

## CURRICULUM VITAE (CV)

Acad. Dr. Mindaugas Gedvilas



**First name:** Mindaugas  
**Last name:** Gedvilas  
**Date of birth (Day / Month / Year):** 13 / 09 / 1981  
**Age:** 37 years old  
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### Summary of Research Activities:

**Acad. Dr. Mindaugas Gedvilas** (h-index **19**, papers cited **~1000** times, source Google Scholar), age 37, a young scientist (obtained a doctoral degree 7 years ago on November 11, 2011), FTMC Chief Researcher, LMT expert, LMA young academy member. In 2006 graduated from VU FF in 2011 at joint VU and FTMC defended a doctoral dissertation on technological sciences. He started scientific activity started in 2003 as a student of VU. He has published **50** articles of CA WoS (**30 × Q1, 18 × Q2, 2 × Q3**), in 12 he is the first author and in 13 corresponding author. 22 articles in international conferences proceedings (in 5 he is the first author). M. Gedvilas has contributed to the preparation of more than 75 presentations at international scientific conferences, of which he has prepared and presented 14 oral and 1 invited presentation. He is a co-author of 2 European and 1 Lithuanian patents. He actively participates in the evaluation of project proposals and project reports in LMT's expert's activities. He **successfully coordinated** LMT LAT program project FUNSPACE, budget 300 000 Eur, project outcome 9 × Q1 papers. In total, he participated in 10 projects: 1 FP7 (WP6 coordinator), 5 LMT, 1 ESFA, 1 MITA, 1 ŪM, and 1 VSF. Presently, he is in charge of 1 doctoral student and has led the final thesis for 12 students (undergraduate and graduate). Member of 3 international and 1 national conference organizing committees. The reviewer of scientific articles in international 15 CA WoS (Q1, Q2) scientific journals. Contributing to the organization of events for the promotion of science: 2 World Photonics Days, 4 Science Festivals - Spacecraft.

### Personal education:

- 2006 – 2011 **PhD studies** (Technological Sciences), Vilnius university and Center for Physical Sciences and Technology, Vilnius, Lithuania
- 2004 – 2006 **Master studies** (Laser physics and optical technology), Vilnius university, Vilnius, Lithuania
- 2000 – 2004 **Bachelor studies** (Physics), Vilnius university, Vilnius, Lithuania
- 1991 – 2000 Šiaulių “Ragainės” secondary school, Šiauliai, Lithuania
- 1988 – 1991 Šiaulių 18<sup>th</sup> secondary school, Šiauliai, Lithuania

### Extracurricular activities:

- 1996 – 1999 Extra training school for especially talented students, Olympus of Physics, Vilnius, Lithuania ([www.olimpas.lt](http://www.olimpas.lt))
- 1995 – 1999 Extramural school for young physicists, Photon, Siauliai University, Siauliai, Lithuania ([fotonas.su.lt](http://fotonas.su.lt))
- 1994 – 1997 Siauliai school of art, Siauliai, Lithuania ([www.sdailesmokykla.lt](http://www.sdailesmokykla.lt))

### Research interests:

Efficient laser ablation, two-colour double-pulse laser combined irradiation, heat transfer in laser matter interaction, stealth dicing of sapphire, laser interference ablation, laser formation of bio-inspired functional surfaces, laser induced periodical surface structuring (LIPSS), ripple formation, multilayer thin film solar cell interaction with laser irradiation.

### Work experience:

- 2004 - Present **Chief researcher** (2016 – Present), Senior research fellow (2012 – 2016), Junior research fellow (2006 – 2012), Engineer (2004 – 2006), Department of Laser Technologies, State Research Institute Center for Physical Sciences and Technology, Vilnius, Lithuania ([www.lts-ftmc.lt](http://www.lts-ftmc.lt))
- 2015 - Present **Expert** (evaluation of project proposals, evaluation of project reports), Research Council of Lithuania, Vilnius, Lithuania ([www.lmt.lt](http://www.lmt.lt))
- 2018 - Present **Member**, The Young Academy of the Lithuanian Academy of Sciences, Vilnius, Lithuania ([www.lma.lt](http://www.lma.lt))
- 2003 – 2004 **Engineer**, Vilnius University Institute of Theoretical Physics and Astronomy, Vilnius, Lithuania ([www.tfai.vu.lt](http://www.tfai.vu.lt))

### Projects:

1. **Project coordinator**, No. LAT-12/2016 ("Formation of functional bio-inspired surfaces for space applications via hybrid laser-chemical processing" or FUNSPACE by the Research Council of Lithuania program „Towards future technologies “), 2016-04-01 - 2018-12-31, 299 999 Eur.
2. **WP6 coordinator** ("Formation of Electrically Conductive Lines within Polymer Matrix") at FTMC No. 609355 („Hub of Application Laboratories for Equipment Assessment in Laser” or APPOLO by the European Union **FP7** Programme), 2013-2017, 10 999 954 Eur.

