

# Kei Kamada

## List of Publications by Year in descending order

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80  
papers

2,614  
citations

331670  
21  
h-index

189892  
50  
g-index

80  
all docs

80  
docs citations

80  
times ranked

1173  
citing authors

#	ARTICLE	IF	CITATIONS
1	Composition Engineering in Cerium-Doped (Lu,Gd) <sub>3</sub> (Ga,Al) <sub>5</sub> O <sub>12</sub> Single-Crystal Scintillators. <i>Crystal Growth and Design</i> , 2011, 11, 4484-4490.	3.0	461
2	2inch diameter single crystal growth and scintillation properties of Ce:Gd <sub>3</sub> Al <sub>2</sub> Ga <sub>3</sub> O <sub>12</sub> . <i>Journal of Crystal Growth</i> , 2012, 352, 88-90.	1.5	272
3	Defect Engineering in Ce-Doped Aluminum Garnet Single Crystal Scintillators. <i>Crystal Growth and Design</i> , 2014, 14, 4827-4833.	3.0	197
4	Scintillator-oriented combinatorial search in Ce-doped (Y,Gd) <sub>3</sub> (Ga,Al) <sub>5</sub> O <sub>12</sub> multicomponent garnet compounds. <i>Journal Physics D: Applied Physics</i> , 2011, 44, 505104.	2.8	195
5	Cz grown 2-in. size Ce:Gd <sub>3</sub> (Al,Ga)5O <sub>12</sub> single crystal; relationship between Al, Ga site occupancy and scintillation properties. <i>Optical Materials</i> , 2014, 36, 1942-1945.	3.6	151
6	Performance of cerium-doped Gd <sub>3</sub> Al <sub>2</sub> Ga <sub>3</sub> O <sub>12</sub> (GAGG:Ce) scintillator in gamma-ray spectrometry. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2013, 712, 34-40.	1.6	117
7	Alkali earth co-doping effects on luminescence and scintillation properties of Ce doped Gd <sub>3</sub> Al <sub>2</sub> Ga <sub>3</sub> O <sub>12</sub> scintillator. <i>Optical Materials</i> , 2015, 41, 63-66.	3.6	114
8	A prototype of aerial radiation monitoring system using an unmanned helicopter mounting a GAGG scintillator Compton camera. <i>Journal of Nuclear Science and Technology</i> , 2016, 53, 1067-1075.	1.3	80
9	Studies of low temperature thermoluminescence of GAGG:Ce and LuAG:Pr scintillator crystals using the Tmax–T <sub>stop</sub> method. <i>Journal of Luminescence</i> , 2014, 154, 452-457.	3.1	72
10	Studies of light yield as a function of temperature and low temperature thermoluminescence of Gd <sub>3</sub> Al <sub>2</sub> Ga <sub>3</sub> O <sub>12</sub> :Ce scintillator crystals. <i>Optical Materials</i> , 2014, 36, 1665-1669.	3.6	65
11	Large Size Czochralski Growth and Scintillation Properties of. <i>IEEE Transactions on Nuclear Science</i> , 2016, 63, 443-447.	2.0	49
12	Positron emission mammography using Pr:LuAG scintillator – Fusion of optical material study and systems engineering. <i>Optical Materials</i> , 2010, 32, 1294-1297.	3.6	42
13	Field test around Fukushima Daiichi nuclear power plant site using improved Ce:Gd <sub>3</sub> (Al,Ga) <sub>5</sub> O <sub>12</sub> scintillator Compton camera mounted on an unmanned helicopter. <i>Journal of Nuclear Science and Technology</i> , 2016, 53, 1907-1918.	1.3	38
14	Luminescence and scintillation mechanism in Ce <sup>3+</sup> -and Pr <sup>3+</sup> -doped (Lu,Y,Gd) <sub>3</sub> (Ga,Al)5O <sub>12</sub> single crystal scintillators. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2013, 10, 172-175.	0.8	37
15	Growth and scintillation properties of 3 in. diameter Ce doped Gd <sub>3</sub> Ga <sub>3</sub> Al <sub>2</sub> O <sub>12</sub> scintillation single crystal. <i>Journal of Crystal Growth</i> , 2016, 452, 81-84.	1.5	37
16	A novel gamma-ray detector with submillimeter resolutions using a monolithic MPPC array with pixelized Ce:LYSO and Ce:GGAG crystals. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2013, 699, 235-241.	1.6	36
17	Orientation relationships of unidirectionally aligned GdAlO <sub>3</sub> /Al <sub>2</sub> O <sub>3</sub> eutectic fibers. <i>Journal of the European Ceramic Society</i> , 2014, 34, 3849-3857.	5.7	36
18	Growth, Structural Considerations, and Characterization of Ce-Doped (La,Gd) <sub>2</sub> Si <sub>2</sub> O <sub>7</sub> Scintillating Crystals. <i>Crystal Growth and Design</i> , 2015, 15, 1642-1651.	3.0	31

