

# Andrea A Zappettini

## List of Publications by Year in descending order

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237  
papers

4,962  
citations

126708

33  
h-index

123241

61  
g-index

240  
all docs

240  
docs citations

240  
times ranked

5320  
citing authors

#	ARTICLE	IF	CITATIONS
1	Progress in the Development of CdTe and CdZnTe Semiconductor Radiation Detectors for Astrophysical and Medical Applications. <i>Sensors</i> , 2009, 9, 3491-3526.	2.1	642
2	Growth of ZnO tetrapods for nanostructure-based gas sensors. <i>Sensors and Actuators B: Chemical</i> , 2010, 144, 472-478.	4.0	175
3	ZnO gas sensors: A comparison between nanoparticles and nanotetrapods-based thick films. <i>Sensors and Actuators B: Chemical</i> , 2009, 137, 164-169.	4.0	151
4	Zn vacancy induced green luminescence on non-polar surfaces in ZnO nanostructures. <i>Scientific Reports</i> , 2014, 4, 5158.	1.6	144
5	Adsorption effects of NO <sub>2</sub> at ppm level on visible photoluminescence response of SnO <sub>2</sub> nanobelts. <i>Applied Physics Letters</i> , 2005, 86, 011923.	1.5	133
6	Combined experimental and theoretical investigation of optical, structural, and electronic properties of $C_{3H}N_3$	1.1	128
7	Metal oxide nanocrystals for gas sensing. <i>Sensors and Actuators B: Chemical</i> , 2005, 109, 2-6.	4.0	113
8	Human stress monitoring through an organic cotton-fiber biosensor. <i>Journal of Materials Chemistry B</i> , 2014, 2, 5620-5626.	2.9	107
9	A single cotton fiber organic electrochemical transistor for liquid electrolyte saline sensing. <i>Journal of Materials Chemistry</i> , 2012, 22, 23830.	6.7	99
10	Aldehyde detection by ZnO tetrapod-based gas sensors. <i>Journal of Materials Chemistry</i> , 2011, 21, 15532.	6.7	85
11	Low-temperature In <sub>2</sub> O <sub>3</sub> nanowire luminescence properties as a function of oxidizing thermal treatments. <i>Nanotechnology</i> , 2007, 18, 355707.	1.3	78
12	Structural and optical study of SnO <sub>2</sub> nanobelts and nanowires. <i>Materials Science and Engineering C</i> , 2005, 25, 625-630.	3.8	75
13	Influence of the Synthetic Procedures on the Structural and Optical Properties of Mixed-Halide (Br, I) Perovskite Films. <i>Journal of Physical Chemistry C</i> , 2015, 119, 21304-21313.	1.5	71
14	An in vivo biosensing, biomimetic electrochemical transistor with applications in plant science and precision farming. <i>Scientific Reports</i> , 2017, 7, 16195.	1.6	67
15	Growth and optical, magnetic and transport properties of (C <sub>4</sub> H <sub>9</sub> NH <sub>3</sub> ) <sub>2</sub> MCl <sub>4</sub> organic-inorganic hybrid films (M = Cu, Sn). <i>Applied Physics A: Materials Science and Processing</i> , 2005, 81, 963-968.	1.1	65
16	<i>In Vivo</i> Phenotyping for the Early Detection of Drought Stress in Tomato. <i>Plant Phenomics</i> , 2019, 2019, 6168209.	2.5	60
17	Ion selective textile organic electrochemical transistor for wearable sweat monitoring. <i>Organic Electronics</i> , 2020, 78, 105579.	1.4	57
18	Detection of Nuclear Sources by UAV Teleoperation Using a Visuo-Haptic Augmented Reality Interface. <i>Sensors</i> , 2017, 17, 2234.	2.1	56

