fibres V*, 24–27 April 2017, p. 1023205.
- [33] M. Kamradek, J. Aubrecht, P. Peterka, O. Podrazky, P. Honzatko, J. Cajzl, J. Mrazek, V. Kubecek, and I. Kasik, "Thulium-doped optical fibers for fiber lasers," in Proc. SPIE 10603, *Photonics Prague*, Prague, Czech Republic, 28-30 August 2017, p. 106030V.
- [34] J. Cajzl, P. Peterka, P. Honzatko, O. Podrazky, M. Kamradek, J. Aubrecht, J. Probostova, and I. Kasik, "Evaluation of energy transfer coefficients in Tm-doped fibers for fiber lasers," in Proc. SPIE 10603, *Photonics Prague*, Prague, Czech Republic, 28-30 Aug. 2017, p. 106030G.
- [35] J. Aubrecht, P. Peterka, P. Koska, P. Honzatko, M. Jelinek, M. Kamradek, M. Frank, V. Kubecek, and I. Kasik, "Spontaneous laser-line sweeping in Ho-doped fiber laser," in Proc. SPIE 10083, *SPIE Photonics West*, San Francisco, USA, 28 January–2 February 2017, p. 100831V.
- [36] J. Aubrecht, P. Peterka, P. Honzatko, F. Todorov, O. Podrazky, M. Kamradek, J. Probostova, and I. Kasik, "Monolithic thulium-doped fiber laser," in Proc. SPIE 10603, *Photonics Prague*, Prague, Czech Republic, 28-30 August 2017, p. 106030L.
- [37] S. Taccheo, K. Schuster, M. Ferrari, A. Seddon, M. Marciniak, C. Taudt, J. Troles, G. Valentini, D. Dorosz, F. Prudenzeno, M. Jaeger, C. Dandrea, M. Ivanda, A. Chiasera, S. Sujecki, V. Nazabal, D. Comelli, H. Baghdasaryan, T. Baselt, P. Hartmann, A. Lucianetti, P. Peterka, A. Klotzbach, J. L. Adam, and H. Gebavi, "Challenges and future trends in fiber lasers," in Proc. 18th International Conference on Transparent Optical Networks (ICTON), Trento, Italy, 10-14 July 2016, p. ThC1.
- [38] J. Probostova, J. Slanicka, J. Mrazek, O. Podrazky, A. Benda, and P. Peterka, "Measurement of refractive index profile of non-symmetric, complex silica preforms with high refractive index differences," in Proc. SPIE 9886, *SPIE Photonics Europe: Micro-Structured and Specialty Optical Fibres IV*, Brussels, Belgium, 4-7 April 2016, p. 98861G.
- [39] P. Honzatko, Y. Baravets, S. Mondal, P. Peterka, and F. Todorov, "Coherent sources for mid-infrared laser spectroscopy [Invited]," in Proc. SPIE 10142, 20th Slovak-Czech-Polish Optical Conference on Wave and Quantum Aspects of Contemporary Optics, Jasná, Slovakia, 5-9 Sept. 2016, p. 1014202.

- [40] J. Aubrecht, P. Peterka, P. Honzátko, P. Koška, O. Podrazký, F. Todorov, and I. Kašík, "Self-swept holmium-doped fiber laser near 2100 nm," in *Proc. OSA Lasers Congress: Advanced Solid State Lasers*, Boston, Massachusetts, 30 October–3 November 2016, p. JTU2A.7.
- [41] J. Aubrecht, P. Peterka, P. Honzátko, Y. Baravets, M. Jelinek, V. Kubecek, M. Pawliszewska, J. Sotor, G. Sobon, K. M. Abramski, and I. Kasik, "Characterization of holmium fibers with various concentrations for fiber laser applications around 2.1 μm ," in *Proc. SPIE 9886, SPIE Photonics Europe*, Brussels, Belgium, 4-7 April 2016, p. 988607.
- [42] P. Peterka, P. Honzátko, P. Koska, O. Podrazky, and I. Kasik, "Transient-fiber-Bragg grating spectra in self-swept Fabry-Perot fiber lasers," in *Proc. SPIE 9344, SPIE Photonics West: Fiber Lasers XII*, San Francisco, USA, 7-12 Feb. 2015, p. 934423.
