

Alexander G Poleshchuk

List of Publications by Year in descending order

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papers

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citations

840776

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times ranked

184
citing authors

#	ARTICLE	IF	CITATIONS
1	Application of the Shack-Hartmann Wavefront Sensor for Monitoring the Parameters of a Supersonic Gas Jet. Optoelectronics, Instrumentation and Data Processing, 2018, 54, 19-25.	0.6	0
2	Efficient tight focusing of laser beams optimally matched to their thin-film linear-to-radial polarization conversion: Method, implementation, and field near focus. Optics Communications, 2018, 407, 217-226.	2.1	11
3	Alignment of the writing beam with the diffractive structure rotation axis in synthesis of diffractive optical elements in a polar coordinate system. Optoelectronics, Instrumentation and Data Processing, 2017, 53, 123-130.	0.6	3
4	Manufacturing and certification of a diffraction corrector for controlling the surface shape of the six-meter main mirror of the Big Azimuthal Telescope of the Russian Academy of Sciences. Optoelectronics, Instrumentation and Data Processing, 2017, 53, 517-523.	0.6	2
5	Laser technologies in micro-optics. Part 1. Fabrication of diffractive optical elements and photomasks with amplitude transmission. Optoelectronics, Instrumentation and Data Processing, 2017, 53, 474-483.	0.6	22
6	Dynamic correction of the laser beam coordinate in fabrication of large-sized diffractive elements for testing aspherical mirrors. Optoelectronics, Instrumentation and Data Processing, 2017, 53, 255-263.	0.6	4
7	Diffractive optics for precision alignment of Euclid space telescope optics (Conference Presentation). , 2017, , .		1
8	METHODS FOR ON-LINE TESTING OF CHARACTERISTICS OF DIFFRACTIVE AND CONFORMAL OPTICAL ELEMENTS DURING THE MANUFACTURING PROCESS. Computer Optics, 2016, 40, 818-829.	2.2	13
9	Diffractive technique for testing the resolution and sensitivity of Hartmann and Shack-Hartmann sensors. Optics Letters, 2015, 40, 5050.	3.3	4
10	Direct laser writing of gray-scale microimages with a large dynamic range in chromium films. Optoelectronics, Instrumentation and Data Processing, 2015, 51, 287-292.	0.6	6
11	The use of diffractive imitator optics as calibration artefacts. , 2015, , .		0
12	Optical Measuring and Laser Technologies for Scientific and Industrial Applications. International Journal of Automation Technology, 2015, 9, 515-524.	1.0	12
13	Laser-Induced Local Oxidation of Thin Metal Films: Physical Fundamentals and Applications. Springer Series in Materials Science, 2014, , 149-171.	0.6	7
14	HARTMANN WAVEFRONT SENSOR BASED ON MULTIELEMENT AMPLITUDE MASKS WITH APODIZED APERTURES. Computer Optics, 2014, 38, 695-703.	2.2	10
15	Diffractive attenuators of laser radiation: Fabrication and optical characteristics. Optoelectronics, Instrumentation and Data Processing, 2013, 49, 72-80.	0.6	1
16	Aperture apodization on regular gratings with variable transmission in the zero diffraction order. Optoelectronics, Instrumentation and Data Processing, 2013, 49, 598-607.	0.6	1
17	Aspherical wavefront shaping with combined computer generated holograms. Optical Engineering, 2013, 52, 091709.	1.0	5
18	Etch depth mapping of phase binary computer-generated holograms by means of specular spectroscopic scatterometry. Optical Engineering, 2013, 52, 091722.	1.0	6

