# Andrea A Zappettini

# List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

3,803 205 30 53 h-index g-index citations papers 4,382 5.1 240 3.3 L-index avg, IF ext. citations ext. papers

#	Paper	IF	Citations
205	Engineered Nanomaterial Exposure Affects Organelle Genetic Material Replication in <i>ACS Nano</i> , <b>2022</b> ,	16.7	4
204	Interaction of hyperaccumulating plants with Zn and Cd nanoparticles <i>Science of the Total Environment</i> , <b>2022</b> , 817, 152741	10.2	4
203	Incomplete Charge Collection at Inter-Pixel Gap in Low- and High-Flux Cadmium Zinc Telluride Pixel Detectors <i>Sensors</i> , <b>2022</b> , 22,	3.8	4
202	Potentialities of High-Resolution 3-D CZT Drift Strip Detectors for Prompt Gamma-Ray Measurements in BNCT <i>Sensors</i> , <b>2022</b> , 22,	3.8	2
201	Data on the interaction of hyperaccumulating plants with nanoscale metals Zn and Cd <i>Data in Brief</i> , <b>2022</b> , 42, 108171	1.2	1
200	Comparative Analysis of Proteins Regulated during Cadmium Sulfide Quantum Dots Response in Wild Type and Tolerant Mutants. <i>Nanomaterials</i> , <b>2021</b> , 11,	5.4	3
199	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. <i>Applied Sciences (Switzerland)</i> , <b>2021</b> , 11, 4729	2.6	4
198	Energy Recovery of Multiple Charge Sharing Events in Room Temperature Semiconductor Pixel Detectors. <i>Sensors</i> , <b>2021</b> , 21,	3.8	4
197	All-Polymeric Pressure Sensors Based on PEDOT:PSS-Modified Polyurethane Foam. <i>ACS Applied Polymer Materials</i> , <b>2021</b> , 3, 1563-1572	4.3	12
196	Real-time monitoring of Arundo donax response to saline stress through the application of in vivo sensing technology. <i>Scientific Reports</i> , <b>2021</b> , 11, 18598	4.9	3
195	Numerical and experimental investigation of CdZnTe growth by the boron oxide encapsulated vertical Bridgman method. <i>International Journal of Heat and Mass Transfer</i> , <b>2021</b> , 176, 121490	4.9	O
194	. IEEE Transactions on Nuclear Science, <b>2020</b> , 67, 2273-2277	1.7	3
193	Proteomic Analysis Identifies Markers of Exposure to Cadmium Sulphide Quantum Dots (CdS QDs). <i>Nanomaterials</i> , <b>2020</b> , 10,	5.4	2
192	Room-temperature X-ray response of cadmium-zinc-telluride pixel detectors grown by the vertical Bridgman technique. <i>Journal of Synchrotron Radiation</i> , <b>2020</b> , 27, 319-328	2.4	14
191	Data on miRNome changes in human cells exposed to nano- or ionic- forms of Cadmium. <i>Data in Brief</i> , <b>2020</b> , 30, 105636	1.2	3
190	A mathematical model of OECTs with variable internal geometry. <i>Sensors and Actuators A: Physical</i> , <b>2020</b> , 304, 111894	3.9	5
189	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> <b>2020</b> , 960, 163663	1.2	8

