

Akira Yoshikawa

List of Publications by Year in descending order

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115
papers

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147801

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115
all docs

115
docs citations

115
times ranked

2234
citing authors

#	ARTICLE	IF	CITATIONS
1	Temperature Characteristics of Resonance Frequency for Double-Layered Thickness-Shear Resonator. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2022, 69, 870-877.	3.0	3
2	Growth of 6-Li -enriched LiCl/BaCl ₂ eutectic as a novel neutron scintillator. Japanese Journal of Applied Physics, 2022, 61, SC1038.	1.5	11
3	Growth of Tb-doped BaCl ₂ /NaCl/KCl ternary eutectic and its luminescence properties. Journal of Crystal Growth, 2022, 580, 126467.	1.5	3
4	Crystal growth and luminescence properties of phenanthrene for neutron detection. Journal of Crystal Growth, 2022, 581, 126494.	1.5	0
5	Growth and scintillation properties of Ce doped LiBr/LaBr	1.6	8
6	Microstructure and thermoelectric properties of La-doped SrTiO ₃ /TiO ₂ eutectic crystals grown by Micro-Pulling-Down method. Journal of Crystal Growth, 2022, 583, 126551.	1.5	4
7	Composite Detectors Based on Single-Crystalline Films and Single Crystals of Garnet Compounds. Materials, 2022, 15, 1249.	2.9	12
8	Growth of Zn ₃ Ta ₂ O ₈ crystal scintillator by a novel melt growth technique named shielded arc melting method. Optical Materials: X, 2022, 14, 100149.	0.8	1
9	Growth of thallium-doped CsI/CsCl/KCl eutectics and their scintillation properties. Optical Materials: X, 2022, , 100159.	0.8	0
10	Optical, luminescence and scintillation properties of Mg ²⁺ -codoped (Lu,Y) ₃ Al ₂ Ga ₃ O ₁₂ :Pr garnet crystals: The effect of Y admixture. Radiation Physics and Chemistry, 2022, 201, 110400.	2.8	5
11	Temperature dependence of radio- and photoluminescence and scintillation properties of Y _{0.6} Gd _{2.4} Al ₂ Ga ₃ O ₁₂ :Ce,Mg single crystal. Optical Materials, 2022, 131, 112662.	3.6	1
12	Development of large size crystal growth technology of oxide eutectic scintillator and a proto-type Talbot-Lau imaging system. Japanese Journal of Applied Physics, 2021, 60, SBBK04.	1.5	11
13	Investigations on the electric-dipole allowed $4f^2 5d \rightarrow 4f^3$ broadband emission of Nd ³⁺ -doped 20Al(PO ₃) ₃ -80LiF glass for potential VUV scintillator application. Journal of Alloys and Compounds, 2021, 856, 158096.	5.5	6
14	Effect of W and Mo co-doping on the photo- and thermally stimulated luminescence and defects creation processes in Gd ₃ (Ga,Al) ₅ O ₁₂ :Ce crystals. Optical Materials, 2021, 114, 110923.	3.6	4
15	Development of the Multi-Cubic $\hat{\Gamma}^3$ -ray spectrometer and its performance under intense ¹³⁷ Cs and ⁶⁰ Co radiation fields. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2021, 1010, 165544.	1.6	0
16	The scintillation performance of one-inch diameter CsI/CsCl/NaCl eutectics grown by the Czochralski method. Journal of Crystal Growth, 2021, 572, 126266.	1.5	14
17	Scintillation characteristics and temperature quenching of radio- and photoluminescence of Mg ²⁺ -codoped (Lu,Gd) ₃ Al _{2.4} Ga _{2.6} O ₁₂ :Ce garnet crystals. Optical Materials, 2021, 121, 111595.	3.6	4
18	Growth and scintillation properties of Tl-doped CsI/KI/KCl ternary eutectics. Journal of Crystal Growth, 2021, 573, 126287.	1.5	3

