Tomasz Szczesniak

List of Publications by Year in descending order

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154 papers	2,708 citations	185998 28 h-index	223531 46 g-index
154 all docs	154 docs citations	154 times ranked	1796 citing authors

#	Article	IF	Citations
1	Scintillation Properties of LuAG:Ce, YAG:Ce and LYSO:Ce Crystals for Gamma-Ray Detection. IEEE Transactions on Nuclear Science, 2009, 56, 3800-3805.	1.2	227
2	Temperature dependences of LaBr3(Ce), LaCl3(Ce) and NaI(Tl) scintillators. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2006, 568, 739-751.	0.7	127
3	Non-Proportionality of Electron Response and Energy Resolution of Compton Electrons in Scintillators. IEEE Transactions on Nuclear Science, 2012, 59, 222-229.	1.2	123
4	Performance of cerium-doped Gd3Al2Ga3O12 (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.	0.7	117
5	New Prospects for Time-of-Flight PET With LSO Scintillators. IEEE Transactions on Nuclear Science, 2006, 53, 2484-2488.	1.2	66
6	Characterization of GAGG:Ce scintillators with various Al-to-Ga ratio. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2015, 772, 112-117.	0.7	66
7	Energy resolution of scintillation detectors. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2016, 805, 25-35.	0.7	64
8	Characterization of CaWO4 scintillator at room and liquid nitrogen temperatures. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2005, 553, 578-591.	0.7	63
9	Fast Photomultipliers for TOF PET. IEEE Transactions on Nuclear Science, 2009, 56, 173-181.	1.2	61
10	New Photonis XP20D0 photomultiplier for fast timing in nuclear medicine. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2006, 567, 31-35.	0.7	58
11	Energy Resolution of Compton Electrons in LaBr$_{3}$:Ce Scintillator. IEEE Transactions on Nuclear Science, 2010, 57, 1697-1701.	1.2	55
12	Scintillation Properties of Praseodymium Doped LuAG Scintillator Compared to Cerium Doped LuAG, LSO and ${m LaBr} _{3}$. IEEE Transactions on Nuclear Science, 2009, 56, 2499-2505.	1.2	54
13	Energy Resolution of Scintillation Detectorsâ€"New Observations. IEEE Transactions on Nuclear Science, 2008, 55, 1062-1068.	1.2	53
14	Measurement of Compton edge position in low-Z scintillators. Radiation Measurements, 2010, 45, 605-607.	0.7	53
15	Light Yield Non-Proportionality and Energy Resolution of Praseodymium Doped LuAG Scintillator. IEEE Transactions on Nuclear Science, 2009, 56, 934-938.	1.2	49
16	Comparison of absorption, luminescence and scintillation characteristics in Lu1.95Y0.05SiO5:Ce,Ca and Y2SiO5:Ce scintillators. Optical Materials, 2013, 35, 1679-1684.	1.7	48
17	Characterization of Scintillators by Modern Photomultipliersâ€"A New Source of Errors. IEEE Transactions on Nuclear Science, 2010, 57, 2886-2896.	1.2	46
18	Comparative studies of Lu₃Al₅O₁₂:Ce and Y₃Al₅O₁₂:Ce scintillators for gammaâ€ray detection. Physica Status Solidi (A) Applications and Materials Science, 2009, 206, 2599-2605.	0.8	43