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19	Optical and scintillation properties of Ce <sup>3+</sup> -doped YGd <sub>2</sub> Al <sub>5-x</sub> Ga <sub>x</sub> O <sub>12</sub> ( $x=2,3,4$ ) single crystal scintillators. <i>Journal of Luminescence</i> , 2016, 169, 43-50.	3.1	31
20	Scintillation properties of Ce:(La,Gd)2Si <sub>2</sub> O <sub>7</sub> at high temperatures. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2015, 772, 72-75.	1.6	28
21	Luminescence and scintillation characteristics of Gd <sub>3</sub> Al <sub>2</sub> Ga <sub>3</sub> O <sub>12</sub> :Ce <sup>3+</sup> scintillators. <i>Optical Materials</i> , 2013, 36, 568-571.	3.6	24
22	Probing shallow electron traps in cerium-doped Gd <sub>3</sub> Al <sub>2</sub> Ga <sub>3</sub> O <sub>12</sub> scintillators by UV-induced absorption spectroscopy. <i>Applied Physics Express</i> , 2016, 9, 072602.	2.4	24
23	Growth and scintillation properties of Eu doped LiSr <sub>1</sub> I <sub>3</sub> /LiI eutectics. <i>Optical Materials</i> , 2017, 68, 70-74.	3.6	23
24	Development of novel growth methods for halide single crystals. <i>Optical Materials</i> , 2017, 65, 46-51.	3.6	22
25	LiF/CaF <sub>2</sub> /LiBaF <sub>3</sub> ternary fluoride eutectic scintillator. <i>Japanese Journal of Applied Physics</i> , 2015, 54, 04DH04.	1.5	21
26	Luminescence and scintillation characteristics of (GdxY <sub>3-x</sub> )Al <sub>2</sub> Ga <sub>3</sub> O <sub>12</sub> :Ce ( $x\hat{=}1,2,3$ ) single crystals. <i>Optical Materials</i> , 2018, 76, 162-168.	3.6	21
27	Scintillation properties of Gd <sub>3</sub> (Al <sub>5-x</sub> Gax)O <sub>12</sub> :Ce ( $x = 2.3, 2.6, 3.0$ ) single crystals. <i>Optical Materials</i> , 2018, 81, 23-29.	3.6	17
28	Development of a novel red-emitting cesium hafnium iodide scintillator. <i>Radiation Measurements</i> , 2019, 124, 54-58.	1.4	17
29	Luminescence and scintillation properties of Ce dope SrHfO <sub>3</sub> based eutectics. <i>Optical Materials</i> , 2015, 41, 41-44.	3.6	14
30	Fiber-read radiation monitoring system using an optical fiber and red-emitting scintillator for ultra-high-dose conditions. <i>Applied Physics Express</i> , 2020, 13, 047002.	2.4	14
31	A Crosshair Light Sharing PET Detector With DOI and TOF Capabilities Using Four-to-One Coupling and Single-Ended Readout. <i>IEEE Transactions on Radiation and Plasma Medical Sciences</i> , 2021, 5, 638-644.	3.7	14
32	The scintillation performance of one-inch diameter CsI/CsCl/NaCl eutectics grown by the Czochralski method. <i>Journal of Crystal Growth</i> , 2021, 572, 126266.	1.5	14
33	Development of crosshair light sharing PET detector with TOF and DOI capabilities using fast LGSO scintillator. <i>Physics in Medicine and Biology</i> , 2021, 66, 225003.	3.0	14
34	Growth of 2 Inch Eu-doped SrI <sub>2</sub> single crystals for scintillator applications. <i>Journal of Crystal Growth</i> , 2016, 452, 73-80.	1.5	13
35	Cesium hafnium chloride scintillator coupled with an avalanche photodiode photodetector. <i>Journal of Instrumentation</i> , 2017, 12, C02042-C02042.	1.2	13
36	Development of a high resolution LaGPS imaging detector with pulse shape discrimination capability of different types of radiations. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2019, 922, 8-18.	1.6	13