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19	Cs ₂ HfCl ₆ doped with Zr: Influence of tetravalent substitution on scintillation properties. Journal of Crystal Growth, 2021, 573, 126307.	1.5	4
20	1000Å optical ratiometric thermometer based on Er ³⁺ luminescence in yttrium gallium garnet. Journal of Alloys and Compounds, 2021, 886, 161188.	5.5	12
21	Growth and scintillation properties of Tl-doped CsI/CsCl/NaCl ternary eutectic scintillators. Japanese Journal of Applied Physics, 2021, 60, SBBK01.	1.5	8
22	Luminescence and scintillation properties of Mo co-doped Y _{0.8} Gd _{2.2} (Al _{5-x} Ga _x)O ₁₂ : Ce multicomponent garnet crystals. Optical Materials, 2021, 122, 111783.	3.6	2
23	Modified vertical Bridgman method: Time and cost effective tool for preparation of Cs ₂ HfCl ₆ single crystals. Journal of Crystal Growth, 2020, 533, 125479.	1.5	12
24	Cerium-doped gadolinium fine aluminum gallate in scintillation spectrometry. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2020, 979, 164464.	1.6	3
25	New Efficient Scintillating and Photoconversion Materials Based on the Self-Flux Grown Tb ₃ Al ₅ O ₁₂ :Ce Single Crystal. Physica Status Solidi - Rapid Research Letters, 2020, 14, 2000327.	2.4	6
26	Single-crystal growth, structure and luminescence properties of Cs ₂ HfCl ₃ Br ₃ . Optical Materials, 2020, 106, 109942.	3.6	5
27	Luminescence and Scintillation Properties of Mg ²⁺ -Codoped Lu _{0.6} Gd _{2.4} Al ₂ Ga ₃ O ₁₂ :Ce Single Crystal. IEEE Transactions on Nuclear Science, 2020, 67, 904-909.	2.0	9
28	Growth and Scintillation Properties of a New Red-Emitting Scintillator Rb ₂ Hf ₂ for the Fiber-Reading Radiation Monitor. IEEE Transactions on Nuclear Science, 2020, 67, 1055-1062.	2.0	7
29	Light Yield and Timing Characteristics of Lu ₂ Gd ₂ (Al _{5-x} Ga _x)O ₁₂ :Ce,Mg Single Crystals. IEEE Transactions on Nuclear Science, 2020, 67, 2295-2299.	2.0	4
30	Growth and Scintillation Properties of Directionally Solidified Ce:LaBr ₃ /AEBr ₂ (AE = Mg, Ca, Sr, Ba) Eutectic System. Crystals, 2020, 10, 584.	2.2	7
31	Fiber-read radiation monitoring system using an optical fiber and red-emitting scintillator for ultra-high-dose conditions. Applied Physics Express, 2020, 13, 047002.	2.4	14
32	Scintillation Characteristics of Mg ²⁺ -Codoped Y _{0.8} Gd _{2.2} (Al _{5-x} Ga _x)O ₁₂ :Ce Single Crystals. IEEE Transactions on Nuclear Science, 2020, 67, 910-914.	2.0	11
33	Bulk Single Crystal Growth of W Co-Doped Ce:Gd ₂ Ga ₂ Al ₅ O ₁₂ , by Czochralski Method. IEEE Transactions on Nuclear Science, 2020, 67, 1045-1048.	2.0	5
34	Performance Evaluation of Liquinert-Processed CeBr ₃ Crystals Coupled With a Multipixel Photon Counter. IEEE Transactions on Nuclear Science, 2020, 67, 988-993.	2.0	6
35	Development of Gamma-Ray Detector Arrays Consisting of Diced Eu-Doped SrI ₂ Scintillator Arrays and TSV-MPPC Arrays. IEEE Transactions on Nuclear Science, 2020, 67, 999-1002.	2.0	0
36	Composite Scintillators Based on the Films and Crystals of (Lu,Gd,La) ₂ Si ₂ O ₇ Pyrosilicates. IEEE Transactions on Nuclear Science, 2020, 67, 994-998.	2.0	2

