

Alexander A Zhilin

List of Publications by Year in descending order

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279798

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120
docs citations

120
times ranked

909
citing authors

#	ARTICLE	IF	CITATIONS
1	Light scattering in Eu ³⁺ -doped glass-ceramics containing SrLiNbVO ₃ nanocrystals. Journal of the Optical Society of America B: Optical Physics, 2018, 35, 3116.	2.1	1
2	Pulse-burst Er:glass laser. , 2017, , .		2
3	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
4	Glass-ceramics with Yb, Tm:YNbO ₄ nanocrystals: Novel NIR-to-NIR upconversion phosphor. , 2016, , .		0
5	Compact 0.7 mJ/11 ns eye-safe erbium laser. Laser Physics, 2016, 26, 125801.	1.2	12
6	Structure and nonlinear optical properties of novel transparent glass-ceramics based on Co ²⁺ :ZnO nanocrystals. Laser Physics Letters, 2016, 13, 055803.	1.4	25
7	Glass-ceramics with Co ²⁺ :ZnO nanocrystals: Novel saturatable absorber for Er lasers. , 2016, , .		0
8	Synthesis, structure and Q-switching behaviour of transparent glass-ceramics based on a mixture of Co:ZnO and Co:ZnO nanocrystals. , 2016, , .		0
9	Saturable absorber: transparent glass-ceramics based on a mixture of Co:ZnO and Co:ZnO nanocrystals. Applied Optics, 2016, 55, 5505.	2.1	27
10	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 Spektroskopiya) 2016, 10, 10.		0
11	Novel transparent glass-ceramics based on Co:Li(Al, Ga)O:ZnO nanocrystals for passive Q-switching of Er lasers. , 2016, , .		0
12	Transparent glass-ceramics with (Eu ³⁺ , Yb ³⁺):YNbO ₄ nanocrystals: Crystallization, structure, optical spectroscopy and cooperative upconversion. Journal of Luminescence, 2016, 179, 64-73.	3.1	34
13	The crystallization of glasses of the MgO-Al ₂ O ₃ -SiO ₂ -TiO ₂ -ZrO ₂ -Y ₂ O ₃ system and the nature of a new yttrium-containing crystalline phase. Journal of Optical Technology (A Translation of Optika i Spektroskopiya) 2016, 11, 10.		0
14	Phase transformations in glass of the MgO-Al ₂ O ₃ -SiO ₂ -TiO ₂ system doped with yttrium oxide. Glass Physics and Chemistry, 2015, 41, 597-606.	0.7	6
15	Glass-ceramics with Ga ₂ O ₃ :Co ²⁺ nanocrystals: saturable absorber for 1.5-1.7 μm Er lasers. Laser Physics Letters, 2015, 12, 035803.	1.4	20
16	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
17	Spectroscopic properties of highly concentrated Nd ³⁺ -doped antimony-phosphate glass for microchip lasers. Glass Physics and Chemistry, 2015, 41, 137-144.	0.7	2
18	1 mJ single-rod fiber Er:glass laser for rangefinding. Proceedings of SPIE, 2015, , .	0.8	2

