

Martynas Beresna

List of Publications by Year in descending order

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124
papers

3,026
citations

201385

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161609

54
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129
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129
docs citations

129
times ranked

2123
citing authors

#	ARTICLE	IF	CITATIONS
1	Enhanced bandwidth distributed acoustic sensing using a frequency multiplexed pulse train and micro-machined point reflector fiber. <i>Optics Letters</i> , 2022, 47, 529.	1.7	9
2	Extruded TOPAS hollow-core anti-resonant fiber optimized for THz guidance at 0.9THz. <i>Optics Express</i> , 2022, 30, 13059.	1.7	8
3	Multi-parameter optical gauge based on mode coupling effect in asymmetric index multi-core fibres. <i>Optics and Lasers in Engineering</i> , 2022, 154, 107047.	2.0	3
4	Near-Field Mediated 40nm In-Volume Glass Fabrication by Femtosecond Laser. <i>Advanced Optical Materials</i> , 2022, 10, .	3.6	13
5	Hollow-core antiresonant terahertz fiber-based TOPAS extruded from a 3D printer using a metal 3D printed nozzle. <i>Photonics Research</i> , 2021, 9, 1513.	3.4	20
6	152 km-range single-ended distributed acoustic sensor based on inline optical amplification and a micromachined enhanced-backscattering fiber. <i>Optics Letters</i> , 2021, 46, 552.	1.7	22
7	Anisotropic nanostructure generated by a spatial-temporal manipulated picosecond pulse for multidimensional optical data storage. <i>Optics Letters</i> , 2021, 46, 5485.	1.7	10
8	Low bend loss femtosecond laser written waveguides exploiting integrated microcrack. <i>Scientific Reports</i> , 2021, 11, 23770.	1.6	11
9	Singlemoded THz guidance in bendable TOPAS suspended-core fiber directly drawn from a 3D printer. <i>Scientific Reports</i> , 2020, 10, 11045.	1.6	15
10	High-performance vector bending and orientation distinguishing curvature sensor based on asymmetric coupled multi-core fibre. <i>Scientific Reports</i> , 2020, 10, 14058.	1.6	26
11	Control of Laser Induced Cumulative Stress for Efficient Processing of Fused Silica. <i>Scientific Reports</i> , 2020, 10, 3819.	1.6	14
12	Low-noise distributed acoustic sensing using enhanced backscattering fiber with ultra-low-loss point reflectors. <i>Optics Express</i> , 2020, 28, 14638.	1.7	45
13	Suspended-Core Microstructured Polymer Optical Fibers and Potential Applications in Sensing. <i>Sensors</i> , 2019, 19, 3449.	2.1	18
14	Control of Laser Induced Stress for Diffractive Optics in Transparent Media. , 2019, , .		0
15	High-Peak-Power Tunable Source at 550 nm From a Frequency-Doubled Yb-Doped Fiber MOPA. <i>IEEE Photonics Technology Letters</i> , 2019, 31, 727-730.	1.3	1
16	Optical fibers for bio-sensing applications. <i>Journal of Physics: Conference Series</i> , 2019, 1151, 012003.	0.3	2
17	Optical Nanofiber Coupler Sensors Operating in the Cut-Off Wavelength Region. <i>IEEE Sensors Journal</i> , 2018, 18, 2782-2787.	2.4	15
18	Toward the generation of broadband optical vortices: extending the spectral range of a q-plate by polarization-selective filtering. <i>Journal of the Optical Society of America B: Optical Physics</i> , 2018, 35, 190.	0.9	18

