

Aleksandr Tolmachev

List of Publications by Year in descending order

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#	ARTICLE	IF	CITATIONS
1	Interfacial properties of cetyltrimethylammonium-coated SiO ₂ nanoparticles in aqueous media as studied by using different indicator dyes. <i>Journal of Colloid and Interface Science</i> , 2007, 316, 712-722.	5.0	57
2	Effect of starting materials and sintering temperature on microstructure and optical properties of Y ₂ O ₃ :Yb ³⁺ + 5 at% transparent ceramics. <i>Journal of Advanced Ceramics</i> , 2021, 10, 49-61.	8.9	39
3	Luminescence VUV spectroscopy of cerium-and europium-doped lithium borate crystals. <i>Optics and Spectroscopy (English Translation of Optika I Spektroskopiya)</i> , 2007, 102, 60-67.	0.2	35
4	Influence of sintering temperature on structural and optical properties of Y ₂ O ₃ â€“MgO composite SPS ceramics. <i>Ceramics International</i> , 2020, 46, 6537-6543.	2.3	33
5	Spherical coreâ€“shell structured nanophosphors on the basis of europium-doped lutetium compounds. <i>Nanotechnology</i> , 2009, 20, 325601.	1.3	26
6	Luminescence and thermally stimulated recombination processes in Li ₆ Gd(BO ₃) ₃ :Ce ³⁺ crystals. <i>Optics and Spectroscopy (English Translation of Optika I Spektroskopiya)</i> , 2011, 110, 266-276.	0.2	19
7	Thermally stimulated recombination processes and luminescence in Li ₆ (Y,Gd,Eu)(BO ₃) ₃ crystals. <i>Physics of the Solid State</i> , 2011, 53, 263-270.	0.2	18
8	Transformation-assisted consolidation of Y ₂ O ₃ :Eu ³⁺ nanospheres as a concept to optical nanograined ceramics. <i>Ceramics International</i> , 2014, 40, 3561-3569.	2.3	18
9	Invited Lecture. Helical twisting in cholesteric mesophases: Molecular structure and microscopic description. <i>Liquid Crystals</i> , 1989, 5, 877-888.	0.9	17
10	Temperature dependence of the luminescence of Li ₆ Gd _x Y _{1-x} (BO ₃) ₃ :Eu crystals. <i>Optics and Spectroscopy (English Translation of Optika I Spektroskopiya)</i> , 2012, 113, 63-70.	0.2	16
11	Thermostimulated luminescence from single crystals of modified lithium gadolinium orthoborate Li ₆ â€“x Na _x Gd(BO ₃) ₃ :Ce. <i>Technical Physics Letters</i> , 2004, 30, 976-978.	0.2	15
12	Fluorescent dye N,Nâ€“2-diocetadecylrhodamine as a new interfacial acidâ€“base indicator. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2008, 69, 1125-1129.	2.0	15
13	Growth of single crystals of Li ₆ Y _{1-x} Eu _x (BO ₃) ₃ (x = 0â€“1) solid solutions by the Czochralski method. <i>Crystallography Reports</i> , 2005, 50, S88-S91.	0.1	14
14	Electronic excitation dynamics and energy transfer in lithium-gadolinium borates doped by rare earths. <i>Physics of the Solid State</i> , 2008, 50, 1684-1686.	0.2	14
15	The effect of residual porosity on the optical properties of Y ₃ Al ₅ O ₁₂ :Nd ³⁺ laser ceramics. <i>Technical Physics Letters</i> , 2015, 41, 496-499.	0.2	13
16	Transient hole-polaron optical absorption in Li ₆ Gd(BO ₃) ₃ crystals. <i>Physics of the Solid State</i> , 2009, 51, 1160-1166.	0.2	12
17	Effect of the geometric shape of Lu ₂ O ₃ : Eu spherical nanocrystals on their spontaneous luminescence. <i>Physics of the Solid State</i> , 2011, 53, 1895-1901.	0.2	12
18	Nanopowders M ₂ O ₃ (M = Y, La, Yb, Nd) with spherical particles and laser ceramics based on them. <i>Quantum Electronics</i> , 2013, 43, 271-275.	0.3	11

