Charles L. Melcher

List of Publications by Year
in descending order

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	Cerium-doped lutetium oxyorthosilicate: a fast, efficient new scintillator. IEEE Transactions on Nuclear Science, 1992, 39, 502-505.	2.0	736
2	A promising new scintillator: cerium-doped lutetium oxyorthosilicate. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 1992, 314, 212-214.	1.6	269
3	Measuring metamorphic history of unequilibrated ordinary chondrites. Nature, 1980, 287, 791-795.	27.8	262
4	UV and gamma-ray excited luminescence of cerium-doped rare-earth oxyorthosilicates. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 1992, 320, 263-272.	1.6	247
5	Effects of $hbox {Ca}^{2+}$ Co-Doping on the Scintillation Properties of LSO:Ce. IEEE Transactions on Nuclear Science, 2008, 55, 1178-1182.	2.0	201
6	Properties of LYSO and recent LSO scintillators for phoswich PET detectors. IEEE Transactions on Nuclear Science, 2004, 51, 789-795.	2.0	173
7	Light emission mechanism of Lu/sub 2/(SiO/sub 4/)O:Ce. IEEE Transactions on Nuclear Science, 1993, 40, 380-383.	2.0	154
8	YSO, LSO, GSO and LGSO. A study of energy resolution and nonproportionality. IEEE Transactions on Nuclear Science, 2000, 47, 1319-1323.	2.0	149
9	Hybrid Organicâ€“Inorganic Halides (C₅H₇N₂)₂MBr₄ (M = Hg, Zn) with High Color Rendering Index and High-Efficiency White-Light Emission. Chemistry of Materials, 2019, 31, 2983-2991.	6.7	143
10	Performance results of a new DOI detector block for a high resolution PET-LSO research tomograph HRRT. IEEE Transactions on Nuclear Science, 1998, 45, 3000-3006.	2.0	141
11	Afterglow and thermoluminescence properties of Lu2SiO5:Ce scintillation crystals. Journal of Physics Condensed Matter, 1994, 6, 4167-4180.	1.8	137
12	A room temperature LSO/PIN photodiode PET detector module that measures depth of interaction. IEEE Transactions on Nuclear Science, 1995, 42, 1085-1089.	2.0	127
13	Role of<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msup><mml:mrow><mml:mi>Ce</mml:mi></mml:mrow><mml:mrow><mml:mn>4</mml:mn><m the Scintillation Mechanism of Codoped<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mi>Gd</mml:mi></mml:mrow><mml:mrow><mml:mn>3</mml:mn></m Physical Review Applied, 2014, 2, .	3.8	127
14	Effect of codoping on scintillation and optical properties of a Ce-doped Gd₃Ga₃Al₂O₁₂scintillator. Journal Physics D: Applied Physics, 2013, 46, 475302.	2.8	118
15	Perspectives on the future development of new scintillators. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2005, 537, 6-14.	1.6	110
16	Scintillators for well logging applications. Nuclear Instruments & Methods in Physics Research B, 1989, 40-41, 1214-1218.	1.4	108
17	Czochralski growth of rare earth oxyorthosilicate single crystals. Journal of Crystal Growth, 1993, 128, 1001-1005.	1.5	96
18	Chemical and physical studies of type 3 chondritesâ€"I: Metamorphism related studies of Antarctic and other type 3 ordinary chondrites. Geochimica Et Cosmochimica Acta, 1982, 46, 2471-2481.	3.9	89

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19	Scintillation properties of GSO. IEEE Transactions on Nuclear Science, 1990, 37, 161-164.	2.0	86
20	Comparison of Fast Scintillators With TOF PET Potential. IEEE Transactions on Nuclear Science, 2009, 56, 926-933.	2.0	84
21	Nonlinear response in the scintillation yield of Lu/sub 2/SiO/sub 5/:Ce/sup 3+/. IEEE Transactions on Nuclear Science, 1994, 41, 735-737.	2.0	79
22	Scintillation properties of LSO:Ce boules. IEEE Transactions on Nuclear Science, 2000, 47, 965-968.	2.0	78
23	Effects of Calcium Codoping on Charge Traps in LSO:Ce Crystals. IEEE Transactions on Nuclear Science, 2009, 56, 2960-2965.	2.0	76
