

**Ing. Martin Jakub Duda**

## **Publikace související s tématem dizertace**

Publikace v recenzovaných časopisech a konferenčních sbornících související s tématem dizertace. Počet citací podle [Google Scholar\\*](#) ze dne 31. května 2021.

- [A.1] **M. Duda**, O. Novák, M. Smrž, A. Lucianetti, V. Kubeček and T. Mocek. 'Numerical study of sum frequency ultrashort pulse compression in borate crystals'. In: *Journal of the Optical Society of America B* 37.11 (Nov. 2020), p. 3229. DOI: [10.1364/JOSAB.401657](#). **Cit. 0**
- [A.2] P. Hauschwitz, B. Stoklasa, J. Kuchařík, H. Turčičová, M. Písařík, J. Brajer, D. Rostohar, T. Mocek, **M. Duda** and A. Lucianetti. 'Micromachining of Invar with 784 Beams Using 1.3 ps Laser Source at 515 nm'. In: *Materials* 13.13 (July 2020), p. 2962. DOI: [10.3390/ma13132962](#). **Cit. 3**
- [A.3] **M. Duda**, O. Novák, M. Chyła, V. Kubeček, M. Smrž and T. Mocek. 'Shaping of picosecond laser pulses by second harmonic generation with time predelay'. In: *Nonlinear Frequency Generation and Conversion: Materials and Devices XIX*. ed. by P. G. Schunemann and K. L. Schepler. Vol. 1126413. March. SPIE, Mar. 2020, p. 39. DOI: [10.1117/12.2546153](#). **Cit. 1**
- [A.4] **M. Duda**, O. Novák, M. Chyła, M. Smrž and T. Mocek. 'Balancing the conversion efficiency and beam quality of second harmonic generation of a two-picosecond Yb:YAG thin-disk laser'. In: *Laser Physics* 30.2 (Feb. 2020), p. 025405. DOI: [10.1088/1555-6611/ab60b0](#). **Cit. 3**
- [A.5] **M. Duda**, O. Novák, M. Chyła, H. Turčičová, V. Kubeček, M. Smrž and T. Mocek. 'Peak Power Enhancement of Yb:YAG Laser Pulses by Second Harmonic Generation with Time Predelay in Borate Crystals'. In: *2019 Conference on Lasers and Electro-Optics Europe and European Quantum Electronics Conference*. Munich, 2019, cd\_p\_11. **Cit. 1**

## **Další publikace**

Publikace v recenzovaných časopisech a příspěvky na konferencích, kde jsem první autor, přímo nesouvisející s tématem dizertace.

- [B.1] D. Vojna, **M. Duda**, R. Yasuhara, O. Slezák, W. Schlichting, K. Stevens, H. Chen, A. Lucianetti and T. Mocek. 'Verdet constant of potassium terbium fluoride crystal as a function of wavelength and temperature'. In: *Optics Letters* 45.7 (Apr. 2020), p. 1683. DOI: [10.1364/OL.387911](#). **Cit. 4**
- [B.2] T. Fok, P. Wachulak, K. Janulewicz, **M. Duda**, Ł. Wegrzyński, A. Bartnik, R. Jarocki and H. Fiedorowicz. 'Near-Edge X-Ray Absorption Fine Structure Spectroscopy of Agarose with a Compact Laser Plasma Soft X-Ray Source'. In: *Acta Physica Polonica A* 137.1 (Jan. 2020), pp. 51–53. DOI: [10.12693/APhysPo1A.137.51](#). **Cit. 0**
- [B.3] C. Liberatore, **M. Duda**, P. Sikocinski, M. Chyła, A. Endo, M. Smrz and T. Mocek. 'EUV SOURCE AT HiLASE: THE STATE OF THE ART'. in: *MM Science Journal* 2019.05 (Dec. 2019), pp. 3406–3409. DOI: [10.17973/MMSJ.2019\\_12\\_2018131](#). **Cit. 0**

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\*<https://scholar.google.com/citations?user=gKBQnnIAAAAJ&hl=en>