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19	Luminescent properties of europium-activated yttrium gadolinium phosphates. <i>Inorganic Materials</i> , 2009, 45, 423-427.	0.2	10
20	Production of the Y3Al5O12 transparent nanostructured ceramics. <i>Journal of Superhard Materials</i> , 2009, 31, 252-259.	0.5	10
21	Nd3+:Y3Al5O12 laser ceramics: Influence of the size of yttrium oxide particles on sintering. <i>Crystallography Reports</i> , 2015, 60, 299-305.	0.1	10
22	Lasing in spherically shaped Y2O3-ZnO nanocomposites. <i>Semiconductors</i> , 2012, 46, 1072-1078.	0.2	9
23	Radiation-stimulated point defects in Li2B4O7 single crystals. <i>Technical Physics Letters</i> , 1999, 25, 709-711.	0.2	7
24	Macro- and Microdefects in Czochralski-Grown Li6GdB3O9 and Li6-xNaxGdB3O9 Single Crystals. <i>Inorganic Materials</i> , 2004, 40, 856-859.	0.2	7
25	Spontaneous and stimulated red luminescence of Lu2O3: Eu nanocrystals. <i>Physics of the Solid State</i> , 2011, 53, 1263-1268.	0.2	7
26	Geometry effect on spontaneous emission decay in nanosized Y2O3:Eu3+ particles. <i>Optical Materials</i> , 2014, 37, 714-717.	1.7	7
27	Effects of membranotropic agents on mono- and multilayer structures of dipalmitoylphosphatidylcholine. <i>European Biophysics Journal</i> , 2002, 31, 554-558.	1.2	6
28	Slip and cleavage systems in the new crystal Li6YB3O9. <i>Crystallography Reports</i> , 2005, 50, 982-985.	0.1	6
29	Change of the luminescence decay time for Lu2O3: Eu nanocrystals embedded in synthetic opal. <i>Physics of the Solid State</i> , 2010, 52, 2510-2517.	0.2	6
30	Luminescence and recombination processes in bulky Li6Gd x Y1-x (BO3)3:Eu crystals. <i>Optics and Spectroscopy (English Translation of Optika i Spektroskopiya)</i> , 2011, 111, 441-450.	0.2	6
31	Size-dependent luminescence of spherical Y2O3:Er nanoparticles. <i>Inorganic Materials</i> , 2014, 50, 1099-1103.	0.2	6
32	Transparent 4 at% Nd3+:Y3Al5O12 ceramic by reactive spark plasma sintering. <i>AIP Conference Proceedings</i> , 2017, , .	0.3	6
33	Formation peculiarities and optical properties of highly-doped (Y0.86La0.09Yb0.05)2O3 transparent ceramics. <i>Ceramics International</i> , 2019, 45, 16002-16007.	2.3	6
34	A novel IR-transparent Ho3+:Y2O3: MgO nanocomposite ceramics for potential laser applications. <i>Ceramics International</i> , 2021, 47, 1399-1406.	2.3	6
35	Molecular structural features of unsymmetrical ortho analogs of POPOP. <i>Chemistry of Heterocyclic Compounds</i> , 1997, 33, 1341-1349.	0.6	5
36	Features of strontium tetraborate synthesis by means of borate rearrangement. <i>Inorganic Materials</i> , 2008, 44, 1345-1348.	0.2	5

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37	Photoluminescence properties of core-shell SiO ₂ /Lu ₂ O ₃ : Eu monodisperse heteronanoparticles. <i>Physics of the Solid State</i> , 2010, 52, 2385-2391.	0.2	5
38	Structuring of tricarbocyanine dye molecules in Langmuir-Blodgett films. <i>Russian Chemical Bulletin</i> , 1995, 44, 1232-1236.	0.4	4
39	Synthesis and thermally stimulated luminescence of polycrystalline Sr ^{1-x} Eu _x B ₄ O ₇ . <i>Crystallography Reports</i> , 2005, 50, S141-S144.	0.1	4
40	Crystal structure and luminescent properties of europium-activated Ca ^{10-x} M _x (PO ₄) ₆ F ₂ (M = Pb, Mg) prepared via precipitation from aqueous solutions. <i>Inorganic Materials</i> , 2007, 43, 873-877.	0.2	4
41	Optical properties of spherical monodisperse Y ₂ O ₃ -ZnO nanoparticles. <i>Physics of the Solid State</i> , 2012, 54, 2260-2265.	0.2	4
42	Structure and morphology of spherical crystalline (Y ^{1-x} Eu _x) ₂ O ₃ particles. <i>Inorganic Materials</i> , 2015, 51, 51-56.	0.2	4
43	Sintering trajectory of the 2.88 Y ₂ O ₃ -0.12 Nd ₂ O ₃ -5Al ₂ O ₃ powders of different sizes. <i>Journal of Superhard Materials</i> , 2015, 37, 63-65.	0.5	4
44	Luminescence of Eu ³⁺ rare-earth ions in Lu ₂ O ₃ nanospheres. <i>JETP Letters</i> , 2017, 106, 145-151.	0.4	4
45	Size-dependent luminescence kinetics of rare-earth Er ³⁺ ions in Y ₂ O ₃ nanospheres. <i>Journal of Applied Physics</i> , 2019, 125, .	1.1	4
46	Order in amphiphilic polyimides: Cast and Langmuir films. <i>Makromolekulare Chemie Macromolecular Symposia</i> , 1991, 46, 277-282.	0.6	3
47	Oscillations of the absorbance of PbS nanocrystals grown in situ in Langmuir-Blodgett films of lead stearate. <i>JETP Letters</i> , 2002, 75, 135-137.	0.4	3
48	On the nature of fracture of SrB ₄ O ₇ and PbB ₄ O ₇ single crystals. <i>Crystallography Reports</i> , 2007, 52, 889-893.	0.1	3
49	Production of Y ₃ Al ₅ O ₁₂ and Y ₂ O ₃ nanopowders for optical ceramics. <i>Crystallography Reports</i> , 2008, 53, 1191-1193.	0.1	3
50	Composite phosphor films based on spherical Lu ₂ O ₃ :Eu ³⁺ nanoparticles. <i>Technical Physics Letters</i> , 2011, 37, 174-177.	0.2	3
51	Fabrication and luminescent properties of (Y _{0.99} Eu _{0.01}) ₂ O ₃ transparent nanostructured ceramics. <i>Optical Materials</i> , 2018, 78, 285-291.	1.7	3
52	Crack resistance and atomic structure of Li ₂ B ₄ O ₇ single crystals. <i>Crystallography Reports</i> , 2006, 51, 292-295.	0.1	2
53	Recombination processes and luminescence in Li ₆ Gd _x Y ^{1-x} (BO ₃) ₃ -Eu crystals. <i>IOP Conference Series: Materials Science and Engineering</i> , 2010, 15, 012072.	0.3	2
54	Searches for neutrinoless resonant double electron captures at LNGS. <i>Journal of Physics: Conference Series</i> , 2012, 375, 042024.	0.3	2