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19	Mid-IR Hollow-core microstructured fiber drawn from a 3D printed PETG preform. Scientific Reports, 2018, 8, 8113.	1.6	49
20	Point-by-point femtosecond laser micro-processing of independent core-specific fiber Bragg gratings in a multi-core fiber. Optics Express, 2018, 26, 2039.	1.7	36
21	56 kW peak power, nanosecond pulses at 274 nm from a frequency quadrupled Yb-doped fiber MOPA. Optics Express, 2018, 26, 6554.	1.7	14
22	Novel method for manufacturing optical fiber: extrusion and drawing of microstructured polymer optical fibers from a 3D printer. Optics Express, 2018, 26, 32007.	1.7	60
23	Femtosecond Written Silica Waveguides for High Extinction Polarization Filtering. , 2018, , .		0
24	Giant Faraday rotation in gadolinium doped silica optical fibers for high performance optical isolators. , 2018, , .		1
25	High Peak Power Tunable DUV Source around 275 nm from a Frequency quadrupled Yb-doped fiber MOPA. , 2018, , .		0
26	Applications of ultrafast laser direct writing: from polarization control to data storage. , 2018, , .		0
27	Magnetic field sensor based on multi-port microcoil resonator. Proceedings of SPIE, 2017, , .	0.8	1
28	Ultraviolet photoluminescence in Gd-doped silica and phosphosilicate fibers. APL Photonics, 2017, 2, 046101.	3.0	12
29	Ultrafast Laser-Induced Metasurfaces for Geometric Phase Manipulation. Advanced Optical Materials, 2017, 5, 1600575.	3.6	40
30	UV luminescence in Gd-doped silica and phosphosilicate optical fibers. , 2017, , .		1
31	Enhanced ultraviolet photoluminescence of Gd ³⁺ in silica glass. , 2017, , .		0
32	A nano-fiber coupler thermometer. , 2017, , .		0
33	Enhanced ultraviolet photoluminescence in Gd ³⁺ -doped Silica glass. , 2017, , .		0
34	Femtosecond inscription and thermal testing of Bragg gratings in high concentration (40 mol%) germania-doped optical fibre. Optics Express, 2017, 25, 32879.	1.7	5
35	Radially and azimuthally polarized nanosecond Yb-doped fiber MOPA system incorporating temporal shaping. Optics Letters, 2017, 42, 1740.	1.7	16
36	Anomalous spectral behaviour of weakly-fused optical fibre couplers with sub-micron diameters. , 2017, , .		0

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37	All-fiber sixth-harmonic generation of deep UV. Optics Letters, 2017, 42, 4671.	1.7	9
38	OAM generation in optical fibre and free space devices. , 2016, , .		1
39	High order Bragg gratings for short wavelengths operation. , 2016, , .		0
40	Laser material processing with tightly focused cylindrical vector beams. Applied Physics Letters, 2016, 108, .	1.5	77
41	Direct writing of birefringent elements by ultrafast laser nanostructuring in multicomponent glass. Applied Physics Letters, 2016, 108, .	1.5	51
42	Void-nanograting transition by ultrashort laser pulse irradiation in silica glass. Optics Express, 2016, 24, 19344.	1.7	36
43	Eternal 5D data storage by ultrafast laser writing in glass. Proceedings of SPIE, 2016, , .	0.8	23
44	Geometric Phase Holograms Imprinted by Femtosecond Laser Nanostructuring. , 2016, , .		0
45	Laser Induced Self-organisation: from Plasma to Nanostructures. , 2016, , .		0
46	High power fiber lasers with radially polarized output beams. , 2016, , .		1
47	Revealing the nanoparticles aspect ratio in the glass-metal nanocomposites irradiated with femtosecond laser. Scientific Reports, 2015, 5, 13746.	1.6	8
48	Achromatic polarization rotator imprinted by ultrafast laser nanostructuring in glass. Applied Physics Letters, 2015, 107, 181111.	1.5	11
49	Polarization Sensitive Printing by Ultrafast Laser Nanostructuring in Amorphous Silicon. , 2015, , .		0
50	Giant birefringence and dichroism induced by ultrafast laser pulses in hydrogenated amorphous silicon. Applied Physics Letters, 2015, 106, .	1.5	33
51	Deep-UV fluorescence lifetime imaging microscopy. Photonics Research, 2015, 3, 283.	3.4	11
52	Tailored surface birefringence by femtosecond laser assisted wet etching. Optics Express, 2015, 23, 1428.	1.7	23
53	High-Topological Charge Vortex Tweezers with Continuous Control of Orbital Angular Momentum by Ultrafast Laser Machining. , 2015, , .		2
54	Polarization sensitive anisotropic structuring of silicon by ultrashort light pulses. Applied Physics Letters, 2015, 107, 041114.	1.5	11