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37	Crystal Growth and Scintillation Properties of Carbazole for Neutron Detection. IEEE Transactions on Nuclear Science, 2020, 67, 1027-1031.	2.0	4
38	Spectroscopic investigation of praseodymium and cerium co-doped 20Al(PO ₃) ₃ -80LiF glass for potential scintillator applications. Journal of Non-Crystalline Solids, 2019, 521, 119495.	3.1	13
39	Pulse-shape discrimination potential of new scintillator material: La-GPS:Ce. Journal of Instrumentation, 2019, 14, P06037-P06037.	1.2	2
40	Investigation of the Relation of Decay Time Differences and α - η Ratios for Newly Developed Scintillators. IEEE Transactions on Nuclear Science, 2019, 66, 2324-2328.	2.0	0
41	Ga for Al substitution effects on the garnet phase stability and luminescence properties of Gd ₃ GaAl _{5-x} O ₁₂ :Ce single crystals. Journal of Luminescence, 2019, 216, 116724.	3.1	26
42	Development of a high resolution LaGPS imaging detector with pulse shape discrimination capability of different types of radiations. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2019, 922, 8-18.	1.6	13
43	Development of a novel red-emitting cesium hafnium iodide scintillator. Radiation Measurements, 2019, 124, 54-58.	1.4	17
44	An ultrahigh spatial resolution radiation-imaging detector using 0.1 mm pixelated GAGG plate combined with 1 mm channel size Si-PM array. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2019, 919, 125-133.	1.6	9
45	Development of Composite Scintillators Based on Single Crystalline Films and Crystals of Ce ³⁺ -Doped (Lu,Gd) ₃ (Al,Ga) ₅ O ₁₂ Mixed Garnet Compounds. Crystal Growth and Design, 2018, 18, 1834-1842.	3.0	26
46	Luminescence and scintillation characteristics of (Gd _x Y _{3-x})Al ₂ Ga ₃ O ₁₂ :Ce (x=1,2,3) single crystals. Optical Materials, 2018, 76, 162-168.	3.6	21
47	Comparative Study of GdLu ₂ Al ₂ Ga ₃ O ₁₂ :Ce and GdY ₂ Al ₂ Ga ₃ O ₁₂ :Ce Scintillation Crystals for γ -Ray Detection. IEEE Transactions on Nuclear Science, 2018, 65, 2081-2084.	2.0	1
48	Afterglow and Quantum Tunneling in Ce-Doped Lutetium Aluminum Garnet. IEEE Transactions on Nuclear Science, 2018, 65, 2085-2089.	2.0	5
49	Influence of Mg-codoping, non-stoichiometry and Ga-admixture on LuAG:Ce scintillation properties. Optical Materials, 2018, 86, 213-232.	3.6	6
50	Needs, Trends, and Advances in Inorganic Scintillators. IEEE Transactions on Nuclear Science, 2018, 65, 1977-1997.	2.0	305
51	Growth and Luminescent Properties of Cs ₂ HfCl ₆ Scintillators Doped With Alkaline Earth Metals. IEEE Transactions on Nuclear Science, 2018, 65, 2169-2173.	2.0	8
52	Scintillation properties of Gd ₃ (Al _{5-x} Ga _x)O ₁₂ :Ce (x = 2.3, 2.6, 3.0) single crystals. Optical Materials, 2018, 81, 23-29.	3.6	17
53	Non-proportionality of GAGG:Ce scintillators down to 50 eV electron equivalent by application of alpha particle excitation. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2018, 898, 24-29.	1.6	5
54	Comprehensive Study on Ce-Doped (Gd, La) ₂ Si ₂ O ₇ Scintillator. IEEE Transactions on Nuclear Science, 2018, 65, 2136-2139.	2.0	7