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55	Synthesis, morphology and structure of the dense $(Y_{1-x}Eu_x)_2O_3$ spherical shape particles. Crystal Research and Technology, 2015, 50, 621-625.	0.6	2
56	Effect of Growth Conditions on the Structural Properties of Calcium Phosphate Coatings Prepared in the System $CaCl_2$ - KH_2PO_4 - KOH - HCl - H_2O . Inorganic Materials, 2005, 41, 864-868.	0.2	1
57	Synthesis and features of the structure and luminescence of monodisperse $SiO_2/(Lu_{1-x}Eu_x)_2O_3$ (x =) Tj ETQq1,1 0.784314 rgBT 0.2 1	0.2	1
58	Double \hat{I}^2 experiments with the help of scintillation and HPGe detectors at Gran Sasso. , 2011, , .		1
59	Spontaneous luminescence of Eu^{3+} ions in porous Y_2O_3 nanospheres. Optics and Spectroscopy (English Translation of Optika i Spektroskopiya), 2017, 122, 906-911.	0.2	1
60	Effect of the sintering temperature on microstructure and optical properties of reactive sintered $YAG:Sm^{3+}$ ceramics. Optical Materials: X, 2022, 13, 100131.	0.3	1
61	A study of the induced helical pitch in a reentrant nematic mixture. Liquid Crystals, 1990, 7, 595-599.	0.9	0
62	Structural aspect of the transformation of mesogens to mesophases. X-ray crystallographic investigation and calculation of the energy of cholesterol p-n-hexadecyloxybenzoate crystals. Journal of Structural Chemistry, 1991, 31, 746-753.	0.3	0
63	Unusual dependence of the effectiveness of spectral sensitization of the photoconductivity of polycrystalline ZnO on the dye concentration in a mixed monolayer on a semiconductor surface. JETP Letters, 1996, 64, 186-190.	0.4	0
64	Isomorphous substitution and luminescence properties of haloapatites synthesized by the low-temperature method. Crystallography Reports, 2008, 53, 1256-1260.	0.1	0
65	SEARCH FOR RARE PROCESSES AT GRAN SASSO. , 2009, , .		0
66	Search for rare nuclear decays with HPGe detectors at the STELLA facility of the LNGS. , 2013, , .		0
67	Specific features of the structure of ZnO nanocrystals grown in pores of Y_2O_3 spherical matrices. Crystallography Reports, 2015, 60, 293-298.	0.1	0
68	Effect of microstructural features on the laser efficiency of $Nd^{3+}:Y_3Al_5O_{12}$ ceramics. Quantum Electronics, 2015, 45, 819-822.	0.3	0
69	Influence of Time-Temperature Parameters on the Structure and Photoluminescence of $(Y_{1-x}Eu_x)_2O_3$ Crystalline Spheres. Journal of Materials Engineering and Performance, 2015, 24, 859-863.	1.2	0
70	$Nd^{3+}:YAG$ Ceramic Materials with Efficient Laser Emission under Diode-Laser Pumping. , 2017, , .		0