3. Project implementer No. TEC-07/2015 ("Laser system for sapphire processing utilizing spatial light modulator and ultra-short pulse laser working in burst regime" or BURSA by the Research Council of Lithuania LMT program „Technology Development“), 2015- 2016, 194 408 Eur.
4. Project implementer No. VP1-3.1-ŠMM-08-K-01-009 ESFA („Research on materials and technologies for photovoltaic structures and sensors “ by the National Program “An improvement of the skills of researchers” launched by the Lithuanian Ministry of Education and Science), 2012-2015, 4 619 139 Lt.
5. Project implementer No. ATE 09/2012 („Technological processes of membranes production for micro-solid oxide fuel cells“ or MIKROKOKE-2 by the Research Council of Lithuania LMT program „Future Energy“), 2012-2013, 71 800 Lt.
6. Project implementer No. ATE-05/2010 („Micro and nanostructures for micro solid oxide fuel cells“ or MIKROKOKE by the Research Council of Lithuania LMT program „Future Energy“), 2010-2011, 861 600 Lt.
7. Project implementer No. 2300-P137 ("Development of Laser Technology for Complex Structure of Sapphire" by the Agency for Science, Innovation and Technology MITA), 2012-2012, 270 790 Lt.
8. Project implementer No. 2300-P88 ("Method for Periodic Structures in Thin Material Layer Forming Interfering Laser Fibers" by the Ministry of Economy of the Republic of Lithuania), 2010-2011, 20 533 LT.
9. Project implementer No. 206-P11 („Multi-beam laser technologies for functional surfaces and thin films“ or MULATAS by the The State Studies Foundation and the Research Council of Lithuania program), 2008-2010, 1 056 700 Lt.
10. Project implementer No. 600B164 („Material processing by using ultra-short laser pulses“ or MATILDA by the State Studies Foundation VSF), 2005-2006, 159 800 Lt.

#### Scientific awards:

2019	Special FTMC Award for becoming a member of the LMA Young Academy, March 7, 2019, Saulėtekio al. 3, Vilnius
2018	Outstanding student poster award, III-place, research supervisor, International Conference ICPEPA 11, Vilnius, Lithuania
2018	Outstanding student poster award, II-place, research co-author, International Conference ICPEPA 11, Vilnius, Lithuania
2017	<b>Winner</b> of invention contest "Vilnius Invents 2017", Benediktas Gylys Foundation, Vilnius, Lithuania
2016 - 2017	<b>Winner</b> of INFOBALT nominee scholarship by Lithuanian Academy of Sciences, Vilnius, Lithuania
2016	2 <sup>nd</sup> place poster award in the International Conference HPLA/DE, Santa Fe, New Mexico, USA
2016	Patented invention of January 2016, LT 6240, The State Patent Bureau of the Republic of Lithuania
2015 - 2016	Awarded with Young Researcher Grant of Lithuanian Academy of Sciences, Vilnius, Lithuania
2012 - 2013	Award with Young Researcher Grant of Lithuanian Academy of Sciences, Vilnius, Lithuania
2008	<b>Absolute winner</b> of 1 <sup>st</sup> Tournament of Physics in Lithuania
2000	Participation in XXXI International Olympiad of Physics, Lester, England

- 1999 Participation in XXX International Olympiad of Physics, Padua, Italy
- 1999 Absolute winner of 11<sup>th</sup> Student Championship of Physics in Lithuania

**Sports awards:**

- 2018 **Winner**, Professor's tennis cup 2018, juniors group, Kaunas, Lithuania
- 2017 Third-place finisher, Professor's tennis cup 2017, juniors group, Kaunas, Lithuania

**Review of scientific papers in CA WoS journals:**

1. Additive Manufacturing, Elsevier (IF = 7.7),
2. IEEE Transactions on Industrial Electronics, IEEE (IF = 6.5),
3. Scientific Reports, Springer-Nature (IF = 4.6),
4. Applied Surface Science, Elsevier (IF = 4.2),
5. IEEE Access, IEEE (IF = 4.1),
6. Optics Express, OSA publishing (IF = 3.5),
7. Optics & Laser Technology, Elsevier (IF = 2.5),
8. Materials, MDPI (IF = 2.5),
9. Applied Sciences, MDPI (IF = 2.2),
10. Journal of Applied Physics, AIP Publishing (IF = 2.1),
11. European Journal of Mechanics - B/Fluids, Elsevier (IF = 2.0),
12. Applied Physics B, Springer (IF = 1.9),
13. Journal of Laser Applications, LIA (IF = 1.6),
14. Microsystem Technologies, Springer (IF=1.6),
15. JLMN-Journal of Laser Micro/Nanoengineering, JLPS (IF = 0.9),
16. SN Applied Sciences, Springer (IF = n/a).