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19	Boron-10 Loaded BC523A Liquid Scintillator for Neutron Detection in the Border Monitoring. IEEE Transactions on Nuclear Science, 2008, 55, 3710-3716.	1.2	37
20	Non-Proportionality of Organic Scintillators and BGO. IEEE Transactions on Nuclear Science, 2008, 55, 1069-1072.	1.2	37
21	Multi Pixel Photon Counters (MPPC) as an Alternative to APD in PET Applications. IEEE Transactions on Nuclear Science, 2010, 57, 1008-1014.	1.2	35
22	Neutron/gamma discrimination properties of composite scintillation detectors. Journal of Instrumentation, 2011, 6, P07007-P07007.	0.5	35
23	Energy resolution of small scintillation detectors with SiPM light readout. Journal of Instrumentation, 2013, 8, P02017-P02017.	0.5	34
24	Fast neutron and gamma ray pulse shape discrimination in EJ-276 and EJ-276G plastic scintillators. Journal of Instrumentation, 2020, 15, P03030-P03030.	0.5	34
25	A Further Study of Timing With LSO on XP20D0 for TOF PET. IEEE Transactions on Nuclear Science, 2007, 54, 1464-1473.	1.2	31
26	MPPC Array in the Readout of CsI:Tl, LSO:Ce:Ca, LaBr$_{3}!$:Ce, and BGO Scintillators. IEEE Transactions on Nuclear Science, 2012, 59, 3294-3303.	1.2	31
27	Further Study of Boron-10 Loaded Liquid Scintillators for Detection of Fast and Thermal Neutrons. IEEE Transactions on Nuclear Science, 2010, 57, 375-380.	1.2	29
28	Study of LaBr$_{3}$ Crystals Coupled to Photomultipliers and Avalanche Photodiodes. IEEE Transactions on Nuclear Science, 2008, 55, 1774-1780.	1.2	28
29	A Comparative Study of Undoped NaI Scintillators With Different Purity. IEEE Transactions on Nuclear Science, 2009, 56, 1655-1660.	1.2	28
30	Light Pulse Shapes in Liquid Scintillators Originating From Gamma-Rays and Neutrons. IEEE Transactions on Nuclear Science, 2010, 57, 3846-3852.	1.2	27
31	Comparison of SensL and Hamamatsu 4Ã—4 channel SiPM arrays in gamma spectrometry with scintillators. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2017, 856, 53-64.	0.7	27
32	Measuring the scintillation decay time for different energy depositions in NaI:Tl, LSO:Ce and CeBr3 scintillators. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2014, 749, 68-73.	0.7	26
33	Electron response of some low-Z scintillators in wide energy range. Journal of Instrumentation, 2012, 7, P06011-P06011.	0.5	25
34	A Comparative Study of Silicon Drift Detectors With Photomultipliers, Avalanche Photodiodes and PIN Photodiodes in Gamma Spectrometry With LaBr$_{3}$ Crystals. IEEE Transactions on Nuclear Science, 2009, 56, 1006-1011.	1.2	24
35	Timing Resolution and Decay Time of LSO Crystals Co-Doped With Calcium. IEEE Transactions on Nuclear Science, 2010, 57, 1329-1334.	1.2	23
36	Properties of CdWO₄and ZnWO₄scintillators at liquid nitrogen temperature. Journal of Instrumentation, 2012, 7, P03011-P03011.	0.5	23

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37	Comparative study of large NaI(Tl) and BGO scintillators for the EURopean illicit TRAfficking countermeasures kit project. IEEE Transactions on Nuclear Science, 2006, 53, 1737-1743.	1.2	22
38	Energy resolution of CsI(Na) scintillators. Radiation Measurements, 2010, 45, 377-379.	0.7	22
39	Comparative study of large samples (2" Ã— 2") plastic scintillators and EJ309 liquid with pulse shape discrimination (PSD) capabilities. Journal of Instrumentation, 2014, 9, P06014-P06014.	0.5	22
40	Energy Resolution of Calcium Co-Doped LSO:Ce Scintillators. IEEE Transactions on Nuclear Science, 2009, 56, 2972-2978.	1.2	21
41	Luminescence and scintillation characteristics of (GdxY3-x)Al2Ga3O12:Ce (xÂ=Â1,2,3) single crystals. Optical Materials, 2018, 76, 162-168.	1.7	21
42	Silicon photomultipliers in gamma spectroscopy with scintillators. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2019, 926, 129-147.	0.7	21
43	Characterization of LFS-3 scintillator in comparison with LSO. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2011, 652, 226-230.	0.7	20
44	MPPC Arrays in PET Detectors With LSO and BGO Scintillators. IEEE Transactions on Nuclear Science, 2013, 60, 1533-1540.	1.2	20
45	Scintillation properties of Gd3Al2Ga3O12:Ce, Li and Gd3Al2Ga3O12:Ce, Mg single crystal scintillators: A comparative study. Optical Materials, 2019, 92, 181-186.	1.7	20
46	A technique for measuring the energy resolution of low-Z scintillators. , 2009, , .		18
47	Energy resolution of scintillation detectors with SiPM light readout. , 2010, , .		18
48	High performance detectors for upgraded gamma ray diagnostics for JET DT campaigns. Physica Scripta, 2016, 91, 064003.	1.2	18
49	Investigation of Absolute Light Output Measurement Techniques. IEEE Transactions on Nuclear Science, 2007, 54, 1367-1371.	1.2	17
50	Performance of FBK high-density SiPMs in scintillation spectrometry. Journal of Instrumentation, 2014, 9, P08004-P08004.	0.5	17
51	The time-of-flight method for characterizing the neutron response of liquid organic scintillators. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2015, 794, 44-49	0.7	17
52	Study of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" id="mml79" display="inline" overflow="scroll" altimg="si79.gif"><mml:mi>n</mml:mi></mml:math>-<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" id="mml80" display="inline" overflow="scroll" altimg="si80.gif"><mml:mi mathvariant="normal">Î³</mml:mi></mml:math> discrimination by zero-crossing method with SiPM based scintillation detectors. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2018, 8	0.7	17
53	Scintillation properties of Gd3(Al5-xGax)O12:Ce (x = 2.3, 2.6, 3.0) single crystals. Optical Materials, 2018, 81, 23-29.	1.7	17
54	Suppression of gamma-ray sensitivity of liquid scintillators for neutron detection. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2011, 652, 330-333.	0.7	16