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55	Radially Polarized Optical Vortex Micro-Converters Imprinted by Femtosecond Laser Nanostructuring in Amorphous Silicon. , 2015, , .		0
56	Harnessing polarization spatio-temporal coupling: a new degree of freedom in ultrafast laser material processing. , 2015, , .		1
57	Effect of Laser Wavelength on Structure and Photoelectric Properties of α -Si:H Films Crystallized by Femtosecond Laser Pulses. Journal of Nanoelectronics and Optoelectronics, 2015, 9, 728-733.	0.1	1
58	Engineering Anisotropy in Glass with Ultrafast Laser Assisted Nanostructuring. , 2015, , .		0
59	Optical Tweezers with Tunable Orbital Angular Momentum. , 2014, , .		5
60	Femtosecond Laser Nanostructuring for Polarization Sensitive Imaging. , 2014, , .		0
61	Nanotexturing of Glass Surface by Ultrafast Laser Assisted Wet Etching. , 2014, , .		0
62	Silicon Microreflector Created by Single Ultrafast Laser Pulse. , 2014, , .		0
63	Airy beams generated by ultrafast laser-imprinted space-variant nanostructures in glass. Optics Letters, 2014, 39, 6791.	1.7	23
64	Post-hydrogenation of amorphous hydrogenated silicon films modified by femtosecond laser irradiation. , 2014, , .		1
65	Seemingly Unlimited Lifetime Data Storage in Nanostructured Glass. Physical Review Letters, 2014, 112, 033901.	2.9	265
66	Effect of hydrogen concentration on structure and photoelectric properties of α -Si:H films modified by femtosecond laser pulses. Canadian Journal of Physics, 2014, 92, 883-887.	0.4	4
67	Femtosecond laser induced crystallization of hydrogenated amorphous silicon for photovoltaic applications. Thin Solid Films, 2014, 556, 410-413.	0.8	22
68	Single beam optical vortex tweezers with tunable orbital angular momentum. Applied Physics Letters, 2014, 104, .	1.5	124
69	Ultrafast laser direct writing and nanostructuring in transparent materials. Advances in Optics and Photonics, 2014, 6, 293.	12.1	163
70	Cladding-pumped ytterbium-doped fiber laser with radially polarized output. Optics Letters, 2014, 39, 5359.	1.7	47
71	Characterization of optical polarization converters made by femtosecond laser writing. , 2013, , .		0
72	Broadband anisotropy of femtosecond laser induced nanogratings in fused silica. Applied Physics Letters, 2013, 103, .	1.5	34

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73	Anomalous Interaction of Longitudinal Electric Field with Hydrogenated Amorphous Silicon Films. , 2013, , .		0
74	3/2 Harmonic Generation “ The Clue to the Mechanism of Ultrafast Laser Nanostructuring. , 2013, , .		0
75	Polarization sensitive camera by femtosecond laser nanostructuring. Optics Letters, 2013, 38, 4096.	1.7	34
76	5D Data Storage by Ultrafast Laser Nanostructuring in Glass. , 2013, , .		9
77	Self-assembled nanostructuring of a-Si:H films with ultrashort light pulses. , 2013, , .		0
78	Unambiguous evidence of two plasmon decay during ultrafast laser writing in glass. , 2013, , .		0
79	Modification of transparent materials by tightly focused annular, radially and azimuthally polarized ultrafast laser beams. , 2013, , .		0
80	Femtosecond versus picosecond laser machining of nano-gratings and micro-channels in silica glass. Optics Express, 2013, 21, 3946.	1.7	51
81	Extraordinary anisotropy of ultrafast laser writing in glass. Optics Express, 2013, 21, 3959.	1.7	37
82	Stress distribution around femtosecond laser affected zones: effect of nanogratings orientation. Optics Express, 2013, 21, 24942.	1.7	56
83	The Puzzle of Longitudinal Electric Field Interaction with Transparent Media. MATEC Web of Conferences, 2013, 8, 04006.	0.1	0
84	Laser assisted modification of poled silver-doped nanocomposite soda-lime glass. MATEC Web of Conferences, 2013, 8, 02008.	0.1	0
85	Nanograting Orientation Influence on Stress Induced by Femtosecond Laser in Fused Silica. MATEC Web of Conferences, 2013, 8, 04008.	0.1	0
86	Nanograting Orientation Influence on Stress Induced by Femtosecond Laser in Fused Silica. , 2013, , .		0
87	Polarization Dependence of Area Scanning Ultrafast Laser Machining. , 2012, , .		0
88	Picosecond laser machining in the bulk of transparent dielectrics: critical comparison with fs-laser direct writing. , 2012, , .		2
89	Analysis and applications of femtosecond-laser-induced nanogratings from UV to telecom wavelength. , 2012, , .		1
90	Exciton mediated self-organization in glass driven by ultrashort light pulses. Applied Physics Letters, 2012, 101, 053120.	1.5	76