#	ARTICLE	IF	CITATIONS
19	3D Optical Measuring Systems and Laser Technologies for Scientific and Industrial Applications. Measurement Science Review, 2013, 13, 322-328.	1.0	15
20	Multibeam laser writing of diffractive optical elements. Optoelectronics, Instrumentation and Data Processing, 2012, 48, 327-333.	0.6	2
21	Laser illuminator based on diffraction elements for training systems. Optoelectronics, Instrumentation and Data Processing, 2012, 48, 87-92.	0.6	0
22	Method for increasing the accuracy of wavefront reconstruction from a set of interferograms. Optoelectronics, Instrumentation and Data Processing, 2011, 47, 593-601.	0.6	3
23	Study of the spatial resolution of laser thermochemical technology for recording diffraction microstructures. Quantum Electronics, 2011, 41, 631-636.	1.0	24
24	Methods of improving the accuracy of operation of an autofocus in a circular laser writing system. Optoelectronics, Instrumentation and Data Processing, 2010, 46, 87-95.	0.6	5
25	Microstructuring of optical surfaces: Technology and device for direct laser writing of diffractive structures. Optoelectronics, Instrumentation and Data Processing, 2010, 46, 171-180.	0.6	9
26	Combined CGH with Aperture Divided into Angular Sectors for Null Corrector Certification. , 2010, , .		0
27	Shack-Hartmann sensor based on a low-aperture off-axis diffraction lens array. Optoelectronics, Instrumentation and Data Processing, 2009, 45, 161-170.	0.6	9
28	Combined computer-generated hologram for testing steep aspheric surfaces. Optics Express, 2009, 17, 5420.	3.4	27
29	Diffractive variable attenuator for femtosecond laser radiation control. Applied Optics, 2009, 48, 708.	2.1	2
30	Three-dimensional inspection of grid spacers of fuel assemblies of nuclear reactors using diffractive optical elements. Optoelectronics, Instrumentation and Data Processing, 2008, 44, 111-117.	0.6	2
31	Local Laser Oxidation of Thin Metal Films: Ultra-resolution in Theory and in Practice. Journal of Laser Micro Nanoengineering, 2008, 3, 201-205.	0.1	18
32	Absolute calibration of null correctors using dual computer-generated holograms. Proceedings of SPIE, 2007, , .	0.8	2
33	Asphere testing with a Fizeau interferometer based on a combined computer-generated hologram. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2006, 23, 172.	1.5	39
34	Modernizing the optical divider production of the Ural Optomechanical Factory on the basis of up-to-date laser-computer and photolithographic technologies. Journal of Optical Technology (A) Tj ETQq0 0 0 rgBT0,0 Overlock 10 Tf 50 1		
35	Efficient testing of segmented aspherical mirrors by use of a reference plate and computer-generated holograms II Case study, error analysis, and experimental validation. Applied Optics, 2004, 43, 5313.	2.1	8
36	Testing optical surfaces by high-precision diffractive null lenses with integrated reference surface. , 2003, , .		0

#	ARTICLE	IF	CITATIONS
37	<title>Compact absolute shaft angular encoder based on diffractive optical elements</title>. , 2002, , .		0
38	<title>Application of diffractive optical elements in laser metrology</title>. , 2002, 4900, 841.		1
39	<title>Requirements and approaches to adapting laser writers for fabrication of gray-scale masks</title>. , 2001, , .		3
40	Excitation of luminescence by a Bessel radiation beam for detection of radiophotoluminescent images with a high spatial resolution. Quantum Electronics, 2001, 31, 811-813.	1.0	0
41	Polar coordinate laser pattern generator for fabrication of diffractive optical elements with arbitrary structure. Applied Optics, 1999, 38, 1295.	2.1	146
42	Laser technologies in diffractive optics. , 1999, , .		2
43	<title>Application of gray-scale LDW-glass masks for fabrication of high-efficiency DOEs</title>. , 1999, 3633, 129.		6
44	Techniques for formation of the surface profile of diffractive optical elements. Optics and Lasers in Engineering, 1998, 29, 289-306.	3.8	1
45	Diffractive light attenuators with variable transmission. Journal of Modern Optics, 1998, 45, 1513-1522.	1.3	9
46	Accuracy potential of circular laser writing of DOEs. , 1998, , .		10
47	<title>Processing parameter optimization for thermochemical writing of DOEs on chromium films</title>. , 1997, 3010, 168.		21
48	<title>Fabrication of diffractive optical elements by direct laser-writing with circular scanning</title>. , 1995, 2363, 290.		7
49	<title>Fabrication of phase structures with continuous and multilevel profile for diffraction optics</title>. , 1991, , .		5
50	Data readout from compact disks by a laser pickup with diffraction optics. Soviet Journal of Quantum Electronics, 1988, 18, 1336-1339.	0.1	0
51	Laser thermochemical technology for synthesizing optical diffraction elements utilizing chromium films. Soviet Journal of Quantum Electronics, 1985, 15, 494-497.	0.1	16