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19	Study of Surface Treatment Effects on the Metal-CdZnTe Interface. IEEE Transactions on Nuclear Science, 2009, 56, 1823-1826.	1.2	55
20	Unpredicted Nucleation of Extended Zinc Blende Phases in Wurtzite ZnO Nanotetrapod Arms. ACS Nano, 2009, 3, 3158-3164.	7.3	49
21	15% efficient Cu(In,Ga)Se <sub>2</sub> solar cells obtained by low-temperature pulsed electron deposition. Applied Physics Letters, 2012, 101, .	1.5	49
22	Enzymatic sensing with laccase-functionalized textile organic biosensors. Organic Electronics, 2017, 40, 51-57.	1.4	49
23	The Proteomic Response of Arabidopsis thaliana to Cadmium Sulfide Quantum Dots, and Its Correlation with the Transcriptomic Response. Frontiers in Plant Science, 2015, 6, 1104.	1.7	48
24	Low temperature thermal evaporation growth of aligned ZnO nanorods on ZnO film: a growth mechanism promoted by Zn nanoclusters on polar surfaces. CrystEngComm, 2011, 13, 1707-1712.	1.3	44
25	Extended functionality of ZnO nanotetrapods by solution-based coupling with CdS nanoparticles. Journal of Materials Chemistry, 2012, 22, 5694.	6.7	42
26	X-ray response of CdZnTe detectors grown by the vertical Bridgman technique: Energy, temperature and high flux effects. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2016, 835, 1-12.	0.7	42
27	Boron oxide fully encapsulated CdZnTe crystals grown by the vertical Bridgman technique. Journal of Crystal Growth, 2007, 307, 283-288.	0.7	41
28	Exposure of Cucurbita pepo to binary combinations of engineered nanomaterials: physiological and molecular response. Environmental Science: Nano, 2017, 4, 1579-1590.	2.2	40
29	Full encapsulated CdZnTe crystals by the vertical Bridgman method. Journal of Crystal Growth, 2008, 310, 2072-2075.	0.7	39
30	Boron Oxide Encapsulated Vertical Bridgman Grown CdZnTe Crystals as X-Ray Detector Material. IEEE Transactions on Nuclear Science, 2009, 56, 1743-1746.	1.2	38
31	Third order optical characterisation of a $\pi$ -conjugated polydiacetylene by Maker fringes technique. Synthetic Metals, 2002, 127, 143-146.	2.1	37
32	Proteomic, gene and metabolite characterization reveal the uptake and toxicity mechanisms of cadmium sulfide quantum dots in soybean plants. Environmental Science: Nano, 2019, 6, 3010-3026.	2.2	37
33	Large-area self-catalysed and selective growth of ZnO nanowires. Nanotechnology, 2008, 19, 325603.	1.3	36
34	Growth and Characterization of CZT Crystals by the Vertical Bridgman Method for X-Ray Detector Applications. IEEE Transactions on Nuclear Science, 2011, 58, 2352-2356.	1.2	35
35	Photoluminescence and photoconductivity in CdTe crystals doped with Bi. Journal of Applied Physics, 2006, 100, 104901.	1.1	33
36	Nucleo-mitochondrial interaction of yeast in response to cadmium sulfide quantum dot exposure. Journal of Hazardous Materials, 2017, 324, 744-752.	6.5	33