- [B.4] P. Wachulak, **M. Duda**, A. Bartnik, Ł. Wegrzyński, T. Fok and H. Fiedorowicz. 'NEXAFS at nitrogen K-edge and titanium L-edge using a laser-plasma soft x-ray source based on a double-stream gas puff target'. In: *APL Photonics* 4.3 (2019), p. 030807. DOI: [10.1063/1.5085810](https://doi.org/10.1063/1.5085810). **Cit. 7**
- [B.5] **M. Duda**, P. Wachulak, T. Fok, Ł. Wegrzyński, A. Jančárek and H. Fiedorowicz. 'A single-shot near edge x-ray absorption fine structure spectroscopy using double stream gas puff target source'. In: *XXII International Symposium on High Power Laser Systems and Applications*. Ed. by P. Di Lazzaro. XXII International Symposium on High Power Laser Systems and Applications. SPIE, Jan. 2019, p. 33. DOI: [10.1117/12.2522429](https://doi.org/10.1117/12.2522429). **Cit. 0**
- [B.6] P. Wachulak, **M. Duda**, A. Bartnik, Ł. Wegrzyński, T. Fok, A. Jancarek and H. Fiedorowicz. 'NEXAFS spectroscopy and spectromicroscopy in the soft X-ray spectral region with a compact laser plasma source based on a double stream gas puff target'. In: *Radiation Physics and Chemistry* 175. November 2018 (Oct. 2018), p. 108086. DOI: [10.1016/j.radphyschem.2018.12.006](https://doi.org/10.1016/j.radphyschem.2018.12.006). **Cit. 0**
- [B.7] P. Wachulak, **M. Duda**, T. Fok, A. Bartnik, Z. Wang, Q. Huang, A. Sarzyński, A. Jancarek and H. Fiedorowicz. 'Single-Shot near Edge X-ray Fine Structure (NEXAFS) Spectroscopy Using a Laboratory Laser-Plasma Light Source'. In: *Materials* 11.8 (2018), p. 1303. DOI: [10.3390/ma11081303](https://doi.org/10.3390/ma11081303). **Cit. 11**
- [B.8] **M. Duda**, P. Wachulak, A. Bartnik, A. Sarzyński, Ł. Węgrzyński, H. Fiedorowicz and A. Jančárek. 'NEXAFS based elemental mapping of EUV irradiated PET with compact soft X-ray source'. In: *Instruments and Methods for Biology and Medicine 2018* (2018), p. 15. **Cit. 0**
- [B.9] P. Wachulak, **M. Duda**, A. Bartnik, A. Sarzyński, L. Węgrzynski and H. Fiedorowicz. '2-D elemental mapping of an EUV-irradiated PET with a compact NEXAFS spectromicroscopy'. In: *Spectrochimica Acta Part B: Atomic Spectroscopy* 145 (2018), pp. 107–114. DOI: [10.1016/j.sab.2018.04.014](https://doi.org/10.1016/j.sab.2018.04.014). **Cit. 8**
- [B.10] P. Wachulak, **M. Duda**, A. Bartnik, A. Sarzyński, L. Węgrzynski, M. Nowak, A. Jancarek and H. Fiedorowicz. 'Compact system for near edge X-ray fine structure (NEXAFS) spectroscopy using a laser-plasma light source'. In: *Optics Express* 26.7 (2018), p. 8262. DOI: [10.1364/oe.26008260](https://doi.org/10.1364/oe.26008260). **Cit. 27**
- [B.11] **M. Duda**, P. Wachulak, A. Bartnik, A. Sarzyński, L. Węgrzynski, M. Nowak, H. Fiedorowicz, L. Pina and A. Jancarek. 'A compact, desk-top near edge soft X-ray absorption fine structure spectroscopy system based on a laser plasma double stream gas puff target source'. In: *2017 International Workshop on EUV and Soft X-Ray Sources*. Dublin, Ireland, 2017, S77. **Cit. 0**