Oleg Sidletskiy

List of Publications by Year
in descending order

121 papers	1,669 citations	331670 21 h-index	434195 31 g-index
124 all docs	124 docs citations	124 times ranked	1022 citing authors

#	Article	IF	Citations
1	Structureâ€“Property Correlations in a Ce-Doped (Lu,Gd)₂SiO₅:Ce Scintillator. Crystal Growth and Design, 2012, 12, 4411-4416.	3.0	59
2	Structure and scintillation yield of Ce-doped Alâ€“Ga substituted yttrium garnet. Materials Research Bulletin, 2012, 47, 3249-3252.	5.2	59
3	Aluminum and Gallium Substitution in Yttrium and Lutetium Aluminumâ€“Gallium Garnets: Investigation by Single-Crystal NMR and TSL Methods. Journal of Physical Chemistry C, 2016, 120, 24400-24408.	3.1	51
4	Impact of Lu/Gd ratio and activator concentration on structure and scintillation properties of LGSO:Ce crystals. Journal of Crystal Growth, 2010, 312, 601-606.	1.5	45
5	Scintillation and luminescent properties of undoped and Ce3+ doped Y2SiO5 and Lu2SiO5 single crystalline films grown by LPE method. Optical Materials, 2012, 34, 1969-1974.	3.6	41
6	Luminescent and scintillation properties of orthotantalates with common formulae RETaO4 (RE=Y, Sc,) Tj ETQq0 0 0 rgBT /Overlock 10 T 2013, 178, 1491-1496.	3.5	41
7	High-perfomance Ce-doped multicomponent garnet single crystalline film scintillators. Physica Status Solidi - Rapid Research Letters, 2015, 9, 489-493.	2.4	41
8	Gadolinium pyrosilicate single crystals for gamma ray and thermal neutron monitoring. Radiation Measurements, 2010, 45, 365-368.	1.4	39
9	Growth of bulk gadolinium pyrosilicate single crystals for scintillators. Journal of Crystal Growth, 2011, 318, 805-808.	1.5	39
10	Radioactive contamination of SrI2(Eu) crystal scintillator. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2012, 670, 10-17.	1.6	38
11	Growth and luminescent properties of Lu2SiO5 and Lu2SiO5:Ce single crystalline films. Optical Materials, 2011, 33, 846-852.	3.6	37
12	Oxygen-vacancy donor-electron center in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi mathvariant="normal">Y</mml:mi><mml:mn>3</mml:mn></mml:msub><mml:msub><mml:mi>Al</mml:mi><mml:mn>5</mml:mn></m mathvariant="normal">O</mml:mi><mml:mn>12</mml:mn></mml:msub></mml:mrow></mml:math> garnet crystals: Electron paramagnetic resonance and dielectric spectroscopy study. Physical Review B, 2020, 101, .	3.2	33
13	Lightâ€yield improvement trends in mixed scintillation crystals. Physica Status Solidi (A) Applications and Materials Science, 2014, 211, 2384-2387.	1.8	31
14	New, dense, and fast scintillators based on rare-earth tantalo-niobates. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2014, 764, 227-231.	1.6	28
15	Engineering of bulk and fiber-shaped YAGG:Ce scintillator crystals. CrystEngComm, 2017, 19, 1001-1007.	2.6	27
16	Eu Doped and Eu, Tl Co-Doped NaI Scintillators. IEEE Transactions on Nuclear Science, 2010, 57, 1233-1235.	2.0	26
17	Growth and luminescent properties of Lu2SiO5:Ce and (Lu1â^'xGdx)2SiO5:Ce single crystalline films. Journal of Crystal Growth, 2011, 337, 72-80.	1.5	26
18	Development of Composite Scintillators Based on Single Crystalline Films and Crystals of Ce³⁺-Doped (Lu,Gd)₃(Al,Ga)₅O₁₂ Mixed Garnet Compounds. Crystal Growth and Design, 2018, 18, 1834-1842.	3.0	26

