

# Charles L. Melcher

## List of Publications by Year in descending order

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233  
papers

7,445  
citations

57758

44  
h-index

69250

77  
g-index

233  
all docs

233  
docs citations

233  
times ranked

3194  
citing authors

#	ARTICLE	IF	CITATIONS
1	Crystal growth, density functional theory, and scintillation properties of $\text{TlMgX}_3$ ( $X = \text{Cl, Br, I}$ ). <i>Chemical Physics</i> , 2022, 558, 111535.	1.9	2
2	Effects of composition and growth parameters on phase formation in multicomponent aluminum garnet crystals. <i>Acta Crystallographica Section B: Structural Science, Crystal Engineering and Materials</i> , 2022, 78, 476-484.	1.1	1
3	$\text{TlSr}_2\text{I}_5:\text{Eu}^{2+}$ - A new high density scintillator for gamma-ray detection. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2021, 988, 164876.	1.6	7
4	Crystal growth, density functional theory, and scintillation properties of $\text{Tl}_3\text{LnCl}_6:\text{Ce}^{3+}$ and $\text{TlLn}_2\text{Cl}_7:\text{Ce}^{3+}$ ( $\text{Ln} = \text{Y, Gd}$ ). <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2021, 995, 165047.	1.6	11
5	Analysis of luminescence spectra and decay kinetics of $\text{LYSO}:\text{Ce}$ scintillating crystals with varied yttrium content. <i>Ceramics International</i> , 2021, 47, 16918-16925.	4.8	9
6	Effects of zirconium codoping on the optical and scintillation properties of $\text{Sr}_2\text{Eu}$ single crystals. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2020, 954, 161242.	1.6	13
7	Czochralski growth and scintillation properties of $\text{Li}^+$ , $\text{Na}^+$ , and $\text{K}^+$ codoped $(\text{Lu}_{0.75}\text{Y}_{0.25})_3\text{Al}_5\text{O}_{12}:\text{Pr}^{3+}$ single crystals. <i>Journal of Crystal Growth</i> , 2020, 532, 125408.	1.5	7
8	Investigation of $\text{CeBr}_3$ scintillators. <i>Journal of Crystal Growth</i> , 2020, 531, 125365.	1.5	12
9	Solid-state synthesis of multicomponent equiatomic rare-earth oxides. <i>Journal of the American Ceramic Society</i> , 2020, 103, 2908-2918.	3.8	37
10	Crystal growth and scintillation properties of new ytterbium-activated scintillators $\text{Cs}_4\text{Ca}_6:\text{Yb}$ and $\text{Cs}_4\text{Sr}_6:\text{Yb}$ . <i>Optical Materials</i> , 2020, 110, 110536.	3.6	12
11	Role of Yttrium in Thermoluminescence of $\text{LYSO}:\text{Ce}$ Crystals. <i>Journal of Physical Chemistry C</i> , 2020, 124, 17726-17732.	3.1	10
12	Studying the effects of thermally diffusing Ce into the surface of $\text{YAlO}_3$ for associated particle imaging. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , 2020, 473, 55-61.	1.4	3
13	Role of Lithium Codoping in Enhancing the Scintillation Yield of Aluminate Garnets. <i>Physical Review Applied</i> , 2020, 13.	3.8	8
14	Thallium-based scintillators for high-resolution gamma-ray spectroscopy: $\text{Ce}$ doped $\text{Tl}_2\text{LaCl}_5$ and $\text{Tl}_2\text{LaBr}$ .	1.6	9
15	Self-assembled $\text{LiCl} \cdot \text{CeCl}_3$ directionally solidified eutectics for thermal neutron detection. <i>CrystEngComm</i> , 2020, 22, 3269-3273.	2.6	5
16	Highly Efficient Broad-Band Luminescence Involving Organic and Inorganic Molecules in a Zero-Dimensional Hybrid Lead Chloride. <i>Journal of Physical Chemistry C</i> , 2019, 123, 22470-22477.	3.1	57
17	Europium concentration effects on the scintillation properties of $\text{Cs}_4\text{Sr}_6:\text{Eu}$ and $\text{Cs}_4\text{Ca}_6:\text{Eu}$ single crystals for use in gamma spectroscopy. <i>Journal of Luminescence</i> , 2019, 216, 116740.	3.1	14
18	Effect of lithium codopant concentration on the luminescence properties of $(\text{Lu}_{0.75}\text{Y}_{0.25})_3\text{Al}_5\text{O}_{12}:\text{Pr}^{3+}$ single crystals: Before and after air annealing. <i>Journal of Luminescence</i> , 2019, 216, 116751.	3.1	6

