

# Andrzej J Wojtowicz

## List of Publications by Year in descending order

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107  
papers

2,931  
citations

159585

30  
h-index

189892

50  
g-index

108  
all docs

108  
docs citations

108  
times ranked

1678  
citing authors

#	ARTICLE	IF	CITATIONS
1	Fundamental limits of scintillator performance. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 1993, 333, 304-311.	1.6	238
2	LuAlO <sub>3</sub> :Ce and other aluminate scintillators. IEEE Transactions on Nuclear Science, 1995, 42, 280-284.	2.0	221
3	Luminescence properties of Ce-activated YAG optical ceramic scintillator materials. Journal of Luminescence, 1997, 75, 193-203.	3.1	178
4	Optical spectroscopy and scintillation mechanisms of Ce:LaF <sub>3</sub> . Physical Review B, 1994, 49, 14880-14895.	3.2	111
5	Properties of the new LuAP:Ce scintillator. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 1997, 385, 123-131.	1.6	108
6	Cerium-doped orthophosphates: new promising scintillators. IEEE Transactions on Nuclear Science, 1993, 40, 384-387.	2.0	92
7	Electron traps and scintillation mechanism in YAlO <sub>3</sub> :Ce and LuAlO <sub>3</sub> :Ce scintillators. Journal of Luminescence, 1998, 79, 275-291.	3.1	84
8	Scintillation properties of selected oxide monocrystals activated with Ce and Pr. Optical Materials, 2006, 28, 85-93.	3.6	73
9	Studies of low temperature thermoluminescence of GAGG:Ce and LuAG:Pr scintillator crystals using the T <sub>max</sub> -T <sub>stop</sub> method. Journal of Luminescence, 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. Optical Materials, 2014, 36, 1665-1669.	3.6	65
11	Scintillation yield of Bi <sub>4</sub> Ge <sub>3</sub> O <sub>12</sub> (BGO) pixel crystals. Physica B: Condensed Matter, 2010, 405, 1647-1651.	2.7	53
12	LuPO <sub>4</sub> :Nd and YPO <sub>4</sub> :Nd – new promising VUV scintillation materials. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2002, 486, 239-243.	1.6	52
13	Fundamental limitations of scintillators. Journal of Luminescence, 1994, 60-61, 942-947.	3.1	50
14	Recombination and scintillation processes in. Journal of Physics Condensed Matter, 1998, 10, 8401-8415.	1.8	50
15	Thermoluminescence and scintillation properties of LuAP and YAP. Journal of Alloys and Compounds, 2000, 300-301, 289-294.	5.5	49
16	VUV spectroscopy and low temperature thermoluminescence of LSO:Ce and YSO:Ce. Journal of Alloys and Compounds, 2004, 380, 146-150.	5.5	46
17	33000 photons per MeV from mixed (Lu <sub>0.75</sub> Y <sub>0.25</sub> ) <sub>3</sub> Al <sub>5</sub> O <sub>12</sub> :Pr scintillator crystals. Optical Materials Express, 2014, 4, 1207.	3.0	45
18	Rare-earth-activated wide bandgap materials for scintillators. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2002, 486, 201-207.	1.6	44

