Alexander A Zhilin

List of Publications by Year
in descending order

119	1,495	279798	414414
papers	citations	23 h-index	32 g-index

120	120	120	909
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Optical applications of glass-ceramics. Journal of Non-Crystalline Solids, 2010, 356, 3042-3058.	3.1	66
2	Cobalt-doped transparent glass ceramic as a saturable absorber Q switch for erbium:glass lasers. Applied Optics, 2001, 40, 4322.	2.1	65
3	Glass doped with PbS quantum dots as a saturable absorber for 1-Î¼m neodymium lasers. Journal of the Optical Society of America B: Optical Physics, 2002, 19, 28.	2.1	51
4	Linear and nonlinear optical properties of cobalt-doped zinc aluminum glass ceramics. Journal of Applied Physics, 2003, 93, 3827-3831.	2.5	49
5	Radiative properties of Nd-doped transparent glass-ceramics in the lithium aluminosilicate system. Journal of Non-Crystalline Solids, 2000, 278, 75-84.	3.1	38
6	Passive mode locking of a Cr4+:YAG laser by PbS quantum-dot-doped glass saturable absorber. Optics Communications, 2004, 241, 449-454.	2.1	37
7	Magnesium- and zinc-aluminosilicate cobalt-doped glass ceramics as saturable absorbers for diode-pumped 13-Î¼m laser. Applied Optics, 2004, 43, 682.	2.1	36
8	Diode-pumped Tm:KY(WO4)2 laser passively Q-switched withÂPbS-doped glass. Applied Physics B: Lasers and Optics, 2008, 93, 787-791.	2.2	36
9	Structural states of Ni(II) in glasses and glass-ceramic materials of the lithium-aluminium-silicate system. Journal of Non-Crystalline Solids, 1991, 127, 44-52.	3.1	35
10	Absorption, emission and absorption saturation of Cr4+ ions in calcium aluminate glass. Journal of Non-Crystalline Solids, 2005, 351, 3551-3555.	3.1	34
11	Transparent glassâ€“ceramics with (Eu3+,Yb3+):YNbO4 nanocrystals: Crystallization, structure, optical spectroscopy and cooperative upconversion. Journal of Luminescence, 2016, 179, 64-73.	3.1	34
12	Low-frequency Raman scattering of magnesium aluminosilicate glasses and glass-ceramics. Journal of Non-Crystalline Solids, 2001, 282, 306-316.	3.1	33
13	On the Phase Separation and Crystallization of Glasses in the MgOâ€“Al2O3â€“SiO2â€“TiO2 System. Glass Physics and Chemistry, 2003, 29, 254-266.	0.7	32
14	Optical absorption and luminescence study of cobalt-doped magnesium aluminosilicate glass ceramics. Journal of the Optical Society of America B: Optical Physics, 2002, 19, 1815.	2.1	30
15	Small-angle X-ray scattering and low-frequency Raman scattering study of liquid phase separation and crystallization in titania-containing glasses of the ZnOâ€“Al2O3â€“SiO2 System. Journal of Non-Crystalline Solids, 2005, 351, 711-721.	3.1	30
16	Nanosized glass-ceramics doped with transition metal ions: nonlinear spectroscopy and possible laser applications. Journal of Alloys and Compounds, 2002, 341, 247-250.	5.5	29
17	Raman spectroscopy quantifying the composition of stuffed Î²-quartz derivative phases in lithium aluminosilicate glass-ceramics. Journal of Non-Crystalline Solids, 2008, 354, 4932-4939.	3.1	29
18	Influence of CoO addition on phase separation and crystallization of glasses of the ZnOâ€“Al2O3â€“SiO2â€“TiO2 system. Journal of Non-Crystalline Solids, 2011, 357, 3928-3939.	3.1	27

