

Jméno, příjmení, titul žadatele: Martin Divoký, Ing.

Seznam publikovaných prací:

Vlastní publikace v rámci disertační práce

A) impaktované časopisy

[1] Hana Turcicova, Jan Dostal, Gabriela Kocourkova, Pavel Cerny, Martin Divoky, Martin Smrz, and Petr Straka: Amplification of ultrashort laser pulses by the OPCPA method at SOFIA laboratory, Acta Physica Slovaca, vol 56, no 2, 2006, 115-118.

[2] Divoký M., Straka P., Simple two-dimensional-imaging spectrograph with wedged narrow band filters, Rev. Sci. Instrum. 79 (2008) 123114(1) - 123114(4).

B) patentová přihláška

[1] Straka P, Divoký M; Patentová přihláška s názvem "Zobrazující spektrograf" PV 2008-385

[2] Straka P, Divoký M; PCT patentová přihláška s názvem "Imaging spectrograph" PCT/CZ2009/000080

C) popularizace a výroční zprávy

[2] Divoký M; Jak se zbavit duhy aneb náprava barevného rozmazání obrazu ve spektroskopii a jeho využití při diagnostice velmi krátkých optických pulzů, Československý časopis pro fyziku, no. 59, 375-378, 2009

D) konference se sborníkem

[1] Divoký M, Straka P: Pulse stretcher for chirped pulse amplification with a high power- and spectral-transmissions, XV International Symposium on Gas Flow, Chemical Lasers, and High-Power Lasers (CGL/HPL 2004), edited by Jarmila Kodymová, Proceedings of SPIE Vol. 5777 (SPIE, Bellingham, WA, 2005), 762-765.

[2] Turčičová H, Dostál J, Kuhnová G, Knyttl J, Skála J, Pfeifer M, Divoký M, Smrž M, Böhm P, Novák O, Dombrovský A, Belardi W, Straka P: Solid-state-gas-laser SOFIA as a pump for the optical parametric chirped pulse amplification, XV International Symposium on Gas Flow, Chemical Lasers, and High-Power Lasers (CGL/HPL 2004), edited by Jarmila Kodymová, Proceedings of SPIE Vol. 5777 (SPIE, Bellingham, WA, 2005), 631-635.

[3] H.Turčičová, J. Dostál, G. Kuhnová, J. Knyttl, J. Skála, M. Pfeifer, M. Divoký, M. Smrž, O. Novák, P. Böhm, P. Straka, Hybrid laser chain SOFIA as a test laboratory for the petawatt-grade of Prague Asterix Laser System (PALS), Proceedings of the International Workshop on Optical Parametric Processes and Periodical Structures, 26-29 September 2004, Vilnius University, Lithuania, 43-44.

[4] Divoký M, Smrž M, Straka P; Pulse Stretcher for chirped pulse amplification with high power- and spectral-transmissions, Proceedings of 13th Annual university-wide seminar WORKSHOP 2005, Eds. B. Říha, 21-25 March, 2005, Praha, 136-137.

[5] Divoky M, Smrz M, Straka P: Improving spatial precision of 2D-imaging color filter spectrograph with wedged optical filters, Proceedings of 19th Annual CTU Student Scientific Conference WORKSHOP 2010, Eds. B. Říha, 22-26 February, 2010, Praha, 38-39.

[6] Novák O, Divoky M, Bohm P, Smrz M, Turcicova H, Straka P: Proposal of Ultra-High-Power Beams at the Kilojoule Iodine Laser PALS, Proceedings of 19th Annual CTU Student Scientific Conference WORKSHOP 2010, Eds. B. Říha, 22-26 February, 2010, Praha, 44-45.

[7] Divoky M, Straka P: Pulse stretcher diagnostics by camera and color filters, Light at Extreme Intensities – Opportunities and Technological Issues of the Extreme Light Infrastructure: LEI 2009, AIP Conference Proceedings Vol. 1228, 16th April 2010, 230-233.

E) ostatní konference

[1] Turcicova H., Skala J., Pfeifer M., Straka P., Dostal J., Kocourkova G., Knyttl J., Divoky M., Smrz M., Novak O., Bohm P.; Application of the hybrid laser SOFIA for OPCPA pumping; The European Conference on Lasers and Electro-Optics and the European Quantum Electronics Conference (CLEO@Europe-EQEC 2005), CG1-5-MON, 12-17 June 2005, Munich, Germany.