**Conference organizing:**

1. Participation in organizing committee of 11<sup>th</sup> International Conference on Photo-Excited Processes and Applications (ICPEPA2011) in Vilnius, Lithuania, September 10-14, 2018.
2. Participation in organizing committee of The 15<sup>th</sup> International Symposium on "Laser Precision Microfabrication" (LPM2014), Vilnius, Lithuania, June 17-20, 2014.
3. Participation in organizing committee of XX -th Lithuania- Belarus seminar "Lasers and Optical Nonlinearity" (LON2013), Vilnius, Lithuania, November 21-22, 2013.
4. Participation in organizing committee of 9<sup>th</sup> National conference „Lasers: Science and Technology“, Molėtai, Lithuania, August 30-31, 2013.

**Expertise:**

1. Expert at the Research Council of Lithuania (LMT) from 2015. Expert evaluation of project applications, project reports, doctoral scholarships, doctoral visits.

#### **Review of bachelor, master and doctoral theses:**

1. Review of Arnas Pocius Bachelor Thesis "CUTTING OF CERAMIC FLOORS IN PERMANENT ACTIVITY LIGHTING LASER".
2. Review of Eglė Kaziulionytė Bachelor Thesis "FORMATION OF COMPOSITE MICROSTRUCTURIZED SPACE IN LASER POLYMERIZATION BUDGET".
3. Review of Dovilė Mackevičiūtė Bachelor Thesis "FORMATION OF MICROSTRUCTURIZED CARCASES BY THREE-PRINTING AND LASER POLYMERIZATION METHOD".
4. Review of Tomas Jonavičius Master thesis "LIGHT POLARIZATION IN THE LASER LASER LITERATURE PHOTOPOLYMERS".
5. Review Julius Miraus Master thesis "EFFECTS OF OPTICAL RESISTANCE IN EFFICIENCY ON ONE-CLASS DIELECTRIC COVERINGS AT FEMTOSECONDIC LASER IMPULSE".
6. Review Sima Rekšytė Master thesis "FORMATION OF THREE POLYMER WORKS BY DIRECT LASER WRITING BY DIFFERENT POSITION".
7. Review of Yury Malevich Dissertation "DYNAMICS OF PHOTOINDUCED ANISOTROPY AND THERMAL GENERATION OF SYNTHESIS IN SEMIERS".
8. Review of Teresa Moskalioviene Dissertation "NITROGEN TRANSMISSION PROCESSES IN AUSTENITIC STAINLESS STEEL PLASMA SYNTHESIS".

#### **Supervisor of bachelor, master and doctoral students:**

1. 2017-present Andrius Žemaitis doctoral thesis "Efficient laser ablation for bio-inspired functional surface fabrication".
2. 2018 Mantas Gaidys master thesis "Laser ablation on flat and cylindrical surfaces".
3. 2017 Justinas Mikšys master thesis "Drag reducing bio-inspired riblet surface formation by laser irradiation".
4. 2015 Jonas Grabys master thesis "Laser surface structuring for enhancement of tribological properties".
5. 2015 Justinas Mikšys bachelor thesis "The research of silicon and stainless steel surfaces, irradiated by fundamental and third harmonics picosecond laser pulses".
6. 2015 Jonas Grabys master research work "Stealth dicing of sapphire by using picosecond laser".
7. 2015 Justinas Mikšys bachelor studies research work "The research of silicon and stainless steel surfaces, irradiated by fundamental and third harmonics picosecond laser pulses".
8. 2014 Jonas Berzinš bachelor thesis "Dicing of sapphire wafers by picosecond laser irradiation at 355 nm and 1064 nm wavelengths".
9. 2014 Jonas Grabys master research work "Laser surface structuring for enhancement of tribological properties".
10. 2014 Jonas Berzinš bachelor student scientific research "Dicing of sapphire wafers by picosecond laser irradiation at 355 nm and 1064 nm wavelengths".

11. 2013 Erikas Berzinš master student scientific research "Modelling of thin film solar cell interaction with laser radiation".
12. 2013 Jonas Berzinš bachelor student scientific research "Stealth dicing of sapphire by using picosecond laser".
13. 2012 Antanas Vinčiūnas master student scientific research practise „Enhancement of solar cell efficiency by laser structuring“.

#### **Popularization of science:**

1. Organization of 12<sup>th</sup>, 13<sup>th</sup>, 14<sup>th</sup>, and 15<sup>th</sup> festival of science „Spaceship Earth“ which took place in Department of Laser Technologies Center for Physical Sciences and Technology, Vilnius, Lithuania, September 15, 2015, 2016, 2017, and 2018.
2. Organization of 1<sup>st</sup> and 2<sup>nd</sup> world "Day of Photonics“ which took place in the Center for Physical Sciences and Technology, Vilnius, Lithuania, October 21, 2014 and 2016.
3. Preparation of Science Promotion Program "Mokslo Sriuba", LRT / FTMC, Vilnius, 2015-12-17.