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37	Development of an In Vivo Sensor to Monitor the Effects of Vapour Pressure Deficit (VPD) Changes to Improve Water Productivity in Agriculture. <i>Sensors</i> , 2019, 19, 4667.	2.1	33
38	A new process for synthesizing high-purity stoichiometric cadmium telluride. <i>Journal of Crystal Growth</i> , 2000, 214-215, 14-18.	0.7	32
39	Titania inverse opals for infrared optical applications. <i>Optical Materials</i> , 2001, 17, 11-14.	1.7	32
40	Sputtered stoichiometric TeO <sub>2</sub> glass films: Dispersion of linear and nonlinear optical properties. <i>Journal of Applied Physics</i> , 2003, 94, 1654-1661.	1.1	31
41	Point defects and diffusion in cadmium telluride. <i>Progress in Crystal Growth and Characterization of Materials</i> , 2004, 48-49, 209-244.	1.8	31
42	Heat treatment in semi-closed ampoule for obtaining stoichiometrically controlled cadmium telluride. <i>Journal of Crystal Growth</i> , 2002, 237-239, 1720-1725.	0.7	30
43	Branched gold nanoparticles on ZnO 3D architecture as biomedical SERS sensors. <i>RSC Advances</i> , 2015, 5, 93644-93651.	1.7	30
44	A genome-wide nanotoxicology screen of <i>Saccharomyces cerevisiae</i> mutants reveals the basis for cadmium sulphide quantum dot tolerance and sensitivity. <i>Nanotoxicology</i> , 2016, 10, 1-10.	1.6	29
45	Development of new CdZnTe detectors for room-temperature high-flux radiation measurements. <i>Journal of Synchrotron Radiation</i> , 2017, 24, 429-438.	1.0	29
46	Growth and Deep Level Characterisation of Undoped High Resistivity CdTe Crystals. <i>Physica Status Solidi (B): Basic Research</i> , 2002, 229, 15-18.	0.7	28
47	Development of a combined SEM and ICP-MS approach for the qualitative and quantitative analyses of metal microparticles and sub-microparticles in food products. <i>Analytical and Bioanalytical Chemistry</i> , 2011, 401, 1401-1409.	1.9	28
48	Charge transport properties in CdZnTe detectors grown by the vertical Bridgman technique. <i>Journal of Applied Physics</i> , 2011, 110, .	1.1	28
49	Surface coating determines the response of soybean plants to cadmium sulfide quantum dots. <i>NanoImpact</i> , 2019, 14, 100151.	2.4	28
50	Nanoscale mapping of plasmon and exciton in ZnO tetrapods coupled with Au nanoparticles. <i>Scientific Reports</i> , 2016, 6, 19168.	1.6	27
51	In-catalyzed growth of high-purity indium oxide nanowires. <i>Chemical Physics Letters</i> , 2007, 445, 251-254.	1.2	26
52	Recent advances in the development of high-resolution 3D cadmium-zinc telluride drift strip detectors. <i>Journal of Synchrotron Radiation</i> , 2020, 27, 1564-1576.	1.0	26
53	Characterization of Bulk and Surface Transport Mechanisms by Means of the Photocurrent Technique. <i>IEEE Transactions on Nuclear Science</i> , 2009, 56, 3591-3596.	1.2	25
54	Digital fast pulse shape and height analysis on cadmium-zinc telluride arrays for high-flux energy-resolved X-ray imaging. <i>Journal of Synchrotron Radiation</i> , 2018, 25, 257-271.	1.0	25

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55	Room-temperature X-ray response of cadmium-zinc-telluride pixel detectors grown by the vertical Bridgman technique. <i>Journal of Synchrotron Radiation</i> , 2020, 27, 319-328.	1.0	25
56	Conductivity conversion of lightly Fe-doped InP induced by thermal annealing: A method for semi-insulating material production. <i>Journal of Applied Physics</i> , 1997, 81, 7604-7611.	1.1	24
57	Charge collection in semi-insulator radiation detectors in the presence of a linear decreasing electric field. <i>Journal Physics D: Applied Physics</i> , 2013, 46, 365103.	1.3	24
58	Dual-polarity pulse processing and analysis for charge-loss correction in cadmium-zinc-telluride pixel detectors. <i>Journal of Synchrotron Radiation</i> , 2018, 25, 1078-1092.	1.0	24
59	A theoretical model for the time varying current in organic electrochemical transistors in a dynamic regime. <i>Organic Electronics</i> , 2016, 35, 59-64.	1.4	23
60	Strong mechanical adhesion of gold electroless contacts on CdZnTe deposited by alcoholic solutions. <i>Journal of Instrumentation</i> , 2017, 12, P02018-P02018.	0.5	23
61	Cadmium sulfide quantum dots impact <i>Arabidopsis thaliana</i> physiology and morphology. <i>Chemosphere</i> , 2020, 240, 124856.	4.2	23
62	All-Polymeric Pressure Sensors Based on PEDOT:PSS-Modified Polyurethane Foam. <i>ACS Applied Polymer Materials</i> , 2021, 3, 1563-1572.	2.0	23
63	Characterization of electro-optic shielding effect in bulk CdTe:In crystals. <i>Journal of Crystal Growth</i> , 2000, 214-215, 913-917.	0.7	22
64	New Approaches for Making Large-Volume and Uniform CdZnTe and CdMnTe Detectors. <i>IEEE Transactions on Nuclear Science</i> , 2012, 59, 1510-1515.	1.2	22
65	Modeling, Fabrication and Testing of a Customizable Micromachined Hotplate for Sensor Applications. <i>Sensors</i> , 2017, 17, 62.	2.1	21
66	Differences in toxicity, mitochondrial function and miRNome in human cells exposed in vitro to Cd as CdS quantum dots or ionic Cd. <i>Journal of Hazardous Materials</i> , 2020, 393, 122430.	6.5	21
67	Solution-free and catalyst-free synthesis of ZnO-based nanostructured TCOs by PED and vapor phase growth techniques. <i>Nanotechnology</i> , 2012, 23, 194008.	1.3	20
68	Low Temperature Sensing Properties of a Nano Hybrid Material Based on ZnO Nanotetrapods and Titanyl Phthalocyanine. <i>Sensors</i> , 2013, 13, 3445-3453.	2.1	20
69	A 3D CZT high resolution detector for x- and gamma-ray astronomy. <i>Proceedings of SPIE</i> , 2014, , .	0.8	19
70	Selective response inversion to NO <sub>2</sub> and acetic acid in ZnO and CdS nanocomposite gas sensor. <i>Nanotechnology</i> , 2014, 25, 365502.	1.3	19
71	Stoichiometric deviations and partial-pressure measurements in solid-vapour cadmium telluride system. <i>Materials Chemistry and Physics</i> , 2000, 66, 138-142.	2.0	18
72	Boron Oxide Encapsulated Vertical Bridgman: A Method for Preventing Crystal-Crucible Contact in the CdZnTe Growth. <i>IEEE Transactions on Nuclear Science</i> , 2007, 54, 798-801.	1.2	18