24	Broadband Emission in Hybrid Organicâ€"Inorganic Halides of Group 12 Metals. ACS Omega, 2018, 3, 18791-18802.	3.5	70
25	The role of cerium sites in the scintillation mechanism of LSO. IEEE Transactions on Nuclear Science, 1996, 43, 1324-1328.	2.0	68
26	Sample-to-Sample Variation in Single Crystal YAP:Ce Non-Proportionality. IEEE Transactions on Nuclear Science, 2014, 61, 332-338.	2.0	68
27	New Prospects for Time-of-Flight PET With LSO Scintillators. IEEE Transactions on Nuclear Science, 2006, 53, 2484-2488.	2.0	66
28	Zero-dimensional Cs₄EuX₆ (X = Br, I) all-inorganic perovskite single crystals for gamma-ray spectroscopy. Journal of Materials Chemistry C, 2018, 6, 6647-6655.	5.5	66
29	Photostimulated luminescence and thermoluminescence of LSO scintillators. IEEE Transactions on Nuclear Science, 1994, 41, 689-693.	2.0	65
30	Geometry and surface treatment dependence of the light collection from LSO crystals. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 1999, 437, 374-380.	1.6	65
31	New single crystal scintillators: CsCaCl3:Eu and CsCaI3:Eu. Journal of Crystal Growth, 2012, 352, 115-119.	1.5	65
32	Advances in the scintillation performance of LSO:Ce single crystals. IEEE Transactions on Nuclear Science, 2003, 50, 762-766.	2.0	63
33	Crystal growth and characterization of europium doped KCaI3, a high light yield scintillator. Optical Materials, 2015, 48, 1-6.	3.6	62
34	Applicability of GSO scintillators for well logging. IEEE Transactions on Nuclear Science, 1991, 38, 506-509.	2.0	61
35	Applicability of barium fluoride and cadmium tungstate scintillators for well logging. IEEE Transactions on Nuclear Science, 1989, 36, 1188-1192.	2.0	60
36	Crystal growth and characterization of CsSr_{1â€"<i>x</i>}Eu<i>_x</i>I₃ high light yield scintillators. Physica Status Solidi - Rapid Research Letters, 2011, 5, 43-45.	2.4	59

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37	Highly Efficient Broad-Band Luminescence Involving Organic and Inorganic Molecules in a Zero-Dimensional Hybrid Lead Chloride. Journal of Physical Chemistry C, 2019, 123, 22470-22477.	3.1	57
38	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
39	Dual-emitting film with cellulose nanocrystal-assisted carbon dots grafted SrAl2O4, Eu2+, Dy3+ phosphors for temperature sensing. Carbohydrate Polymers, 2019, 206, 767-777.	10.2	53
40	The role of gadolinium in the scintillation processes of cerium-doped gadolinium oxyorthosilicate. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 1994, 346, 510-521.	1.6	52
41	Scintillation and thermoluminescence properties of Lu 2 SiO 5 : Ce fast scintillation crystals. Journal of Luminescence, 1994, 60-61, 979-982.	3.1	50
42	Applications of single crystals in oil well logging. Journal of Crystal Growth, 1991, 109, 37-42.	1.5	48
43	Characterization of Scintillators by Modern Photomultipliersâ€"A New Source of Errors. IEEE Transactions on Nuclear Science, 2010, 57, 2886-2896.	2.0	46
44	Cerium oxidation state in LSO:Ce scintillators. IEEE Transactions on Nuclear Science, 2005, 52, 1809-1812.	2.0	44
45	Thermoluminescence of meteorites and their orbits. Earth and Planetary Science Letters, 1981, 52, 39-54.	4.4	43
46	Temperature Dependence of Fluorescence Decay Time and Emission Spectrum of Bismuth Germanate. IEEE Transactions on Nuclear Science, 1985, 32, 529-532.	2.0	43
47	Energy transfer mechanism in Gd/sub 2/(SiO/sub 4/)O:Ce scintillators. IEEE Transactions on Nuclear Science, 1994, 41, 681-688.	2.0	43
48	CsI:Tl⁺,Yb²⁺: ultra-high light yield scintillator with reduced afterglow. CrystEngComm, 2014, 16, 3312-3317.	2.6	41