## (2019-2020)

188	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> , <b>2020</b> , 393, 122430	12.8	13
187	Recent advances in the development of high-resolution 3D cadmium-zinc-telluride drift strip detectors. <i>Journal of Synchrotron Radiation</i> , <b>2020</b> , 27, 1564-1576	2.4	10
186	Ion selective textile organic electrochemical transistor for wearable sweat monitoring. <i>Organic Electronics</i> , <b>2020</b> , 78, 105579	3.5	30
185	Improved electroless platinum contacts on CdZnTe X- and Fays detectors. <i>Scientific Reports</i> , <b>2020</b> , 10, 13762	4.9	3
184	Room-temperature performance of 3 mm-thick cadmium-zinc-telluride pixel detectors with sub-millimetre pixelization. <i>Journal of Synchrotron Radiation</i> , <b>2020</b> , 27, 1180-1189	2.4	6
183	Gamma-Ray Spectral Unfolding of CdZnTe-Based Detectors Using a Genetic Algorithm. <i>Sensors</i> , <b>2020</b> , 20,	3.8	2
182	Cadmium sulfide quantum dots impact Arabidopsis thaliana physiology and morphology. <i>Chemosphere</i> , <b>2020</b> , 240, 124856	8.4	14
181	Proteomic, gene and metabolite characterization reveal the uptake and toxicity mechanisms of cadmium sulfide quantum dots in soybean plants. <i>Environmental Science: Nano</i> , <b>2019</b> , 6, 3010-3026	7.1	23
180	. IEEE Sensors Journal, <b>2019</b> , 19, 11753-11758	4	3
179	Transforming diatomaceous earth into sensing devices by surface modification with gold nanoparticles. <i>Micro and Nano Engineering</i> , <b>2019</b> , 2, 29-34	3.4	4
178	In Vivo-In Vitro Comparative Toxicology of Cadmium Sulphide Quantum Dots in the Model Organism. <i>Nanomaterials</i> , <b>2019</b> , 9,	5.4	6
177	Haptic Teleoperation of UAV Equipped with Gamma-Ray Spectrometer for Detection and Identification of Radio-Active Materials in Industrial Plants <b>2019</b> , 197-214		4
176	Cortical-like mini-columns of neuronal cells on zinc oxide nanowire surfaces. <i>Scientific Reports</i> , <b>2019</b> , 9, 4021	4.9	9
175	Surface coating determines the response of soybean plants to cadmium sulfide quantum dots. <i>NanoImpact</i> , <b>2019</b> , 14, 100151	5.6	21
174	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> , <b>2019</b> , 19,	3.8	14
173	Phenotyping for the Early Detection of Drought Stress in Tomato. <i>Plant Phenomics</i> , <b>2019</b> , 2019, 616820	09 <sub>7</sub>	23
172	Characterisation of pixelated CdZnTe sensors using MAXIPIX. <i>Journal of Instrumentation</i> , <b>2019</b> , 14, C12	0 <b>0</b> 9-C1	12φ09
171	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> , <b>2019</b> , 936, 50-51	1.2	3

170	Cadmium telluride and cadmium zinc telluride <b>2019</b> , 273-301		4
169	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> , <b>2018</b> , 25, 257-271	2.4	14
168	Ring-shaped corona proteins influence the toxicity of engineered nanoparticles to yeast. <i>Environmental Science: Nano</i> , <b>2018</b> , 5, 1428-1440	7.1	13
167	Dual-polarity pulse processing and analysis for charge-loss correction in cadmium-zinc-telluride pixel detectors. <i>Journal of Synchrotron Radiation</i> , <b>2018</b> , 25, 1078-1092	2.4	16
166	Al2O3 Coating as Passivation Layer for CZT-based Detectors 2018,		1
165	Overcoming the planar contact geometry limitation for the measurement of transport properties and electric field distribution in X- and gamma ray detectors. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment,</i> <b>2018</b> ,	1.2	1
164	High Performance CZT Detectors for In-Line Non-destructive X-Ray Based Density Measurements <b>2018</b> ,		2
163	Functionalization of carbon fiber tows with ZnO nanorods for stress sensor integration in smart composite materials. <i>Nanotechnology</i> , <b>2018</b> , 29, 335501	3.4	10
162	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> , <b>2018</b> , 903, 134-139	1.2	8
161	Growth and characterization of EGa2O3 nanowires obtained on not-catalyzed and Au/Pt catalyzed substrates. <i>Journal of Crystal Growth</i> , <b>2017</b> , 457, 255-261	1.6	10
160	Smart composites materials: A new idea to add gas-sensing properties to commercial carbon-fibers by functionalization with ZnO nanowires. <i>Sensors and Actuators B: Chemical</i> , <b>2017</b> , 245, 166-170	8.5	15
159	Strong mechanical adhesion of gold electroless contacts on CdZnTe deposited by alcoholic solutions. <i>Journal of Instrumentation</i> , <b>2017</b> , 12, P02018-P02018	1	14
158	Development of new CdZnTe detectors for room-temperature high-flux radiation measurements. <i>Journal of Synchrotron Radiation</i> , <b>2017</b> , 24, 429-438	2.4	18
157	Nucleo-mitochondrial interaction of yeast in response to cadmium sulfide quantum dot exposure. <i>Journal of Hazardous Materials</i> , <b>2017</b> , 324, 744-752	12.8	22
156	Exposure of Cucurbita pepo to binary combinations of engineered nanomaterials: physiological and molecular response. <i>Environmental Science: Nano</i> , <b>2017</b> , 4, 1579-1590	7.1	37
155	Charge-separation enhancement in inverted polymer solar cells by molecular-level triple heterojunction: NiO-np:P3HT:PCBM. <i>Nanotechnology</i> , <b>2017</b> , 28, 035403	3.4	2
154	Electric Field Reconstruction and Transport Parameter Evaluation in CZT X-Ray Detectors. <i>IEEE Transactions on Nuclear Science</i> , <b>2017</b> , 64, 2706-2712	1.7	8
153	An in vivo biosensing, biomimetic electrochemical transistor with applications in plant science and precision farming. <i>Scientific Reports</i> , <b>2017</b> , 7, 16195	4.9	35