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73	The LAUE project and its main results. Proceedings of SPIE, 2013, , .	0.8	18
74	Ring-shaped corona proteins influence the toxicity of engineered nanoparticles to yeast. Environmental Science: Nano, 2018, 5, 1428-1440.	2.2	18
75	Cortical-like mini-columns of neuronal cells on zinc oxide nanowire surfaces. Scientific Reports, 2019, 9, 4021.	1.6	18
76	Engineered Nanomaterial Exposure Affects Organelle Genetic Material Replication in <i>Arabidopsis thaliana</i> . ACS Nano, 2022, 16, 2249-2260.	7.3	18
77	Crystal growth of undoped semi-insulating CdTe. Journal of Crystal Growth, 2002, 234, 184-189.	0.7	17
78	Composite multifunctional nanostructures based on ZnO tetrapods and superparamagnetic Fe <sub>3</sub> O <sub>4</sub> nanoparticles. Nanotechnology, 2013, 24, 135601.	1.3	17
79	A new method to integrate ZnO nano-tetrapods on MEMS micro-hotplates for large scale gas sensor production. Nanotechnology, 2016, 27, 385503.	1.3	17
80	Geometrical Patterning of Super-Hydrophobic Biosensing Transistors Enables Space and Time Resolved Analysis of Biological Mixtures. Scientific Reports, 2016, 6, 18992.	1.6	17
81	Smart composites materials: A new idea to add gas-sensing properties to commercial carbon-fibers by functionalization with ZnO nanowires. Sensors and Actuators B: Chemical, 2017, 245, 166-170.	4.0	17
82	Interaction of hyperaccumulating plants with Zn and Cd nanoparticles. Science of the Total Environment, 2022, 817, 152741.	3.9	17
83	Electrical and optical properties of semi-insulating InP obtained by wafer and ingot annealing. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 1997, 45, 147-151.	1.7	16
84	Boron oxide encapsulated Bridgman growth of high-purity high-resistivity cadmium telluride crystals. Journal of Crystal Growth, 2004, 260, 291-297.	0.7	16
85	Crystal Defects in CdZnTe Crystals Grown by the Modified Low-Pressure Bridgman Method. IEEE Transactions on Nuclear Science, 2012, 59, 264-267.	1.2	16
86	Functionalization of carbon fiber tows with ZnO nanorods for stress sensor integration in smart composite materials. Nanotechnology, 2018, 29, 335501.	1.3	16
87	Real-time monitoring of <i>Arundo donax</i> response to saline stress through the application of in vivo sensing technology. Scientific Reports, 2021, 11, 18598.	1.6	16
88	Potentialities of High-Resolution 3-D CZT Drift Strip Detectors for Prompt Gamma-Ray Measurements in BNCT. Sensors, 2022, 22, 1502.	2.1	15
89	Vapour-phase growth, purification and large-area deposition of ZnO tetrapod nanostructures. Crystal Research and Technology, 2010, 45, 667-671.	0.6	14
90	Electrical properties of Au/CdZnTe/Au detectors grown by the boron oxide encapsulated Vertical Bridgman technique. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2016, 830, 243-250.	0.7	14