#	Article	IF	Citations
19	Luminescent properties of Y 3 Al 5â˜’x Ga x O 12 :Ce crystals. Journal of Luminescence, 2014, 156, 102-107.	3.1	25
20	Growth and characterization of large CeAlO3 perovskite crystals. Journal of Crystal Growth, 2015, 430, 116-121.	1.5	25
21	On the mechanisms of radiation damage and prospects of their suppression in complex metal oxides. Physica Status Solidi (B): Basic Research, 2013, 250, 261-270.	1.5	24
22	Luminescence Properties of the Yttrium and Gadolinium Tantalo-Niobates. Solid State Phenomena, 0, 230, 172-177.	0.3	23
23	Growth and scintillation properties of gadolinium and yttrium orthovanadate crystals. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2012, 664, 299-303.	1.6	22
24	Ce-doped Li6Ln(BO3)3 (Ln=Y, Gd) Single crystals fibers grown by micro-pulling down method and luminescence properties. Optical Materials, 2013, 35, 868-874.	3.6	21
25	Single Crystalline Film Scintillators Based on the Orthosilicate, Perovskite and Garnet Compounds. IEEE Transactions on Nuclear Science, 2012, 59, 2260-2268.	2.0	20
26	Crystal Composition and Afterglow in Mixed Silicates: The Role of Melting Temperature. Physical Review Applied, 2015, 4, .	3.8	20
27	Control of optical properties of YAG crystals by thermal annealing. Journal of Crystal Growth, 2018, 483, 195-199.	1.5	20
28	Trends in Search for Bright Mixed Scintillators. Physica Status Solidi (A) Applications and Materials Science, 2018, 215, 1701034.	1.8	20
29	Gd-Bearing Composite Scintillators as the New Thermal Neutron Detectors. IEEE Transactions on Nuclear Science, 2011, 58, 339-346.	2.0	19
30	Mechanisms of luminescence decay in YAG-Ce,Mg fibers excited by Î³- and X-rays. Optical Materials, 2019, 92, 341-346.	3.6	19
31	Lu2SiO5:Ce and Y2SiO5:Ce single crystals and single crystalline film scintillators: Comparison of the luminescent and scintillation properties. Radiation Measurements, 2013, 56, 84-89.	1.4	18
32	LGSO:Ce scintillation crystal optimization by thermal treatment. Materials Research Bulletin, 2014, 52, 25-29.	5.2	18
33	Growth and luminescent properties of Ce and Ceâ€“Tb doped (Y,Lu,Gd)2SiO5:Ce single crystalline films. Journal of Crystal Growth, 2014, 401, 577-583.	1.5	18
34	Progress in fabrication of long transparent YAG:Ce and YAG:Ce,Mg single crystalline fibers for HEP applications. CrystEngComm, 2019, 21, 1728-1733.	2.6	18
35	Irradiation effects on Gd3Al2Ga3O12 scintillators prospective for application in harsh irradiation environments. Radiation Physics and Chemistry, 2019, 164, 108365.	2.8	18
36	GAGG:Ce composite scintillator for X-ray imaging. Optical Materials, 2020, 109, 110305.	3.6	18

#	Article	IF	Citations
37	Modification of NaI crystal scintillation properties by Eu-doping. Optical Materials, 2010, 32, 1345-1348.	3.6	17
38	Growth of long undoped and Ce-doped LuAG single crystal fibers for dual readout calorimetry. Journal of Crystal Growth, 2016, 435, 31-36.	1.5	17
39	Fast ultradense GdTa1-xNbxO4 scintillator crystals. Optical Materials, 2017, 66, 332-337.	3.6	17
40	Radiation-resistant composite scintillators based on GSO and GPS grains. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2017, 841, 124-129.	1.6	17
41	Optical Transmission and Conductivity of Nematic Liquid Crystals Containing Dispersed Multiwall Nanotubes. Molecular Crystals and Liquid Crystals, 2007, 478, 127/[883]-133/[889].	0.9	16
42	Heat transfer and convection in Czochralski growth of large BGO Crystals. Journal of Crystal Growth, 2009, 311, 3933-3937.	1.5	16
43	Growth and characterization of tetragonal structure modification of Î²-Gd2Si2O7:Ce. Journal of Alloys and Compounds, 2011, 509, 8478-8482.	5.5	16
44	Development of scintillating screens based on the single crystalline films of Ce doped (Gd,Y)3(Al,Ga,Sc)5O12 multi-component garnets. Journal of Crystal Growth, 2014, 401, 532-536.	1.5	16
45	Comparison of the scintillation and luminescence properties of the (Lu_{1âˆ’<i>x</i>}Gd_{<i>x</i>})₂SiO₅:Ce single crystal scintillators. Journal Physics D: Applied Physics, 2014, 47, 365304.	2.8	16
46	Nonlinear behavior of structural and luminescent properties in Gd(NbxTa1-x)O4 mixed crystals. Optical Materials, 2018, 76, 382-387.	3.6	16
47	Epitaxial growth of composite scintillators based on Tb3Al5O12â€‰:â€‰Ce single crystalline films and Gd3Al2.5Ga2.5O12â€‰:â€‰Ce crystal substrates. CrystEngComm, 2018, 20, 3994-4002.	2.6	16
48	Intrinsic luminescence of Lu2SiO5 (LSO) and Y2SiO5 (YSO) orthosilicates. Journal of Luminescence, 2013, 137, 204-207.	3.1	15
49	Free carrier absorption in self-activated PbWO4 and Ce-doped Y3(Al0.25Ga0.75)3O12 and Gd3Al2Ga3O12 garnet scintillators. Optical Materials, 2016, 58, 461-465.	3.6	15
50	Growth and characterization of Ce-doped YAG and LuAG fibers. Optical Materials, 2017, 65, 66-68.	3.6	15
51	OSL dosimetric properties of cerium doped lutetium orthosilicates. Radiation Measurements, 2014, 71, 139-142.	1.4	14
52	Radiation damage effects in Y2SiO5:Ce scintillation crystals under Î³-quanta and 24 GeV protons. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2015, 783, 117-120.	1.6	14
53	Impact of Carbon Co-Doping on the Optical and Scintillation Properties of a YAG:Ce Scintillator. Crystal Growth and Design, 2021, 21, 3063-3070.	3.0	14
54	Absolute Light Yield Determination for LGSO:Ce, CWO, ZnSe:Al, and GSO:Ce Crystals. IEEE Transactions on Nuclear Science, 2010, 57, 1236-1240.	2.0	13