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55	Response of doped alkali iodides measured with gamma-ray absorption and Compton electrons. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2013, 705, 42-46.	0.7	16
56	Study of NaI(Tl) scintillator cooled down to liquid nitrogen temperature. Journal of Instrumentation, 2012, 7, P11006-P11006.	0.5	15
57	Characterization of CsI:Tl at a wide temperature range (â˜'40Â°C to +22Â°C). Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2013, 707, 73-79.	0.7	15
58	Characterization of 4 Ã— 4ch MPPC array in scintillation spectrometry. Journal of Instrumentation, 2013, 8, P09020-P09020.	0.5	15
59	Energy Resolution and Slow Components in Undoped CsI Crystals. IEEE Transactions on Nuclear Science, 2016, 63, 459-466.	1.2	15
60	The Road to the Common PET/CT Detector. IEEE Transactions on Nuclear Science, 2007, 54, 1459-1463.	1.2	14
61	CaF₂(Eu): an ``old'' scintillator revisited. Journal of Instrumentation, 2013, 8, P06010-P06010.	0.5	14
62	New method for evaluating effective recovery time and single photoelectron response in silicon photomultipliers. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2015, 783, 58-64.	0.7	14
63	Study of LaBr<inf>3</inf> crystals coupled to photomultipliers and avalanche photodiodes. , 2007, , .		13
64	Silicon photomultiplier as an alternative for APD in PET/MRI applications. , 2008, , .		13
65	Effective dead time of APD cells of SiPM. , 2011, , .		12
66	Characteristics of scintillation detectors based on inorganic scintillators and SiPM light readout. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2013, 702, 91-93.	0.7	12
67	Comparison of detectors with pulse shape discrimination capability for simultaneous detection of gamma-rays, slow and fast neutrons. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2021, 1019, 165858.	0.7	12
68	Light yield non-proportionality of undoped YAP scintillator. Journal of Instrumentation, 2009, 4, P05006-P05006.	0.5	11
69	A Comparative Study of Fast Photomultipliers for Timing Experiments and TOF PET. IEEE Transactions on Nuclear Science, 2009, 56, 1017-1023.	1.2	11
70	Time resolution of scintillation detectors based on SiPM in comparison to photomultipliers. , 2010, , .		11
71	Demonstration of a Dual-Range Photon Detector With SDD and ${hbox {LaBr}}_{3}({hbox) Tj ETQq1 1 0.784314 rgBT /Overlock 10	1.2	10
72	Influence of lutetium content on the scintillation properties in (Lu x Y1â˜'x)AlO3 :Ce single crystals. Physica Status Solidi (A) Applications and Materials Science, 2013, 210, 1903-1908.	0.8	10