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91	A Biomimetic, Biocompatible OECT Sensor for the Real-Time Measurement of Concentration and Saturation of Ions in Plant Sap. <i>Advanced Electronic Materials</i> , 2022, 8, .	2.6	14
92	Study and characterization of bent crystals for Laue lenses. <i>Experimental Astronomy</i> , 2014, 38, 401-416.	1.6	13
93	Live-monitoring of Te inclusions laser-induced thermo-diffusion and annealing in CdZnTe crystals. <i>Applied Physics Letters</i> , 2014, 104, .	1.5	13
94	A first principle method to simulate the spectral response of CdZnTe-based X- and gamma-ray detectors. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2020, 960, 163663.	0.7	13
95	A method for an accurate determination of stoichiometric deviations in CdTe and CdZnTe bulk crystals. <i>Journal of Crystal Growth</i> , 2005, 275, e571-e575.	0.7	12
96	Three-dimensional mapping of tellurium inclusions in CdZnTe crystals by means of improved optical microscopy. <i>Journal of Crystal Growth</i> , 2011, 318, 1167-1170.	0.7	12
97	Electroless gold contact deposition on CdZnTe detectors by scanning pipette technique. <i>Journal of Instrumentation</i> , 2012, 7, P08022-P08022.	0.5	12
98	Two-step thermal process in tellurium vapor for tellurium inclusion annealing in high resistivity CdZnTe crystals. <i>Journal of Crystal Growth</i> , 2015, 415, 15-19.	0.7	12
99	The Effect of Low-Temperature Annealing on a CdZnTe Detector. <i>IEEE Transactions on Nuclear Science</i> , 2016, 63, 2278-2282.	1.2	12
100	Growth and characterization of $\text{In}^{2+}$ -Ga $_{2}\text{O}_3$ nanowires obtained on not-catalyzed and Au/Pt catalyzed substrates. <i>Journal of Crystal Growth</i> , 2017, 457, 255-261.	0.7	12
101	Innovative 3D sensitive CdZnTe solid state detector for dose monitoring in Boron Neutron Capture Therapy (BNCT). <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2019, 936, 50-51.	0.7	12
102	Deep level characterization of undoped CdTe crystals. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2003, 0, 881-884.	0.8	11
103	Off stoichiometry determination in cadmium telluride crystals. <i>Journal of Alloys and Compounds</i> , 2004, 371, 89-92.	2.8	11
104	Composition Study of CdTe Charges Synthesized by the Travelling Heater Method. <i>IEEE Transactions on Nuclear Science</i> , 2007, 54, 782-785.	1.2	11
105	Facile synthesis of hierarchical CuO nanostructures with enhanced photocatalytic activity. <i>Crystal Research and Technology</i> , 2014, 49, 594-598.	0.6	11
106	Preliminary characterization of a CdZnTe photon detector for BNCT-SPECT. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2018, 903, 134-139.	0.7	11
107	Defect-induced luminescence in high-resistivity high-purity undoped CdTe crystals. <i>Journal of Physics Condensed Matter</i> , 2002, 14, 13203-13209.	0.7	10
108	Wavelength dependence of the third order non-linear coefficient in hydrothermally grown ZnO crystals. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2004, 1, 997-1000.	0.8	10

