Paul Sellin

List of Publications by Year
in descending order

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132	3,398	159585 30	175258 52
papers	citations	h-index	g-index

132	132	132	2952
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Direct Detection of Fast Neutrons by Organic Semiconducting Single Crystal Detectors. Advanced Functional Materials, 2022, 32, 2108857.	14.9	7
2	High sensitivity H2S gas sensors using lead halide perovskite nanoparticles. Results in Physics, 2022, 35, 105333.	4.1	10
3	Polycrystalline Formamidinium Lead Bromide X-ray Detectors. Applied Sciences (Switzerland), 2022, 12, 2013.	2.5	7
4	Recent advances in lead-free double perovskites for x-ray and photodetection. Nanotechnology, 2022, 33, 312001.	2.6	22
5	Formamidinium Lead Halide Perovskite Nanocomposite Scintillators. Nanomaterials, 2022, 12, 2141.	4.1	12
6	Towards superior X-ray detection performance of two-dimensional halide perovskite crystals by adjusting the anisotropic transport behavior. Journal of Materials Chemistry A, 2021, 9, 13209-13219.	10.3	34
7	Ion Migration Controlled Stability in Î±-Particle Response of CsPbBr_{2.4}Cl_{0.6} Detectors. Journal of Physical Chemistry C, 2021, 125, 4235-4242.	3.1	12
8	Solution-Grown Formamidinium Hybrid Perovskite (FAPbBr₃) Single Crystals for Î±-Particle and Î³-Ray Detection at Room Temperature. ACS Applied Materials & Interfaces, 2021, 13, 15383-15390.	8.0	41
9	Polymer Photodetectors for Printable, Flexible, and Fully Tissue Equivalent Xâ€Ray Detection with Zeroâ€Bias Operation and Ultrafast Temporal Responses. Advanced Materials Technologies, 2021, 6, 2001298.	5.8	15
10	Towards high spatial resolution tissue-equivalent dosimetry for microbeam radiation therapy using organic semiconductors. Journal of Synchrotron Radiation, 2021, 28, 1444-1454.	2.4	7
11	Fast-neutron response of the novel scintillator caesium hafnium chloride. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2021, 1012, 165224.	1.6	4
12	Flexible Polymer X-ray Detectors with Non-fullerene Acceptors for Enhanced Stability: Toward Printable Tissue Equivalent Devices for Medical Applications. ACS Applied Materials & Interfaces, 2021, 13, 57703-57712.	8.0	12
13	Characterization of an organic semiconductor diode for dosimetry in radiotherapy. Medical Physics, 2020, 47, 3658-3668.	3.0	15
14	Characterization of a plastic dosimeter based on organic semiconductor photodiodes and scintillator. Physics and Imaging in Radiation Oncology, 2020, 14, 48-52.	2.9	13
15	Boron-Loaded Polymeric Sensor for the Direct Detection of Thermal Neutrons. ACS Applied Materials & Interfaces, 2020, 12, 33050-33057.	8.0	7
16	Melt-grown large-sized Cs₂TeI₆ crystals for X-ray detection. CrystEngComm, 2020, 22, 5130-5136.	2.6	27
17	Optimizing the Sensitivity of a GAGG:Ce-Based Thermal Neutron Detector. IEEE Transactions on Nuclear Science, 2020, 67, 603-608.	2.0	1
18	Purely organic 4HCB single crystals exhibiting high hole mobility for direct detection of ultralow-dose X-radiation. Journal of Materials Chemistry A, 2020, 8, 5217-5226.	10.3	21