- [43] P. Peterka, P. Honzátko, I. Kašík, J. Tarka, G. Sobon, and J. Sotor, "Thulium doped fibers and components for fiber lasers at around 2 μm [Invited]," presented at the *Progress In Electromagnetics Research Symposium - PIERS 2015*, Prague, Czech Republic, 06-09 July 2015.
- [44] P. Koška, P. Peterka, J. Aubrecht, O. Podrazký, F. Todorov, Y. Baravets, P. Honzátko, and I. Kašík, "Enhanced pump absorption efficiency in coiled and twisted double-clad thulium-doped fibers," in *Proc. OSA Advanced Solid State Lasers*, Berlin, Germany, 4–9 Oct. 2015, p. ATU2A.23.
- [45] 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 *Proc. SPIE 9344, SPIE Photonics West: Fiber Lasers XII*, San Francisco, USA, 7-12 Feb. 2015, p. 93442I.
- [46] J. Cajzl, P. Peterka, A. Benda, F. Todorov, Y. Baravets, O. Podrazký, P. Honzátko, and I. Kašík, "Characterization and numerical modeling of holmium-doped optical fibers for fiber lasers at 2.1 μm ," in *Proc. Semiconductor Mid-IR Materials and Optics (SMMO)*, Prague, Czech Republic, 8-11 April 2015, p. 66.
- [47] J. Aubrecht, J. Cajzl, P. Peterka, P. Honzátko, P. Koska, Y. Baravets, M. Becker, O. Podrazky, F. Todorov, and I. Kasik, "Characterization of double-clad thulium-doped fiber with increased quantum conversion efficiency," in *Proc. SPIE 9507, SPIE Optics+Optoelectronics: Micro-Structured and Specialty Optical Fibres IV*, 13-16 April 2015, p. 95070P.
- [48] O. Podrazky, I. Kasik, P. Peterka, J. Aubrecht, J. Cajzl, J. Probostova, and V. Matejec, "Preparation of optical fibers with non-circular cross-section for fiber lasers and amplifiers," in *Proc. SPIE 9450, Photonics Prague*, Prague, Czech Republic, 27-29 August 2014, p. 94501A.
- [49] P. Peterka, P. Honzátko, F. Todorov, J. Aubrecht, O. Podrazky, and I. Kasik, "Self-Q-switched regime of fiber lasers as a transition from self-induced laser line sweeping," in *Proc. OSA Advanced Photonics Congress: Specialty Optical Fibers*, Barcelona, Catalunya, Spain, 27–31 July 2014, p. SoTh2B.6.
- [50] P. Peterka, P. Honzátko, I. Kasik, J. Cajzl, and O. Podrazky, "Thulium-doped optical fibers and components for fiber lasers in 2 μm spectral range [Invited]," in *Proc. SPIE 9441, 19th Polish-Slovak-Czech Optical Conference on Wave and Quantum Aspects of Contemporary Optics*, Wojanów Palace, Poland, 8-12 Sept. 2014, p. 94410B.
- [51] P. Koška and P. Peterka, "Numerical analysis of pump propagation and absorption in specially tailored double-clad rare-earth doped fiber," in *Proc. 22nd Int. Workshop on Opt. Waveguide Theory and Numerical Modelling (OWTNM)*, Nice, France, 27-28 June 2014, p. O1.1.
- [52] J. Cajzl, P. Peterka, P. Honzátko, J. Mrazek, O. Podrazky, F. Todorov, P. Gladkov, J. K. Sahu, M. Nunez-Velazquez, P. Nektivdova, and I. Kasik, "Characterization of fluorescence lifetime of Tm-doped fibers with increased quantum conversion efficiency," in *Proc. SPIE 9450, Photonics Prague*, Prague, Czech Republic, 27-29 August 2014, p. 945017.
- [53] P. Peterka, I. Kašík, V. Matějec, P. Honzátko, T. Martan, O. Podrazký, R. Slavík, F. Todorov, J. Mrázek, and J. Kaňka, "Specialty optical fibers and components for fiber lasers and sensors in UFE [Invited]," presented at the *SPIE Optics+Optoelectronics: NSF Workshop on US-Czech Frontiers in Photonics*, Prague, Czech Republic, 15-18 April 2013.