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19	Thermoluminescence and scintillation of praseodymium-activated Y <sub>3</sub> Al <sub>5</sub> O <sub>12</sub> and LuAlO <sub>3</sub> crystals. Journal of Crystal Growth, 2005, 275, e709-e714.	1.5	43
20	Excited-state absorption in excimer-pumped CaWO <sub>4</sub> crystals. Journal of Luminescence, 1993, 54, 345-355.	3.1	38
21	Radioluminescence and recombination processes in BaF <sub>2</sub> :Ce. Journal of Physics Condensed Matter, 2000, 12, 4097-4124.	1.8	38
22	Electron traps and scintillation mechanism in LuAlO <sub>3</sub> :Ce. Journal of Physics Condensed Matter, 2001, 13, 9599-9619.	1.8	38
23	Stoichiometric cerium compounds as scintillators, II. CeP/sub 5/O/sub 14/. IEEE Transactions on Nuclear Science, 1992, 39, 1542-1548.	2.0	37
24	The carrier capture and recombination processes in Ln/sup 3+/-activated scintillators. IEEE Transactions on Nuclear Science, 1996, 43, 2168-2173.	2.0	37
25	Thermoluminescence and scintillation properties of rare earth oxyorthosilicate scintillators. IEEE Transactions on Nuclear Science, 2004, 51, 1103-1110.	2.0	37
26	Scintillation properties of LuAP and LuYAP crystals activated with Cerium and Molybdenum. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2006, 562, 254-261.	1.6	37
27	Scintillation properties and mechanism in Lu <sub>0.8</sub> Y <sub>0.2</sub> AlO <sub>3</sub> :Ce. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2002, 486, 176-180.	1.6	36
28	Rb <sub>3</sub> Lu(PO <sub>4</sub> ) <sub>2</sub> :Ce and Cs <sub>3</sub> Lu(PO <sub>4</sub> ) <sub>2</sub> :Ce – new promising scintillator materials. Crystal Research and Technology, 2003, 38, 275-282.	1.3	36
29	The coupling of 4T <sub>2</sub> and 2E states of the Cr <sup>3+</sup> ion in solid state materials. Journal of Luminescence, 1991, 50, 231-242.	3.1	35
30	Lutetium aluminate: spectroscopic and scintillation properties. IEEE Transactions on Nuclear Science, 1996, 43, 1316-1320.	2.0	33
31	Luminescence of Cr <sup>3+</sup> in mullite transparent glass cermics (II). Journal of Luminescence, 1988, 39, 189-203.	3.1	32
32	Scintillation properties of Pr-activated LuAlO <sub>3</sub> . Optical Materials, 2006, 28, 102-105.	3.6	32
33	Fast 20ns 5d→4f luminescence and radiation trapping in BaF <sub>2</sub> :Ce. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2002, 486, 412-416.	1.6	31
34	Cerium-Doped Orthophosphate Scintillators. Materials Research Society Symposia Proceedings, 1994, 348, 123.	0.1	30
35	Bulk <sup>125</sup> I-Ga <sub>2</sub> O <sub>3</sub> single crystals doped with Ce, Ce+Si, Ce+Al, and Ce+Al+Si for detection of nuclear radiation. Journal of Alloys and Compounds, 2020, 818, 152842.	5.5	28
36	Stoichiometric cerium compounds as scintillators. I. CeF/sub 3/. IEEE Transactions on Nuclear Science, 1992, 39, 494-501.	2.0	26

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37	Thermoluminescence and scintillation of LuAlO <sub>3</sub> :Ce. Radiation Measurements, 1998, 29, 323-326.	1.4	26
38	Effect of Lu-to-Y ratio and Mo coactivation on scintillation properties of LuYAG:Pr and LuAG:Pr,Mo crystals. Optical Materials, 2016, 59, 107-114.	3.6	26
39	Broadband impurity absorption and luminescence: experiment and line-shape calculations. Journal of the Optical Society of America B: Optical Physics, 1989, 6, 1106.	2.1	25
40	Scintillation and luminescence properties of Ce-activated K <sub>3</sub> Lu(PO <sub>4</sub> ) <sub>2</sub> . Journal of Alloys and Compounds, 2004, 380, 191-195.	5.5	25
41	Luminescence of Cr <sup>3+</sup> in kyanite. Journal of Luminescence, 1991, 50, 221-230.	3.1	24
42	Scintillation mechanisms in rare earth orthophosphates. Radiation Effects and Defects in Solids, 1995, 135, 305-310.	1.2	24
43	Spectroscopic characteristics of chromium doped mullite glass-ceramics. IEEE Journal of Quantum Electronics, 1988, 24, 1109-1113.	1.9	23
44	<sup>125</sup> I-Ga <sub>2</sub> O <sub>3</sub> :Ce as a fast scintillator: An unclear role of cerium. Radiation Measurements, 2019, 121, 49-53.	1.4	23
45	Semiconductor scintillator development: Pure and doped <sup>125</sup> I-Ga <sub>2</sub> O <sub>3</sub> . Optical Materials, 2020, 105, 109856.	3.6	22
46	Luminescence of Cr <sup>3+</sup> in sillimanite. Physical Review B, 1989, 39, 8695-8701.	3.2	20
47	VUV scintillation of LuPO <sub>4</sub> :Nd and YPO <sub>4</sub> :Nd. IEEE Transactions on Nuclear Science, 2002, 49, 937-940.	2.0	19
48	Luminescence and scintillation properties of YAG:Pr. IEEE Transactions on Nuclear Science, 2002, 49, 926-930.	2.0	17
49	Charge Traps in Ce-Doped CaF <sub>2</sub> and BaF <sub>2</sub> . Acta Physica Polonica A, 1999, 95, 251-258.	0.5	17
50	Scintillation mechanism in RE-activated fluorides. Journal of Luminescence, 1997, 72-74, 731-733.	3.1	16
51	Photo- and radioluminescent properties of undoped and Bi-doped Lu <sub>2</sub> WO <sub>6</sub> powders at 10–300K. Journal of Luminescence, 2015, 160, 50-56.	3.1	16
52	Scintillation light trapping and radiation damage in CeF <sub>3</sub> . IEEE Transactions on Nuclear Science, 1994, 41, 713-718.	2.0	15
53	Thermoluminescence of LuAlO <sub>3</sub> : Ce. Journal of Luminescence, 1997, 72-74, 756-758.	3.1	15
54	Photoluminescent Properties of Monoclinic HfO <sub>2</sub> :Ti Sintered Ceramics in 16–300 K. Journal of Physical Chemistry C, 2015, 119, 5026-5032.	3.1	15