#	Article	IF	Citations
19	Retrofitting an environmental monitor with a silicon photomultiplier sensor. Journal of Radiological Protection, 2020, 40, N31-N38.	1.1	2
20	Assessing the suitability of three proxy sources for the development of detectors of special nuclear materials. Journal of Radiological Protection, 2020, 40, 1138-1153.	1.1	0
21	Polycrystalline Perovskite X-ray Detectors. , 2020, , .		0
22	Enhanced X-ray Sensitivity of MAPbBr₃ Detector by Tailoring the Interface-States Density. ACS Applied Materials & Interfaces, 2019, 11, 7522-7528.	8.0	96
23	Investigation into the potential of GAGG:Ce as a neutron detector. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2019, 931, 121-126.	1.6	24
24	A digital pulse shortening method for the mitigation of pulse pile-up effect in scintillation radiation detectors. Journal of Instrumentation, 2019, 14, P04012-P04012.	1.2	4
25	Exploration of Fourier based algorithms and detector designs for pulse shape discrimination. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2019, 930, 64-73.	1.6	7
26	Sensitive X-ray Detectors Synthesised from CsPbBr3. , 2019, , .		1
27	Evaluation of Scintillator Detection Materials for Application within Airborne Environmental Radiation Monitoring. Sensors, 2019, 19, 3828.	3.8	40
28	Comparison of the surfaces and interfaces formed for sputter and electroless deposited gold contacts on CdZnTe. Applied Surface Science, 2018, 427, 1257-1270.	6.1	16
29	Comparison of the pulse shape discrimination performance of plastic scintillators coupled to a SiPM. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2018, 908, 148-154.	1.6	28
30	High Energy Resolution Hyperspectral X-Ray Imaging for Low-Dose Contrast-Enhanced Digital Mammography. IEEE Transactions on Medical Imaging, 2017, 36, 1784-1795.	8.9	14
31	Alpha radiation induced space charge stability effects in semi-insulating silicon carbide semiconductors compared to diamond. Diamond and Related Materials, 2017, 78, 49-57.	3.9	7
32	Performance comparison of small-pixel CdZnTe radiation detectors with gold contacts formed by sputter and electroless deposition. Journal of Instrumentation, 2017, 12, P06015-P06015.	1.2	8
33	Characterization of silicon carbide and diamond detectors for neutron applications. Measurement Science and Technology, 2017, 28, 105501.	2.6	17
34	Neutron detection performance of silicon carbide and diamond detectors with incomplete charge collection properties. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2017, 847, 1-9.	1.6	17
35	Assessment of Quantum Dots for Nuclear Security and X-Ray Dosimetry. , 2017, , .		0
36	The effect of digitizer properties on the pulse shape discrimination perrformance of CLYC. , 2016, , .		1

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37	Neutron-gamma discrimination via PSD plastic scintillator and SiPMs. Journal of Physics: Conference Series, 2016, 763, 012007.	0.4	12
38	Charged-particle spectroscopy in organic semiconducting single crystals. Applied Physics Letters, 2016, 108, .	3.3	19
39	Using the TOF method to measure the electron lifetime in long-drift CdZnTe detectors (Conference) Tj ETQq1 1 0.784314 rgBT /Overlock		1
40	Use of the drift-time method to measure the electron lifetime in long-drift-length CdZnTe detectors. Journal of Applied Physics, 2016, 120, .	2.5	16
41	CdZnTe position-sensitive drift detectors with thicknesses up to 5â€‰cm. Applied Physics Letters, 2016, 108, .	3.3	27
42	Investigation into neutron damage of EJ-299 and EJ-200 plastic scintillators. , 2016, , .		0
43	Simulation of active-edge pixelated CdTe radiation detectors. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2016, 806, 139-145.	1.6	3
44	De-polarization of a CdZnTe radiation detector by pulsed infrared light. Applied Physics Letters, 2015, 107, .	3.3	16
45	Neutron/gamma pulse shape discrimination in EJ-299-34 at high flux. , 2015, , .		11
46	Toward Lowâ€Voltage and Bendable Xâ€Ray Direct Detectors Based on Organic Semiconducting Single Crystals. Advanced Materials, 2015, 27, 7213-7220.	21.0	72
47	RadICAL stack: A localisation method for dynamic gamma/neutron fields. , 2015, , .		0
48	Imaging of Ra-223 with a small-pixel CdTe detector. Journal of Instrumentation, 2015, 10, C01029-C01029.	1.2	7
49	Charge transport optimization in CZT ring-drift detectors. Journal Physics D: Applied Physics, 2015, 48, 485101.	2.8	2
50	Stability of Silicon Carbide Particle Detector Performance at Elevated Temperatures. IEEE Transactions on Nuclear Science, 2015, 62, 2360-2366.	2.0	17
51	Characterization of the metalâ€“semiconductor interface of gold contacts on CdZnTe formed by electroless deposition. Journal Physics D: Applied Physics, 2015, 48, 275304.	2.8	21
52	Control of electric field in CdZnTe radiation detectors by above-bandgap light. Journal of Applied Physics, 2015, 117, 165702.	2.5	17
53	Temporal and temperature evolution of electric field in CdTe:In radiation detectors. Journal of Applied Physics, 2014, 116, 053702.	2.5	4
54	Performance characteristics of CdTe drift ring detector. Journal of Instrumentation, 2014, 9, C03029-C03029.	1.2	4