#	ARTICLE	IF	CITATIONS
55	Features of YAG crystal growth under Ar+CO reducing atmosphere. Journal of Crystal Growth, 2016, 449, 104-107.	1.5	13
56	LPE Growth of Single Crystalline Film Scintillators Based on Ce3+ Doped Tb3â^'xGdxAl5â^'yGayO12 Mixed Garnets. Crystals, 2017, 7, 262.	2.2	13
57	Growth of Ce-doped LGSO fiber-shaped crystals by the micro pulling down technique. Journal of Crystal Growth, 2015, 412, 95-102.	1.5	12
58	Composition engineering of single crystalline films based on the multicomponent garnet compounds. Optical Materials, 2016, 61, 3-10.	3.6	12
59	Drastic Scintillation Yield Enhancement of YAG:Ce with Carbon Doping. Physica Status Solidi (A) Applications and Materials Science, 2018, 215, 1800122.	1.8	12
60	Composite Detectors Based on Single-Crystalline Films and Single Crystals of Garnet Compounds. Materials, 2022, 15, 1249.	2.9	12
61	Growth of LGSO: Ce crystals by the Czochralski method. Crystallography Reports, 2009, 54, 1256-1260.	0.6	11
62	Photoinduced refractive index variation within picosecond laser pulses excitation as the indicator of oxyorthosilicates single crystals composition modification. Nanoscale Research Letters, 2015, 10, 102.	5.7	11
63	Composition effect in luminescence properties of Y(NbxTa1-x)O4 mixed crystals. Optical Materials, 2018, 80, 247-252.	3.6	11
64	Liquid phase epitaxy growth of high-performance composite scintillators based on single crystalline films and crystals of LuAG. CrystEngComm, 2020, 22, 3713-3724.	2.6	11
65	Garnet Crystal Growth in Non-precious Metal Crucibles. Springer Proceedings in Physics, 2019, , 83-95.	0.2	11
66	Scintillating Screens Based on the Single Crystalline Films of Multicomponent Garnets: New Achievements and Possibilities. IEEE Transactions on Nuclear Science, 2016, 63, 497-502.	2.0	10
67	Novel All-Solid-State Composite Scintillators Based on the Epitaxial Structures of LuAG Garnet Doped With Pr, Sc, and Ce Ions. IEEE Transactions on Nuclear Science, 2018, 65, 2114-2119.	2.0	10
68	Comparative study of TL and OSL properties of LSO and LSO:Ce single crystals andÂsingle crystalline films. Radiation Measurements, 2013, 56, 196-199.	1.4	9
69	Improving of LSO(Ce) Scintillator Properties by Co-Doping. IEEE Transactions on Nuclear Science, 2013, 60, 1427-1431.	2.0	9
70	Comparative analysis of the scintillation and thermoluminescent properties of Ce-doped LSO and YSO crystals and films. Optical Materials, 2014, 36, 1715-1719.	3.6	9
71	Micro-pulling-down growth of long YAG- and LuAG-based garnet fibres: advances and bottlenecks. CrystEngComm, 2021, 23, 2633-2643.	2.6	9
72	Impact of codoping on structure, optical and scintillation properties of Gd2Si2O7-based crystalsImpact of codoping on structure, optical and scintillation properties of Gd2Si2O7-based crystals. Functional Materials, 2013, 20, 15-19.	0.1	9