#### **Scientific Dissemination Reports:**

1. M. Gedvilas, "Thermal diffusion in micro / nano derivatives during laser interference ablation using ultra-short pulses", FTMC Annual Scientific Conference, Saulėtekio al. 3, Vilnius, March 6-7, 2019.
2. M. Gedvilas, "An Overview of Laser Micromachining Applications", Laser and Engineering Technology Cluster LITEK, Vilnius, 2018-07-02.
3. M. Gedvilas, "Application of Lasers in Micro-Manufacturing", Photonics Day, FTMC, Vilnius, 2016-10-21.
4. M. Gedvilas, "Light, Lasers and Micro-Processing", Roundtable discussion "What has been done in Lithuania and the world through the International Year of Light", Lithuanian Academy of Sciences, Gedimino pr. 3, Vilnius, 2016-11-15.
5. M. Gedvilas, "Hidden Carving", Laser and Engineering Technology Cluster LITEK, Vilnius, 2016-02-01.
6. M. Gedvilas, "Formation of Periodic Micro / Nano Derivatives on Metal Surface Using Laser Fiber Combination", FTMC Annual Scientific Conference,, Conference Hall, A. Goštauto g. 11, Vilnius. February 10-11, 2016.

#### **Guided tours at Department of Laser Technologies FTMC**

1. A delegation of Chinese scientists, consisting of the Shandong Science Academy Laser Research Center, the Shandong Academy of Oceanography Institute of Oceanographic Equipment and the Shandong Information and Communication Technology Academy, number of visitors 7, 2018-02-07.
2. Kaunas University of Technology, Faculty of Mathematics and Natural Sciences, Materials Physics and Nanotechnology, Applied Physics and Materials and Nanotechnology Studies first year students, number of visitors 23, 2018-03-08.
3. Students of Švenčionėliai Mindaugas Gymnasium are students of eleventh grade, number of visitors 26, 201-05-05.
4. VU Faculty of Physics, students of laser technology program master students, number of visitors 12, 2018-05-15.
5. Vilnius Zemna Gymnasium, tenth grade students, number of visitors 28, 19-19 2018.

6. Kaunas University of Technology, Materials Physics and Nanotechnology and Applied Physics study program first year students, number of visitors 26, 2018-11-15.
7. Delegation of Economy to the Embassy of China in Lithuania, number of visitors 3, 2018-03-06.
8. Chinese Ambassador to Lithuania p. Shen Zhifei and accompanying Chinese Embassy staff, number of visitors 5, 2018-04-09.
9. Visit of Cluster Optence e.V representatives, Workers Generation Workshop, number of visitors 7, 2018-04-16
10. Interreg Europe project project "Innovation Policy-mix Learning for Advanced Manufacturing in European Regions (MANUMIX) project partners visit, number of visitors 25, 2018-17.
11. Visit by the United Arab Emirates (UAE) business delegation, number of visitors 10, 2018-05-10.
12. MITA and journalists visit, number of visitors 15, 2018-08-21.
13. Visit of GO VILNIUS representatives, number of visitors 8, 2018-08-21.
14. Latvian Investment and Development Agency with Latvian technology scout visit, number of visitors 8, 2018-08-24.
15. Chinese Nanjing Institute of Laser Technology Institute and Jiangsu Industry Technology Research Institute visit, number of visitors 3, 2018-09-21.
16. Visit of ICT Cluster representatives, number of visitors 10, 2018-10-05.
17. Visit of Interreg Europe Ecoris3 project representatives, number of visitors 15, 2018-11-27.
18. Visit to China's Xiamen City Government, Number of visitors 6, 2018-12-03.

#### Full publication list:

##### *Patents:*

1. G. Raciukaitis, **M. Gedvilas**, M. Saulius, applicants Center for Physical Science and Technology and UAB ELAS, *Method and apparatus for laser processing of transparent materials*, 2018-06-25, LT 6544 B, The State Patent Bureau of the Republic of Lithuania. (AC = 0.26)
2. G. Račiukaitis, **M. Gedvilas**, V. Stankevič, applicants Center for Physical Science and Technology and UAB ELAS, *Method and apparatus for laser cutting of transparent media*, 2017-02-10, LT 6240 B, EP 2944412 B1, **European Patent Office**. (AC = 0.26)
3. G. Račiukaitis, **M. Gedvilas**, B. Voisiat, applicant Center for Physical Science and Technology, *Method for formation of periodical structures in thin material films by interfering laser beams*, 2017-07-05, LT 5833 B, EP 2431120 B1, **European Patent Office**. (AC = 0.26)

