Martynas Beresna

List of Publications by Citations

84 papers	2,027 citations	23 h-index	43 g-index
129 ext. papers	2,645 ext. citations	3.9 avg, IF	5.04 L-index

#	Paper	IF	Citations
84	Radially polarized optical vortex converter created by femtosecond laser nanostructuring of glass. *Applied Physics Letters*, **2011**, 98, 201101	3.4	320
83	Seemingly unlimited lifetime data storage in nanostructured glass. *Physical Review Letters*, **2014**, 112, 033901	7.4	163
82	Polarization sensitive elements fabricated by femtosecond laser nanostructuring of glass [Invited]. *Optical Materials Express*, **2011**, 1, 783	2.6	147
81	Ultrafast manipulation of self-assembled form birefringence in glass. *Advanced Materials*, **2010**, 22, 4039-43	24	127
80	Ultrafast laser direct writing and nanostructuring in transparent materials. *Advances in Optics and Photonics*, **2014**, 6, 293	16.7	112
79	Single beam optical vortex tweezers with tunable orbital angular momentum. *Applied Physics Letters*, **2014**, 104, 231110	3.4	89
78	Polarization diffraction grating produced by femtosecond laser nanostructuring in glass. *Optics Letters*, **2010**, 35, 1662-4	3	70
77	Dependence of the femtosecond laser refractive index change thresholds on the chemical composition of doped-silica glasses. *Optical Materials Express*, **2011**, 1, 711	2.6	58
76	Exciton mediated self-organization in glass driven by ultrashort light pulses. *Applied Physics Letters*, **2012**, 101, 053120	3.4	58
75	Laser material processing with tightly focused cylindrical vector beams. *Applied Physics Letters*, **2016**, 108, 221107	3.4	51
74	The Femtoprint Project. *Journal of Laser Micro Nanoengineering*, **2012**, 7, 1-10	1	40
73	Stress distribution around femtosecond laser affected zones: effect of nanogratings orientation. *Optics Express*, **2013**, 21, 24942-51	3.3	38
72	Direct writing of birefringent elements by ultrafast laser nanostructuring in multicomponent glass. *Applied Physics Letters*, **2016**, 108, 071905	3.4	37
71	Photosensitivity control of an isotropic medium through polarization of light pulses with tilted intensity front. *Optics Express*, **2011**, 19, 20657-64	3.3	36
70	Femtosecond versus picosecond laser machining of nano-gratings and micro-channels in silica glass. *Optics Express*, **2013**, 21, 3946-58	3.3	35
69	Novel method for manufacturing optical fiber: extrusion and drawing of microstructured polymer optical fibers from a 3D printer. *Optics Express*, **2018**, 26, 32007-32013	3.3	34
68	Cladding-pumped ytterbium-doped fiber laser with radially polarized output. *Optics Letters*, **2014**, 39, 5359-61	3	32

67	Mid-IR Hollow-core microstructured fiber drawn from a 3D printed PETG preform. *Scientific Reports*, **2018**, 8, 8113	4.9	32
66	Extraordinary anisotropy of ultrafast laser writing in glass. *Optics Express*, **2013**, 21, 3959-68	3.3	31
65	High average power second harmonic generation in air. *Applied Physics Letters*, **2009**, 95, 121502	3.4	30
64	Polarization sensitive camera by femtosecond laser nanostructuring. *Optics Letters*, **2013**, 38, 4096-9	3	26
63	Broadband anisotropy of femtosecond laser induced nanogratings in fused silica. *Applied Physics Letters*, **2013**, 103, 131903	3.4	24
62	Effect of the femtosecond laser treatment of hydrogenated amorphous silicon films on their structural, optical, and photoelectric properties. *Semiconductors*, **2012**, 46, 749-754	0.7	24
61	Ultrafast Laser-Induced Metasurfaces for Geometric Phase Manipulation. *Advanced Optical Materials*, **2017**, 5, 1600575	8.1	23
60	Void-nanograting transition by ultrashort laser pulse irradiation in silica glass. *Optics Express*, **2016**, 24, 19344-53	3.3	23
59	Poling-assisted fabrication of plasmonic nanocomposite devices in glass. *Advanced Materials*, **2010**, 22, 4368-72	24	22
58	Femtosecond laser induced crystallization of hydrogenated amorphous silicon for photovoltaic applications. *Thin Solid Films*, **2014**, 556, 410-413	2.2	21
57	Giant birefringence and dichroism induced by ultrafast laser pulses in hydrogenated amorphous silicon. *Applied Physics Letters*, **2015**, 106, 171106	3.4	21
56	Point-by-point femtosecond laser micro-processing of independent core-specific fiber Bragg gratings in a multi-core fiber. *Optics Express*, **2018**, 26, 2039-2044	3.3	18
55	Airy beams generated by ultrafast laser-imprinted space-variant nanostructures in glass. *Optics Letters*, **2014**, 39, 6791-4	3	18
54	Visible luminescence from hydrogenated amorphous silicon modified by femtosecond laser radiation. *Applied Physics Letters*, **2012**, 101, 081902	3.4	18
53	Tailored surface birefringence by femtosecond laser assisted wet etching. *Optics Express*, **2015**, 23, 1428-37	3.3	15
52	Low-noise distributed acoustic sensing using enhanced backscattering fiber with ultra-low-loss point reflectors. *Optics Express*, **2020**, 28, 14638-14647	3.3	14
51	Eternal 5D data storage by ultrafast laser writing in glass **2016**,		13
50	Optical Nanofiber Coupler Sensors Operating in the Cut-Off Wavelength Region. *IEEE Sensors Journal*, **2018**, 18, 2782-2787	4	12