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73	Silicon photomultipliers in scintillation detectors used for gamma ray energies up to 6.1 MeV. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2017, 874, 137-148.	0.7	10
74	Fast photomultipliers for TOF PET. , 2007, , .		9
75	Luminescence and Scintillation Properties of Mg²⁺-Codoped Lu_{0.6}Gd_{2.4}Al₂Ga₃O₁₂:Ce Single Crystal. IEEE Transactions on Nuclear Science, 2020, 67, 904-909.	1.2	9
76	Application of Hamamatsu S8550 APD Array to the Common PET/CT Detector. IEEE Transactions on Nuclear Science, 2008, 55, 2460-2464.	1.2	8
77	SiPM proton irradiation for application in cosmic space. Journal of Instrumentation, 2020, 15, P03002-P03002.	0.5	8
78	Comparative Study of Large NaI(Tl) and BGO Scintillators for the EURopean Illicit TRAfficking Countermeasures Kit Project. , 0, , .		7
79	Characterization of 2 Ã— 2 ch MPPC array over a wide temperature range (â˜’20Â°C to +21Â°C). Journal of Instrumentation, 2013, 8, P07007-P07007.	0.5	7
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91	Scintillation characteristics of YAlO3:Pr perovskite single crystals. Optical Materials, 2020, 108, 110161.	1.7	5
92	Neutron hardness of EJ-276 scintillation material. Journal of Instrumentation, 2020, 15, P10012-P10012.	0.5	5
93	The light response of CsI:Tl crystal after interaction with gamma radiation study using analysis of single scintillation pulses and digital oscilloscope readout. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2022, 1031, 166600.	0.7	5
94	Application of LaBr<inf>3</inf>(Ce³⁺) scintillators in radio-isotope identification devices. , 2007, , .		4
95	Study of n-Î³ discrimination by zero-crossing method with SiPM based scintillation detectors. , 2014, , .		4
96	Temperature properties of scintillators for PET detectors: A comparative study. , 2014, , .		4
97	MCORD - MPD Cosmic Ray Detector a new features. EPJ Web of Conferences, 2019, 204, 07016.	0.1	4
98	New Prospects for Time-of-Flight PET with LSO Scintillators. , 0, , .		3
99	Energy Resolution of Calcium Co-doped LSO:Ce Scintillators. , 2008, , .		3
100	Further study of Boron-10 loaded liquid scintillators for detection of fast and thermal neutrons. , 2008, , .		3
101	Performance of CsI(Na) scintillators in Î³-Ray spectrometry. , 2009, , .		3
102	Comparison of neutron detection efficiency using a He-3 counter and a Boron-10 loaded liquid scintillator EJ309B5. , 2009, , .		3
103	Characterization of scintillators by modern photomultipliers — A new source of errors. , 2009, , .		3
104	Non-proportionality of electron response and energy resolution of Compton electrons in scintillators. , 2010, , .		3
105	2×2 MPPC arrays in gamma spectrometry with CsI(Tl), LSO:Ce(Ca), LaBr<inf>3</inf>, BGO. , 2011, , .		3
106	Coincidence resolution time of two small scintillators coupled to high quantum-efficiency photomultipliers in a PET-like system. EPJ Web of Conferences, 2014, 66, 10010.	0.1	3
107	Scintillation timing characteristics of (La,Gd)2Si2O7:Ce and Gd2SiO5:Ce single crystal scintillators: A comparative study. Radiation Measurements, 2016, 92, 49-53.	0.7	3
108	Luminescence and scintillation timing characteristics of (Lu x Gd 2â^'x)SiO 5 :Ce single crystals. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2017, 844, 116-120.	0.7	3

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109	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.	0.7	3
110	The Road to the Common PET/CT Detector. , 2006, , .		2
111	Boron-10 loaded BC523A liquid scintillator for neutron detection in the border monitoring. , 2007, , .		2
112	MPPC arrays in PET detectors with LSO and BGO scintillators. , 2011, , .		2
113	Properties of NaI(Tl) scintillator at liquid nitrogen temperature. , 2011, , .		2
114	Characterization of 4×4ch MPPC array in scintillation spectrometry. , 2012, , .		2
115	Investigation of the Properties of ${hbox {3}}^{primeprime}imes {hbox {3}}^{primeprime}$ Different Scintillation Detectors for Neutron Activation Analysis Techniques. IEEE Transactions on Nuclear Science, 2012, 59, 230-235.	1.2	2
116	Comparative studies of Lu1.95Y0.05SiO5:Ce and Lu0.7Y0.3AlO3:Ce single crystal scintillators for gamma-ray detection. Nuclear Instruments & Methods in Physics Research B, 2014, 326, 103-105.	0.6	2
117	Digital neutron-gamma discrimination methods: Charge comparison versus zero-crossing. , 2014, , .		2
118	Dynamic derivative convolution algorithm for prompt gamma neutron activation spectra. , 2016, , .		2
119	Performance of 2 inch and 3 inch Scintillation Detectors with SiPM Light Readout. , 2017, , .		2
120	MCORD: MPD cosmic ray detector for NICA. , 2018, , .		2
121	Scintillation Properties of Praseodymium Doped LuAG Scintillator Compared to Cerium Doped LuAG, LSO and LaBr₃. , 2008, , .		1
122	New Organic Scintillators for Neutron Detection. , 2010, , .		1
123	A Time Resolution Study of a Continuous Crystal Detector for TOF PET. IEEE Transactions on Nuclear Science, 2010, 57, 40-47.	1.2	1
124	Lu_{1.8}Y_{0.2}SiO₅:Ce and LaCl₃:Ce Scintillators for Gamma-Ray Detection. Advanced Materials Research, 2011, 284-286, 2064-2069.	0.3	1
125	Characterization of TSV MPPC arrays (4Ã—4 ch and 8Ã—8 ch) in scintillation spectrometry. , 2014, , .		1
126	Photomultipliers with the screening grid at the anode for TOF PET block detectors. , 2015, , .		1