### (2015-2017)

152	Enzymatic sensing with laccase-functionalized textile organic biosensors. <i>Organic Electronics</i> , <b>2017</b> , 40, 51-57	3.5	30	
151	Detection of Nuclear Sources by UAV Teleoperation Using a Visuo-Haptic Augmented Reality Interface. <i>Sensors</i> , <b>2017</b> , 17,	3.8	29	
150	A genome-wide nanotoxicology screen of Saccharomyces cerevisiae mutants reveals the basis for cadmium sulphide quantum dot tolerance and sensitivity. <i>Nanotoxicology</i> , <b>2016</b> , 10, 84-93	5.3	26	
149	The Effect of Low-Temperature Annealing on a CdZnTe Detector. <i>IEEE Transactions on Nuclear Science</i> , <b>2016</b> , 63, 2278-2282	1.7	9	
148	Geometrical Patterning of Super-Hydrophobic Biosensing Transistors Enables Space and Time Resolved Analysis of Biological Mixtures. <i>Scientific Reports</i> , <b>2016</b> , 6, 18992	4.9	15	
147	Nanoscale mapping of plasmon and exciton in ZnO tetrapods coupled with Au nanoparticles. <i>Scientific Reports</i> , <b>2016</b> , 6, 19168	4.9	24	
146	2016,		1	
145	Turning carbon fiber into a stress-sensitive composite material. <i>Journal of Materials Chemistry A</i> , <b>2016</b> , 4, 10486-10492	13	8	
144	Modeling, Fabrication and Testing of a Customizable Micromachined Hotplate for Sensor Applications. <i>Sensors</i> , <b>2016</b> , 17,	3.8	15	
143	Tailoring super-hydrophobic properties of electrochemical biosensor for early cancer detection. <i>MRS Advances</i> , <b>2016</b> , 1, 3545-3552	0.7	3	
142	A new method to integrate ZnO nano-tetrapods on MEMS micro-hotplates for large scale gas sensor production. <i>Nanotechnology</i> , <b>2016</b> , 27, 385503	3.4	16	
141	Multiscale modification of the conductive PEDOT:PSS polymer for the analysis of biological mixtures in a super-hydrophobic drop. <i>Microelectronic Engineering</i> , <b>2016</b> , 158, 80-84	2.5	1	
140	A theoretical model for the time varying current in organic electrochemical transistors in a dynamic regime. <i>Organic Electronics</i> , <b>2016</b> , 35, 59-64	3.5	18	
139	X-ray response of CdZnTe detectors grown by the vertical Bridgman technique: Energy, temperature and high flux effects. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , <b>2016</b> , 835, 1-12	1.2	27	
138	Electrical properties of Au/CdZnTe/Au detectors grown by the boron oxide encapsulated Vertical Bridgman technique. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment,</i> <b>2016</b> , 830, 243-250	1.2	8	
137	Surface-treated self-standing curved crystals as high-efficiency elements for X- and Eay optics: theory and experiment. <i>Journal of Applied Crystallography</i> , <b>2015</b> , 48, 666-671	3.8		
136	Branched gold nanoparticles on ZnO 3D architecture as biomedical SERS sensors. <i>RSC Advances</i> , <b>2015</b> , 5, 93644-93651	3.7	22	
135	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> , <b>2015</b> , 119, 21304-21313	3.8	65	