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37	Development of Single-Ended Readout DOI Detector With Quadrisectioned Crystals. IEEE Transactions on Radiation and Plasma Medical Sciences, 2020, 4, 563-569.	3.7	13
38	Optimization of Dopants and Scintillation Fibersâ™ Diameter of GdAlO <sub>3</sub> /Al <sub>2</sub> O <sub>3</sub> Eutectic for High-Resolution X-Ray Imaging. IEEE Transactions on Nuclear Science, 2018, 65, 2036-2040.	2.0	13
39	Scintillation Characteristics of Mg <sup>2+</sup> -Codoped Y <sub>0.8</sub> Gd <sub>2.2</sub> (Al <sub>x</sub> Ga <sub>1-x</sub> )O <sub>12</sub> :Ce Single Crystal. IEEE Transactions on Nuclear Science, 2020, 67, 910-914.	11	11
40	Development of large size crystal growth technology of oxide eutectic scintillator and a proto-type Talbotâ€“Lau imaging system. Japanese Journal of Applied Physics, 2021, 60, SBBK04.	1.5	11
41	Growth of <sup>6</sup> Li-enriched LiCl/BaCl <sub>2</sub> eutectic as a novel neutron scintillator. Japanese Journal of Applied Physics, 2022, 61, SC1038.	1.5	11
42	Growth of 1.5-In Eu : Single Crystal and Scintillation Properties. IEEE Transactions on Nuclear Science, 2016, 63, 467-470.	2.0	10
43	Growth and luminescence properties of Eu-doped HfO <sub>2</sub> /Al <sub>2</sub> O <sub>3</sub> eutectic scintillator. Journal of Rare Earths, 2016, 34, 796-801.	4.8	10
44	Crystal growth and luminescence properties of Yb <sub>2</sub> Si <sub>2</sub> O <sub>7</sub> infra-red emission scintillator. Optical Materials, 2016, 58, 14-17.	3.6	9
45	An ultrahigh spatial resolution radiation-imaging detector using 0.1Â-mmÂ–Â0.1 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
46	Luminescence and Scintillation Properties of Mg <sup>2+</sup> -Codoped Lu <sub>0.6</sub> Gd <sub>2.4</sub> Al <sub>2</sub> Ga <sub>3</sub> O <sub>12</sub> :Ce Single Crystal. IEEE Transactions on Nuclear Science, 2020, 67, 904-909.	2.0	9
47	Scintillation properties of Zr co-doped Ce:(Gd, La)2Si <sub>2</sub> O <sub>7</sub> grown by the Czochralski process. Radiation Measurements, 2016, 90, 162-165.	1.4	8
48	Growth and Luminescent Properties of Cs <sub>2</sub> HfCl <sub>6</sub> Scintillators Doped With Alkaline Earth Metals. IEEE Transactions on Nuclear Science, 2018, 65, 2169-2173.	2.0	8
49	Growth and scintillation properties of Tl-doped CsI/CsCl/NaCl ternary eutectic scintillators. Japanese Journal of Applied Physics, 2021, 60, SBBK01. Growth and scintillation properties of Ce doped $\text{Cs}_2\text{Li}_1\text{Ta}_1\text{O}_6$ . $\text{Ce}^{3+} \text{O}_{12} \text{Ta}_{2\text{O}_5} \text{Li}_{2\text{O}} \text{Cs}_2\text{O}$ $\text{Ce}^{3+} \text{O}_{12} \text{Ta}_{2\text{O}_5} \text{Li}_{2\text{O}} \text{Cs}_2\text{O}$	1.5	8
50	$\text{Ce}^{3+} \text{O}_{12} \text{Ta}_{2\text{O}_5} \text{Li}_{2\text{O}} \text{Cs}_2\text{O}$ Comprehensive Study on Ce-Doped (Gd, La) <sub>2</sub> Si <sub>2</sub> O <sub>7</sub> Scintillator. IEEE Transactions on Nuclear Science, 2018, 65, 2136-2139.	1.6	8
51	Growth and Scintillation Properties of a New Red-Emitting Scintillator Rb <sub>2</sub> Hf <sub>2</sub> T <sub>2</sub> O <sub>12</sub> for the Fiber-Reading Radiation Monitor. IEEE Transactions on Nuclear Science, 2020, 67, 1055-1062.	2.0	7
52	Growth and Scintillation Properties of Directionally Solidified Ce:LaBr <sub>3</sub> /AEBr <sub>2</sub> (AE = Mg, Ca, Sr, Ba) Eutectic System. Crystals, 2020, 10, 584.	2.2	7
53	Czochralski growth of 2 in. Ce-doped (La,Gd)2Si <sub>2</sub> O <sub>7</sub> for scintillator application. Journal of Crystal Growth, 2016, 452, 57-64.	1.5	6