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19	Unraveling the Critical Role of Site Occupancy of Lithium Codopants in Lu <sub>2</sub> SiO <sub>5</sub> :Ce <sup>3+</sup> Single-Crystalline Scintillators. ACS Applied Materials & Interfaces, 2019, 11, 8194-8201.	8.0	24
20	Czochralski Growth, Optical, Scintillation, and Defect Properties of Cu <sup>2+</sup> Codoped Lu <sub>2</sub> SiO <sub>5</sub> :Ce <sup>3+</sup> Single Crystals. Crystal Growth and Design, 2019, 19, 4081-4089.	3.0	20
21	Hybrid Organic-Inorganic Halides (C <sub>5</sub> H <sub>7</sub> N <sub>2</sub> ) <sub>2</sub> MBr <sub>4</sub> (M = Hg, Zn) with High Color Rendering Index and High-Efficiency White-Light Emission. Chemistry of Materials, 2019, 31, 2983-2991.	6.7	143
22	Dual-emitting film with cellulose nanocrystal-assisted carbon dots grafted SrAl <sub>2</sub> O <sub>4</sub> , Eu <sup>2+</sup> , Dy <sup>3+</sup> phosphors for temperature sensing. Carbohydrate Polymers, 2019, 206, 767-777.	10.2	53
23	Effects of temporary fogging and defogging in plastic scintillators. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2019, 922, 202-208.	1.6	6
24	On the Role of Li <sup>+</sup> Codoping in Simultaneous Improvement of Light Yield, Decay Time, and Afterglow of Lu <sub>2</sub> SiO <sub>5</sub> :Ce <sup>3+</sup> Scintillation Detectors. Physica Status Solidi - Rapid Research Letters, 2019, 13, 1800472.	2.4	16
25	Growth of large size (≈38 Å diameter) KCa <sub>3</sub> Eu scintillator crystals. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2019, 914, 8-14.	1.6	6
26	Excitation Transfer Engineering in Ce-Doped Oxide Crystalline Scintillators by Codoping with Alkali-Earth Ions. Physica Status Solidi (A) Applications and Materials Science, 2018, 215, 1700798.	1.8	37
27	Determination of thermal expansion of KCa <sub>3</sub> using in-situ high temperature powder X-ray diffraction. Materials Chemistry and Physics, 2018, 212, 161-166.	4.0	4
28	Boron codoping of Czochralski grown lutetium aluminum garnet and the effect on scintillation properties. Journal of Crystal Growth, 2018, 486, 126-129.	1.5	8
29	Tailoring the Properties of Europium-Doped Potassium Calcium Iodide Scintillators Through Defect Engineering. Physica Status Solidi - Rapid Research Letters, 2018, 12, 1700403.	2.4	7
30	Correlation of Nonproportionality and Scintillation Properties with Cerium Concentration in YAlO <sub>3</sub> :Ce. IEEE Transactions on Nuclear Science, 2018, 65, 1218-1225.	2.0	4
31	Crystal structure and thermal expansion of CsCa <sub>3</sub> Eu and CsSrBr <sub>3</sub> Eu scintillators. Journal of Crystal Growth, 2018, 481, 35-39.	1.5	9
32	A phoswich detector design for improved spatial sampling in PET. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2018, 882, 124-128.	1.6	3
33	Investigating new activators for small-bandgap LaX <sub>3</sub> (X = Br, I) scintillators. Journal of Crystal Growth, 2018, 483, 251-257.	1.5	2
34	Broadband Emission in Hybrid Organic-Inorganic Halides of Group 12 Metals. ACS Omega, 2018, 3, 18791-18802.	3.5	70
35	Crystal structure, electronic structure, optical and scintillation properties of self-activated Cs <sub>4</sub> YbI <sub>6</sub> . Journal of Luminescence, 2018, 201, 460-465.	3.1	12
36	Revealing the role of calcium codoping on optical and scintillation homogeneity in Lu <sub>2</sub> SiO <sub>5</sub> :Ce single crystals. Journal of Crystal Growth, 2018, 498, 362-371.	1.5	20