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55	Tailoring the scintillation properties of $\text{Ga}_2\text{O}_3$ by doping with Ce and codoping with Si. <i>Optical Materials Express</i> , 2019, 9, 3738.	3.0	15
56	Radiative recombination in $\text{BaF}_2:\text{Pr}$ . <i>Journal of Alloys and Compounds</i> , 2000, 300-301, 261-266.	5.5	14
57	Scintillation light yield of $\text{BaF}_2:\text{Ce}$ . <i>Optical Materials</i> , 2009, 31, 523-526.	3.6	14
58	Effect of thermal annealing on light yield, low temperature thermoluminescence, and time profiles of $\text{LuAG}:\text{Pr}$ scintillator crystals. <i>Radiation Measurements</i> , 2013, 56, 80-83.	1.4	14
59	Spectroscopy and Thermoluminescence of $\text{LuAlO}_3:\text{Ce}$ . <i>Acta Physica Polonica A</i> , 1996, 90, 377-384.	0.5	14
60	$\text{Cr}^{3+}$ in kyanite: A new mechanism of thermally enhanced 2E decay. <i>Journal of Luminescence</i> , 1990, 46, 271-276.	3.1	13
61	Luminescence Quenching of Strongly Coupled Systems. <i>Physica Status Solidi (B): Basic Research</i> , 1993, 179, 233-240.	1.5	12
62	Radiative recombination in Ce-, Pr-, and Tb-doped barium fluoride. <i>Journal of Alloys and Compounds</i> , 2000, 300-301, 199-206.	5.5	12
63	<title>Radio- and VUV-excited luminescence of $\text{YAP}:\text{Ce}$ , $\text{YAP}:\text{Pr}$ and $\text{YAG}:\text{Pr}$ </title>. , 2001, , .		12
64	Photoluminescence Kinetics of YAG Crystals Activated with Ce, and Ce and Mg. <i>Acta Physica Polonica A</i> , 1999, 95, 395-402.	0.5	12
65	Cerium compounds as scintillators. , 0, , .		11
66	Spectroscopy and scintillation mechanism in $\text{LuAlO}_3:\text{Ce}$ . <i>Journal of Luminescence</i> , 1997, 72-74, 789-791.	3.1	11
67	Traps and recombination centers in $\text{YAlO}_3:\text{Ce},\text{Co}$ . <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2002, 486, 482-485.	1.6	10
68	VUV spectroscopy of $\text{BaF}_2:\text{Er}$ . <i>Optical Materials</i> , 2009, 31, 474-478.	3.6	10
69	Excited State Absorption and Thermoluminescence in Ce and Mg Doped Yttrium Aluminum Garnet. <i>Acta Physica Polonica A</i> , 1999, 95, 403-412.	0.5	10
70	High and low spin energy states of the $\text{Tb}^{3+} 4f^7 5d$ configuration in $\text{BaF}_2$ . <i>Optical Materials</i> , 2011, 33, 1535-1539.	3.6	9
71	Thermoluminescent properties of $\text{HfO}_2:\text{Ti}$ after exposure to X-rays. <i>Radiation Measurements</i> , 2016, 90, 140-144.	1.4	9
72	Pulsed laser deposition of $\text{Nd}:\text{YAG}$ on Si with substrate bias voltage. <i>Applied Surface Science</i> , 2002, 193, 261-267.	6.1	8