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19	Effect of yttrium oxide on the crystallization of glasses of the $MgO\text{-}Al_2O_3\text{-}SiO_2$ 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 Opticheskii Zhurnal), 2014, 81, 729.	0.4	12
20	Structural characteristics and spectral properties of novel transparent lithium aluminosilicate glass-ceramics containing $(Er,Yb)NbO_4$ nanocrystals. Journal of Luminescence, 2015, 160, 337-345.	3.1	19
21	In situ evolution of Ni environment in magnesium aluminosilicate glasses and glass-ceramics. Influence of ZrO_2 and TiO_2 nucleating agents. Journal of Physics and Chemistry of Solids, 2015, 78, 137-146.	4.0	9
22	Structure and upconversion luminescence of transparent glass-ceramics containing $(Er,Yb)_2(Ti,Zr)_2O_7$ nanocrystals. Journal of Non-Crystalline Solids, 2015, 409, 54-62.	3.1	20
23	Foreword from the editors of this issue. Journal of Optical Technology (A Translation of Opticheskii Zhurnal), 2014, 81, 723.	0.4	0
24	Anomalies in light scattering by glass-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
25	Transparent glass-ceramics based on ZnO and $ZnO:Co^{2+}$ nanocrystals. Journal of Optical Technology (A Translation of Opticheskii Zhurnal), 2014, 81, 723.	0.4	16
26	Luminescence of erbium ions in transparent glass-ceramics containing $(Er,Yb)NbO_4$ nanocrystals. , 2014, , .		0
27	Influence of NiO on phase transformations and optical properties of $ZnO\text{-}Al_2O_3\text{-}SiO_2$ glass-ceramics nucleated by TiO_2 and ZrO_2 . Part I. Influence of NiO on phase transformations of $ZnO\text{-}Al_2O_3\text{-}SiO_2$ glass-ceramics nucleated by TiO_2 and ZrO_2 . Journal of Non-Crystalline Solids, 2014, 384, 73-82.	3.1	25
28	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
29	Influence of NiO on phase transformations and optical properties of $ZnO\text{-}Al_2O_3\text{-}SiO_2$ glass-ceramics nucleated by TiO_2 and ZrO_2 . Part II. Optical absorption and luminescence. Journal of Non-Crystalline Solids, 2013, 376, 99-105.	3.1	22
30	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
31	Structural transformations and spectroluminescence properties of magnesium aluminosilicate glass-ceramics containing $Er_xY_{b-2-x}(Ti,Zr)_2O_7$ nanocrystals. Journal of Optical Technology (A Translation of Opticheskii Zhurnal), 2014, 81, 723.	0.4	10
32	Synthesis and spectroluminescence properties of lithium aluminosilicate glass-ceramics containing $Er_xY_{b-2-x}Ti_2O_7$ nanocrystals. Journal of Optical Technology (A Translation of Opticheskii Zhurnal), 2014, 81, 723.	0.4	10
33	Metamaterials with a network structure. Journal of Optical Technology (A Translation of Opticheskii Zhurnal), 2014, 81, 723.	0.4	10
34	Principles of a new method of obtaining optical metamaterials. Journal of Optical Technology (A Translation of Opticheskii Zhurnal), 2014, 81, 723.	0.4	10
35	Laser ceramic 2 Spectroscopic and lasing properties. Journal of Optical Technology (A Translation of Opticheskii Zhurnal), 2014, 81, 723.	0.4	8
36	Influence of various alkali and divalent metal oxides on phase transformations in NiO -doped glasses of the $Li_2O\text{-}Al_2O_3\text{-}SiO_2\text{-}TiO_2$ system. Journal of Non-Crystalline Solids, 2011, 357, 2209-2214.	3.1	21

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37	Influence of CoO addition on phase separation and crystallization of glasses of the ZnO-Al ₂ O ₃ -SiO ₂ -TiO ₂ system. Journal of Non-Crystalline Solids, 2011, 357, 3928-3939.	3.1	27
38	Luminescence of transparent glass ceramics containing Er ³⁺ and Yb ³⁺ zirconate-titanate nanocrystals. Journal of Applied Spectroscopy, 2011, 78, 650-658.	0.7	5
39	Metamaterials: A new direction in materials science. Glass Physics and Chemistry, 2010, 36, 521-553.	0.7	1
40	Laser ceramic 1 Production methods. Journal of Optical Technology (A Translation of Opticheskie) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 6	0.4	13
41	Optical applications of glass-ceramics. Journal of Non-Crystalline Solids, 2010, 356, 3042-3058.	3.1	66
42	The new SOO-U6 and SOO-I8 light-scattering glass-ceramics. Journal of Optical Technology (A) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 54	0.4	3
43	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 0.784314rgBT /Overlock 10 Tf 50 54	0.4	1
44	OPTICAL WAVEGUIDES IN GLASSES DOPED WITH LEAD SULFIDE QUANTUM DOTS. , 2009, , .		0
45	Diode-pumped Tm:KY(WO ₄) ₂ laser passively Q-switched with PbS-doped glass. Applied Physics B: Lasers and Optics, 2008, 93, 787-791.	2.2	36
46	Raman spectroscopy quantifying the composition of stuffed Î ² -quartz derivative phases in lithium aluminosilicate glass-ceramics. Journal of Non-Crystalline Solids, 2008, 354, 4932-4939.	3.1	29
47	Metamaterials with negative refractive index. Journal of Optical Technology (A Translation of) Tj ETQq1 1 0.784314rgBT /Overlock 10 Tf 50 54	0.4	1
48	Erbium-glass slab laser with transverse diode pumping. Journal of Optical Technology (A Translation) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 54	0.4	8
49	Metamaterials and the problem of creating invisible objects 1 Objects with size less than a wavelength. Journal of Optical Technology (A Translation of Opticheskie Zhurnal), 2008, 75, 792.	0.4	2
50	Anomalously Low Light Scattering in the Na ₂ O-Nb ₂ O ₅ -SiO ₂ Glass-Ceramics. Advanced Materials Research, 2008, 39-40, 273-276.	0.3	10
51	Structural Features of Nano-Scaled Metamaterials Containing PbS Nanocrystals. Advanced Materials Research, 2008, 39-40, 31-36.	0.3	2
52	Passive Q-switching of diode-pumped Tm:KY(WO ₄) ₂ laser with PbS-doped glass and Cr:ZnSe crystal. , 2007, , .		2
53	<title>Testing of KGSS-0180 laser glass for platinum micro-inclusions</title>. , 2007, , .		1
54	Stimulated emission of Co ²⁺ -doped glass-ceramics. Journal of Non-Crystalline Solids, 2007, 353, 2408-2414.	3.1	22