##### *Application notes of outsourced R&D research from UAB "Ekspla":*

1. G. Račiukaitis, E. Stankevičius, P. Gečys, **M. Gedvilas**, C. Bischoff, E. Jäger, U. Umhofer, F. Völklein, *Laser processing by using diffractive optical laser beam shaping technique*, Application notes Issue AN1012IL01 (2013), ([www.ekspla.ru/articles/pdf/AppNotes%20-%20%20LPM%202010%20DOE%20shaping.pdf](http://www.ekspla.ru/articles/pdf/AppNotes%20-%20%20LPM%202010%20DOE%20shaping.pdf))
2. P. Gečys, **M. Gedvilas**, L. Jacinavičius, R. De Loor, G. Račiukaitis, *High Power, Speed and Precision Processing with Picosecond Laser and Polygon Scanner*, Application notes Issue AN1502IL01, (2015), ([ekspla.com/wp-content/uploads/Product/Industrial-Lasers/applications/AppNotes-ND-Atlantic-polygon-scanner.pdf](http://ekspla.com/wp-content/uploads/Product/Industrial-Lasers/applications/AppNotes-ND-Atlantic-polygon-scanner.pdf))

Scientific papers:

Published in Web of Science database from the Clarivate Analytics - Master Journal List. Abbreviations: quartile (Q1, Q2, Q3, Q4), impact factor (IF), author contribution (AC) was evaluated by method proposed in reference [C.-T. Zhang, A proposal for calculating weighted citations based on author rank, *EMBO Reports* **10**, 416–417 (2009)].

1. M. Gaidys\*, A. Žemaitis, P. Gečys, **M. Gedvilas**, Efficient picosecond laser ablation of copper cylinders, *Appl. Surf. Sci.* **483**, 962-966 (2019). (Q1, IF = 5.15, AC = 0.33).
2. V. P. Veiko, R. A. Zakoldaev\*, E. A. Shakhno, D. A. Sinev, Z. K. Nguyen, A. V. Baranov, K. V. Bogdanov, **M. Gedvilas**, G. Raciukaitis, L. V. vishnevskaya, and E. N. Degtyareva, Thermochemical writing with high spatial resolution on Ti films utilising picosecond laser, *Opt. Mater. Express* **9**, 2729-2737 (2019). (Q1, IF = 3.3, AC = 0.021)
3. I. Stankevičienė, A. Jagminienė, L. Tamašauskaitė-Tamašiūnaitė\*, Z. Sukackienė, **M Gedvilas**, E. Norkus. Investigation of electroless deposition of cobalt films by EQCM in the presence of different amines. *Mater. Sci. Eng. B* **241**, 9-12 (2019). (Q1, IF = 3.3, AC = 0.071)
4. A. Žemaitis, J. Mikšys, M. Gaidys, P. Gečys, **M. Gedvilas\***, High-efficiency laser fabrication of drag reducing riblet surfaces on pre-heated Teflon, *Mater. Res. Express*, **6** 065309 (2019) (Q1, IF = 1.15, AC = 0.33).
5. A. Žemaitis\*, M. Gaidys, P. Gečys, G. Račiukaitis, **M. Gedvilas**, Rapid high-quality 3D micro-machining by optimised efficient ultrashort laser ablation, *Opt. Lasers Eng.* **114**, 83-89 (2019). (Q1, IF = 3.4, AC = 0.33).
6. A. Žemaitis, M. Gaidys, M. Brikas, P. Gečys, G. Račiukaitis, **M .Gedvilas\***, Advanced laser scanning for highly-efficient ablation and ultrafast surface structuring: experiment and model, *Sci. Rep.* **8**, 17376 (2018). (Q1, IF = 4.1, AC = 0.33).
7. **M. Gedvilas\***, K. Ratautas, A. Jagminienė, I. Stankevičienė, N. Li Pira, S. Sinopoli, E. Kacar, E. Norkus, G. Račiukaitis, Percolation effect of a Cu layer on a MWCNT/PP nanocomposite substrate after laser direct structuring and autocatalytic plating, *RSC Adv.* **8**, 30305-30309 (2018). (Q1, IF = 2.9, AC = 0.33).
8. **M. Gedvilas\***, S. Indrišiūnas, B. Voisiat, E. Stankevičius, A. Selskis, G. Račiukaitis, Nanoscale thermal diffusion during the laser interference ablation using femto-, pico-, and nanosecond pulses in silicon, *Phys. Chem. Chem. Phys.* **20**, 12166-12174 (2018). (Q1, IF = 3.9, AC = 0.33).
9. **M. Gedvilas\***, J. Mikšys, J. Berzinš, V. Stankevič, G. Račiukaitis, Multi-photon absorption enhancement by dual-wavelength double-pulse laser irradiation for efficient dicing of sapphire wafers, *Sci. Rep.* **7**, 5218 (2017). (Q1, IF = 4.1, AC = 0.33).
10. E. Stankevičius\*, M. Garliauskas, **M. Gedvilas**, N. Tarasenko, G. Račiukaitis, Structuring of Surfaces with Gold Nanoparticles by Using Bessel-Like Beams, *Ann. Phys.* **529**, 17 1700174 (2017). (Q1; IF = 3.039); (AI = 1/5).
11. **M. Gedvilas**, B. Voisiat, S. Indrišiūnas, G. Račiukaitis, V. Veiko, R. Zakoldaev\*, D. Sinev, E. Shakhno, Thermo-chemical microstructuring of thin metal films using multi-beam interference by short (nano- & picosecond) laser pulses, *Thin Solid Films* **634**, 134–140 (2017). (Q1, IF = 1.76, AC = 0.33).
12. K. Ratautas\*, **M. Gedvilas**, I. Stankevičienė, A. Jagminienė, E. Norkus, N. Li Pira, S. Sinopoli, G. Račiukaitis, Laser-induced selective metallization of polypropylene doped with multiwall carbon nanotubes, *Appl. Surf. Sci.* **412**, 319–326 (2017). (Q1, IF = 3.15, AC = 0.085).
13. V. Veiko, M. Yarchuk, R. Zakoldaev\*, **M. Gedvilas**, G. Raciukaitis, M. Kuzivanov, A. Baranov, Picosecond laser registration of interference pattern by oxidation of thin Cr films, *Appl. Surf. Sci.* **404**, 63–66 (2017). (Q1, IF = 3.15, AC = 0.065).