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37	Improvements in Light Yield and Energy Resolution by Li <sup>+</sup> Codoping (Lu <sub>0.75</sub> Y <sub>0.25</sub> ) <sub>3</sub> Al <sub>5</sub> O <sub>12</sub> :Pr <sup>3+</sup> Single Crystal Scintillators. <i>Physica Status Solidi - Rapid Research Letters</i> , 2018, 12, 1800280.	2.4	11
38	Discovery of New Compounds and Scintillators of the A <sub>4</sub> BX <sub>6</sub> Family: Crystal Structure, Thermal, Optical, and Scintillation Properties. <i>Crystal Growth and Design</i> , 2018, 18, 5220-5230.	3.0	7
39	Zero-dimensional Cs <sub>4</sub> EuX <sub>6</sub> (X = Br, I) all-inorganic perovskite single crystals for gamma-ray spectroscopy. <i>Journal of Materials Chemistry C</i> , 2018, 6, 6647-6655.	5.5	66
40	Multi-ampoule Bridgman growth of halide scintillator crystals using the self-seeding method. <i>Journal of Crystal Growth</i> , 2017, 470, 20-26.	1.5	10
41	Effect of thermal annealing on scintillation properties of Ce:Gd <sub>2</sub> Y <sub>1</sub> Ga <sub>2.7</sub> Al <sub>2.3</sub> O <sub>12</sub> under different atmosphere. <i>Applied Physics A: Materials Science and Processing</i> , 2017, 123, 1.	2.3	8
42	Defect Engineering by Codoping in Single-Crystalline Scintillators. <i>Physical Review Applied</i> , 2017, 8, .	3.8	30
43	Single-Crystalline Scintillators. <i>Physical Review Applied</i> , 2017, 8, .	3.8	30
44	Scintillators for PET and SPECT. <i>Imaging in Medical Diagnosis and Therapy</i> , 2017, , 43-61.	0.0	4
45	Quaternary Iodide K(Ca,Sr) <sub>3</sub> :Eu <sup>2+</sup> Single-Crystal Scintillators for Radiation Detection: Crystal Structure, Electronic Structure, and Optical and Scintillation Properties. <i>Advanced Optical Materials</i> , 2016, 4, 1518-1532.	7.3	35
46	Effects of melt aging and off-stoichiometric melts on CsSr <sub>3</sub> :Eu <sup>2+</sup> single crystal scintillators. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 8453-8461.	2.8	11
47	Improvement in the optical quality and energy resolution of CsSrBr <sub>3</sub> : Eu scintillator crystals. <i>Journal of Crystal Growth</i> , 2016, 445, 1-8.	1.5	15
48	Growth of inch-sized KCa <sub>0.8</sub> Sr <sub>0.2</sub> I <sub>3</sub> :Eu <sup>2+</sup> scintillating crystals and high performance for gamma-ray detection. <i>CrystEngComm</i> , 2016, 18, 7435-7440.	2.6	9
49	Scintillation Properties and Electronic Structures of the Intrinsic and Extrinsic Mixed Elpasolites Cs <sub>2</sub> I <sub>3</sub> . <i>Physical Review Applied</i> , 2016, 5, .	1.8	12
50	Toward High Energy Resolution in CsSr <sub>3</sub> :Eu <sup>2+</sup> Scintillating Crystals: Effects of Off-Stoichiometry and Eu <sup>2+</sup> Concentration. <i>Crystal Growth and Design</i> , 2016, 16, 7186-7193.	3.0	14
51	Scintillators: Quaternary Iodide K(Ca,Sr) <sub>3</sub> :Eu <sup>2+</sup> Single-Crystal Scintillators for Radiation Detection: Crystal Structure, Electronic Structure, and Optical and Scintillation Properties (Advanced Optical Materials 10/2016). <i>Advanced Optical Materials</i> , 2016, 4, 1420-1420.	7.3	2
52	Tackling Single Crystal Growth Challenges for Mixed-Elpasolite Scintillators. <i>Crystal Growth and Design</i> , 2016, 16, 4072-4081.	3.0	13
53	Large-Size KCa <sub>0.8</sub> Sr <sub>0.2</sub> I <sub>3</sub> :Eu <sup>2+</sup> Crystals: Growth and Characterization of Scintillation Properties. <i>Crystal Growth and Design</i> , 2016, 16, 4129-4135.	3.0	18
54	Effects of increasing size and changing europium activator concentration in KCa <sub>3</sub> scintillator crystals. <i>Journal of Crystal Growth</i> , 2016, 449, 96-103.	1.5	21