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55	Optimization of Dopants and Scintillation Fibersâ€™ Diameter of $GdAlO_3/\alpha-Al_2O_3$ Eutectic for High-Resolution X-Ray Imaging. IEEE Transactions on Nuclear Science, 2018, 65, 2036-2040.	2.0	13
56	Timing capabilities of garnet crystals for detection of high energy charged particles. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2017, 852, 1-9.	1.6	32
57	Growth and scintillation properties of Eu doped $LiSr_3Li$ eutectics. Optical Materials, 2017, 68, 70-74.	3.6	23
58	Cesium hafnium chloride scintillator coupled with an avalanche photodiode photodetector. Journal of Instrumentation, 2017, 12, C02042-C02042.	1.2	13
59	Development of $Eu:Sr_2$ Scintillator Array for Gamma-Ray Imaging Applications. IEEE Transactions on Nuclear Science, 2017, 64, 1647-1651.	2.0	4
60	Single crystal growth of $Ce:Gd_3(Ga,Al)_5O_{12}$ with various Mg concentration and their scintillation properties. Journal of Crystal Growth, 2017, 468, 407-410.	1.5	15
61	Basic performance of Mg co-doped new scintillator used for TOF-DOI-PET systems. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2017, 842, 14-19.	1.6	5
62	Development of novel growth methods for halide single crystals. Optical Materials, 2017, 65, 46-51.	3.6	22
63	Luminescence and scintillation properties of Mg-codoped $LuAG:Pr$ single crystals annealed in air. Journal of Luminescence, 2017, 181, 277-285.	3.1	37
64	2 inch size Czochralski growth and scintillation properties of Li + co-doped $Ce:Gd_3Ga_3Al_2O_{12}$. Optical Materials, 2017, 65, 52-55.	3.6	18
65	Temperature Dependence on Scintillation Properties of $La-GPS(Ce)$. , 2017, , .		1
66	Growth and scintillation properties of 3 in. diameter Ce doped $Gd_3Ga_3Al_2O_{12}$ scintillation single crystal. Journal of Crystal Growth, 2016, 452, 81-84.	1.5	37
67	Field test around Fukushima Daiichi nuclear power plant site using improved $Ce:Gd_3(Al,Ga)_5O_{12}$ scintillator Compton camera mounted on an unmanned helicopter. Journal of Nuclear Science and Technology, 2016, 53, 1907-1918.	1.3	38
68	Crystal growth and luminescence properties of $Yb_2Si_2O_7$ infra-red emission scintillator. Optical Materials, 2016, 58, 14-17.	3.6	9
69	Large Size Czochralski Growth and Scintillation Properties of. IEEE Transactions on Nuclear Science, 2016, 63, 443-447.	2.0	49
70	Effect of Mg^{2+} ions co-doping on timing performance and radiation tolerance of Cerium doped $Gd_3Al_2Ga_3O_{12}$ crystals. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2016, 816, 176-183.	1.6	90
71	Growth of 2 Inch Eu-doped Sr_2 single crystals for scintillator applications. Journal of Crystal Growth, 2016, 452, 73-80.	1.5	13
72	Growth of 1.5-In Eu : Single Crystal and Scintillation Properties. IEEE Transactions on Nuclear Science, 2016, 63, 467-470.	2.0	10