14. S. Indrišiūnas\*, B. Voisiat, **M. Gedvilas**, G. Račiukaitis, New opportunities for custom-shape patterning using polarization control in confocal laser beam interference setup, *J. Laser Appl.* **29**, 011501 (2017). (Q1, IF = 1.71, AC = 0.13).
15. V. Jašinskas, **M. Gedvilas**, G. Račiukaitis, V. Gulbinas\*, Background-free electric field-induced second harmonic generation with interdigitated combs of electrodes, *Opt. Lett.* **41**, 2759 (2016). (Q1, IF = 3.04, AC = 0.20).
16. **M. Gedvilas\***, K. Ratautas, E. Kacar, I. Stankevičienė, A. Jagminienė, E. Norkus, N. Li Pira, G. Račiukaitis, Colour-Difference Measurement Method for Evaluation of Quality of Electrolessly Deposited Copper on Polymer after Laser-Induced Selective Activation, *Sci. Rep.* **6**, 22963 (2016). (Q1, IF = 4.3, AC = 0.33).
17. E. Stankevičius\*, M. Garliauskas, **M. Gedvilas**, G. Račiukaitis, Bessel-like beam array formation by periodical arrangement of the polymeric round-tip microstructures, *Opt. Express* **23**, 28557 (2015). (Q1, IF = 3.49, AC = 0.13).
18. L. Marcinauskas\*, A. Grigonis, G. Račiukaitis, **M. Gedvilas**, V. Vinciūnaitė, Irradiation of the amorphous carbon films by picosecond laser pulses, *Thin Solid Films* **593**, 116 (2015). (Q1, IF = 1.76, AC = 0.072).
19. E. Markauskas, P. Gečys\*, A. Žemaitis, **M. Gedvilas**, G. Račiukaitis, Validation of monolithic interconnection conductivity in laser scribed CIGS thin-film solar cells, *Sol. Energy* **120**, 35 (2015). (Q1, IF = 3.54, AC = 0.072).
20. **M. Gedvilas\***, J. Mikšys, G. Račiukaitis Flexible periodical micro- and nano-structuring of a stainless steel surface using dual-wavelength double-pulse picosecond laser irradiation, *RSC Adv.*, **5**, 75075 (2015). (Q1, IF = 3.85, AC = 0.37).
21. P. Gečys\*, A. Vinčiūnas, **M. Gedvilas**, A. Kasparaitis, R. Lazdinis, G. Račiukaitis, Ripple Formation by Femtosecond Laser Pulses for Enhanced Absorptance of Stainless Steel. *J. Laser Micro/Nanoeng.* **10**, 129 (2015). (Q2, IF = 1.01, AC = 0.093).
22. E. Stankevicius\*, **M. Gedvilas**, G. Raciukaitis, Investigation of laser-induced polymerization using a smoothly varying intensity distribution. *Appl. Phys. B-Lasers Opt.* **119**, 525 (2015). (Q1, IF = 1.63, AC = 0.231).
23. L. Marcinauskas\*, A. Grigonis, **M. Gedvilas**, L. Vigricitė, G. Račiukaitis, Ž. Rutkūnienė, M. Černauskas, Irradiation of Diamond-like Carbon Films by Picosecond Laser Pulses, *J. Laser Micro/Nanoeng.* **10**, 43 (2015). (Q2, IF = 1.01, AC = 0.082).
24. **M. Gedvilas\***, B. Voisiat, G. Račiukaitis, Grayscale Marking of Anodized Aluminium Plate by Using Picosecond Laser and Galvanometer Scanner. *J. Laser Micro/Nanoeng.* **9**, 267 (2014). (Q2, IF = 1.01, AC = 0.33).
25. **M. Gedvilas\***, B. Voisiat, K. Regelskis, G. Račiukaitis, Impact of capillarity forces on the steady-state self-organization in the thin chromium film on glass under laser irradiation. *Thin Solid Films* **571**, 102 (2014). (Q1, IF = 1.76, AC = 0.33).
26. M. Maciulevičius\*, B. Abakevičiene, E. Navickas, **M. Gedvilas**, S. Tamulevičius, G. Račiukaitis, Three Phase Boundary Enhancement in SOFC Anodes by Applying Laser Drilling Technique. *J. Laser Micro/Nanoeng.* **9** 169 (2014). (Q2, IF = 1.01, AC = 0.071).
27. P. Gecys\*, E. Markauskas, **M. Gedvilas**, G. Raciukaitis, I. Repins, C. Beall, Ultrashort pulsed laser induced material lift-off processing of CZTSe thin-film solar cells. *Sol. Energy* **102**, 82 (2014). (Q1, IF = 3.54, AC = 0.093).
28. E. Stankevičius\*, **M. Gedvilas**, B. Voisiat, M. Malinauskas, G. Račiukaitis, Fabrication of periodic micro-structures by holographic lithography. *Lith. J. Physics* **53**, 227 (2013). (Q3; IF = 0.62, AC = 0.14).