- [54] P. Peterka, P. Honzatko, F. Todorov, M. Pisarik, O. Podrazky, and I. Kasik, "Thulium-doped-fiber based ASE sources with spectrally-flattened spectrum," in Proc. *22nd International Laser Physics Workshop (LPHYS'13)*, Prague, Czech Republic, 15–19 July 2013, p. 8.2.4.
- [55] P. Peterka, P. Honzatko, M. Pisarik, F. Todorov, Y. Baravets, O. Podrazky, and I. Kasik, "Components for thulium-doped fiber lasers," in Proc. *Semiconductor Mid-IR Materials and Optics (SMMO)*, Warsaw, Poland, 27 February-2 March 2013, p. 34.
- [56] P. Peterka, P. Honzatko, M. Becker, F. Todorov, M. Pisarik, O. Podrazky, and I. Kasik, "Monolithic thulium-doped fiber laser with UV femtosecond-laser-induced fiber-Bragg-grating pair," in Proc. *Conf. on Lasers and Electro-Optics Europe and Int. Quantum Electronics Conference (CLEO Europe/IQEC)*, München, Germany, 12-16 May 2013, p. CJ.P.5 WED.
- [57] P. Navratil, P. Peterka, and V. Kubecek, "Effect of pump wavelength on self-induced laser line sweeping in Yb-doped fiber laser," in Proc. SPIE 8775, *SPIE Optics+Optoelectronics: Micro-Structured and Specialty Optical Fibres II*, Prague, Czech Republic, 15-18 April 2013, p. 87750D.
- [58] P. Navratil, P. Peterka, P. Honzatko, I. Kasik, and V. Kubecek, "Investigation of two distinct regimes of laser wavelength sweeping in Fabry–Perot fiber lasers at 1.08 and 1.55 μm ," in Proc. *22nd International Laser Physics Workshop (LPHYS'13)*, Prague, Czech Republic, 15–19 July 2013, p. 8.1.3.
- [59] J.-F. Lupi, W. Blanc, B. Dussardier, and P. Peterka, "Up-conversion a trois étapes dans une fibre optique aluminosilicate dopée au thulium pompée a 1070 nm," presented at the *Congrès OPTIQUE Paris 2013, Journées Nationales d'Optique Guidée (JNOG)*, Paris, France, 8-11 July 2013.
- [60] P. Koska, P. Peterka, I. Kasik, V. Matejec, and O. Podrazky, "Double-clad rare-earth-doped fiber with cross-section tailored for splicing to the pump and signal fibers: analysis of pump propagation," in Proc. *8775, SPIE Optics+Optoelectronics: Micro-Structured and Specialty Optical Fibres II*, Prague, Czech Republic, 15-18 April 2013, p. 87750V.
- [61] I. Kasik, J. Cajzl, O. Podrazky, J. Mrazek, J. Aubrecht, P. Peterka, P. Nekvindova, and V. Matejec, "Erbium-doped active optical fibers with nanostructured host matrix," presented at the *23rd Int. Congress on Glass*, Prague, Czech Republic, 1-5 July 2013.
- [62] J. Cajzl, O. Podrazky, J. Mrazek, J. Aubrecht, V. Matejec, P. Peterka, P. Nekvindova, and I. Kasik, "The influence of nanostructured optical fiber core matrix on the optical properties of EDFA," in Proc. SPIE 8775, *SPIE Optics+Optoelectronics: Micro-Structured and Specialty Optical Fibres II*, Prague, Czech Republic, 15-18 April 2013, p. 877509.
- [63] P. Zahradnik, P. Peterka, P. Vojtisek, and P. Honzatko, "Numerical modeling of all-fiber passively Q-switched fiber lasers," in Proc. SPIE 8697, *18th Czech-Polish-Slovak Optical Conference on Wave and Quantum Aspects of Contemporary Optics*, Ostravice, Czech Republic, 3-7 sept. 2012, p. 86971L.
- [64] P. Peterka, F. Todorov, I. Kašík, V. Matějec, O. Podrazký, L. Šašek, G. Mallmann, and R. Schmitt, "Wideband and high-power light sources for in-line interferometric diagnostics of laser structuring systems," in Proc. SPIE 8697, *18th Czech-Polish-Slovak Optical Conference on Wave and Quantum Aspects of Contemporary Optics*, Ostravice, Czech Republic, 3-7 Sept. 2012, p. 869718.