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55	Passive Q-switching of erbium glass laser by magnesium aluminosilicate siall with cobalt ions. Journal of Applied Spectroscopy, 2007, 74, 140-146.	0.7	10
56	RELAXATION PROCESSES IN LEAD SULFIDE QUANTUM DOTS. , 2007, , .		0
57	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
58	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
59	Stimulated emission of Co ²⁺ ions in transparent glass-ceramics. Journal of Optical Technology (A Translation of Opticheskii Zhurnal), 2006, 73, 576.	0.4	21
60	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
61	Holmium lasers passively Q-switched with PbS quantum-dot-doped glasses. Applied Optics, 2006, 45, 536.	2.1	18
62	Nd:KGd(WO ₄) ₂ laser at 1.35 μ m passively Q-switched with V ³⁺ :YAG crystal and PbS-doped glass. Optical Materials, 2006, 28, 919-924.	3.6	13
63	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
64	Nonlinear spectroscopy and laser performance of PbS quantum-dot-doped glass as a saturable absorber for passive mode-locking of 1.5 μ m lasers. , 2006, , .		0
65	Passive Q-switching of 2.1 μ m holmium lasers with PbS-quantum dot-doped glass. , 2005, 6054, 16.		1
66	INTENSITY- AND SIZE-DEPENDENT RELAXATION IN PbS QUANTUM DOTS IN GLASS. , 2005, , .		0
67	Lead sulfide quantum dots for mode-locking and Q-switching of near IR lasers. , 2005, , .		1
68	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
69	Small-angle X-ray scattering and low-frequency Raman scattering study of liquid phase separation and crystallization in titania-containing glasses of the ZnO-Al ₂ O ₃ -SiO ₂ System. Journal of Non-Crystalline Solids, 2005, 351, 711-721.	3.1	30
70	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
71	Absorption, emission and absorption saturation of Cr ⁴⁺ ions in calcium aluminate glass. Journal of Non-Crystalline Solids, 2005, 351, 3551-3555.	3.1	34
72	PbS-doped Glass Saturable Absorbers for Mode-Locked and Q-Switched Near-IR Lasers. , 2005, , .		1

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73	Lead Sulfide Doped Glass Saturable Absorbers for Mode-Locked and Q-Switched Near IR Lasers. , 2005, , .		0
74	The Influence of Nickel Oxide Additives on the Phase Separation and Crystallization of Glasses in the MgO-Al ₂ O ₃ -SiO ₂ -TiO ₂ System. Glass Physics and Chemistry, 2004, 30, 300-310.	0.7	25
75	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
76	Relaxation of Bleaching in Lead Sulfide Nanoparticles at Different Pump Powers. Journal of Applied Spectroscopy, 2004, 71, 83-88.	0.7	12
77	Passive mode locking of a Cr ⁴⁺ :YAG laser by PbS quantum-dot-doped glass saturable absorber. Optics Communications, 2004, 241, 449-454.	2.1	37
78	Phase transformations in Na ₂ O-K ₂ O-Nb ₂ O ₅ -SiO ₂ glasses. Journal of Non-Crystalline Solids, 2004, 345-346, 182-186.	3.1	19
79	The influence of NiO on phase separation and crystallization of glasses of the MgO-Al ₂ O ₃ -SiO ₂ -TiO ₂ system. Journal of Non-Crystalline Solids, 2004, 345-346, 187-191.	3.1	11
80	Magnesium- and zinc-aluminosilicate cobalt-doped glass ceramics as saturable absorbers for diode-pumped 13-14 μm laser. Applied Optics, 2004, 43, 682.	2.1	36
81	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
82	Intensity dependent bleaching relaxation in PbS quantum dots. , 2004, , .		0
83	Phase Separation and Crystallization in Glasses of the Na ₂ O-K ₂ O-Nb ₂ O ₅ -SiO ₂ System. Glass Physics and Chemistry, 2003, 29, 243-253.	0.7	9
84	On the Phase Separation and Crystallization of Glasses in the MgO-Al ₂ O ₃ -SiO ₂ -TiO ₂ System. Glass Physics and Chemistry, 2003, 29, 254-266.	0.7	32
85	Viscous shrinkage of microchannel plates. Journal of Optical Technology (A Translation of) Tj ETQq1 1 0.784314 rgBT/Overlock 10 Tf 0,4		0
86	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
87	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
88	Linear and nonlinear optical properties of cobalt-doped zinc aluminum glass ceramics. Journal of Applied Physics, 2003, 93, 3827-3831.	2.5	49
89	Nonlinear absorption properties of new cobalt-doped transparent glass ceramics. , 2002, 4751, 326.		1
90	Nonlinear optical properties of PbS and PbSe quantum dots in glassy matrices. , 2002, 4748, 375.		3