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91	Micromachining with femtosecond laser written radial polarization converter. , 2012, , .		0
92	Visible luminescence from hydrogenated amorphous silicon modified by femtosecond laser radiation. Applied Physics Letters, 2012, 101, 081902.	1.5	24
93	Structural and electrophysical properties of femtosecond laser exposed hydrogenated amorphous silicon films. , 2012, , .		7
94	Effect of the femtosecond laser treatment of hydrogenated amorphous silicon films on their structural, optical, and photoelectric properties. Semiconductors, 2012, 46, 749-754.	0.2	25
95	Quill and Nonreciprocal Ultrafast Laser Writing. Topics in Applied Physics, 2012, , 127-151.	0.4	5
96	Accelerating Airy Beams Generated by Ultrafast Laser Induced Space-Variant Nanostructures in Glass. , 2012, , .		1
97	The Femtoprint Project. Journal of Laser Micro Nanoengineering, 2012, 7, 1-10.	0.4	55
98	Ultrafast Laser Half-Beam Writing Paradox. , 2012, , .		0
99	Discovering new properties and applications of ultrafast laser nanostructuring in transparent materials. Proceedings of SPIE, 2011, , .	0.8	3
100	Beyond conventional 3D ultrafast laser material processing. , 2011, , .		0
101	Role of stress in the chemical etching of fused silica exposed to low-energy femtosecond laser pulses. Proceedings of SPIE, 2011, , .	0.8	1
102	Light coupling and enhanced backscattering in layered plasmonic nanocomposites. Optics Express, 2011, 19, 1335.	1.7	1
103	Twisting light with micro-spheres produced by ultrashort light pulses. Optics Express, 2011, 19, 18989.	1.7	15
104	Photosensitivity control of an isotropic medium through polarization of light pulses with tilted intensity front. Optics Express, 2011, 19, 20657.	1.7	52
105	Dependence of the femtosecond laser refractive index change thresholds on the chemical composition of doped-silica glasses. Optical Materials Express, 2011, 1, 711.	1.6	72
106	Polarization sensitive elements fabricated by femtosecond laser nanostructuring of glass [Invited]. Optical Materials Express, 2011, 1, 783.	1.6	198
107	Radially polarized optical vortex converter created by femtosecond laser nanostructuring of glass. Applied Physics Letters, 2011, 98, .	1.5	440
108	Polarization vortex converter imprinted by femtosecond laser nanostructuring in glass. , 2011, , .		1

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109	Freezing ultrashort light pulses by exciton-polariton interference in glass. , 2011, , .		0
110	Exploring 5th dimension of optical recording with ultrashort light pulses. , 2011, , .		0
111	Phase Transitions Induced by Ultrafast Laser Writing in Transparent Materials. , 2011, , .		1
112	Femtosecond Laser Induced Vortex Anisotropy. , 2010, , .		0
113	Second Harmonic Optical Vortex Generation in Air. , 2010, , .		0
114	Ultrafast Manipulation of Self-Assembled Form Birefringence in Glass. <i>Advanced Materials</i> , 2010, 22, 4039-4043.	11.1	199
115	Poling-Assisted Fabrication of Plasmonic Nanocomposite Devices in Glass. <i>Advanced Materials</i> , 2010, 22, 4368-4372.	11.1	24
116	Polarization diffraction grating produced by femtosecond laser nanostructuring in glass. <i>Optics Letters</i> , 2010, 35, 1662.	1.7	93
117	Saturation of absorption in noble metal doped nanocomposite glass film excited by evanescent light field. <i>Applied Physics Letters</i> , 2010, 97, 261101.	1.5	10
118	New phenomena in interaction of intense ultrashort light pulses with transparent materials: from 3D self-assembled nanostructures to quill writing and nonreciprocal photosensitivity. , 2010, , .		1
119	High average power second harmonic generation in air. <i>Applied Physics Letters</i> , 2009, 95, .	1.5	37
120	Picosecond reflectance recovery dynamics of porous silicon multilayer. <i>Journal of the Optical Society of America B: Optical Physics</i> , 2009, 26, 249.	0.9	3
121	The art and science of femtosecond laser writing. , 2009, , .		0
122	Ultrafast Light Blade. , 2009, , .		0
123	Three-Dimensional Modeling of the Heat-Affected Zone in Laser Machining Applications. <i>Laser Chemistry</i> , 2008, 2008, 1-6.	0.5	9
124	Modelling of reflectivity in 1D porous silicon photonic crystal. <i>Lithuanian Journal of Physics</i> , 2007, 47, 415-419.	0.1	5