- [65] P. Peterka, P. Navratil, B. Dussardier, R. Slavik, P. Honzatko, and V. Kubecek, "Self-induced laser line sweeping and self-pulsing in double-clad fiber lasers in Fabry-Perot and unidirectional ring cavities," in Proc. SPIE 8433, *SPIE Photonics Europe: Laser Sources and Applications*, Brussels, Belgium, 16-19 April 2012, p. 843309.
- [66] P. Peterka, B. Dussardier, W. Blanc, I. Kasik, and P. Honzatko, "Thulium-doped silica fibers with enhanced $^3\text{H}_4$ level lifetime for fiber lasers and amplifiers," in Proc. *IEEE 3rd International Conference on Photonics*, Penang, Malaysia, 1-3 Oct. 2012, pp. 56-60.
- [67] P. Navratil, P. Vojtisek, P. Peterka, P. Honzatko, and V. Kubecek, "Self-induced laser line sweeping and self-pulsing in rare-earth doped fiber lasers," in Proc. *8697, 18th Czech-Polish-*

- Slovak Optical Conference on Wave and Quantum Aspects of Contemporary Optics*, Ostravice, Czech Republic, 3-7 Sept. 2012, p. 86971M.
- [68] P. Honzátko, P. Vojtíšek, P. Navrátil, and P. Peterka, "Self-induced laser line sweeping in tunable erbium-doped fiber laser," in Proc. *5th EPS-QEOD Europhoton Conference*, Stockholm, Sweden, 26-31 August 2012, p. WeP28.
- [69] R. Schmitt, G. Mallmann, and P. Peterka, "Development of a FD-OCT for the inline process metrology in laser structuring systems," in Proc. SPIE 8082, *SPIE Optical Metrology: Optical Measurement Systems for Industrial Inspection VII*, München, Germany, 23-26 June 2011, p. 808228.
- [70] P. Peterka, I. Kasik, W. Blanc, and B. Dussardier, "Modélisation d'un laser a fibre émettant a 800 nm," in Proc. *Journées Nationales d'Optique Guidée (JNOG)*, Marseille, France, 4-7 Juillet 2011, p. P191.
- [71] P. Peterka, P. Honzátko, R. Slavík, P. Navrátil, and P. Zahradník, "Nonlinear optical switch for laser Q-switching based on cascaded long-period fiber gratings in Yb-doped fiber and fiber Bragg grating," in Proc. *2nd EOS Topical Meeting on Lasers (ETML'11)*, Capri, Italy, 26-28 Sept. 2011, p. 4532.
- [72] I. Kasik, A. Dhar, O. Podrazky, J. Mrazek, V. Matejec, P. Peterka, B. Dussardier, and V. Kubecek, "Special optical fibers doped with nanoparticles [Invited Paper]," presented at the *International Conference on Specialty Glass and Optical Fiber: Materials, Technology and Devices (ICGF-2011)*, Kolkata, India, 4-6 August 2011.
- [73] P. Honzátko, P. Peterka, A. Dhar, I. Kasik, O. Podrazky, and V. Matejec, "Efficient core-pumped thulium doped fibers for single frequency master oscillators working at 2000 nm band," in Proc. *2nd EOS Topical Meeting on Lasers (ETML'11)*, Capri, Italy, 26-28 Sept. 2011, p. 4557.
- [74] P. Honzátko, A. Dhar, I. Kasik, O. Podrazky, V. Matejec, P. Peterka, W. Blanc, and B. Dussardier, "Preparation and characterization of highly thulium- and alumina-doped optical fibers for single-frequency fiber lasers," in Proc. SPIE 8306, *Photonics Prague*, Prague, Czech Republic, 24-26 August 2011, p. 830608.
- [75] B. Dussardier, J. Maria, and P. Peterka, "Ytterbium- and chromium-doped fibre laser: from chaotic self-pulsing to passive Q-switching," in Proc. *20th International Laser Physics Workshop (LPHYS'11)*, Sarajevo, Bosnia and Herzegovina, 11-15 July 2011, p. 8.2.3.