49	Twisting light with micro-spheres produced by ultrashort light pulses. *Optics Express*, **2011**, 19, 18989-96	3.3	12
48	Toward the generation of broadband optical vortices: extending the spectral range of a q-plate by polarization-selective filtering. *Journal of the Optical Society of America B: Optical Physics*, **2018**, 35, 190	1.7	11
47	Achromatic polarization rotator imprinted by ultrafast laser nanostructuring in glass. *Applied Physics Letters*, **2015**, 107, 181111	3.4	10
46	Saturation of absorption in noble metal doped nanocomposite glass film excited by evanescent light field. *Applied Physics Letters*, **2010**, 97, 261101	3.4	10
45	Ultraviolet photoluminescence in Gd-doped silica and phosphosilicate fibers. *APL Photonics*, **2017**, 2, 046101	5.2	9
44	Polarization sensitive anisotropic structuring of silicon by ultrashort light pulses. *Applied Physics Letters*, **2015**, 107, 041114	3.4	9
43	Control of Laser Induced Cumulative Stress for Efficient Processing of Fused Silica. *Scientific Reports*, **2020**, 10, 3819	4.9	9
42	Suspended-Core Microstructured Polymer Optical Fibers and Potential Applications in Sensing. *Sensors*, **2019**, 19,	3.8	9
41	High-performance vector bending and orientation distinguishing curvature sensor based on asymmetric coupled multi-core fibre. *Scientific Reports*, **2020**, 10, 14058	4.9	9
40	5.6 kW peak power, nanosecond pulses at 274 nm from a frequency quadrupled Yb-doped fiber MOPA. *Optics Express*, **2018**, 26, 6554-6559	3.3	8
39	Deep-UV fluorescence lifetime imaging microscopy. *Photonics Research*, **2015**, 3, 283	6	7
38	All-fiber sixth-harmonic generation of deep UV. *Optics Letters*, **2017**, 42, 4671-4674	3	7
37	Singlemoded THz guidance in bendable TOPAS suspended-core fiber directly drawn from a 3D printer. *Scientific Reports*, **2020**, 10, 11045	4.9	7
36	Structural and electrophysical properties of femtosecond laser exposed hydrogenated amorphous silicon films **2012**,		6
35	Three-Dimensional Modeling of the Heat-Affected Zone in Laser Machining Applications. *Laser Chemistry*, **2008**, 2008, 1-6		6
34	Radially and azimuthally polarized nanosecond Yb-doped fiber MOPA system incorporating temporal shaping. *Optics Letters*, **2017**, 42, 1740-1743	3	5
33	Revealing the nanoparticles aspect ratio in the glass-metal nanocomposites irradiated with femtosecond laser. *Scientific Reports*, **2015**, 5, 13746	4.9	5
32	Modelling of reflectivity in 1D porous silicon photonic crystal. *Lithuanian Journal of Physics*, **2007**, 47, 415-419	1.1	5

