

Aleksandr Tolmachev

List of Publications by Year in descending order

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#	ARTICLE	IF	CITATIONS
1	Effect of the sintering temperature on microstructure and optical properties of reactive sintered YAG:Sm ³⁺ ceramics. <i>Optical Materials: X</i> , 2022, 13, 100131.	0.3	1
2	A novel IR-transparent Ho ³⁺ :Y ₂ O ₃ @MgO nanocomposite ceramics for potential laser applications. <i>Ceramics International</i> , 2021, 47, 1399-1406.	2.3	6
3	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
4	Influence of sintering temperature on structural and optical properties of Y ₂ O ₃ @MgO composite SPS ceramics. <i>Ceramics International</i> , 2020, 46, 6537-6543.	2.3	33
5	Formation peculiarities and optical properties of highly-doped (Y _{0.86} La _{0.09} Yb _{0.05}) ₂ O ₃ transparent ceramics. <i>Ceramics International</i> , 2019, 45, 16002-16007.	2.3	6
6	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
7	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
8	Transparent 4 at% Nd ³⁺ :Y ₃ Al ₅ O ₁₂ ceramic by reactive spark plasma sintering. <i>AIP Conference Proceedings</i> , 2017, , .	0.3	6
9	Spontaneous luminescence of Eu ³⁺ ions in porous Y ₂ O ₃ nanospheres. <i>Optics and Spectroscopy (English Translation of Optika i Spektroskopiya)</i> , 2017, 122, 906-911.	0.2	1
10	Luminescence of Eu ³⁺ rare-earth ions in Lu ₂ O ₃ nanospheres. <i>JETP Letters</i> , 2017, 106, 145-151.	0.4	4
11	Nd ³⁺ :YAG Ceramic Materials with Efficient Laser Emission under Diode-Laser Pumping. , 2017, , .		0
12	Synthesis, morphology and structure of the dense (Y _{1-x} Eu _x) ₂ O ₃ spherical shape particles. <i>Crystal Research and Technology</i> , 2015, 50, 621-625.	0.6	2
13	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
14	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
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	Nd ³⁺ :Y ₃ Al ₅ O ₁₂ laser ceramics: Influence of the size of yttrium oxide particles on sintering. <i>Crystallography Reports</i> , 2015, 60, 299-305.	0.1	10
17	Specific features of the structure of ZnO nanocrystals grown in pores of Y ₂ O ₃ spherical matrices. <i>Crystallography Reports</i> , 2015, 60, 293-298.	0.1	0
18	Effect of microstructural features on the laser efficiency of Nd ³⁺ :Y ₃ Al ₅ O ₁₂ ceramics. <i>Quantum Electronics</i> , 2015, 45, 819-822.	0.3	0

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19	Influence of Time-Temperature Parameters on the Structure and Photoluminescence of $(Y_{1-x}Eu_x)Y_2O_3$ Crystalline Spheres. <i>Journal of Materials Engineering and Performance</i> , 2015, 24, 859-863.	1.2	0
20	Transformation-assisted consolidation of $Y_2O_3:Eu^{3+}$ nanospheres as a concept to optical nanograined ceramics. <i>Ceramics International</i> , 2014, 40, 3561-3569.	2.3	18
21	Size-dependent luminescence of spherical $Y_2O_3:Er$ nanoparticles. <i>Inorganic Materials</i> , 2014, 50, 1099-1103.	0.2	6
22	Geometry effect on spontaneous emission decay in nanosized $Y_2O_3:Eu^{3+}$ particles. <i>Optical Materials</i> , 2014, 37, 714-717.	1.7	7
23	Nanopowders M_2O_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
24	Search for rare nuclear decays with HPGe detectors at the STELLA facility of the LNGS. , 2013, , .		0
25	Searches for neutrinoless resonant double electron captures at LNGS. <i>Journal of Physics: Conference Series</i> , 2012, 375, 042024.	0.3	2
26	Temperature dependence of the luminescence of $Li_6Gd_xY_{1-x}(BO_3)_3:Eu$ crystals. <i>Optics and Spectroscopy (English Translation of Optika i Spektroskopiya)</i> , 2012, 113, 63-70.	0.2	16
27	Optical properties of spherical monodisperse Y_2O_3-ZnO nanoparticles. <i>Physics of the Solid State</i> , 2012, 54, 2260-2265.	0.2	4
28	Lasing in spherically shaped Y_2O_3-ZnO nanocomposites. <i>Semiconductors</i> , 2012, 46, 1072-1078.	0.2	9
29	Double \hat{I}^2 experiments with the help of scintillation and HPGe detectors at Gran Sasso. , 2011, , .		1
30	Composite phosphor films based on spherical $Lu_2O_3:Eu^{3+}$ nanoparticles. <i>Technical Physics Letters</i> , 2011, 37, 174-177.	0.2	3
31	Luminescence and thermally stimulated recombination processes in $Li_6Gd(BO_3)_3:Ce^{3+}$ crystals. <i>Optics and Spectroscopy (English Translation of Optika i Spektroskopiya)</i> , 2011, 110, 266-276.	0.2	19
32	Luminescence and recombination processes in bulky $Li_6Gd_xY_{1-x}(BO_3)_3:Eu$ crystals. <i>Optics and Spectroscopy (English Translation of Optika i Spektroskopiya)</i> , 2011, 111, 441-450.	0.2	6
33	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
34	Spontaneous and stimulated red luminescence of $Lu_2O_3:Eu$ nanocrystals. <i>Physics of the Solid State</i> , 2011, 53, 1263-1268.	0.2	7
35	Effect of the geometric shape of $Lu_2O_3:Eu$ spherical nanocrystals on their spontaneous luminescence. <i>Physics of the Solid State</i> , 2011, 53, 1895-1901.	0.2	12
36	Photoluminescence properties of core-shell $SiO_2/Lu_2O_3:Eu$ monodisperse heteronanoparticles. <i>Physics of the Solid State</i> , 2010, 52, 2385-2391.	0.2	5