#	Article	IF	Citations
19	Saturable absorber: transparent glass-ceramics based on a mixture of Co:Î²-Zn_2SiO_4 and Co:ZnO nanocrystals. Applied Optics, 2016, 55, 5505.	2.1	27
20	The Influence of Nickel Oxide Additives on the Phase Separation and Crystallization of Glasses in the MgOâ€“Al2O3â€“SiO2â€“TiO2System. Glass Physics and Chemistry, 2004, 30, 300-310.	0.7	25
21	Influence of NiO on phase transformations and optical properties of ZnOâ€“Al2O3â€“SiO2 glass-ceramics nucleated by TiO2 and ZrO2. Part I. Influence of NiO on phase transformations of ZnOâ€“Al2O3â€“SiO2 glass-ceramics nucleated by TiO2 and ZrO2. Journal of Non-Crystalline Solids, 2014, 384, 73-82.	3.1	25
22	Structure and nonlinear optical properties of novel transparent glass-ceramics based on Co²⁺:ZnO nanocrystals. Laser Physics Letters, 2016, 13, 055803.	1.4	25
23	Title is missing!. Glass Physics and Chemistry, 2002, 28, 66-78.	0.7	24
24	Nonlinear spectroscopy of PbS quantum-dot-doped glasses as saturable absorbers for the mode locking of solid-state lasers. Journal of Applied Physics, 2006, 100, 023108.	2.5	23
25	Stimulated emission of Co2+-doped glassâ€“ceramics. Journal of Non-Crystalline Solids, 2007, 353, 2408-2414.	3.1	22
26	Influence of NiO on phase transformations and optical properties of ZnOâ€“Al2O3â€“SiO2 glassâ€“ceramics nucleated by TiO2 and ZrO2. Part II. Optical absorption and luminescence. Journal of Non-Crystalline Solids, 2013, 376, 99-105.	3.1	22
27	The structure of luminescence centers of neodymium in glasses and transparent glass-ceramics of the Li2O-Al2O3-SiO2 system. Journal of Non-Crystalline Solids, 1996, 196, 67-72.	3.1	21
28	Spectroscopic and X-ray Diffraction Investigations into the Specific Features of Crystallization of Potassium Niobium Silicate Glasses. Glass Physics and Chemistry, 2004, 30, 311-320.	0.7	21
29	Intensity-dependent bleaching relaxation in lead salt quantum dots. Journal of the Optical Society of America B: Optical Physics, 2005, 22, 1660.	2.1	21
30	Nanostructured glass-crystal materials with lead sulfide for passive Q switching of IR lasers. Journal of Optical Technology (A Translation of Opticheskii Zhurnal), 2006, 73, 576.	0.4	21
31	Influence of various alkali and divalent metal oxides on phase transformations in NiO-doped glasses of the Li2Oâ€“Al2O3â€“SiO2â€“TiO2 system. Journal of Non-Crystalline Solids, 2011, 357, 2209-2214.	3.1	21
32	Raman spectroscopy study of phase transformations in titania-containing lithium aluminosilicate glasses doped with CoO. Journal of Non-Crystalline Solids, 2005, 351, 2969-2978.	3.1	20
33	PbS quantum-dot-doped glass for efficient passive mode locking in a CW Yb : KYW laser. IEEE Photonics Technology Letters, 2006, 18, 259-261.	2.5	20
34	Glass-ceramics withÎ³-Ga₂O₃:Co²⁺nanocrystals: saturable absorber for 1.5â€“1.7â€‰Î¼m Er lasers. Laser Physics Letters, 2015, 12, 035803.	1.4	20
35	Structure and upconversion luminescence of transparent glass-ceramics containing (Er,Yb)2(Ti,Zr)2O7 nanocrystals. Journal of Non-Crystalline Solids, 2015, 409, 54-62.	3.1	20
36	Phase transformations in Na2Oâ€“K2Oâ€“Nb2O5â€“SiO2 glasses. Journal of Non-Crystalline Solids, 2004, 345-346, 182-186.	3.1	19