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55	Performance Evaluation of Liquinert-Processed CeBr <sub>3</sub> f Crystals Coupled With a Multipixel Photon Counter. IEEE Transactions on Nuclear Science, 2020, 67, 988-993.	2.0	6
56	First imaging demonstration of a crosshair light-sharing PET detector. Physics in Medicine and Biology, 2021, 66, 065013.	3.0	6
57	Growth and scintillation properties of Ce doped Gd <sub>2</sub> Si <sub>2</sub> O <sub>7</sub> /SiO <sub>2</sub> eutectics. Journal of Physics: Conference Series, 2015, 619, 012036.	0.4	5
58	Timing characteristics of the scintillation response of Gd <sub>3</sub> Al <sub>2</sub> Ga <sub>3</sub> O <sub>12</sub> :Ce and Gd <sub>3</sub> Al <sub>2.6</sub> Ga <sub>2.4</sub> O <sub>12</sub> :Ce single crystal scintillators. Radiation Measurements, 2016, 87, 24-28.	1.4	5
59	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
60	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
61	Single-crystal growth, structure and luminescence properties of Cs <sub>2</sub> HfCl <sub>3</sub> Br <sub>3</sub> . Optical Materials, 2020, 106, 109942.	3.6	5
62	Bulk Single Crystal Growth of W Co-Doped Ce:Gd <sub>3</sub> Ga <sub>5</sub> Al <sub>13</sub> , by Czochralski Method. IEEE Transactions on Nuclear Science, 2020, 67, 1045-1048.	2.0	5
63	Large size growth of terbium doped BaCl <sub>2</sub> /NaCl/KCl eutectic for radiation imaging. Japanese Journal of Applied Physics, 0, .	1.5	5
64	Development of Eu:SrI <sub>2</sub> Scintillator Array for Gamma-Ray Imaging Applications. IEEE Transactions on Nuclear Science, 2017, 64, 1647-1651.	2.0	4
65	Light Yield and Timing Characteristics of Lu <sub>2</sub> Gd <sub>3</sub> (Al <sub>5</sub> xGa <sub>5-x</sub> O <sub>12</sub> ) <sub>3</sub> :Ce, Mg Single Crystals. IEEE Transactions on Nuclear Science, 2020, 67, 2295-2299.	2.0	4
66	Scintillation characteristics and temperature quenching of radio- and photoluminescence of Mg <sup>2+</sup> -codoped (Lu,Gd)3Al <sub>2.4</sub> Ga <sub>2.6</sub> O <sub>12</sub> :Ce garnet crystals. Optical Materials, 2021, 121, 111595.	3.6	4
67	Crystal Growth and Scintillation Properties of Carbazole for Neutron Detection. IEEE Transactions on Nuclear Science, 2020, 67, 1027-1031.	2.0	4
68	Growth and scintillation properties of Tl-doped CsI/KI/KCl ternary eutectics. Journal of Crystal Growth, 2021, 573, 126287.	1.5	3
69	Gapless implementation of crosshair light-sharing PET detector. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2022, 1021, 165922.	1.6	3
70	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
71	Growth of Tb-doped BaCl <sub>2</sub> /NaCl/KCl ternary eutectic and its luminescence properties. Journal of Crystal Growth, 2022, 580, 126467.	1.5	3
72	Pulse-shape discrimination potential of new scintillator material: La-GPS:Ce. Journal of Instrumentation, 2019, 14, P06037-P06037.	1.2	2

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73	Luminescence and scintillation properties of Mo co-doped Y <sub>0.8</sub> Gd <sub>2.2</sub> (Al <sub>5-x</sub> Gax)O <sub>12</sub> :Ce multicomponent garnet crystals. Optical Materials, 2021, 122, 111783.		3.6	2
74	Temperature Dependence on Scintillation Properties of La-GPS(Ce)., 2017, ,.			1
75	Comparative Study of GdLu <sub>2</sub> Al <sub>2</sub> Ga <sub>3</sub> O <sub>12</sub> :Ce and GdY <sub>2</sub> Al <sub>2</sub> Ga <sub>3</sub> O <sub>12</sub> :Ce Scintillation Crystals for \$gamma\$-Ray Detection. IEEE Transactions on Nuclear Science, 2018, 65, 2081-2084.		2.0	1
76	Temperature dependence of radio- and photoluminescence and scintillation properties of Y <sub>0.6</sub> Gd <sub>2.4</sub> Al <sub>2</sub> Ga <sub>3</sub> O <sub>12</sub> :Ce,Mg single crystal. Optical Materials, 2022, 131, 112662.		3.6	1
77	Investigation of the Relation of Decay Time Differences and \$alpha\$-\$eta\$ Ratios for Newly Developed Scintillators. IEEE Transactions on Nuclear Science, 2019, 66, 2324-2328.		2.0	0
78	Development of Gamma-Ray Detector Arrays Consisting of Diced Eu-Doped SrI <sub>2</sub> Scintillator Arrays and TSV-MPPC Arrays. IEEE Transactions on Nuclear Science, 2020, 67, 999-1002.		2.0	0
79	Development of the Multi-Cubic $\beta^3$ -ray spectrometer and its performance under intense $^{137}\text{Cs}$ and $^{60}\text{Co}$ radiation fields. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2021, 1010, 165544.		1.6	0
80	Growth of thallium-doped CsI/CsCl/KCl eutectics and their scintillation properties. Optical Materials: X, 2022, , 100159.		0.8	0