- [76] P. Peterka, I. Kasik, B. Dussardier, and W. Blanc, "Theoretical analysis of fiber lasers emitting around 810 nm based on thulium-doped silica fibers with enhanced $^3\text{H}_4$ level lifetime," in Proc. *4th EPS-QEOD Europhoton conference*, Hamburg, Germany, 29 Aug. - 3 Sept. 2010, p. WeP5.
- [77] P. Peterka, I. Kasik, A. Dhar, B. Dussardier, and W. Blanc, "Thulium-doped silica fibers with enhanced $^3\text{H}_4$ level lifetime: modelling the devices for 800-820 nm band," in Proc. SPIE 7843, *SPIE Photonics Asia: High-Power Lasers and Applications V*, Beijing, China, p. 78430A.
- [78] P. Peterka, I. Kasik, W. Blanc, B. Dussardier, and G. Monnom, "Thulium-doped silica fibers with enhanced $^3\text{H}_4$ level lifetime: modelling the devices for 800-820 nm and 1460-1530 nm bands [Invited]," presented at the *Final Conference of the COST Action 299 Optical Fibers for New Challenges Facing the Information Society*, Cluj-Napoca, Romania, 15-17 March 2010.
- [79] A. Novozamsky, J. Slanicka, and P. Peterka, "Tomography Reconstruction of Geometry and Refractive Index Profile of Highly Asymmetric Optical Fiber Preforms," in Proc. SPIE 7746, *17th Slovak-Czech-Polish Optical Conference on Wave and Quantum Aspects of Contemporary Optics*, Liptovský Ján, Slovakia, 6-10 Sept. 2010, p. 77461O.
- [80] B. Dussardier, J. Maria, and P. Peterka, "Passively Q-switched ytterbium and chromium all-fibre laser," in Proc. *Photonics 2010 - International Conference on Fiber Optics & Photonics*, Guwahati, India, 11-15 December 2010, p. 483.
- [81] P. Peterka and R. Slavík, "Extension of the double-clad Yb-doped fiber laser oscillation range thanks to long-period fiber grating filters," in Proc. OSA *CLEO/Europe and EQEC*, München, Germany, 14-19 June 2009, p. CJ.P11.

- [82] J. Maria, P. Peterka, R. Slavik, B. Dussardier, P. Honzatko, and V. Kubecek, "Selection de la longueur d'onde d'un laser en anneau a fibre dopee Yb par un reseau a pas long," in Proc. *Optique Lille 2009: 28iemes Journées Nationales d'Optique Guidée (JNOG)*, Lille, France, 6-9 Juillet 2009, p. A1.4.
- [83] J. Maria, P. Peterka, and B. Dussardier, "Effets d'absorbant saturable sur la dynamique d'un laser a fibre double gaine dopée ytterbium," in Proc. *11'eme Colloque sur les Lasers et l'Optique Quantique (COLOQ11)*, Mouans-Sartoux, France, 7-9 Sept. 2009, p. 56.
- [84] P. Peterka, W. Blanc, B. Dussardier, G. Monnom, D. Simpson, and G. Baxter, "Estimation of energy transfer parameters in thulium- and ytterbium-doped silica fibers," in Proc. SPIE 7138, *Photonics Prague*, Prague, Czech Republic, 27-29 Aug. 2008, p. 71381K.
- [85] P. Peterka, I. Kasik, V. Matejec, M. Karasek, J. Kanka, P. Honzatko, and V. Kubecek, "Amplifier performance of double-clad Er/Yb-doped fiber with cross-section tailored for direct splicing to the pump and signal fibers," in Proc. *OSA Optical Fiber Communication Conference and Exposition and The National Fiber Optic Engineers Conference*, Anaheim, California, USA, 25-29 March 2007, p. JWA12.
- [86] D. Kacik, P. Peterka, J. Canning, I. Turek, M. Kolimar, and S. Berezina, "The modified interferometer for measurement of the chromatic dispersion in PCFs," in Proc. SPIE 6588, *SPIE Optics+Optoelectronics: Photonic Crystal Fibers*, Prague, Czech Republic, 16-19 April 2007, p. 65880N.
- [87] P. Peterka, V. Kubecek, P. Dvoracek, I. Kasik, and V. Matejec, "Laser performance of double-clad Er/Yb doped fiber with cross-section tailored for direct splicing to the pump and signal fibers," in Proc. *OSA Conference on Lasers and Electro-Optics (CLEO)*, Long Beach, California, USA, 21-26 May 2006, p. CTuQ7.