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109	Spectroscopic Response of CZT Detectors Obtained by the Boron Oxide Encapsulated Vertical Bridgman Method. IEEE Transactions on Nuclear Science, 2011, 58, 552-558.	1.2	10
110	On the Role of Boron in CdTe and CdZnTe Crystals. Journal of Electronic Materials, 2011, 40, 2043-2050.	1.0	10
111	Unmanned aerial vehicle equipped with spectroscopic CdZnTe detector for detection and identification of radiological and nuclear material. , 2015, , .		10
112	In Vivo-In Vitro Comparative Toxicology of Cadmium Sulphide Quantum Dots in the Model Organism Saccharomyces cerevisiae. Nanomaterials, 2019, 9, 512.	1.9	10
113	A mathematical model of OECTs with variable internal geometry. Sensors and Actuators A: Physical, 2020, 304, 111894.	2.0	10
114	Incomplete Charge Collection at Inter-Pixel Gap in Low- and High-Flux Cadmium Zinc Telluride Pixel Detectors. Sensors, 2022, 22, 1441.	2.1	10
115	Stoichiometry related defects in CdTe crystals. Physica Status Solidi C: Current Topics in Solid State Physics, 2004, 1, 735-738.	0.8	9
116	Control of the interface shape in vertical Bridgman grown CdZnTe crystals for X-ray detector applications. CrystEngComm, 2012, 14, 5992.	1.3	9
117	Haptic guided UAV for detection of radiation sources in outdoor environments. , 2015, , .		9
118	Electric Field Reconstruction and Transport Parameter Evaluation in CZT X-Ray Detectors. IEEE Transactions on Nuclear Science, 2017, 64, 2706-2712.	1.2	9
119	Room-temperature performance of 3 mm-thick cadmium-zinc telluride pixel detectors with sub-millimetre pixelization. Journal of Synchrotron Radiation, 2020, 27, 1180-1189.	1.0	9
120	Comparative Analysis of Proteins Regulated during Cadmium Sulfide Quantum Dots Response in Arabidopsis thaliana Wild Type and Tolerant Mutants. Nanomaterials, 2021, 11, 615.	1.9	9
121	Rf-sputtering growth of stoichiometric amorphous TeO <sub>2</sub> thin films. Crystal Research and Technology, 2005, 40, 1023-1027.	0.6	8
122	Thienylene polyazomethines and polyazines as third-order nonlinear optical materials. Journal of the Optical Society of America B: Optical Physics, 2007, 24, 1505.	0.9	8
123	Investigations on 40MeV Li <sup>3+</sup> ions irradiated GaN epilayers. Nuclear Instruments & Methods in Physics Research B, 2008, 266, 1799-1803.	0.6	8
124	A three-dimensional CZT detector as a focal plane prototype for a Laue Lens telescope. , 2008, , .		8
125	Pd/PdO functionalization of SnO <sub>2</sub> nanowires and ZnO nanotetrapods. Crystal Research and Technology, 2011, 46, 847-851.	0.6	8
126	Study of the anomalous zinc distribution in vertical Bridgman grown CdZnTe crystals. CrystEngComm, 2013, 15, 2227-2231.	1.3	8



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127	Turning carbon fiber into a stress-sensitive composite material. Journal of Materials Chemistry A, 2016, 4, 10486-10492.	5.2	8
128	Cadmium telluride and cadmium zinc telluride. , 2019, , 273-301.		8
129	Improved electroless platinum contacts on CdZnTe X- and $\hat{I}^3$ -rays detectors. Scientific Reports, 2020, 10, 13762.	1.6	8
130	Towards In Vivo Monitoring of Ions Accumulation in Trees: Response of an in Planta Organic Electrochemical Transistor Based Sensor to Water Flux Density, Light and Vapor Pressure Deficit Variation. Applied Sciences (Switzerland), 2021, 11, 4729.	1.3	8
131	CZT X-ray detectors obtained by the boron encapsulated vertical Bridgman method. , 2007, , .		7
132	Dewetting During the Crystal Growth of (Cd,Zn)Te:In Under Microgravity. IEEE Transactions on Nuclear Science, 2009, 56, 1747-1751.	1.2	7
133	Development of a 3D CZT detector prototype for Laue Lens telescope. , 2010, , .		7
134	Ion Beam (RBS) and XRF Analysis of Metal Contacts Deposited on CdZnTe and CdTe Crystals. IEEE Transactions on Nuclear Science, 2011, 58, 1964-1971.	1.2	7
135	Modification of the Luminescence Properties of CZT Crystals Around Tellurium Inclusions. IEEE Transactions on Nuclear Science, 2012, 59, 1526-1530.	1.2	7
136	Oriented orthorhombic Lead Oxide film grown by vapour phase deposition for X-ray detector applications. Crystal Research and Technology, 2013, 48, 245-250.	0.6	7
137	Haptic Teleoperation of UAV Equipped with Gamma-Ray Spectrometer for Detection and Identification of Radio-Active Materials in Industrial Plants. , 2019, , 197-214.		7
138	Characterisation of pixelated CdZnTe sensors using MAXIPIX. Journal of Instrumentation, 2019, 14, C12009-C12009.	0.5	7
139	Energy Recovery of Multiple Charge Sharing Events in Room Temperature Semiconductor Pixel Detectors. Sensors, 2021, 21, 3669.	2.1	7
140	A study of iron incorporation in LEC-grown indium phosphide. Journal of Crystal Growth, 1996, 166, 572-577.	0.7	6
141	Erbium-doped crystalline YAG planar and ridge waveguides on quartz and sapphire substrates: deposition and material characterisation. Optical Materials, 2001, 17, 251-254.	1.7	6
142	Growth and characterization of hybrid (CnH2n+1NH3)2CuCl4 self-assembled films. Crystal Research and Technology, 2005, 40, 1028-1032.	0.6	6
143	Optical properties of reactively sputtered TeOx amorphous films. Applied Optics, 2005, 44, 534.	2.1	6
144	Mosaic GaAs crystals for hard x-ray astronomy. Proceedings of SPIE, 2008, , .	0.8	6