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1. V. Stankevič, **M. Gedvilas**, J. Karosas, G. Račiukaitis, Femtosecond laser writing of multi-level binary DOE in fused silica by slicing simulated phase distribution (Conference Presentation), *Proc. SPIE*, **10905**, 1090507 (2019). (AC = 0.14)
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2. M. Stehlik, J. Sládek, **M. Gedvilas**, I. Mirza, N. Bulgakova, G. Račiukaitis, *Investigation of large-area femtosecond laser-induced periodic surface nanostructuring of metals*, 11<sup>th</sup> International Conference on Photo-Excited Processes and Applications (ICPEPA 11), Vilnius, Lithuania, September 10-14, 2018. (**Outstanding student poster award, II-place**).
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5. A. Žemaitis (presenter), P. Gečys, G. Račiukaitis, **M. Gedvilas**, *Rapid and high-quality 3D fabrication by efficient ultrashort laser ablation*, 11<sup>th</sup> International Conference on Photo-Excited Processes and Applications (ICPEPA 11), Vilnius, Lithuania, September 10-14, 2018. (**Outstanding student poster award, III-place**).
6. A. Žemaitis (presenter), P. Gečys, **M. Gedvilas**, *Fabrication of 3D objects using efficient laser ablation*, XX<sup>TH</sup> International Conference and School on Quantum Electronics "Laser Physics and Applications" (ICSQE 2018), Nessebar, Bulgarija (2018) (**oral, 2 nd place price**).
7. I. Beleckaitė, R. Adomavičius, A. Krotkus, **M. Gedvilas**, M. Gaidys, G. Račiukaitis, *Terahertz emission enhancement by forming LIPS structures on the surface of GaAs*, Advanced Properties and Processes in Optoelectronic Materials and Systems (APROPOS 16) Vilnius, Lithuania, October 10-12, 2018.
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9. A. Žemaitis, M. Gaidys, **M. Gedvilas**, *Efficient Ultrashort Pulsed Laser Ablation For 3d Engraving*, 61st International Conference for Students of Physics and Natural Sciences, Open Readings 2018, Vilnius, Lithuania, March 20-23, 2018.
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11. A. Žemaitis, P. Gečys, G. Račiukaitis, **M. Gedvilas**, *Efficient ultrafast laser ablation for 3D structuring and engraving*, The 19th International Symposium on Laser Precision Microfabrication (LPM 2018), Edinburgh, Scotland, UK, June 25-28, 2018.