- [88] P. Peterka, I. Kasik, V. Matejec, W. Blanc, B. Faure, B. Dussardier, G. Monnom, and V. Kubecek, "Thulium-doped silica-based optical fibers for cladding-pumped amplifiers and lasers," in Proc. *4th International Symposium on Laser, Scintillator and Non Linear Optical Materials (ISL NOM)*, Prague, Czech Republic, 26-30 June 2006, p. 127.
- [89] V. Matejec, M. Hayer, I. Kasik, J. Mrazek, P. Peterka, J. Kanka, and P. Honzatko, "Microstructure fibers for the development of fiber lasers," in Proc. SPIE 6180, *Photonics Prague*, Prague, Czech Republic, 8-11 June 2005, p. 61800Z.
- [90] J. Slánička, P. Peterka, V. Matějec, I. Kašík, and M. Pospíšilová, "Tomographic reconstruction of the geometry and refractive index profile of specialty fibre preforms," in Proc. *Optické komunikace*, Prague, Czech Republic, 20-21 Oct. 2005, pp. 121-127 (in Czech).
- [91] P. Peterka, I. Kašík, V. Matějec, J. Kaňka, M. Karásek, M. Hayer, and J. Slánička, "Novel coupling element for end-pumping of double-clad fibres," in Proc. *31st European Conference on Optical Communication (ECOC'05)*, Glasgow, Scotland, 25-29 Sept. 2005, pp. 755-756.
- [92] P. Peterka, I. Kašík, V. Kubeček, V. Matějec, M. Hayer, P. Honzátko, A. Zavadilova, and P. Dvořáček, "Optimization of erbium-ytterbium fibre laser with simple double-clad structure," in Proc. SPIE 6180, *Photonics Prague*, Prague, Czech Republic, 8-11 June 2005, p. 618010.
- [93] P. Peterka, I. Kasik, V. Matejec, P. Honzatko, and J. Slanicka, "Novel method for end-pumping of double-clad fiber amplifiers: principle and tailoring the cross section," in Proc. *OSA Optical Amplifiers and Their Applications*, Budapest, Hungary, 7-10 August 2005, p. ME4.
- [94] P. Peterka, J. Kanka, P. Dymak, P. Honzatko, D. Kacik, J. Canning, W. Padden, and K. Lyytikainen, "Measurement of chromatic dispersion in specialty fibres using simple setup of interferometric method," in Proc. *7th Optical Fibre measurement Conference (OFMC'05)*, Teddington, UK, 21-23 Sept. 2005 pp. 45-49.
- [95] M. Karasek, P. Peterka, and J. Radil, "Transmission of 2x 10 GE channels over 252 km without in-line EDFA," in Proc. *Conference on Optical Network Design and Modelling*, Milano, Italy, 7-9 Feb. 2005, pp. 55-58.
- [96] D. Kacik, I. Turek, I. Martincek, D. Pudis, K. Lyytikainen, J. Canning, and P. Peterka, "Influence of fibre length on intermodal interference in PCF," in Proc. SPIE 5950, *Int. Congress on Optics*

- and Optoelectronics: Photonic Crystals and Fibers*, Warsaw, Poland, 28 Aug. - 5 Sept. 2005, p. 595011.
- [97] W. Blanc, P. Peterka, B. Faure, B. Dussardier, G. Monnom, I. Kasik, J. Kanka, D. Simpson, and G. Baxter, "Characterization of a thulium-doped silica-based optical fibre for S-band amplification," in Proc. SPIE 6180, *Photonics Prague*, Prague, Czech Republic, 8-11 June 2005, p. 61800V.
- [98] D. Simpson, T. Nguyen, G. Baxter, S. Collins, B. Faure, W. Blanc, B. Dussardier, G. Monnom, and P. Peterka, "Thulium-doped silica fiber for S-band amplifiers: pump power and host composition effect on the $^3H_4 \Rightarrow ^3F_4$ band," in Proc. *EPS-QEOD Europhoton Conference on Solid-State and Fiber Coherent Light Sources*, Lausanne, Switzerland, 29 Aug. - 3. Sept. 2004, p. WeC14.