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73	Czochralski growth of 2 in. Ce-doped (La,Gd) ₂ Si ₂ O ₇ for scintillator application. Journal of Crystal Growth, 2016, 452, 57-64.	1.5	6
74	Growth and luminescence properties of Eu-doped HfO ₂ /Al ₂ O ₃ eutectic scintillator. Journal of Rare Earths, 2016, 34, 796-801.	4.8	10
75	Scintillation properties of Zr co-doped Ce:(Gd, La) ₂ Si ₂ O ₇ grown by the Czochralski process. Radiation Measurements, 2016, 90, 162-165.	1.4	8
76	Timing characteristics of the scintillation response of Gd ₃ Al ₂ Ga ₃ O ₁₂ :Ce and Gd ₃ Al _{2.6} Ga _{2.4} O ₁₂ :Ce single crystal scintillators. Radiation Measurements, 2016, 87, 24-28.	1.4	5
77	Optical and scintillation properties of Ce ³⁺ -doped YGd ₂ Al _{5-x} Ga _x O ₁₂ (x = 2,3,4) single crystal scintillators. Journal of Luminescence, 2016, 169, 43-50.	3.1	31
78	A prototype of aerial radiation monitoring system using an unmanned helicopter mounting a GAGG scintillator Compton camera. Journal of Nuclear Science and Technology, 2016, 53, 1067-1075.	1.3	80
79	Crystal growth and scintillation properties of multi-component oxide single crystals: Ce:GGAG and Ce:La-GPS. Journal of Luminescence, 2016, 169, 387-393.	3.1	33
80	LiF/CaF ₂ /LiBaF ₃ ternary fluoride eutectic scintillator. Japanese Journal of Applied Physics, 2015, 54, 04DH04.	1.5	21
81	Growth and scintillation properties of Ce doped Gd ₂ Si ₂ O ₇ /SiO ₂ eutectics. Journal of Physics: Conference Series, 2015, 619, 012036.	0.4	5
82	Luminescence and scintillation properties of Ce doped SrHfO ₃ based eutectics. Optical Materials, 2015, 41, 41-44.	3.6	14
83	Scintillation properties of Ce:(La,Gd) ₂ Si ₂ O ₇ at high temperatures. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2015, 772, 72-75.	1.6	28
84	Growth, Structural Considerations, and Characterization of Ce-Doped (La,Gd) ₂ Si ₂ O ₇ Scintillating Crystals. Crystal Growth and Design, 2015, 15, 1642-1651.	3.0	31
85	Recent R&D Trends in Inorganic Single-Crystal Scintillator Materials for Radiation Detection. Advanced Optical Materials, 2015, 3, 463-481.	7.3	567
86	Alkali earth co-doping effects on luminescence and scintillation properties of Ce doped Gd ₃ Al ₂ Ga ₃ O ₁₂ scintillator. Optical Materials, 2015, 41, 63-66.	3.6	114
87	Studies of light yield as a function of temperature and low temperature thermoluminescence of Gd ₃ Al ₂ Ga ₃ O ₁₂ :Ce scintillator crystals. Optical Materials, 2014, 36, 1665-1669.	3.6	65
88	Luminescence Characteristics of the Ce ³⁺ -Doped Pyrosilicates: The Case of La-Admixed Gd ₂ Si ₂ O ₇ Single Crystals. Journal of Physical Chemistry C, 2014, 118, 26521-26529.	3.1	33
89	Defect Engineering in Ce-Doped Aluminum Garnet Single Crystal Scintillators. Crystal Growth and Design, 2014, 14, 4827-4833.	3.0	197
90	Growth and optical properties of LiF/LaF ₃ eutectic crystals. Journal of the European Ceramic Society, 2014, 34, 2111-2115.	5.7	14