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55	Eu <sup>2+</sup> concentration effects in KCa <sub>0.8</sub> Sr <sub>0.2</sub> Li <sub>3</sub> Eu <sup>2+</sup> : A novel high-performance scintillator. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2016, 820, 132-140.	1.6	24
56	Scintillation properties of Eu <sup>2+</sup> -doped K <sub>2</sub> Ba <sub>2</sub> Li <sub>5</sub> and K <sub>2</sub> Ba <sub>2</sub> Li <sub>4</sub> . Journal of Luminescence, 2016, 169, 301-307.	3.1	23
57	Effect of annealing atmosphere on the cerium valence state and F <sup>4f</sup> luminescence center in Ca <sup>2+</sup> -doped GGAG:Ce single crystals. Physica Status Solidi (B): Basic Research, 2015, 252, 1394-1401.	1.5	12
58	Scintillation Characteristics of Indium Doped Cesium Iodide Single Crystal. IEEE Transactions on Nuclear Science, 2015, 62, 571-576.	2.0	10
59	Single crystal and optical ceramic multicomponent garnet scintillators: A comparative study. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2015, 780, 45-50.	1.6	40
60	Effect of Co-doping On the Radiation Hardness of $\text{Gd}_3\text{Ga}_3\text{Al}_2\text{O}_{12}$ Ce Scintillators. IEEE Transactions on Nuclear Science, 2015, 62, 336-339.	2.0	8
61	Growth and characterization of potassium strontium iodide: A new high light yield scintillator with 2.4% energy resolution. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2015, 780, 40-44.	1.6	54
62	Crystal growth and characterization of europium doped KCa <sub>3</sub> , a high light yield scintillator. Optical Materials, 2015, 48, 1-6.	3.6	62
63	Crystal growth and spectroscopic performance of large crystalline boules of CsCa <sub>3</sub> Eu scintillator. Journal of Crystal Growth, 2015, 427, 42-47.	1.5	24
64	Crystal growth and scintillation properties of potassium strontium bromide. Optical Materials, 2015, 46, 59-63.	3.6	24
65	Defect Engineering in Sr <sub>2</sub> :Eu <sup>2+</sup> Single Crystal Scintillators. Crystal Growth and Design, 2015, 15, 3929-3938.	3.0	29
66	Crystal structure and thermal expansion of a CsCe <sub>2</sub> Cl <sub>7</sub> scintillator. Journal of Solid State Chemistry, 2015, 227, 142-149.	2.9	6
67	Blue emission of Eu <sup>2+</sup> -doped translucent alumina. Journal of Luminescence, 2015, 168, 297-303.	3.1	25
68	A novel LiCl $\cdot$ BaCl <sub>2</sub> :Eu <sup>2+</sup> eutectic scintillator for thermal neutron detection. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2015, 797, 319-323.	1.6	7
69	Crystal structure, electronic structure, temperature-dependent optical and scintillation properties of CsCe <sub>2</sub> Br <sub>7</sub> . Journal of Materials Chemistry C, 2015, 3, 11366-11376.	5.5	14
70	Relationship between Ca <sup>2+</sup> concentration and the properties of codoped Gd <sub>3</sub> Ga <sub>3</sub> Al <sub>2</sub> O <sub>12</sub> :Ce scintillators. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2015, 797, 138-143.	1.6	16
71	Temperature dependence spectroscopic study of Ce-doped Cs <sub>3</sub> LaCl <sub>6</sub> and Cs <sub>3</sub> LaBr <sub>6</sub> scintillators. Journal of Luminescence, 2015, 160, 64-70.	3.1	4
72	Sintered pellets: A simple and cost effective method to predict the performance of GGAG:Ce single crystals. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2015, 193, 20-26.	3.5	13