49	The effect of co-doping on the growth stability and scintillation properties of lutetium oxyorthosilicate. Journal of Crystal Growth, 2008, 310, 2110-2114.	1.5	40
50	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
51	Thermoluminescence of meteorites and their terrestrial ages. Geochimica Et Cosmochimica Acta, 1981, 45, 615-626.	3.9	39
52	Optimization of a LSO-Based Detector Module for Time-of-Flight PET. IEEE Transactions on Nuclear Science, 2010, 57, 1570-1576.	2.0	37
53	Excitation Transfer Engineering in Ceâ€Doped Oxide Crystalline Scintillators by Codoping with Alkaliâ€Earth Ions. Physica Status Solidi (A) Applications and Materials Science, 2018, 215, 1700798.	1.8	37
54	Solidâ€state synthesis of multicomponent equiatomic rareâ€earth oxides. Journal of the American Ceramic Society, 2020, 103, 2908-2918.	3.8	37

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55	Origin of improved scintillation efficiency in (Lu,Gd)3(Ga,Al)5O12:Ce multicomponent garnets: An X-ray absorption near edge spectroscopy study. APL Materials, 2014, 2, .	5.1	36
56	Theoretical and experimental characterization of promising new scintillators: Eu2+ doped CsCaCl3 and CsCaI3. Journal of Applied Physics, 2013, 113, .	2.5	35
57	Thermally induced ionization of 5d1 state of Ce3+ ion in Gd3Ga3Al2O12 host. Chemical Physics Letters, 2013, 574, 56-60.	2.6	35
58	Quaternary Iodide K(Ca,Sr)I₃:Eu²⁺ Singleâ€Crystal Scintillators for Radiation Detection: Crystal Structure, Electronic Structure, and Optical and Scintillation Properties. Advanced Optical Materials, 2016, 4, 1518-1532.	7.3	35
59	Thermoluminescent Determination of Prehistoric Heat Treatment of Chert Artifacts. Science, 1977, 197, 1359-1362.	12.6	34
60	Compositionâ€"property relationships in (Gd3â^'xLux)(GayAl5â^'y)O12: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
61	The scintillation properties of CeBr 3â^'x Cl x single crystals. Journal of Luminescence, 2014, 156, 175-179.	3.1	34
62	Radiation damage of a cerium-doped lutetium oxyorthosilicate single crystal. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 1993, 335, 509-512.	1.6	33
63	The Effect of ${hbox {Ca}}^{2+}$ Codoping on Shallow Traps in YSO:Ce Scintillators. IEEE Transactions on Nuclear Science, 2009, 56, 958-961.	2.0	33
64	9 kV, 1 cm×1 cm SiC super gto technology development for pulse power. , 2009, , .		29
65	Study on the cerium oxidation state in a Lu0.8Sc0.2BO3 host. Journal of Materials Chemistry, 2011, 21, 17805.	6.7	29
66	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
67	Defect Engineering in SrI₂:Eu²⁺ Single Crystal Scintillators. Crystal Growth and Design, 2015, 15, 3929-3938.	3.0	29
68	Radiation damage of LSO crystals under Î³- 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
69	Design Considerations of Phoswich Detectors for High Resolution Positron Emission Tomography. IEEE Transactions on Nuclear Science, 2009, 56, 182-188.	2.0	27
70	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
71	Effect of ${m Ca}^{2+}$ Co-Doping on the Scintillation Kinetics of Ce Doped ${m Gd}_{3}{m Ga}_{3}{m Al}_{2}{m O}_{12}$. IEEE Transactions on Nuclear Science, 2014, 61, 297-300.	2.0	26
72	Erosion of frozen sulfur dioxide by ion bombardment: Applications to Io. Geophysical Research Letters, 1982, 9, 1151-1154.	4.0	25

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73	A comparison of the effect of Ca2+ codoping in cerium doped GSO with that of LSO and YSO. Journal of Crystal Growth, 2012, 352, 133-136.	1.5	25
74	Blue emission of Eu2+-doped translucent alumina. Journal of Luminescence, 2015, 168, 297-303.	3.1	25