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91	Crystal growth of LiF/LiYF ₄ eutectic crystals and their luminescent properties. Journal of the European Ceramic Society, 2014, 34, 2117-2121.	5.7	19
92	Growth of Eu:SrI ₂ bulk crystals and their scintillation properties. Journal of Crystal Growth, 2014, 401, 343-346.	1.5	24
93	Cz grown 2-in. size Ce:Gd ₃ (Al,Ga) ₅ O ₁₂ single crystal; relationship between Al, Ga site occupancy and scintillation properties. Optical Materials, 2014, 36, 1942-1945.	3.6	151
94	Performance of Ce-doped (La, Gd) ₂ Si ₂ O ₇ scintillator with an avalanche photodiode. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2014, 744, 30-34.	1.6	29
95	Studies of low temperature thermoluminescence of GAGG:Ce and LuAG:Pr scintillator crystals using the T _{max} –T _{stop} method. Journal of Luminescence, 2014, 154, 452-457.	3.1	72
96	Orientation relationships of unidirectionally aligned GdAlO ₃ /Al ₂ O ₃ eutectic fibers. Journal of the European Ceramic Society, 2014, 34, 3849-3857.	5.7	36
97	Luminescence and scintillation mechanism in Ce ³⁺ and Pr ³⁺ doped (Lu,Y,Gd) ₃ (Ga,Al) ₅ O ₁₂ single crystal scintillators. Physica Status Solidi C: Current Topics in Solid State Physics, 2013, 10, 172-175.	0.8	37
98	Luminescence and scintillation characteristics of Gd ₃ Al ₂ Ga ₃ O ₁₂ :Ce ³⁺ scintillators. Optical Materials, 2013, 36, 568-571.	3.6	24
99	Submicron-diameter phase-separated scintillator fibers for high-resolution X-ray imaging. Applied Physics Letters, 2013, 102, .	3.3	63
100	Development of LuAG-based scintillator crystals – A review. Progress in Crystal Growth and Characterization of Materials, 2013, 59, 47-72.	4.0	249
101	Performance of cerium-doped Gd ₃ Al ₂ Ga ₃ O ₁₂ (GAGG:Ce) scintillator in gamma-ray spectrometry. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2013, 712, 34-40.	1.6	117
102	2inch diameter single crystal growth and scintillation properties of Ce:Gd ₃ Al ₂ Ga ₃ O ₁₂ . Journal of Crystal Growth, 2012, 352, 88-90.	1.5	272
103	Crystal Growth and Scintillation Properties of Fluoride Scintillators. IEEE Transactions on Nuclear Science, 2012, 59, 2173-2176.	2.0	14
104	Afterglow Suppression by Codoping with Bi in CsI:Tl Crystal Scintillator. Applied Physics Express, 2012, 5, 052601.	2.4	28
105	Composition Engineering in Cerium-Doped (Lu,Gd) ₃ (Ga,Al) ₅ O ₁₂ Single-Crystal Scintillators. Crystal Growth and Design, 2011, 11, 4484-4490.	3.0	461
106	Scintillator-oriented combinatorial search in Ce-doped (Y,Gd) ₃ (Ga,Al) ₅ O ₁₂ multicomponent garnet compounds. Journal Physics D: Applied Physics, 2011, 44, 505104.	2.8	195
107	Positron emission mammography using Pr:LuAG scintillator – Fusion of optical material study and systems engineering. Optical Materials, 2010, 32, 1294-1297.	3.6	42
108	Growth of Optical Crystals by the Micro-Pulling-Down Method. MRS Bulletin, 2009, 34, 266-270.	3.5	76

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109	Pr ³⁺ -doped complex oxide single crystal scintillators. Journal Physics D: Applied Physics, 2009, 42, 055117.	2.8	128
110	Challenge and study for developing of novel single crystalline optical materials using micro-pulling-down method. Optical Materials, 2007, 30, 6-10.	3.6	187
111	Antisite defect-free Lu ₃ (Ga _x Al _{1-x}) ₅ O ₁₂ :Pr scintillator. Applied Physics Letters, 2006, 88, 141916.	3.3	143
112	Microstructure of Al ₂ O ₃ /ZrO ₂ eutectic fibers grown by the micro-pulling down method. Journal of Crystal Growth, 2001, 222, 791-796.	1.5	93
113	Phase identification of Al ₂ O ₃ /RE ₃ Al ₅ O ₁₂ and Al ₂ O ₃ /REAlO ₃ (RE=Sm, Lu, Y) eutectics. Journal of Crystal Growth, 2000, 218, 67-73.	1.5	62
114	Microstructures in oxide eutectic fibers grown by a modified micro-pulling-down method. Journal of Crystal Growth, 1999, 205, 305-316.	1.5	115
115	Large size growth of terbium doped BaCl ₂ /NaCl/KCl eutectic for radiation imaging. Japanese Journal of Applied Physics, 0, , .	1.5	5