- [99] P. Peterka, P. Dymák, P. Honzátko, V. Matějec, J. Kaňka, T. Martan, B. Vraný, D. Káčik, W. Padden, and K. Lyytikainen, "Measurement of chromatic dispersion and birefringence of microstructure optical fibres," in Proc. *Optické komunikace*, Prague, Czech Republic, 21-22 Oct. 2004, pp. 137-143 (in Czech).
- [100] M. Karasek, P. Peterka, and J. Radil, "Optimization of the 10 Gigabit Ethernet transmission over standard single-mode fibres without in-line amplifiers," in Proc. *Elektro 2004*, Žilina, Slovakia, 25-26 May 2004, pp. 11-14 (in Czech).
- [101] B. Faure, W. Blanc, B. Dussardier, G. Monnom, and P. Peterka, "Thulium-doped silica-fiber based S-band amplifier with increased efficiency by aluminum co-doping," in Proc. Optical Society of America *Optical Amplifiers and Their Applications*, San Francisco, California, USA, 27-30 June 2004, p. OWC2.
- [102] P. Peterka, I. Kašík, and V. Matějec, "Optimal fibre cross section shape for cladding-pumped fibre lasers and amplifiers," in Proc. *Optické komunikace*, Prague, Czech Republic, 21-22 Oct. 2003, pp. 125-130 (in Czech).
- [103] P. Peterka, B. Faure, W. Blanc, M. Karasek, and B. Dussardier, "Theoretical modelling of S-band thulium-doped fibre amplifiers," in Proc. *11th International Workshop on Optical Waveguide Theory and Numerical Modelling (OWTNM)*, Prague, Czech Republic, 4-5 April 2003, p. 130.
- [104] P. Peterka, W. Blanc, B. Faure, B. Dussardier, and G. Monnom, "Modélisation de l'amplificateur à fibre de silice dopée thulium," in Proc. *8^{ème} Colloque sur les lasers et l'optique quantique (COLOQ 8)*, Toulouse, France, 3-5 Sept. 2003.
- [105] D. Káčik, I. Turek, I. Martinček, and P. Peterka, "Characterisation of the experimental twin-core fibre," in Proc. *Optické komunikace*, Prague, Czech Republic, 21-22 Oct. 2003, pp. 71-76 (in Slovak).
- [106] B. Faure, W. Blanc, P. Peterka, A. Ibrahim, B. Dussardier, and G. Monnom, "Fibre optique en silice dopée au thulium pour la réalisation d'un amplificateur dans la bande S," in Proc. *22emes Journees Nationales d'Optique Guidee (JNOG)*, Valence, France, 12 - 14 Nov. 2003.
- [107] P. Peterka, P. Honzátko, J. Kanka, V. Matejec, and I. Kasik, "Generation of high repetition rate pulse trains in a fiber laser through a twin-core fiber," in Proc. SPIE 5036, *Photonics Prague*, Prague, Czech Republic, 26-29 May 2002, pp. 376-381.
- [108] P. Dymák and P. Peterka, "Measurement of chromatic dispersion of erbium-doped fibres using interferometric method," in Proc. *Optické komunikace*, Prague, Czech Republic, 30-31 Oct. 2002, pp. 136-140 (in Czech).
- [109] P. Peterka, P. Honzátko, J. Kaňka, V. Matějec, and I. Kašík, "Measurement of intermodal dispersion in a twin-core fibre filter," in Proc. *6th Optical Fibre Measurement Conf. (OFMC'01)*, Cambridge, United Kingdom, 26-28 Sept. 2001, pp. 221-224.
- [110] J. Kanka, P. Honzátko, and P. Peterka, "Stationary pulse train generation through modulational-instability in a sigma-cavity fiber laser," in Proc. *OSA Annual Meeting*, Long Beach, California, USA, 14-18 Oct. 2001, p. MZ2.

- [111] J. Kanka, P. Honzátko, and P. Peterka, "Characterisation of a modulation instability sigma-cavity fibre laser," in Proc. *6th Optical Fibre Measurement Conf. (OFMC'01)*, Cambridge, United Kingdom, 26-28 Sept. 2001, pp. 255-258.
- [112] P. Honzátko, P. Peterka, and J. Kaňka, "Three- and four-wave model of modulation instability fiber laser," in Proc. *2nd EOS Topical Meeting on Electromagnetic Optics*, Paris, France, 26-30 Aug. 2001, p. 108.