#	Article	IF	Citations
73	Growth and Characterization of SrI₂:Eu Crystals Fabricated by the Czochralski Method. IEEE Transactions on Nuclear Science, 2018, 65, 2174-2177.	2.0	8
74	Growth and scintillation performances of SrI2:Eu with low activator concentration. Journal of Crystal Growth, 2019, 521, 41-45.	1.5	8
75	Structure and role of carbon-related defects in yttrium aluminum garnet. Optical Materials, 2021, 111, 110561.	3.6	8
76	Luminescent and Scintillation Properties of CeAlO3 Crystals and Phase-Separated CeAlO3/CeAl11O18 Metamaterials. Crystals, 2019, 9, 296.	2.2	7
77	Thermoluminescent Properties of Undoped and Ce-Doped Lutetium Orthosilicate and Yttrium Orthosilicate Single Crystals and Single Crystalline Films Scintillators. IEEE Transactions on Nuclear Science, 2014, 61, 276-281.	2.0	6
78	Optical study of Y3-xGdxAl5O12:Ce crystals grown from the melt. Optical Materials, 2019, 96, 109283.	3.6	6
79	Thermal conditions for large alkali-halide crystal growth by the continuous feed method. Optical Materials, 2007, 30, 109-112.	3.6	5
80	Evaluation of LGSO:Ce scintillator for high energy physics experiments. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2014, 735, 620-623.	1.6	5
81	Confocal Microscopy of Luminescence Inhomogeneity in LGSO:Ce Scintillator Crystal. IEEE Transactions on Nuclear Science, 2014, 61, 343-347.	2.0	5
82	Optimization of heating conditions during Cz BGO crystal growth. Journal of Crystal Growth, 2014, 407, 42-47.	1.5	5
83	Non-Linear Optical Phenomena in Detecting Materials as a Possibility for Fast Timing in Detectors of Ionizing Radiation. IEEE Transactions on Nuclear Science, 2016, 63, 2979-2984.	2.0	5
84	Development of YAG:Ce,Mg and YAGG:Ce Scintillation Fibers. Springer Proceedings in Physics, 2017, , 114-128.	0.2	5
85	New types of composite scintillators based on the single crystalline films and crystals of Gd3(Al,Ga)5O12:Ce mixed garnets. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2021, 264, 114909.	3.5	5
86	The crystal growth of ortho- and pyrosilicates from W and Mo crucibles. CrystEngComm, 2021, 23, 360-367.	2.6	5
87	Effect of Carbon Doping on Fâ€Type Defects in YAG and YAG:Ce Crystals. Physica Status Solidi (B): Basic Research, 2021, 258, 2100325.	1.5	5
88	New efficient OSL detectors based on the crystals of Ce3+ doped Gd3Al5âˆ’xGaxO12 mixed garnet. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2021, 273, 115448.	3.5	5
89	Gd-bearing composite scintillators as the new thermal neutron detectors. , 2009, , .		4
90	Growth and luminescent properties of Lu2SiO5and Lu2SiO5:Ce single crystalline films. IOP Conference Series: Materials Science and Engineering, 2010, 15, 012010.	0.6	4