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73	Anti-Site Defects in Perovskite YAlO <sub>3</sub> :Ce Using Aberration-Corrected STEM. Microscopy and Microanalysis, 2014, 20, 132-133.	0.4	2
74	Ultralow-concentration Sm codoping in CsI:Tl scintillator: A case of little things can make a big difference. Optical Materials, 2014, 38, 297-300.	3.6	13
75	Role of $\langle m \text{Ca} \rangle^{2+}$ Co-Doping on the Scintillation Kinetics of Ce Doped $\langle m \text{Gd} \rangle_{\{3\}} \langle m \text{Ga} \rangle_{\{3\}} \langle m \text{Al} \rangle_{\{2\}} \langle m \text{O} \rangle_{\{12\}}$ . IEEE Transactions on Nuclear Science, 2014, 61, 297-300.	3.8	127
76	Origin of improved scintillation efficiency in (Lu,Gd) <sub>3</sub> (Ga,Al) <sub>5</sub> O <sub>12</sub> :Ce multicomponent garnets: An X-ray absorption near edge spectroscopy study. APL Materials, 2014, 2, .	5.1	36
77	High energy resolution scintillators for nuclear nonproliferation applications. Proceedings of SPIE, 2014, , .	0.8	6
78	High energy resolution with transparent ceramic garnet scintillators. Proceedings of SPIE, 2014, , .	0.8	14
79	Effect of yttrium on electron-phonon coupling strength of 5d state of Ce <sup>3+</sup> ion in LYSO:Ce crystals. Journal of Luminescence, 2014, 154, 260-266.	3.1	21
80	Effect of $\langle m \text{Ca} \rangle^{2+}$ Co-Doping on the Scintillation Kinetics of Ce Doped $\langle m \text{Gd} \rangle_{\{3\}} \langle m \text{Ga} \rangle_{\{3\}} \langle m \text{Al} \rangle_{\{2\}} \langle m \text{O} \rangle_{\{12\}}$ . IEEE Transactions on Nuclear Science, 2014, 61, 297-300.	2.0	26
81	CsI:Tl <sup>+</sup> , Yb <sup>2+</sup> : ultra-high light yield scintillator with reduced afterglow. CrystEngComm, 2014, 16, 3312-3317.	2.6	41
82	Sample-to-Sample Variation in Single Crystal YAP:Ce Non-Proportionality. IEEE Transactions on Nuclear Science, 2014, 61, 332-338.	2.0	68
83	The europium oxidation state in CsSrI <sub>3</sub> :Eu scintillators measured by X-ray absorption spectroscopy. Optical Materials, 2014, 36, 670-674.	3.6	11
84	Influence of yttrium content on the location of rare earth ions in LYSO:Ce crystals. Journal of Solid State Chemistry, 2014, 209, 56-62.	2.9	29
85	Effects of anisotropy on structural and optical characteristics of LYSO:Ce crystal. Physica Status Solidi (B): Basic Research, 2014, 251, 1202-1211.	1.5	14
86	Two new cerium-doped mixed-anion elpasolite scintillators: Cs <sub>2</sub> NaYBr <sub>3</sub> I <sub>3</sub> and Cs <sub>2</sub> NaLaBr <sub>3</sub> I <sub>3</sub> . Optical Materials, 2014, 38, 154-160.	3.6	18
87	The scintillation properties of CeBr <sub>3</sub> × Cl <sub>x</sub> single crystals. Journal of Luminescence, 2014, 156, 175-179.	3.1	34
88	Scintillation Properties of Cs <sub>3</sub> LaCl <sub>6</sub> :Ce <sup>3+</sup> and Cs <sub>3</sub> LaBr <sub>6</sub> :Ce <sup>3+</sup> . IEEE Transactions on Nuclear Science, 2014, 61, 390-396.	2.0	17
89	A novel method to create an intrinsic reflective layer on a Gd <sub>3</sub> Ga <sub>3</sub> Al <sub>2</sub> O <sub>12</sub> :Ce scintillation crystal. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2014, 763, 591-595.	1.6	3
90	Thermal expansion of Lu <sub>2</sub> SiO <sub>5</sub> :Ce crystal. Thermochimica Acta, 2014, 576, 36-38.	2.7	5