31	Effect of hydrogen concentration on structure and photoelectric properties of a-Si:H films modified by femtosecond laser pulses. *Canadian Journal of Physics*, **2014**, 92, 883-887	1.1	4
30	5D Data Storage by Ultrafast Laser Nanostructuring in Glass **2013**,		4
29	Hollow-core antiresonant terahertz fiber-based TOPAS extruded from a 3D printer using a metal 3D printed nozzle. *Photonics Research*, **2021**, 9, 1513	6	4
28	152 km-range single-ended distributed acoustic sensor based on inline optical amplification and a micromachined enhanced-backscattering fiber. *Optics Letters*, **2021**, 46, 552-555	3	4
27	Optical Tweezers with Tunable Orbital Angular Momentum **2014**,		3
26	Discovering new properties and applications of ultrafast laser nanostructuring in transparent materials **2011**,		3
25	Picosecond reflectance recovery dynamics of porous silicon multilayer. *Journal of the Optical Society of America B: Optical Physics*, **2009**, 26, 249	1.7	3
24	Quill and Nonreciprocal Ultrafast Laser Writing. *Topics in Applied Physics*, **2012**, 127-151	0.5	3
23	Harnessing Ultrafast Laser Induced Nanostructures in Transparent Materials. *Nano-optics and Nanophotonics*, **2015**, 31-46	0	2
22	Near-Field Mediated 40□nm In-Volume Glass Fabrication by Femtosecond Laser. *Advanced Optical Materials*, **2022**, 10, 2101676	8.1	2
21	Magnetic field sensor based on multi-port microcoil resonator **2017**,		1
20	High-Peak-Power Tunable Source at 550 nm From a Frequency-Doubled Yb-Doped Fiber MOPA. *IEEE Photonics Technology Letters*, **2019**, 31, 727-730	2.2	1
19	Optical fibers for bio-sensing applications. *Journal of Physics: Conference Series*, **2019**, 1151, 012003	0.3	1
18	High-Topological Charge Vortex Tweezers with Continuous Control of Orbital Angular Momentum by Ultrafast Laser Machining **2015**,		1
17	Harnessing polarization spatio-temporal coupling: a new degree of freedom in ultrafast laser material processing **2015**,		1
16	Femtosecond inscription and thermal testing of Bragg gratings in high concentration (40 mol%) germania-doped optical fibre. *Optics Express*, **2017**, 25, 32879	3.3	1
15	Post-hydrogenation of amorphous hydrogenated silicon films modified by femtosecond laser irradiation **2014**,		1
14	Role of stress in the chemical etching of fused silica exposed to low-energy femtosecond laser pulses **2011**,		1

13	Light coupling and enhanced backscattering in layered plasmonic nanocomposites. *Optics Express*, **2011**, 19, 1335-43	3.3	1
12	Picosecond laser machining in the bulk of transparent dielectrics: critical comparison with fs-laser direct writing **2012**,		1
11	Analysis and applications of femtosecond-laser-induced nanogratings from UV to telecom wavelength **2012**,		1
10	Enhanced bandwidth distributed acoustic sensing using a frequency multiplexed pulse train and micro-machined point reflector fiber.. *Optics Letters*, **2022**, 47, 529-532	3	1
9	Phase Transitions Induced by Ultrafast Laser Writing in Transparent Materials **2011**,		1
8	Accelerating Airy Beams Generated by Ultrafast Laser Induced Space-Variant Nanostructures in Glass **2012**,		1
7	Extruded TOPAS hollow-core anti-resonant fiber optimized for THz guidance at 0.9THz.. *Optics Express*, **2022**, 30, 13059-13069	3.3	1
6	Low bend loss femtosecond laser written waveguides exploiting integrated microcrack. *Scientific Reports*, **2021**, 11, 23770	4.9	1
5	Anisotropic nanostructure generated by a spatial-temporal manipulated picosecond pulse for multidimensional optical data storage. *Optics Letters*, **2021**, 46, 5485-5488	3	0
4	Multi-parameter optical gauge based on mode coupling effect in asymmetric index multi-core fibres. *Optics and Lasers in Engineering*, **2022**, 154, 107047	4.6	0
3	Laser assisted modification of poled silver-doped nanocomposite soda-lime glass. *MATEC Web of Conferences*, **2013**, 8, 02008	0.3	
2	Nanograting Orientation Influence on Stress Induced by Femtosecond Laser in Fused Silica. *MATEC Web of Conferences*, **2013**, 8, 04008	0.3	
1	The Puzzle of Longitudinal Electric Field Interaction with Transparent Media. *MATEC Web of Conferences*, **2013**, 8, 04006	0.3	