#	Article	IF	Citations
91	Development of Composite Scintillators Based on the LuAG: Pr Single Crystalline Films and LuAG:Sc Single Crystals. Crystals, 2021, 11, 846.	2.2	4
92	Engineering of mixed Bi4(GexSi1-x)3O12 scintillation crystals. Functional Materials, 2015, 22, 423-428.	0.1	4
93	Defects related luminescence in yttrium-aluminum garnet crystals. Functional Materials, 2016, 23, 191-196.	0.1	4
94	Characterization of mixed Bi4(Ge<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML") Tj ETQq0 0 0 rgBT /Overlock 10 Tf 5	1.6	4
95	Novel Scintillating Screens Based on the Single Crystalline Films of Ce Doped Multi-Component $({m) Tj ETQq1 1 0.784314 rgBT /Overl Science, 2014, 61, 439-442.	2.0	3
96	Thermally stimulated luminescence of undoped and Ce3+-doped Gd2SiO5 and (Lu,Gd)2SiO5 single crystals. Journal of Luminescence, 2015, 159, 229-237.	3.1	3
97	Luminescence and scintillation timing characteristics of (Lu x Gd 2â˘'x)SiO 5 :Ce single crystals. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers,	1.6	3
98	Radiation tolerant YAG:Ce scintillation crystals grown under reducing <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" id="d1e821" altimg="si3.svg"><mml:mrow><mml:mi mathvariant="normal">Ar</mml:mi><mml:mo linebreak="goodbreak" linebreakstyle="after">+</mml:mo><mml:mi mathvariant="normal">CO</mml:mi></mml:mrow></mml:math> atmosphere. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equip[illegible], 2017, 844, 116-120	1.6	3
99	Mechanical Properties and Lattice Parameters of Lu_{2x}Gd_{2(1-x)}SiO₅:Ce Scintillation Crystals. Acta Physica Polonica A, 2010, 117, 146-149.	0.5	3
100	Characterization of bismuth germanate crystals grown by EFG method. Crystal Research and Technology, 2015, 50, 150-154.	1.3	2
101	Luminescence and scintillation properties of Lu0.8Gd1.2SiO5:Ce and Lu1.8Gd0.2SiO5:Ce single crystals: A comparative study. Radiation Measurements, 2016, 93, 1-6.	1.4	2
102	Melt composition and heat treatment at growth of Gd2Si2O7 â€" based crystals. Functional Materials, 2013, 20, 234-238.	0.1	2
103	Combined composite scintillation detector for separate measurements of fast and thermal neutrons. , 2010, , .		1
104	Czochralski growth and characterization of mixed BGO-BSO crystals. , 2014, , .		1
105	Energy Relaxation in LSO and LGSO Crystals Studied in the VUV Range. IEEE Transactions on Nuclear Science, 2014, 61, 290-292.	2.0	1
106	Nucleation of the Plasticity at Nanodeformation of the Y3Al5O12 Yttrium-Aluminum Garnet. Journal of Superhard Materials, 2018, 40, 75-81.	1.2	1
107	Intermolecular interactions in binary mixtures of two liquid crystals and mixtures liquid crystal--nonmesogenous compound. , 2002, , .		0
108	Title is missing!. Instruments and Experimental Techniques, 2002, 45, 576-578.	0.5	0

#	Article	IF	Citations
109	LPE growth and luminescent properties of Ce doped A<inf>2S</inf>iO<inf>5</inf>:Ce (A = Lu, Gd, Y) single crystalline films. , 2012, , .		0
110	TSL properties of A<inf>2</inf>SiO<inf>5</inf> and A<inf>2</inf>SiO<inf>5</inf>:Ce (A=Y, Lu) single crystals and single crystalline films. , 2012, , .		0
111	Impact of composition modification of oxyorthosilicates single crystals on pulsed laser radiation self-action effect manifestation. , 2014, , .		0
112	Modifying the properties of crystals in the transition from pure to mixed perovskites. , 2014, , .		0
113	Luminescent and scintillation characteristics of RE(Nb<inf>x</inf>Ta<inf>1−x</inf>)O<inf>4</inf> compounds (RE=Y or Gd). , 2014, , .		0
114	Scintillating screens based on the single crystalline films of orthosilicates and multicomponent garnets. , 2014, , .		0
115	Obtaining of optically perfect YAG crystals grown from Mo crucibles. , 2014, , .		0
116	Phenomenological approach to prediction of scintillation yield in mixed crystals. , 2014, , .		0
117	Conference comments by the Editors. IEEE Transactions on Nuclear Science, 2014, 61, 228-228.	2.0	0
118	Potential of non-linear optical phenomena for fast timing in detectors of ionizing radiation. , 2015, , .		0
119	Concentration and composition of gas inclusions in some oxide crystals. Journal of Crystal Growth, 2017, 459, 189-193.	1.5	0
120	Experimental studies of heat transfer between crystal, crucible elements, and surrounding media when growing large-size alkali halide ingots with melt feeding. WIT Transactions on Engineering Sciences, 2006, , .	0.0	0
121	Peculiarities of the solid-state synthesis of yttrium and gadolinium orthovanadates raw material. Functional Materials, 2015, 22, 299-303.	0.1	0