- [113] P. Peterka, J. Kaňka, and P. Honzátko, "Measurement of intermodal dispersion in a twin-core optical fibre," in Proc. *Optické komunikace*, Prague, Czech Republic, 14-15 Nov. 2000, pp. 128-132 (in Czech).
- [114] P. Peterka and J. Kanka, "Erbium-doped twin-core fibre narrow-band filter for fibre lasers," in Proc. *Workshop on Optical Waveguide Theory and Numerical Modelling (OWTNM)*, Prague, Czech Republic, 26-27 May 2000.
- [115] P. Peterka, A. Procházka, and V. Matějec, "Application of the spot size measurement using offset method to Er/Yb fibres characterization," in Proc. *Optické komunikace*, Prague, Czech Republic, 23-24 Nov. 1999, p. 174 (in Czech).
- [116] P. Peterka, J. Kanka, M. Karasek, P. Honzátko, and F. Abdelmalek, "Characterization and modelling of Er/Yb codoped fibres," in Proc. SPIE 4016, *Photonics Prague*, Prague, Czech Republic, 21-23 June 1999, pp. 282-287.
- [117] J. Kanka, P. Peterka, P. Honzátko, V. Matejec, and I. Kasik, "Performance characterisation of twin-core fibre filter in fibre laser," in Proc. *5th Optical Fibre Measurement Conf. (OFMC'99)*, Nantes, France, 22-24 Sept. 1999, pp. 190-193.
- [118] J. Kanka, P. Honzátko, P. Peterka, I. Kasik, and V. Matejec, "Line-narrowing and wavelength stabilisation in a tunable Er-Yb fibre ring laser with an Er twin-core fibre," in Proc. SPIE 4016, *Photonics Prague*, Prague, Czech Republic, 21-23 June 1999, pp. 315-319.
- [119] P. Peterka, J. Kaňka, P. Honzátko, V. Matějec, and I. Kašík, "Twin-core optical fiber - design, preparation, characterisation," in Proc. *Optické komunikace*, Prague, Czech Republic, 20-21 Oct. 1998, pp. 127-131 (in Czech).
- [120] P. Peterka and J. Kaňka, "Er-doped twin-core fibre as a saturable- absorber-based tracking bandpass filter for fibre lasers," in Proc. *7th Czech Technical University Annual Seminar WORKSHOP'98*, Prague, Czech Republic, 3-5 Feb. 1998, pp. I.323-324.
- [121] J. Kaňka, P. Peterka, P. Honzátko, V. Matějec, and I. Kašík, "Er-doped twin-core fibre coupler as a saturable-absorber-based tracking narrow-band filter for fibre lasers," in Proc. *Czech-Chinese Workshop on Advanced Materials for Optoelectronics (AMFO'98)*, Prague, Czech Republic, 15-17 June 1998, p. 10.
- [122] J. Kaňka and P. Peterka, "Er-doped twin-core fibre tracking bandpass filter for fibre lasers," in Proc. *International Student Conference on Electrical Engineering (POSTER'98)*, Prague, Czech Republic, 28 May 1998, p. EEC14.
- [123] P. Peterka, "Design of the twin-core fiber coupler," in Proc. *International Student Conference on Electrical Engineering (POSTER'97)*, Prague, Czech Republic, May 1997, p. EEC30.
- [124] U. Haberland, P. Peterka, and V. Blažek, "Depth resolved Doppler imaging with synthesised coherence functions using tunable lasers - Concept and theoretical aspects," in Proc. Fortschritt-Berichte VDI *7th International Symposium Computer-aided Noninvasive Vascular Diagnostics (CNVD'97): Frontiers in computer-aided visualization of vascular functions*, Paris, France, 10-12 Jan. 1997, pp. 41 - 46.
- [125] P. Peterka, "Computer model of Er/Yb-doped fiber amplifier," in Proc. *International Student Conference on Electrical Eng. (POSTER'96)*, Prague, Czech Republic, 1996 (in Czech), p. 50.
- [126] M. Khodl, I. Paulička, V. Sochor, J. Resl, and P. Peterka, "Fiber optic sensor for area protection," in Proc. *Czech Technical University Annual Seminar WORKSHOP'92*, Prague, Czechoslovakia, 1992.