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55	Semiconductor neutron detector for harsh radiation applications. , 2014, , .		0
56	Flux-dependent electric field changes in semi-insulating CdZnTe. Journal Physics D: Applied Physics, 2013, 46, 235306.	2.8	17
57	Multiple Module Pixellated CdTe Spectroscopic X-Ray Detector. IEEE Transactions on Nuclear Science, 2013, 60, 1197-1200.	2.0	28
58	Electrical Characteristics and Fast Neutron Response of Semi-Insulating Bulk Silicon Carbide. IEEE Transactions on Nuclear Science, 2013, 60, 1432-1435.	2.0	7
59	Enhanced x-ray detection sensitivity in semiconducting polymer diodes containing metallic nanoparticles. Journal Physics D: Applied Physics, 2013, 46, 275102.	2.8	50
60	Application of pulse-shape discrimination to coplanar CdZnTe detectors. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2013, 729, 541-545.	1.6	4
61	An XPS study of bromine in methanol etching and hydrogen peroxide passivation treatments for cadmium zinc telluride radiation detectors. Applied Surface Science, 2013, 264, 681-686.	6.1	27
62	X-ray induced photocurrent characteristics of CVD diamond detectors with different carbon electrodes. Journal of Instrumentation, 2013, 8, C12046-C12046.	1.2	6
63	A multi-technique characterization of electroless gold contacts on single crystal CdZnTe radiation detectors. Journal Physics D: Applied Physics, 2013, 46, 455502.	2.8	18
64	Direct detection of 6 MV x-rays from a medical linear accelerator using a semiconducting polymer diode. Physics in Medicine and Biology, 2013, 58, 4471-4482.	3.0	20
65	Edge effects in a small pixel CdTe for X-ray imaging. Journal of Instrumentation, 2013, 8, P10018-P10018.	1.2	13
66	Optimization of K-edge subtraction imaging using a pixellated spectroscopic detector. , 2012, , .		7
67	Heavy metallic oxide nanoparticles for enhanced sensitivity in semiconducting polymer x-ray detectors. Nanotechnology, 2012, 23, 235502.	2.6	60
68	Investigation of Te inclusion induced glides and the corresponding dislocations in CdZnTe crystal. CrystEngComm, 2012, 14, 417-420.	2.6	20
69	Evaluation of a new small-pixel CdTe spectroscopic detector in dual-tracer SPECT brain imaging. , 2012, , .		3
70	A CdTe detector for hyperspectral SPECT imaging. Journal of Instrumentation, 2012, 7, P08027-P08027.	1.2	20
71	Digital pulse height correction in HgI₂Î³-ray detectors. Journal of Instrumentation, 2012, 7, T04002-T04002.	1.2	13
72	Development of large area polycrystalline diamond detectors for fast timing application of high-energy heavy-ion beams. Journal of Instrumentation, 2012, 7, P05005-P05005.	1.2	18