#	Article	IF	Citations
37	Formation and Passive Q-Switch Performance of Glass-Ceramics Containing Co²⁺-Doped Spinel Nanocrystals. Advanced Materials Research, 0, 39-40, 219-224.	0.3	19
38	Structural evolution of Ni environment in lithium, magnesium and zinc aluminosilicate glasses and glass-ceramics. Journal of Non-Crystalline Solids, 2015, 413, 24-33.	3.1	19
39	Structural characteristics and spectral properties of novel transparent lithium aluminosilicate glass-ceramics containing (Er,Yb)NbO4 nanocrystals. Journal of Luminescence, 2015, 160, 337-345.	3.1	19
40	Structural states of Co(II) in Î²-eucryptite-based glass-ceramics nucleated with ZrO2. Journal of Non-Crystalline Solids, 1996, 204, 151-157.	3.1	18
41	Structural transformations of nanometer sized crystals in CoO-doped Î²-eucryptite-based glass-ceramics. Journal of Non-Crystalline Solids, 1999, 258, 216-222.	3.1	18
42	Holmium lasers passively Q-switched with PbS quantum-dot-doped glasses. Applied Optics, 2006, 45, 536.	2.1	18
43	Transparent glassâ€“ceramics based on ZnO and ZnO:Co^2+ nanocrystals. Journal of Optical Technology (A Translation of Opticheskii Zhurnal), 2014, 81, 723.	0.4	16
44	Title is missing!. Glass Physics and Chemistry, 2001, 27, 344-352.	0.7	14
45	Nd:KGd(WO4)2 laser at 1.35Î¼m passively Q-switched with V3+:YAG crystal and PbS-doped glass. Optical Materials, 2006, 28, 919-924.	3.6	13
46	Laser ceramic 1 Production methods. Journal of Optical Technology (A Translation of Opticheskii) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50	0.4	13
47	Relaxation of Bleaching in Lead Sulfide Nanoparticles at Different Pump Powers. Journal of Applied Spectroscopy, 2004, 71, 83-88.	0.7	12
48	Effect of yttrium oxide on the crystallization of glasses of the MgOâ€“Al_2O_3â€“SiO_2 system, nucleated by a mix of titanium and zirconium dioxides, and the transparency of glass–crystalline materials in the superhigh-frequency spectral region. Journal of Optical Technology (A Translation of) Tj ETQq0 0 0 rgBT /Overlock 10 Tf	0.4	12
49	Compact 0.7 mJ/11 ns eye-safe erbium laser. Laser Physics, 2016, 26, 125801.	1.2	12
50	Crystallization of Glasses in the K2Oâ€“Nb2O5â€“SiO2System. Glass Physics and Chemistry, 2001, 27, 504-511.	0.7	11
51	The influence of NiO on phase separation and crystallization of glasses of the MgOâ€“Al2O3â€“SiO2â€“TiO2 system. Journal of Non-Crystalline Solids, 2004, 345-346, 187-191.	3.1	11
52	Variation of the transmittance and the Kerr constant during the crystallization of sodium-niobium-silicate glasses. Journal of Optical Technology (A Translation of Opticheskii Zhurnal), 2006, 73, 590.	0.4	11
53	Passive Q-switching of erbium glass laser by magnesium aluminosilicate sitall with cobalt ions. Journal of Applied Spectroscopy, 2007, 74, 140-146.	0.7	10
54	Anomalously Low Light Scattering in the Na₂O-Nb₂O₅-SiO₂ Glass-Ceramics. Advanced Materials Research, 2008, 39-40, 273-276.	0.3	10

#	Article	IF	Citations
55	Features of the anomalous scattering of light in two-phase sodium borosilicate glass. Journal of Optical Technology (A Translation of Opticheskii Zhurnal), 2013, 80, 706.	0.4	10
56	Anomalies in light scattering by glassâ€“ceramics of the zinc aluminum silicate system, caused by low nickel oxide doping. Journal of Optical Technology (A Translation of Opticheskii Zhurnal), 2014, 81, 729.	0.4	10
57	On the measurements of scattering coefficient of nanostructured glass-ceramics by a serial spectrophotometer. Measurement: Journal of the International Measurement Confederation, 2017, 95, 306-316.	5.0	10
58	Phase Separation and Crystallization in Glasses of the Na2Oâ€“K2Oâ€“Nb2O5â€“SiO2 System. Glass Physics and Chemistry, 2003, 29, 243-253.	0.7	9
59	Synthesis and spectroluminescence properties of lithium aluminosilicate glassâ€“ceramics containing Er_xY b_2?xTi_2O_7 nanocrystals. Journal of Optical Technology (A Translation of Opticheskii) Tj ETQq1 1 0.784314 rgBT /Overlock 10	0.4	9
60	In situ evolution of Ni environment in magnesium aluminosilicate glasses and glassâ€“ceramicsâ€“Influence of ZrO2 and TiO2 nucleating agents. Journal of Physics and Chemistry of Solids, 2015, 78, 137-146.	4.0	9
61	Erbium-glass slab laser with transverse diode pumping. Journal of Optical Technology (A Translation) Tj ETQq1 1 0.784314 rgBT /Overlock	0.4	8
62	Laser ceramic 2 Spectroscopic and lasing properties. Journal of Optical Technology (A Translation of) Tj ETQq0 0 0 rgBT /Overlock 10 Tf	0.4	8
63	Structural transformations and spectroluminescence properties of magnesium aluminosilicate glassâ€“ceramics containing Er_xY b_2-x(Ti,Zr)_2O_7 nanocrystals. Journal of Optical Technology (A) Tj ETQq1 1 0.784314 rgBT /Overlock	0.4	8
64	Influence of reducing-oxidizing conditions on the optical properties of Co^2+-doped magnesium aluminosilicate glass ceramics and their use as an effective saturable absorber Q switch. Applied Optics, 2004, 43, 6011.	2.1	6
65	Phase transformations in glass of the MgOâ€“Al2O3â€“SiO2â€“TiO2 system doped with yttrium oxide. Glass Physics and Chemistry, 2015, 41, 597-606.	0.7	6
66	Luminescence of transparent glass ceramics containing Er3+ and Yb3+ zirconate-titanate nanocrystals. Journal of Applied Spectroscopy, 2011, 78, 650-658.	0.7	5
67	Spectroscopic properties of magnesium aluminosilicate glass-ceramics doped with divalent cobalt ions. Optics and Spectroscopy (English Translation of Optika I Spektroskopiya), 2002, 93, 559-566.	0.6	4
68	Features of the phase transformations in titanium-containing zinc aluminosilicate glasses doped with cobalt oxide. Glass Physics and Chemistry, 2013, 39, 113-123.	0.7	4
69	Raman-scattering results on transformations in finely divided titanium dioxide. Journal of Applied Spectroscopy, 1989, 50, 593-598.	0.7	3
70	Nonlinear optical properties of PbS and PbSe quantum dots in glassy matrices. , 2002, 4748, 375.		3
71	Study of phase transformations in titanium-containing magnesium-aluminum silicate glasses and glass-ceramics for diffuse reflectors. Journal of Optical Technology (A Translation of Opticheskii) Tj ETQq1 1 0.784314 rgBT /Overlock	0.4	3
72	Measuring the surface tension of glass in the temperature region of softening and viscous flow. Journal of Optical Technology (A Translation of Opticheskii Zhurnal), 2003, 70, 888.	0.4	3