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73	Luminescence and scintillation properties of XPO <sub>4</sub> :Nd <sup>3+</sup> (X = Y, Lu, Sc, La) crystals. <i>Optical Materials</i> , 2018, 79, 273-278.	3.6	8
74	Scintillation Mechanism and Radiation Damage in CexLa <sub>1-x</sub> F <sub>3</sub> Crystals. <i>Materials Research Society Symposia Proceedings</i> , 1994, 348, 455.	0.1	7
75	Changes in optical properties of YAG:Ce single crystals due to codoping and ionizing radiation treatment. , 1999, 3724, 339.		7
76	Fast and efficient VUV/UV emissions from (Ba,Lu)F <sub>2</sub> :Er crystals. <i>Journal of Luminescence</i> , 2009, 129, 1594-1597.	3.1	7
77	Study of closed-shell molecular complexes as possible laser media. <i>IEEE Journal of Quantum Electronics</i> , 1995, 31, 1554-1560.	1.9	6
78	VUV spectroscopy of wide bandgap materials. <i>Optical Materials</i> , 2009, 31, 1772-1776.	3.6	6
79	Recent progress in the development of $\text{Lu}^{2+}$ -Ga <sub>2</sub> O <sub>3</sub> scintillator crystals grown by the Czochralski method. <i>Optical Materials Express</i> , 2021, 11, 2488.	3.0	6
80	Physics of Solid-State Laser Materials. <i>Acta Physica Polonica A</i> , 1991, 80, 193-205.	0.5	6
81	Thermoluminescence and Scintillation Time Profiles of BaF <sub>2</sub> :Ce. <i>Acta Physica Polonica A</i> , 1999, 95, 259-268.	0.5	6
82	Rapid intensity fluctuations of light scattered by glasses. <i>Physical Review B</i> , 1987, 36, 9413-9415.	3.2	5
83	Some Aspects of Solid State Radioluminescence. <i>Acta Physica Polonica A</i> , 1999, 95, 165-178.	0.5	5
84	Heading for brighter and faster $\text{Lu}^{2+}$ -Ga <sub>2</sub> O <sub>3</sub> scintillator crystals. <i>Optical Materials: X</i> , 2022, 15, 100157.	0.8	5
85	Properties of Ce-activated alkali-lutetium double phosphate scintillators. <i>Radiation Measurements</i> , 2010, 45, 400-402.	1.4	4
86	Unknown Excited States of the Self-Activated Center in ZnSe. <i>Physica Status Solidi (B): Basic Research</i> , 1982, 112, K103.	1.5	3
87	X-ray study of Nd:YAG on (111)-oriented Si obtained by pulsed laser deposition. , 2001, 4412, 396.		3
88	A preliminary assessment of Lu <sub>2</sub> Y <sub>2</sub> Al <sub>2</sub> O <sub>9</sub> :Pr (LuYAM:Pr) as a potential scintillator. <i>Radiation Measurements</i> , 2016, 93, 41-45.	1.4	3
89	Thermal effects in excimer-excited bismuth germanate. <i>Journal of the Optical Society of America B: Optical Physics</i> , 1991, 8, 1831.	2.1	2
90	Luminescence and scintillation properties of YAG:Pr. , 0, , .		2

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91	Effect of doping with cobalt on radioluminescence and low temperature thermoluminescence of Li <sub>2</sub> B <sub>4</sub> O <sub>7</sub> crystals. Radiation Measurements, 2014, 70, 29-33.	1.4	2
92	A deeper insight into (Lu,Y)AG:Pr scintillator crystals. IOP Conference Series: Materials Science and Engineering, 2017, 169, 012010.	0.6	2
93	New Trends In Scintillator Research. , 0, , .		1
94	<title>Charge traps and emission kinetics in LuAP:Ce</title>. , 2001, , .		1
95	Spin-Orbit Coupling in Cr <sup>3+</sup> Ion in Solid State Materials. Acta Physica Polonica A, 1991, 79, 235-238.	0.5	1
96	Luminescence of Ag atoms removed from the surfaces of AgI crystals irradiated by nitrogen laser. Journal of Luminescence, 1975, 11, 83-89.	3.1	0
97	Polarization of Ag luminescence in ZnSe. Journal of Crystal Growth, 1985, 72, 167-169.	1.5	0
98	CeF <sub>3</sub> / Scintillator: The State Of The Art. , 0, , .		0
99	The scintillation properties of Ce <sub>x</sub> La <sub>1-x</sub> F <sub>3</sub> . Journal of Luminescence, 1994, 60-61, 987-990.	3.1	0
100	<title>Energy transfer processes in (Lu,Gd)AlO <sub>3</sub> :Ce</title>. , 2001, 4412, 221.		0
101	VUV scintillation of LuPO <sub>4</sub> :Nd and YPO <sub>4</sub> :Nd. , 0, , .		0
102	Thermoluminescence and scintillation properties of rare earth oxyorthosilicate scintillators. , 2003, , .		0
103	EditorialConference Comments by the Editors. IEEE Transactions on Nuclear Science, 2010, 57, 1161-1161.	2.0	0
104	Conference Comments by the Editors. IEEE Transactions on Nuclear Science, 2012, 59, 2037-2037.	2.0	0
105	The 1S <sub>0</sub> emission from the minor site of Pr <sup>3+</sup> in (Ba,Lu)F <sub>2</sub> :Pr. Radiation Measurements, 2013, 56, 407-410.	1.4	0
106	Luminescence and Scintillation Properties of Ce <sub>x</sub> La <sub>1-x</sub> F <sub>3</sub> Monocrystals. Acta Physica Polonica A, 1993, 84, 963-968.	0.5	0
107	New High Performance Scintillators Based on Re-Activated Insulator Materials. Acta Physica Polonica A, 1996, 90, 215-222.	0.5	0