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91	Effects of Bi <sup>3+</sup> codoping on the optical and scintillation properties of CsI:Tl single crystals. Physica Status Solidi (A) Applications and Materials Science, 2014, 211, 2586-2591.	1.8	12
92	Relationship between Ca <sup>2+</sup> concentration and the properties of codoped GGAG:Ce scintillators. , 2014, , .		0
93	A heuristic function for modelling scintillation pulses and other phenomena of interest in medical imaging. , 2014, , .		0
94	Suppression of YAG phase formation in YAP:Ce pellets. , 2014, , .		0
95	Radiation damage of LSO crystals under <sup>13</sup> I- and 24GeV protons irradiation. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2013, 721, 76-82.	1.6	28
96	LuYAP/LSO Phoswich Detectors for High Resolution Positron Emission Tomography. IEEE Transactions on Nuclear Science, 2013, 60, 194-196.	2.0	1
97	Effect of Ba substitution in CsSr13:Eu <sup>2+</sup> . Journal of Crystal Growth, 2013, 384, 27-32.	1.5	21
98	The Effect of B <sup>3+</sup> and Ca <sup>2+</sup> Co-Doping on Factors Which Affect the Energy Resolution of Gd <sub>3</sub> Ga <sub>3</sub> Al <sub>2</sub> O <sub>12</sub> :Ce. IEEE Transactions on Nuclear Science, 2013, 60, 4002-4006.	2.0	19
99	Effect of codoping on scintillation and optical properties of a Ce-doped Gd <sub>3</sub> Ga <sub>3</sub> Al <sub>2</sub> O <sub>12</sub> scintillator. Journal Physics D: Applied Physics, 2013, 46, 475302.	2.8	118
100	Composition-property relationships in (Gd <sub>3</sub> xLux)(GaAl <sub>5</sub> y)O <sub>12</sub> :Ce (x=0, 1, 2, 3 and y=0, 1, 2, 3, 4) multicomponent garnet scintillators. Optical Materials, 2013, 36, 476-481.	3.6	34
101	Effect of $\{m \text{ Ca}^{2+}\{m \text{ Co}\}$ -Doping on the Temperature Dependence of $\{m \text{ Gd}\}_{2}\{m \text{ SiO}\}_{5}:\{m \text{ Ce}\}$ Photoluminescence. IEEE Transactions on Nuclear Science, 2013, 60, 973-978.	2.0	2
102	Theoretical and experimental characterization of promising new scintillators: Eu <sup>2+</sup> doped CsCaCl <sub>3</sub> and CsCaI <sub>3</sub> . Journal of Applied Physics, 2013, 113, .	2.5	35
103	Thermally induced ionization of 5d1 state of Ce <sup>3+</sup> ion in Gd <sub>3</sub> Ga <sub>3</sub> Al <sub>2</sub> O <sub>12</sub> host. Chemical Physics Letters, 2013, 574, 56-60.	2.6	35
104	Spectroscopic properties of transparent Y <sub>3</sub> Al <sub>5</sub> O <sub>12</sub> :Eu ceramics. Optical Materials Express, 2013, 3, 2022.	3.0	11
105	Growth of CsCe <sub>2</sub> Cl <sub>7</sub> and Cs <sub>3</sub> CeCl <sub>6</sub> utilizing the Bridgman method. , 2013, , .		0
106	Development of scintillation materials for medical imaging and other applications. , 2013, , .		0
107	Effect of cation size at Gd and Al site on ce energy levels in Gd <sub>3</sub> (GaAl) <sub>5</sub> O <sub>12</sub> sintered pellets. , 2013, , .		0
108	Spectroscopic refractive indices of monoclinic single crystal and ceramic lutetium oxyorthosilicate from 200 to 850nm. Journal of Applied Physics, 2012, 112, .	2.5	21