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145	Directionally Selective Sensitization of ZnO Nanorods by TiOPc: A Novel Approach to Functionalized Nanosystems. <i>Journal of Physical Chemistry C</i> , 2012, 116, 8223-8229.	1.5	6
146	Defect Characterization in Fully Encapsulated CdZnTe. <i>IEEE Transactions on Nuclear Science</i> , 2013, 60, 2870-2874.	1.2	6
147	X-ray diffraction efficiency of bent GaAs mosaic crystals for the Laue project. <i>Optical Engineering</i> , 2014, 53, 047104.	0.5	6
148	Numerical and experimental investigation of CdZnTe growth by the boron oxide encapsulated vertical Bridgman method. <i>International Journal of Heat and Mass Transfer</i> , 2021, 176, 121490.	2.5	6
149	Incorporation and electrical activity of Fe in LEC InP. <i>Semiconductor Science and Technology</i> , 1998, 13, 512-516.	1.0	5
150	High-pressure bridgman grown CdZnTe for electro-optic applications. <i>Journal of Electronic Materials</i> , 2001, 30, 743-747.	1.0	5
151	Nonlinear optical characterisation of CdS and PbS quantum dots dispersed in a glass matrix. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2004, 1, 1001-1004.	0.8	5
152	Crystal defects and charge collection in CZT x-ray and gamma detectors. , 2010, , .		5
153	Characterization of CZT crystals grown by the boron oxide encapsulated vertical Bridgman technique for the preparation of X-ray imaging detectors. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2011, 633, S92-S94.	0.7	5
154	Studies on charge collection and transport properties on semi-insulating materials in the presence of a non-uniform electric field. <i>Solid State Communications</i> , 2012, 152, 1212-1215.	0.9	5
155	Controllable vapor phase growth of vertically aligned ZnO nanorods on TCO/Glass substrates. <i>Crystal Research and Technology</i> , 2014, 49, 558-563.	0.6	5
156	Transforming diatomaceous earth into sensing devices by surface modification with gold nanoparticles. <i>Micro and Nano Engineering</i> , 2019, 2, 29-34.	1.4	5
157	Proteomic Analysis Identifies Markers of Exposure to Cadmium Sulphide Quantum Dots (CdS QDs). <i>Nanomaterials</i> , 2020, 10, 1214.	1.9	5
158	BEaTriX—the Beam Expander Testing X-Ray facility for testing ATHENA's SPO modules: progress in the realization. , 2019, , .		5
159	Determination of ionic and pure electronic contributions to the electro-optic coefficient of cadmium telluride and gallium arsenide single crystals. <i>Synthetic Metals</i> , 2001, 124, 257-259.	2.1	4
160	Evidence of a stoichiometry-related compensation in undoped high-resistivity CdTe crystals. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2004, 1, 739-742.	0.8	4
161	A 3D CZT hard x-ray polarimeter for a balloon-borne payload. , 2012, , .		4
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