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37	Change of the luminescence decay time for Lu ₂ O ₃ : Eu nanocrystals embedded in synthetic opal. <i>Physics of the Solid State</i> , 2010, 52, 2510-2517.	0.2	6
38	Synthesis and features of the structure and luminescence of monodisperse SiO ₂ /(Lu ^{1-x} Eu ^x) ₂ O ₃ (x =) <i>Tj ETQq0,0,0 rgBTJ/Overlock</i>	0.2	1
39	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
40	Luminescent properties of europium-activated yttrium gadolinium phosphates. <i>Inorganic Materials</i> , 2009, 45, 423-427.	0.2	10
41	Spherical core-shell structured nanophosphors on the basis of europium-doped lutetium compounds. <i>Nanotechnology</i> , 2009, 20, 325601.	1.3	26
42	Production of the Y ₃ Al ₅ O ₁₂ transparent nanostructured ceramics. <i>Journal of Superhard Materials</i> , 2009, 31, 252-259.	0.5	10
43	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
44	SEARCH FOR RARE PROCESSES AT GRAN SASSO. , 2009, , .		0
45	Fluorescent dye N,N'-dioctadecylrhodamine as a new interfacial acid-base indicator. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2008, 69, 1125-1129.	2.0	15
46	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
47	Isomorphous substitution and luminescence properties of haloapatites synthesized by the low-temperature method. <i>Crystallography Reports</i> , 2008, 53, 1256-1260.	0.1	0
48	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
49	Features of strontium tetraborate synthesis by means of borate rearrangement. <i>Inorganic Materials</i> , 2008, 44, 1345-1348.	0.2	5
50	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
51	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
52	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
53	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
54	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

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55	Slip and cleavage systems in the new crystal Li ₆ YB ₃ O ₉ . Crystallography Reports, 2005, 50, 982-985.	0.1	6
56	Growth of single crystals of Li ₆ Y _{1-x} Eux(BO ₃) ₃ (x = 0-1) solid solutions by the Czochralski method. Crystallography Reports, 2005, 50, S88-S91.	0.1	14
57	Synthesis and thermally stimulated luminescence of polycrystalline Sr _{1-x} EuxB ₄ O ₇ . Crystallography Reports, 2005, 50, S141-S144.	0.1	4
58	Effect of Growth Conditions on the Structural Properties of Calcium Phosphate Coatings Prepared in the System CaCl ₂ -KH ₂ PO ₄ -KOH-HCl-H ₂ O. Inorganic Materials, 2005, 41, 864-868.	0.2	1
59	Thermostimulated luminescence from single crystals of modified lithium gadolinium orthoborate Li _{6-x} NaxGd(BO ₃) ₃ :Ce. Technical Physics Letters, 2004, 30, 976-978.	0.2	15
60	Macro- and Microdefects in Czochralski-Grown Li ₆ GdB ₃ O ₉ and Li _{6-x} NaxGdB ₃ O ₉ Single Crystals. Inorganic Materials, 2004, 40, 856-859.	0.2	7
61	Effects of membranotropic agents on mono- and multilayer structures of dipalmitoylphosphatidylcholine. European Biophysics Journal, 2002, 31, 554-558.	1.2	6
62	Oscillations of the absorbance of PbS nanocrystals grown in situ in Langmuir-Blodgett films of lead stearate. JETP Letters, 2002, 75, 135-137.	0.4	3
63	Radiation-stimulated point defects in Li ₂ B ₄ O ₇ single crystals. Technical Physics Letters, 1999, 25, 709-711.	0.2	7
64	Molecular structural features of unsymmetrical ortho analogs of POPOP. Chemistry of Heterocyclic Compounds, 1997, 33, 1341-1349.	0.6	5
65	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
66	Structuring of tricarbocyanine dye molecules in Langmuir-Blodgett films. Russian Chemical Bulletin, 1995, 44, 1232-1236.	0.4	4
67	Order in amphiphilic polyimides: Cast and Langmuir films. Makromolekulare Chemie Macromolecular Symposia, 1991, 46, 277-282.	0.6	3
68	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
69	A study of the induced helical pitch in a reentrant nematic mixture. Liquid Crystals, 1990, 7, 595-599.	0.9	0
70	Invited Lecture. Helical twisting in cholesteric mesophases: Molecular structure and microscopic description. Liquid Crystals, 1989, 5, 877-888.	0.9	17