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13. A. Žemaitis (pranešėjas), P. Gečys, G. Račiukaitis, **M. Gedvilas**, Efficient ultrafast laser ablation for 3D engraving, 6<sup>th</sup> International School on Lasers in Materials Science (SLIMS), S. Servolo Island, Venice, Italy, July 8-14, 2018 (žodinis ir stendinis).
14. M. Gaidys (presenter), A. Žemaitis, P. Gečys, G. Račiukaitis, **M. Gedvilas**, Efficient laser ablation on flat and cylindrical surfaces, 6<sup>th</sup> International School on Lasers in Materials Science (SLIMS), S. Servolo Island, Venice, Italy, July 8-14, 2018 (žodinis ir stendinis).
15. **M. Gedvilas**, S. Indrišiūnas, B. Voisiat, E. Stankevičius, G. Račiukaitis, *Nanoscale Heat Transfer in Laser Interference Ablation by Ultrashort Pulses*, The annual "International Conference on Advanced Laser Technologies" (ALT'17), Busan, Korea, September 10-15, 2017 (**Žodinis**).
16. K. Ratautas, **M. Gedvilas**, I. Stankevičiene, A. Jagminienė, E. Norkus, N. Li Pira, S. Sinopoli, G. Račiukaitis, *Laser Assisted Selective Copper Plating on Polymers*, The annual "International Conference on Advanced Laser Technologies" (ALT'17), Busan, Korea, September 10-15, 2017 (Stendinis).
17. **M. Gedvilas**, A. Žemaitis, P. Gečys, G. Račiukaitis, *Sub-ns Laser Effective Ablation of Metals*, The 18<sup>th</sup> International Symposium on "Laser Precision Microfabrication" (LPM2017), Toyama, Japan, June 5 - 8, 2017 (**Žodinis**).
18. S. Indrišūnas, B. Voisiat, **M. Gedvilas**, G. Račiukaitis, *Polarization control in direct laser interference ablation setup for flexible generation of periodic patterns*, The 18<sup>th</sup> International Symposium on "Laser Precision Microfabrication" (LPM2017), Toyama, Japan, June 5 - 8, 2017 (Stendinis).
19. **M. Gedvilas**, K. Ratautas, I. Stankevičienė, A. Jagminienė, E. Norkus, G. Račiukaitis, *Quality Characterization of Electroless Copper Deposition on Polymer after Laser-Induced Selective Activation Using Color-Distance Metrics*, 17<sup>th</sup> International Symposium on "Laser Precision Microfabrication" (LPM2016), Wyndham Grand Xi'an South, Xi'an, China, May 23 - 27, 2016 (**Žodinis**).
20. **M. Gedvilas**, J. Mikšys, G. Račiukaitis, *Flexible periodical micro/nano surface structuring by manipulation of chromatic and temporal characteristics of laser irradiation*, 17<sup>th</sup> International Symposium on "Laser Precision Microfabrication" (LPM2016), Wyndham Grand Xi'an South, Xi'an, China, May 23 - 27, 2016 (**Žodinis**).
21. **M. Gedvilas**, J. Mikšys, J. Berzinš, V. Stankevič, G. Račiukaitis, *Effective Volume Scribing of Sapphire Wafers by Dual-Wavelength Double-Pulse Picosecond Laser Irradiation*, 11<sup>th</sup> International "High Power Laser Ablation & Directed Energy" (HPLA/DE) Symposium, Santa Fe, New Mexico, USA, April 4 - 7, 2016 (**Žodinis**).
22. **M. Gedvilas**, *Direct Laser Interference Patterning of Thin Metal Films to Control the Flow of Electromagnetic Radiation*, 11th International "High Power Laser Ablation & Directed Energy" (HPLA/DE) Symposium, Santa Fe, New Mexico, USA, April 4 - 7, 2016 (Poster, **2<sup>nd</sup> place poster award**).
23. K. Ratautas, **M. Gedvilas**, I. Stankevičiene, A. Jagminienė, E. Norkus, N. Li Pira, S. Sinopoli, U. Emanuele, G. Račiukaitis, *Selective copper plating on polymers induced by laser activated fillers*, "Lasers in Manufacturing" (Lim2015), Munich, Germany, June 22-25, 2015.
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  29. E. Stankevičius, **M. Gedvilas**, G. Račiukaitis, *Micro-Lenses Fabricated by Interference Lithography*, The 15<sup>th</sup> International Symposium on Laser Precision Microfabrication (LPM2014), Vilnius, Lithuania, June 17-20, 2014.
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  32. A. Grigonis, L. Vigricaitė, Ž. Rutkūnienė, **M. Gedvilas**, G. Račiukaitis, L. Marcinauskas, *Irradiation of Diamond-Like Carbon Films by Picosecond Laser Pulses*, The 15<sup>th</sup> International Symposium on Laser Precision Microfabrication (LPM2014), Vilnius, Lithuania, June 17-20, 2014.
  33. J. Berzinš, **M. Gedvilas**, G. Račiukaitis, *Dicing of Sapphire Wafer by Picosecond Laser Irradiation at 355 nm and 1064 nm Wavelengths at Once*, The 15<sup>th</sup> International Symposium on Laser Precision Microfabrication (LPM2014), Vilnius, Lithuania, June 17-20, 2014.
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  36. J. Berzinš, **M. Gedvilas**, *Scribing of sapphire wafers by using picosecond laser irradiation at 355 nm and 1064 nm wavelengths*, 56<sup>th</sup> scientific conference for young students of physics and natural sciences „Open readings 2013”, Vilnius, Lithuania, March 20-23, 2013.
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