75	Scintillation Non-Proportionality of Lutetium- and Yttrium-Based Silicates and Aluminates. IEEE Transactions on Nuclear Science, 2009, 56, 915-919.	2.0	24
76	Scintillation kinetics and thermoluminescence of SrI2:Eu2+ single crystals. Journal of Luminescence, 2012, 132, 1824-1829.	3.1	24
77	Crystal growth and spectroscopic performance of large crystalline boules of CsCaI3:Eu scintillator. Journal of Crystal Growth, 2015, 427, 42-47.	1.5	24
78	Crystal growth and scintillation properties of potassium strontium bromide. Optical Materials, 2015, 46, 59-63.	3.6	24
79	Eu2+ concentration effects in KCa0.8Sr0.2I3:Eu2+: 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
80	Unraveling the Critical Role of Site Occupancy of Lithium Codopants in Lu₂SiO₅:Ce³⁺ Single-Crystalline Scintillators. ACS Applied Materials & Interfaces, 2019, 11, 8194-8201.	8.0	24
81	Timing Resolution and Decay Time of LSO Crystals Co-Doped With Calcium. IEEE Transactions on Nuclear Science, 2010, 57, 1329-1334.	2.0	23
82	Praseodymium valence determination in Lu2SiO5, Y2SiO5, and Lu3Al5O12 scintillators by x-ray absorption spectroscopy. Applied Physics Letters, 2012, 101, .	3.3	23
83	Scintillation properties of Eu2+-doped KBa2I5 and K2BaI4. Journal of Luminescence, 2016, 169, 301-307.	3.1	23
84	Scintillation Properties and Electronic Structures of the Intrinsic and Extrinsic Mixed Elpasolites<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mi>Cs</mml:mi></mml:mrow><mml:mrow><mml:mn>2</mml:mn></mn mathvariant="normal">I</mml:mi></mml:mrow><mml:mrow><mml:mn>3</m. Physical Review Applied, 2016, 5, .	3.8	22
85	Energy transfer from Gd to Ce in Gd2(SiO4)O : Ce. Journal of Luminescence, 1994, 60-61, 963-966.	3.1	21
86	Experience with scintillators for PET: towards the fifth generation of PET scanners. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2004, 525, 242-248.	1.6	21
87	Energy Resolution of Calcium Co-Doped LSO:Ce Scintillators. IEEE Transactions on Nuclear Science, 2009, 56, 2972-2978.	2.0	21
88	Spectroscopic refractive indices of monoclinic single crystal and ceramic lutetium oxyorthosilicate from 200 to 850â€‰nm. Journal of Applied Physics, 2012, 112, .	2.5	21
89	Effect of Ba substitution in CsSrI3:Eu2+. Journal of Crystal Growth, 2013, 384, 27-32.	1.5	21
90	Effect of yttrium on electronâ€“phonon coupling strength of 5d state of Ce3+ ion in LYSO:Ce crystals. Journal of Luminescence, 2014, 154, 260-266.	3.1	21

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91	Effects of increasing size and changing europium activator concentration in KCaI3 scintillator crystals. Journal of Crystal Growth, 2016, 449, 96-103.	1.5	21
92	Sputtering of SO2by high energy ions. Radiation Effects, 1983, 71, 245-259.	0.4	20
93	Use of GSO for inelastic gamma-ray spectroscopy measurements in the borehole. IEEE Transactions on Nuclear Science, 1992, 39, 1412-1416.	2.0	20
94	Large size LSO:Ce and YSO:Ce scintillators for 50 MeV range /spl gamma/-ray detector. IEEE Transactions on Nuclear Science, 2000, 47, 1324-1328.	2.0	20
95	Revealing the role of calcium codoping on optical and scintillation homogeneity in Lu2SiO5:Ce single crystals. Journal of Crystal Growth, 2018, 498, 362-371.	1.5	20
96	Czochralski Growth, Optical, Scintillation, and Defect Properties of Cu²⁺ Codoped Lu₂SiO₅:Ce³⁺ Single Crystals. Crystal Growth and Design, 2019, 19, 4081-4089.	3.0	20
97	The Effect of B^{3+} and Ca^{2+}Co-Doping on Factors Which Affect the Energy Resolution of Gd$_{{3}}$Ga$_{{3}}$Al$_{{2}}$O$_{{12}}$: Ce. IEEE Transactions on Nuclear Science, 2013, 60, 4002-4006.	2.0	19
98	Thermoluminescence and radiation damage in bismuth germanate. Nature, 1985, 313, 465-467.	27.8	18