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73	X-Ray Beam Studies of Charge Sharing in Small Pixel, Spectroscopic, CdZnTe Detectors. IEEE Transactions on Nuclear Science, 2012, 59, 1563-1568.	2.0	13
74	Growth by the Multi-tube Physical Vapour Transport method and characterisation of bulk (Cd,Zn)Te. Journal of Crystal Growth, 2012, 352, 120-123.	1.5	13
75	GaN detector development for particle and X-ray detection. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2012, 695, 303-305.	1.6	20
76	A study of timing properties of Silicon Photomultipliers. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2012, 695, 257-260.	1.6	10
77	An ASIC for the Study of Charge Sharing Effects in Small Pixel CdZnTe X-Ray Detectors. IEEE Transactions on Nuclear Science, 2011, 58, 2357-2362.	2.0	34
78	Locking Carbon Nanotubes in Confined Lattice Geometries â^' A Route to Low Percolation in Conducting Composites. Journal of Physical Chemistry B, 2011, 115, 6395-6400.	2.6	90
79	Radiation induced control of electric field in Au/CdTe/In structures. Applied Physics Letters, 2011, 98, 232115.	3.3	26
80	Morphology evolution of micron-scale secondary phases in CdZnTe crystals grown by vertical Bridgman method. Journal of Alloys and Compounds, 2011, 509, 2338-2342.	5.5	15
81	Pixellated Cd(Zn)Te high-energy X-ray instrument. Journal of Instrumentation, 2011, 6, C12009-C12009.	1.2	97
82	High charge-carrier mobilities in blends of poly(triarylamine) and TIPS-pentacene leading to better performing X-ray sensors. Organic Electronics, 2011, 12, 1903-1908.	2.6	56
83	The effect of annealing on the Xâ€ray induced photocurrent characteristics of CVD diamond radiation detectors with different electrical contacts. Physica Status Solidi (A) Applications and Materials Science, 2011, 208, 2079-2086.	1.8	20
84	Optical Pattern Fabrication in Amorphous Silicon Carbide with High-Energy Focused Ion Beams. Acta Physica Polonica A, 2011, 120, 56-59.	0.5	0
85	X-ray photoelectron study of high-energy He⁺implanted a-SiC:H thin films. Journal of Physics: Conference Series, 2010, 253, 012052.	0.4	1
86	Investigation of the internal electric field distribution under in situ x-ray irradiation and under low temperature conditions by the means of the Pockels effect. Journal Physics D: Applied Physics, 2010, 43, 085102.	2.8	19
87	Time walk correction of CdTe detectors using depth sensing technique. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2010, 621, 506-512.	1.6	9
88	Chemical etching and surface oxidation studies of cadmium zinc telluride radiation detectors. Surface and Interface Analysis, 2010, 42, 795-798.	1.8	17
89	Comparison of the X-ray performance of small pixel CdTe and CZT detectors. , 2010, , .		5
90	Electric field distributions in CdZnTe due to reduced temperature and x-ray irradiation. Applied Physics Letters, 2010, 96, 133509.	3.3	63

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91	Investigating the small pixel effect in CdZnTe Hard X-ray detectors — The PIXIE ASIC. , 2010, , .		2
92	Epitaxial Growth of High-Resistivity CdTe Thick Films Grown Using a Modified Close Space Sublimation Method. Japanese Journal of Applied Physics, 2010, 49, 025504.	1.5	9
93	The effect of fast neutron irradiation on the performance of synthetic single crystal diamond particle detectors. Diamond and Related Materials, 2010, 19, 841-845.	3.9	11
94	Achieving a Stable Time Response in Polymeric Radiation Sensors under Charge Injection by X-rays. ACS Applied Materials & Interfaces, 2010, 2, 1692-1699.	8.0	49
95	Influence of Contacts on Electric Field in an Au/(CdZn)Te/Au Detector: A Simulation. IEEE Transactions on Nuclear Science, 2010, 57, 2349-2358.	2.0	17
96	Improvement of Electron Field Emission in Patterned Carbon Nanotubes by High Temperature Hydrogen Plasma Treatment. Current Nanoscience, 2009, 5, 54-57.	1.2	9
97	High-resolution alpha spectrometry with a thin-window silicon carbide semiconductor detector. , 2009, , .		7
98	Editorial Conference Comments by the Editors. IEEE Transactions on Nuclear Science, 2009, 56, 724-724.	2.0	0
99	Characterization of CdZnTe Crystals Grown Using a Seeded Modified Vertical Bridgman Method. IEEE Transactions on Nuclear Science, 2009, 56, 2808-2813.	2.0	31
100	Low temperature time of flight mobility measurements on synthetic single crystal diamond. Diamond and Related Materials, 2009, 18, 1338-1342.	3.9	20
101	Non-destructive characterization and selection of x/Î³-ray detector-grade CdZnTe crystals. , 2009, , .		0
102	Carbon Nanotube Based DNA Biosensor for Rapid Detection of Anti-Cancer Drug of Cyclophosphamide. Current Nanoscience, 2009, 5, 312-317.	1.2	9
103	X-ray performance of pixilated CdZnTe detectors. , 2008, , .		1
104	Effect of dislocations on charge carrier mobilityâ€“lifetime product in synthetic single crystal diamond. Applied Physics Letters, 2007, 90, 102111.	3.3	40
105	EBIC and IBIC Imaging on Polycrystalline CdTe. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2007, 576, 5-9.	1.6	10
106	Modification induced by proton irradiation in Makrofol-DE polycarbonate. Radiation Measurements, 2007, 42, 1655-1660.	1.4	32
107	Temperature-dependent hole detrapping for unprimed polycrystalline chemical vapor deposited diamond. Applied Physics Letters, 2006, 88, 023501.	3.3	11
108	Nonvolatile Memory from Single-walled Carbon Nanotube-based Field Effect Transistors. Current Nanoscience, 2005, 1, 43-46.	1.2	12