- [2] Divoky M, Straka P, Böhm P; Off-plane diffraction in pulse stretcher and compressor; The European Conference on Lasers and Electro-Optics and the European Quantum Electronics Conference (CLEO®/Europe-EQEC 2005), CG-9-TUE, 12-17 June 2005, Munich, Germany.
- [3] Divoký M, Smrž M, Straka P; Conical diffraction in pulse stretcher and compressor; International Conference on Ultrahigh Intensity Lasers (ICUIL 2006), 25-29 September 2006, Chassis, France.
- [4] Dostal J, Divoky M, Smrz M, Novak O, Bohm P, Turcicova H, Straka P; Iodine laser system SOFIA used as a pump for OPCPA, International Conference on Ultrahigh Intensity Lasers (ICUIL 2006), 25-29 September 2006, Chassis, France.
- [5] Dostal J, Divoky M, Smrz M, Novak O, Huynh J, Kral L, Turcicova H, Kralikova B, and Straka P; SOFIA iodine laser system as a driver for OPCPA; International Conference on Ultrahigh Intensity Lasers (ICUIL 2008), 27-31 October 2008, Tongli, China.
- [6] Novak O, Divoky M, Bohm P, Smrz M, Sedlar R, Straka P, and Turcicova H; Proposal of ultra-high-power beams at the kilojoule iodine laser PALS; International Conference on Ultrahigh Intensity Lasers (ICUIL 2008), 27-31 October 2008, Tongli, China.
- [7] Divoky M, Straka P; Precise 2D-imaging color filter spectrograph with wedged optical filters in femtosecond systems diagnostics, UltraFast Optics (UFO VII) and High Field Short Wavelength (HFSW XIII) conference, Aug 31 - Sept 4 2009, Arcachon, France.

Ohlasy

- [1] Jedlicka P, Lazar J, Cip O; Fully digital frequency stabilization of IR fiber-coupled laser; Review of scientific instruments, vol 77, no 6, 2006, 063111(1)- 063111(5).
- [2] Kral L; Closed-loop wavelength stabilization of an optical parametric oscillator as a front end of a high-power iodine laser chain; Review of scientific instruments, vol 78, no 5, 2007, 053104(1)- 053104 (5)
- [3] Kral L; Automatic beam alignment system for a pulsed infrared laser; Review of scientific instruments, vol 80, no 1, 2009, 013102(1)- 013102 (5)

Vlastní publikace mimo disertační práci

C) popularizace a výroční zprávy

- [1] Divoký M., Hernandez-Gomez C., Spider diagnostics technique for Vulcan 10 PW OPCPA project, Central Laser Facility Annual Report 2007-2008, RAL-TR-2008-025, 273-275.
- [2] Lyachev A., Chekhlov O., Collier J. L., Hancock S., Holligan P., Hernandez-Gomez C., Matousek P., Musgrave I., Ross I. N., Tang Y., Divoky M., Development of the Joule level amplification stage for the Phase I of the Vulcan 10 PW OPCPA project, Central Laser Facility Annual Report 2007-2008, RAL-TR-2008-025, 271-272.
- [3] Lyachev A., Winstone T., Musgrave I., Hernandez-Gomez C., Ross I.N., Tang Y., Collier J. L. and Divoky M., Evaluation of new gratings for the Vulcan 10 PW OPCPA upgrade project, Central Laser Facility Annual Report 2008-2009, RAL-TR-2009-XXX, 276-278.

D) konference se sborníkem

- [1] Smrž M, Straka P, Divoký M; Measurement of sub-12-fs laser pulses by a light-emitting diode, Proceedings of 13th Annual university-wide seminar WORKSHOP 2005, Eds. B. Říha, 21-25 March, 2005, Praha, 112-113.

E) ostatní konference

- [1] Collier J, Checklov O, Clark RJ, Divoky M, Hernandez-Gomez C, Lyachev A, Musgrave IO, Matousek P, Neely D, Nerreys PA, Ross I, Tang Y, Winstone TB, and Wyborn BE; The 10PW OPCPA capability on the Vulcan Laser – An Update; International Conference on Ultrahigh Intensity Lasers (ICUIL 2008), 27-31 October 2008, Tongli, China.
- [2] Sawicka M, Divoký M, Jakubczak K, Novák J, Mocek T, Numerical simulations of amplified spontaneous emission in multi-slab amplifiers, High Energy Class Diode Pumped Solid State Lasers (HEC-DPSSL) International Workshop, September 8-10 2010, Versailles, France.
- [3] Pires H, Divoky M, Hernandez-Gomez C, Galimberti M, Lyachev A, Musgrave IO; Characterization of a 34 fs broadband laser source at 900 nm; International Conference on Ultrahigh Intensity Lasers (ICUIL 2010), 26. September - 1. October 2010, Watkins Glen, USA.