#	Article	IF	Citations
73	The new SOO-U6 and SOO-I8 light-scattering glass-ceramics. Journal of Optical Technology (A) Tj ETQq1 1 0.784314 rgBT /Overlock 10	0.4	3
74	The crystallization of glasses of the MgOâ€“Al_2O_3â€“SiO_2â€“TiO_2â€“ZrO_2â€“Y_2O_3 system and the nature of a new yttrium-containing crystalline phase. Journal of Optical Technology (A Translation of) Tj ETQq0 0 0 rgBT /Overlock 10 Tf	0.4	3
75	Nonmonotonic transmittance variation of a material during the crystallization of liquating glasses. Journal of Optical Technology (A Translation of Opticheskii Zhurnal), 2003, 70, 857.	0.4	2
76	Passive Q-switching of diode-pumped Tm:KY(WO 4) 2 laser with PbS-doped glass and Cr:ZnSe crystal. , 2007, , .		2
77	Metamaterials and the problem of creating invisible objects 1 Objects with size less than a wavelength. Journal of Optical Technology (A Translation of Opticheskii Zhurnal), 2008, 75, 792.	0.4	2
78	Structural Features of Nano-Scaled Metamaterials Containing PbS Nanocrystals. Advanced Materials Research, 2008, 39-40, 31-36.	0.3	2
79	Spectroscopic properties of highly concentrated Nd3-doped antimony-phosphate glass for microchip lasers. Glass Physics and Chemistry, 2015, 41, 137-144.	0.7	2
80	1 mJ single-rod fiber Er:glass laser for rangefinding. Proceedings of SPIE, 2015, , .	0.8	2
81	Pulse-burst Er:glass laser. , 2017, , .		2
82	Use of induction furnaces with a cold crucible for melting hard glasses (review). Glass and Ceramics (English Translation of Steklo I Keramika), 1986, 43, 391-396.	0.6	1
83	New Co-containing glass ceramics saturable absorbers for 1.5-Î¼m solid state lasers. , 2001, 4350, 106.		1
84	Nonlinear absorption properties of new cobalt-doped transparent glass ceramics. , 2002, 4751, 326.		1
85	<title>Passive <emph type="1">Q</emph>-switching of 2-Î¼m holmium lasers with PbS-quantum dot-doped glass</title>. , 2005, 6054, 16.		1
86	<title>Lead sulfide quantum dots for mode-locking and Q-switching of near IR lasers</title>. , 2005, , .		1
87	<title>Testing of KGSS-0180 laser glass for platinum micro-inclusions</title>. , 2007, , .		1
88	Metamaterials with negative refractive index. Journal of Optical Technology (A Translation of) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 142	0.4	1
89	Metamaterials: A new direction in materials science. Glass Physics and Chemistry, 2010, 36, 521-553.	0.7	1
90	Metamaterials with a network structure. Journal of Optical Technology (A Translation of Opticheskii) Tj ETQq0 0 0 rgBT /Overlock 10 Tf	0.4	1