99	Two new cerium-doped mixed-anion elpasolite scintillators: Cs2NaYBr3I3 and Cs2NaLaBr3I3. Optical Materials, 2014, 38, 154-160.	3.6	18
100	Large-Size KCa_{0.8}Sr_{0.2}I₃:Eu²⁺ Crystals: Growth and Characterization of Scintillation Properties. Crystal Growth and Design, 2016, 16, 4129-4135.	3.0	18
101	Crystal growth and luminescence properties of Lu0.8Sc0.2BO3 scintillators doped with different Ce concentrations. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2011, 176, 889-893.	3.5	17
102	Scintillation Properties of Cs$_{3}$LaCl$_{6}$:Ce^{3+} and Cs$_{3}$LaBr$_{6}$:Ce^{3+}. IEEE Transactions on Nuclear Science, 2014, 61, 390-396.	2.0	17
103	Scanning electron and cathodoluminescence imaging of thin film Lu2SiO5:Ce scintillating materials. Applied Physics Letters, 2007, 91, .	3.3	16
104	Crystal growth and scintillation properties of Cs3CeCl6 and CsCe2Cl7. Journal of Crystal Growth, 2011, 318, 809-812.	1.5	16
105	Relationship between Ca2+ concentration and the properties of codoped Gd3Ga3Al2O12:Ce scintillators. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2015, 797, 138-143.	1.6	16
106	On the Role of Li⁺ Codoping in Simultaneous Improvement of Light Yield, Decay Time, and Afterglow of Lu₂SiO₅:Ce³⁺ Scintillation Detectors. Physica Status Solidi - Rapid Research Letters, 2019, 13, 1800472.	2.4	16
107	Correlation between Thermoluminescence and Radiation Damage in Bismuth Germanate. IEEE Transactions on Nuclear Science, 1985, 32, 545-548.	2.0	15
108	Improvement in the optical quality and energy resolution of CsSrBr3: Eu scintillator crystals. Journal of Crystal Growth, 2016, 445, 1-8.	1.5	15

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109	High energy resolution with transparent ceramic garnet scintillators. Proceedings of SPIE, 2014, , .	0.8	14
110	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
111	Crystal structure, electronic structure, temperature-dependent optical and scintillation properties of CsCe₂Br₇. Journal of Materials Chemistry C, 2015, 3, 11366-11376.	5.5	14
112	Toward High Energy Resolution in CsSrI₃/Eu²⁺ Scintillating Crystals: Effects of Off-Stoichiometry and Eu²⁺ Concentration. Crystal Growth and Design, 2016, 16, 7186-7193.	3.0	14
113	Europium concentration effects on the scintillation properties of Cs4SrI6:Eu and Cs4CaI6:Eu single crystals for use in gamma spectroscopy. Journal of Luminescence, 2019, 216, 116740.	3.1	14
114	Cerium-doped mixed-alkali rare-earth double-phosphate scintillators for thermal neutron detection. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2007, 579, 19-22.	1.6	13
115	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
116	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
117	Tackling Single Crystal Growth Challenges for Mixed-Elpasolite Scintillators. Crystal Growth and Design, 2016, 16, 4072-4081.	3.0	13
118	Effects of zirconium codoping on the optical and scintillation properties of SrI2:Eu<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" overflow="scroll" id="d1e283" altimg="si9.gif"><mml:msup><mml:mrow /><mml:mrow><mml:mn>2</mml:mn><mml:mo>+</mml:mo></mml:mrow></mml:msup></mml:math> single crystals. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2020, 954, 161242.	1.6	13
119	Gamma ray spectroscopy and timing using LSO and PIN photodiodes. IEEE Transactions on Nuclear Science, 1995, 42, 597-600.	2.0	12
120	Effects of Bi³⁺ 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
121	Effect of annealing atmosphere on the cerium valence state and F⁺ luminescence center in Caâ€codoped GGAG:Ce single crystals. Physica Status Solidi (B): Basic Research, 2015, 252, 1394-1401.	1.5	12