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127	Photomultipliers With the Screening Grid at the Anode for TOF PET Block Detectors. IEEE Transactions on Nuclear Science, 2016, 63, 2772-2776.	1.2	1
128	CsI:Tl scintillation pulse shapes measured with a SiPM photodetector in a liquid nitrogen cryostat. , 2016, , .		1
129	Evolution of MPPC properties as a function of neutron fluence. , 2017, , .		1
130	Comparative Study of GdLu₂Al₂Ga₃O₁₂:Ce and GdY₂Al₂Ga₃O₁₂:Ce Scintillation Crystals for $gamma$ -Ray Detection. IEEE Transactions on Nuclear Science, 2018, 65, 2081-2084.	1.2	1
131	Study of MPPC damage induced by neutrons. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2018, 906, 30-36.	0.7	1
132	The light response of CsI: Tl scintillators with Tl concentrations of 0.05wt% to 0.13wt% for a temperature range of 303 K to 203 K. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2019, 914, 165-172.	0.7	1
133	Conceptual design report of the MPD Cosmic Ray Detector (MCORD). Journal of Instrumentation, 2021, 16, P11035.	0.5	1
134	A Further Study of Timing with LSO on XP20D0 for TOF PET. , 2006, , .		0
135	Application of Hamamatsu S8550 APD array to the common PET/CT detector. , 2007, , .		0
136	A Comparative Study of Undoped NaI Scintillators with Different Purity. , 2008, , .		0
137	A Continuous Crystal Detector for TOF PET. , 2008, , .		0
138	Light pulse shapes in liquid scintillators originating from gamma-rays and neutrons. , 2009, , .		0
139	Properties of CdWO<inf>4</inf> and ZnWO<inf>4</inf> at liquid nitrogen temperature. , 2009, , .		0
140	Energy resolution of Compton electrons in scintillators. , 2009, , .		0
141	Radiation results of the SEE test of Xilinx XC3S400 FPGA instances. , 2009, , .		0
142	Time Resolution of Fast Photomultipliers for Time of Flight PET. , 2010, , .		0
143	Linearity and energy resolution of compton electrons in CZT measured using the wide angle compton coincidence technique. , 2010, , .		0
144	CaF<inf>2</inf>(Eu): An “Old” scintillator revisited. , 2010, , .		0

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145	The comparison of large scintillators for high energy gamma-rays detection. , 2010, , .		0
146	Gamma-ray and electron response in doped alkali halide scintillators. , 2011, , .		0
147	Time jitter of silicon photomultipliers. , 2012, , .		0
148	Characterization of 2×2ch MPPC array at a wide temperature range (−20) Tj ETQq0 0 0 rgBT /Overlock 10 Tf		0
149	Energy dependence of scintillation decay time measured with gamma-rays and compton electrons. , 2012, , .		0
150	Performance of FBK high-density SiPMs in scintillation spectrometry. , 2013, , .		0
151	microPMT - a new photodetector for gamma spectrometry and fast timing?. , 2013, , .		0
152	Silicon photomultipliers in scintillation detectors used for gamma-ray energies up to 6.1 MeV. , 2015, , .		0
153	Timing resolution of monolithic scintillators coupled to laige SiPM arrays. , 2016, , .		0
154	Temperature Dependence of CsI:Tl Scintillation Pulse Shapes from -183Â°C to +90Â°C Measured with a SiPM Readout. , 2017, , .		0