#	Article	IF	Citations
91	Principles of a new method of obtaining optical metamaterials. Journal of Optical Technology (A) Tj ETQq1 1 0.784314 rgBT /Overlock	0.4	1
92	Optical properties of transparent cobalt-containing magnesium aluminosilicate glass-ceramics doped with gallium oxide for saturable absorbers. Optics and Spectroscopy (English Translation of Optika I) Tj ETQq0 0 0 rgBT /Overlock 10 Tf	0.8	1
93	PbS-doped Glass Saturable Absorbers for Mode-Locked and Q-Switched Near-IR Lasers. , 2005, , .		1
94	Light scattering in Eu3+-doped glass-ceramics containing SrIINbIVO3 nanocrystals. Journal of the Optical Society of America B: Optical Physics, 2018, 35, 3116.	2.1	1
95	Melting optical glasses in high-frequency furnaces. Glass and Ceramics (English Translation of Steklo) Tj ETQq1 1 0.784314 rgBT /Overlock	0.6	0
96	Mathematical modeling of glass melt heat exchange in a cylindrical induction furnace. Glass and Ceramics (English Translation of Steklo I Keramika), 1994, 51, 122-127.	0.6	0
97	Title is missing!. Glass Physics and Chemistry, 2001, 27, 88-91.	0.7	0
98	Study of the strength of laser glasses by a photoelasticity method. Journal of Optical Technology (A) Tj ETQq0 0 0 rgBT /Overlock 10 Tf	0.4	0
99	Viscous shrinkage of microchannel plates. Journal of Optical Technology (A Translation of) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf	0.4	0
100	Optical properties of new saturable absorbers for 1.3 - 1.6 mcm lasers. , 0, , .		0
101	Diode-pumped 1.35-micron Nd:KGd(WO/sub 4/)/sub 2/ laser passively Q-switched with cobalt-doped glass ceramics. , 0, , .		0
102	PbS quantum-dot-doped glass as saturable absorber for passive mode-locking of a Cr/sup 4+/:YAG laser. , 0, , .		0
103	Diode-pumped Nd:YVO/sub 4/ 1.3 Î¼m laser passively Q-switched with the PbS-doped glass. , 0, , .		0
104	INTENSITY- AND SIZE-DEPENDENT RELAXATION IN PbS QUANTUM DOTS IN GLASS. , 2005, , .		0
105	Stimulated emission from co-doped zinc-aluminosilicate glass ceramics. , 0, , .		0
106	Stimulated emission of Co^2+ ions in transparent glass-ceramics. Journal of Optical Technology (A) Tj ETQq0 0 0 rgBT /Overlock 10 Tf	0.4	0
107	Metamaterials and the problem of creating invisible objects 2 Invisible shells that conceal the objects contained in them from an external observer. Journal of Optical Technology (A Translation of) Tj ETQq1 1 0.784314 rgBT /Overlock	0.4	0
108	OPTICAL WAVEGUIDES IN GLASSES DOPED WITH LEAD SULFIDE QUANTUM DOTS. , 2009, , .		0

#	Article	IF	Citations
109	Foreword from the editors of this issue. Journal of Optical Technology (A Translation of Opticheskii) Tj ETQq1 1 0.784314 rgBT /Overlo	0.4	0
110	Luminescence of erbium ions in transparent glass-ceramics containing (Er,Yb)NbO<inf>4</inf> nanocrystals. , 2014, , .		0
111	Glass-ceramics with Yb, Tm:YNbO<inf>4</inf> nanocrystals: Novel NIR-to-NIR upconversion phosphor. , 2016, , .		0
112	Glass-ceramics with Co²⁺:ZnO nanocrystals: Novel saturatable absorber for Er lasers. , 2016, , .		0
113	Synthesis, structure and Q-switching behaviour of transparent glass-ceramics based on a mixture of Co:Î²-Zn<inf>2</inf>SiO<inf>4</inf> and Co:ZnO nanocrystals. , 2016, , .		0
114	Novel transparent glass-ceramics based on Co:Li(Al, Ga)<inf>5</inf>O<inf>8</inf> nanocrystals for passive Q-switching of Er lasers. , 2016, , .		0
115	Passive Q-switching of 1.35 Î¼m diode-pumped Nd: KGW laser with PbS- doped silicate glasses. , 2002, , .		0
116	Intensity dependent bleaching relaxation in PbS quantum dots. , 2004, , .		0
117	Lead Sulfide Doped Glass Saturable Absorbers for Mode- Locked and Q-Switched Near IR Lasers. , 2005, , .		0
118	Nonlinear spectroscopy and laser performance of PbS quantum-dot-doped glass as a saturable absorber for passive mode-locking of 1-Î¼m lasers. , 2006, , .		0
119	RELAXATION PROCESSES IN LEAD SULFIDE QUANTUM DOTS. , 2007, , .		0