122	Crystal structure, electronic structure, optical and scintillation properties of self-activated Cs4YbI6. Journal of Luminescence, 2018, 201, 460-465.	3.1	12
123	Investigation of CeBr3â^’xIx scintillators. Journal of Crystal Growth, 2020, 531, 125365.	1.5	12
124	Crystal growth and scintillation properties of new ytterbium-activated scintillators Cs4CaI6:Yb and Cs4SrI6:Yb. Optical Materials, 2020, 110, 110536.	3.6	12
125	Thermal expansion and stability of cerium-doped Lu2SiO5. Materials Research Bulletin, 2006, 41, 423-435.	5.2	11
126	Potentials for large axial field of view positron camera systems. , 2008, , .		11

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127	Crystal growth and characterization of LuAG:Ce:Tb scintillator. Journal of Crystal Growth, 2010, 312, 1244-1248.	1.5	11
128	Spectroscopic properties of transparent Y_3Al_5O_12: Eu ceramics. Optical Materials Express, 2013, 3, 2022.	3.0	11
129	The europium oxidation state in CsSrI3:Eu scintillators measured by X-ray absorption spectroscopy. Optical Materials, 2014, 36, 670-674.	3.6	11
130	Effects of melt aging and off-stoichiometric melts on CsSrI₃:Eu²⁺ single crystal scintillators. Physical Chemistry Chemical Physics, 2016, 18, 8453-8461.	2.8	11
131	Improvements in Light Yield and Energy Resolution by Li⁺ Codoping (Lu_{0.75}Y_{0.25})₃Al₅O₁₂:Pr³⁺ Single Crystal Scintillators. Physica Status Solidi - Rapid Research Letters, 2018, 12, 1800280.	2.4	11
132	Crystal growth, density functional theory, and scintillation properties of Tl3LnCl6:Ce3+ and TlLn2Cl7:Ce3+ (Ln = Y, Gd). Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2021, 995, 165047.	1.6	11
133	Retention of ion-implanted-xenon in olivine: Dependence on implantation dose. Geochimica Et Cosmochimica Acta, 1983, 47, 1707-1712.	3.9	10
134	Gamma-ray detector properties for hostile environments. IEEE Transactions on Nuclear Science, 1988, 35, 876-878.	2.0	10
135	Cerium-doped lutetium oxyorthosilicate: a fast, efficient new scintillator. , 0, , .		10
136	Restored thermoluminescence in oxide crystals. Journal of Luminescence, 2010, 130, 2004-2012.	3.1	10
137	Crystal growth and scintillation properties of Cs3EuI5 crystals. Journal of Crystal Growth, 2011, 318, 833-835.	1.5	10
138	Scintillation Characteristics of Indium Doped Cesium Iodide Single Crystal. IEEE Transactions on Nuclear Science, 2015, 62, 571-576.	2.0	10
139	Multi-ampoule Bridgman growth of halide scintillator crystals using the self-seeding method. Journal of Crystal Growth, 2017, 470, 20-26.	1.5	10
140	Defect Engineering by Codoping in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mrow><mml:msub><mml:mrow><mml:mi>KCaI</mml:mi></mml:mrow><mml:mrow><mml:mn>3< Single-Crystalline Scintillators. Physical Review Applied, 2017, 8, .	3.8	10
141	Role of Yttrium in Thermoluminescence of LYSO:Ce Crystals. Journal of Physical Chemistry C, 2020, 124, 17726-17732.	3.1	10
142	Combinatorial Thin Film Synthesis of Cerium Doped Scintillation Materials in the Lutetium Oxideâ€"Silicon Oxide System. IEEE Transactions on Nuclear Science, 2008, 55, 1480-1483.	2.0	9
143	Combinatorial thin film sputtering investigation of cerium concentration in Lu2SiO5 scintillators. Journal of Luminescence, 2010, 130, 1366-1370.	3.1	9
144	Growth of inch-sized KCa_{0.8}Sr_{0.2}I₃:Eu²⁺scintillating crystals and high performance for gamma-ray detection. CrystEngComm, 2016, 18, 7435-7440.	2.6	9

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145	Crystal structure and thermal expansion of CsCaI3:Eu and CsSrBr3:Eu scintillators. Journal of Crystal Growth, 2018, 481, 35-39.	1.5	9
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