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109	A comparison of the effect of Ca <sup>2+</sup> codoping in cerium doped GSO with that of LSO and YSO. Journal of Crystal Growth, 2012, 352, 133-136.	1.5	25
110	New single crystal scintillators: CsCaCl <sub>3</sub> :Eu and CsCaI <sub>3</sub> :Eu. Journal of Crystal Growth, 2012, 352, 115-119.	1.5	65
111	Praseodymium valence determination in Lu <sub>2</sub> SiO <sub>5</sub> , Y <sub>2</sub> SiO <sub>5</sub> , and Lu <sub>3</sub> Al <sub>5</sub> O <sub>12</sub> scintillators by x-ray absorption spectroscopy. Applied Physics Letters, 2012, 101, .	3.3	23
112	Measuring the non-proportional response of scintillators using a Positron Emission Tomography scanner. , 2012, , .		1
113	Scintillation kinetics and thermoluminescence of SrI <sub>2</sub> :Eu <sup>2+</sup> single crystals. Journal of Luminescence, 2012, 132, 1824-1829.	3.1	24
114	Effect of Ca Co-Doping on the Luminescence Centers in LSO:Ce Single Crystals. IEEE Transactions on Nuclear Science, 2011, 58, 1394-1399.	2.0	26
115	Study on the cerium oxidation state in a Lu <sub>0.8</sub> Sc <sub>0.2</sub> BO <sub>3</sub> host. Journal of Materials Chemistry, 2011, 21, 17805.	6.7	29
116	Phoswich solutions for the PET DOI problem. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2011, 648, S288-S292.	1.6	6
117	Synthesis and scintillation properties of CsGd <sub>2</sub> Cl <sub>7</sub> :Ce <sup>3+</sup> for gamma ray and neutron detection. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2011, 656, 92-95.	1.6	2
118	Crystal growth and characterization of CsSr <sub>3</sub> Eu <sub>x</sub> high light yield scintillators. Physica Status Solidi - Rapid Research Letters, 2011, 5, 43-45.	2.4	59
119	Crystal growth and scintillation properties of Ce <sup>3+</sup> -doped KGd <sub>2</sub> Cl <sub>7</sub> . Journal of Crystal Growth, 2011, 318, 796-799.	1.5	7
120	Crystal growth and scintillation properties of Cs <sub>3</sub> Eu <sub>5</sub> crystals. Journal of Crystal Growth, 2011, 318, 833-835.	1.5	10
121	Crystal growth and luminescence properties of Lu <sub>0.8</sub> Sc <sub>0.2</sub> BO <sub>3</sub> scintillators doped with different Ce concentrations. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2011, 176, 889-893.	3.5	17
122	Characterization of Ca co-doped LSO:Ce scintillators coupled to SiPM for PET applications. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2011, 628, 423-425.	1.6	6
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