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91	Glass doped with PbS quantum dots as a saturable absorber for 1- $\frac{1}{4}$ m neodymium lasers. Journal of the Optical Society of America B: Optical Physics, 2002, 19, 28.	2.1	51
92	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
93	Study of the strength of laser glasses by a photoelasticity method. Journal of Optical Technology (A Translation of Opticheskii Zhurnal) 11(10):1043-1048, 2002.	0.4	8
94	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 Zhurnal) 11(10):1049-1053, 2002.	0.0	0
95	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
96	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
97	Title is missing!. Glass Physics and Chemistry, 2002, 28, 66-78.	0.7	24
98	Passive Q-switching of 1.35 $\frac{1}{4}$ m diode-pumped Nd: KGW laser with PbS- doped silicate glasses. , 2002, , .		0
99	Cobalt-doped transparent glass ceramic as a saturable absorber Q switch for erbium:glass lasers. Applied Optics, 2001, 40, 4322.	2.1	65
100	Low-frequency Raman scattering of magnesium aluminosilicate glasses and glass-ceramics. Journal of Non-Crystalline Solids, 2001, 282, 306-316.	3.1	33
101	Title is missing!. Glass Physics and Chemistry, 2001, 27, 88-91.	0.7	0
102	Title is missing!. Glass Physics and Chemistry, 2001, 27, 344-352.	0.7	14
103	Crystallization of Glasses in the K ₂ O-Nb ₂ O ₅ -SiO ₂ System. Glass Physics and Chemistry, 2001, 27, 504-511.	0.7	11
104	New Co-containing glass ceramics saturable absorbers for 1.5- $\frac{1}{4}$ m solid state lasers. , 2001, 4350, 106.		1
105	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
106	Structural transformations of nanometer sized crystals in CoO-doped $\frac{1}{2}$ -eucryptite-based glass-ceramics. Journal of Non-Crystalline Solids, 1999, 258, 216-222.	3.1	18
107	The structure of luminescence centers of neodymium in glasses and transparent glass-ceramics of the Li ₂ O-Al ₂ O ₃ -SiO ₂ system. Journal of Non-Crystalline Solids, 1996, 196, 67-72.	3.1	21
108	Structural states of Co(II) in $\frac{1}{2}$ -eucryptite-based glass-ceramics nucleated with ZrO ₂ . Journal of Non-Crystalline Solids, 1996, 204, 151-157.	3.1	18

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109	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
110	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
111	Raman-scattering results on transformations in finely divided titanium dioxide. Journal of Applied Spectroscopy, 1989, 50, 593-598.	0.7	3
112	Melting optical glasses in high-frequency furnaces. Glass and Ceramics (English Translation of Steklo I Keramika), 1994, 51, 122-127.	0.6	0
113	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
114	Optical properties of new saturable absorbers for 1.3 - 1.6 μm lasers. , 0, , .		0
115	Diode-pumped 1.35-micron Nd:K ₂ Gd(WO ₄) ₂ laser passively Q-switched with cobalt-doped glass ceramics. , 0, , .		0
116	PbS quantum-dot-doped glass as saturable absorber for passive mode-locking of a Cr ⁴⁺ :YAG laser. , 0, , .		0
117	Diode-pumped Nd:YVO ₄ 1.3 μm laser passively Q-switched with the PbS-doped glass. , 0, , .		0
118	Stimulated emission from co-doped zinc-aluminosilicate glass ceramics. , 0, , .		0
119	Formation and Passive Q-Switch Performance of Glass-Ceramics Containing Co ²⁺ -Doped Spinel Nanocrystals. Advanced Materials Research, 0, 39-40, 219-224.	0.3	19