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109	Alpha particle transient response of a polycrystalline diamond detector. Carbon, 2005, 43, 3167-3171.	10.3	8
110	Pronounced hysteresis and high charge storage stability of single-walled carbon nanotube-based field-effect transistors. Applied Physics Letters, 2005, 87, 133117.	3.3	24
111	Drift mobility and mobility-lifetime products in CdTe:Cl grown by the travelling heater method. IEEE Transactions on Nuclear Science, 2005, 52, 3074-3078.	2.0	84
112	Thermal and electrical transport in multi-walled carbon nanotubes. Physics Letters, Section A: General, Atomic and Solid State Physics, 2004, 329, 207-213.	2.1	165
113	Multi-walled carbon nanotube-based gas sensors for NH3 detection. Diamond and Related Materials, 2004, 13, 1327-1332.	3.9	136
114	DNA biosensors based on self-assembled carbon nanotubes. Biochemical and Biophysical Research Communications, 2004, 325, 1433-1437.	2.1	119
115	High-resolution pixel detectors for second generation digital mammography. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2003, 497, 21-29.	1.6	19
116	Laser-induced pulse shapes in partially depleted epitaxial GaAs radiation detectors. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2003, 509, 65-69.	1.6	4
117	Digital pulse-shape algorithms for scintillation-based neutron detectors. IEEE Transactions on Nuclear Science, 2002, 49, 1824-1828.	2.0	32
118	Imaging of charge transport in polycrystalline diamond using ion-beam-induced charge microscopy. Applied Physics Letters, 2000, 77, 913-915.	3.3	34
119	A Pixel-Array Detector for Time-Resolved X-ray Diffraction. Journal of Synchrotron Radiation, 1998, 5, 252-255.	2.4	11
120	Radioactivity of neutron deficient isotopes in the regionN>82>Z. Physical Review C, 1996, 53, 660-670.	2.9	161
121	Intruder bands in (Z=53)I113: Band termination interpretation. Physical Review C, 1995, 51, 2427-2438.	2.9	37
122	In-beam Î³-ray spectroscopy aboveSn100using the new technique of recoil decay tagging. Physical Review C, 1995, 51, 78-87.	2.9	219
123	First Experimental Limit on theNe19(p,Î³)Na20Resonance Strength, of Astrophysical Interest. Physical Review Letters, 1994, 73, 3066-3069.	7.8	46
124	Decays of odd-oddN-Z=2 nuclei aboveSn100: The observation of proton radioactivity fromCs112. Physical Review Letters, 1994, 72, 1798-1801.	7.8	69
125	Deformed intruder band inTe112: First evidence for rotational behavior in the tellurium isotopes. Physical Review C, 1994, 50, 698-706.	2.9	51
126	Alpha radioactivity aboveSn100including the decay ofI108. Physical Review C, 1994, 49, 3312-3315.	2.9	46

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127	Imaging of high field regions in semi-insulating GaAs under bias. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 1994, 28, 485-487.	3.5	33
128	Searches for proton radioactivity in oddZdrip-line nuclei fromZ=61 to 67. Physical Review C, 1993, 48, 3113-3114.	2.9	12
129	Isomeric proton emission from the drip-line nucleusTa156. Physical Review C, 1993, 48, R2151-R2153.	2.9	23
130	Proton spectroscopy beyond the drip line nearA=150. Physical Review C, 1993, 47, 1933-1942.	2.9	71
131	Deformed intruder band inI113. Physical Review C, 1993, 48, R490-R493.	2.9	24
132	Discovery of new proton emittersRe160andTa156. Physical Review Letters, 1992, 68, 1287-1290.	7.8	63