134	Mechanically stable metal layers for ohmic and blocking contacts on CdZnTe detectors by electroless deposition <b>2015</b> ,		2
133	Unmanned aerial vehicle equipped with spectroscopic CdZnTe detector for detection and identification of radiological and nuclear material <b>2015</b> ,		9
132	Haptic guided UAV for detection of radiation sources in outdoor environments 2015,		8
131	The Proteomic Response of Arabidopsis thaliana to Cadmium Sulfide Quantum Dots, and Its Correlation with the Transcriptomic Response. <i>Frontiers in Plant Science</i> , <b>2015</b> , 6, 1104	6.2	40
130	Two-step thermal process in tellurium vapor for tellurium inclusion annealing in high resistivity CdZnTe crystals. <i>Journal of Crystal Growth</i> , <b>2015</b> , 415, 15-19	1.6	8
129	Zn vacancy induced green luminescence on non-polar surfaces in ZnO nanostructures. <i>Scientific Reports</i> , <b>2014</b> , 4, 5158	4.9	118
128	Facile synthesis of hierarchical CuO nanostructures with enhanced photocatalytic activity. <i>Crystal Research and Technology</i> , <b>2014</b> , 49, 594-598	1.3	9
127	InZnO nanorods obtained via zinc vapour phase deposition on liquid indium seeded substrates. <i>CrystEngComm</i> , <b>2014</b> , 16, 1696	3.3	2
126	Selective response inversion to NOIand acetic acid in ZnO and CdS nanocomposite gas sensor. <i>Nanotechnology</i> , <b>2014</b> , 25, 365502	3.4	16
125	Live-monitoring of Te inclusions laser-induced thermo-diffusion and annealing in CdZnTe crystals. <i>Applied Physics Letters</i> , <b>2014</b> , 104, 252105	3.4	11
124	High energy resolution pixel detectors based on boron oxide vertical Bridgman grown CdZnTe crystals <b>2014</b> ,		3
123	Study and characterization of bent crystals for Laue lenses. <i>Experimental Astronomy</i> , <b>2014</b> , 38, 401-416	1.3	12
122	A 3D CZT high resolution detector for x- and gamma-ray astronomy <b>2014</b> ,		10
121	Human stress monitoring through an organic cotton-fiber biosensor. <i>Journal of Materials Chemistry B</i> , <b>2014</b> , 2, 5620-5626	7.3	85
120	Controllable vapor phase growth of vertically aligned ZnO nanorods on TCO/Glass substrates. <i>Crystal Research and Technology</i> , <b>2014</b> , 49, 558-563	1.3	5
119	Guest EditorsIPreface. Crystal Research and Technology, 2014, 49, 533-534	1.3	
118	X-ray diffraction efficiency of bent GaAs mosaic crystals for the Laue project. <i>Optical Engineering</i> , <b>2014</b> , 53, 047104	1.1	3
117	Defect Characterization in Fully Encapsulated CdZnTe. <i>IEEE Transactions on Nuclear Science</i> , <b>2013</b> , 60, 2870-2874	1.7	5

### (2012-2013)

116	Study of the anomalous zinc distribution in vertical Bridgman grown CdZnTe crystals. <i>CrystEngComm</i> , <b>2013</b> , 15, 2227-2231	3.3	7	
115	Oriented orthorhombic Lead Oxide film grown by vapour phase deposition for X-ray detector applications. <i>Crystal Research and Technology</i> , <b>2013</b> , 48, 245-250	1.3	6	
114	Composite multifunctional nanostructures based on ZnO tetrapods and superparamagnetic Fe3O4 nanoparticles. <i>Nanotechnology</i> , <b>2013</b> , 24, 135601	3.4	17	
113	Charge collection in semi-insulator radiation detectors in the presence of a linear decreasing electric field. <i>Journal Physics D: Applied Physics</i> , <b>2013</b> , 46, 365103	3	19	
112	Low temperature sensing properties of a nano hybrid material based on ZnO nanotetrapods and titanyl phthalocyanine. <i>Sensors</i> , <b>2013</b> , 13, 3445-53	3.8	17	
111	Development of a CZT spectroscopic 3D imager prototype for hard X ray astronomy <b>2013</b> ,		1	
110	Crystal bending by surface damaging in mosaic GaAs crystals for the LAUE project 2013,		2	
109	The LAUE project and its main results <b>2013</b> ,		15	
108	X-ray diffraction efficiency of bent GaAs mosaic crystals for the LAUE project 2013,		1	
107	Synthesis of high purity, stoichiometric controlled, TeO2 powders. <i>Materials Chemistry and Physics</i> , <b>2012</b> , 133, 804-807	4.4	2	
106	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> , <b>2012</b> , 152, 1212-1215	1.6	4	
105	Crystal Defects in CdZnTe Crystals Grown by the Modified Low-Pressure Bridgman Method. <i>IEEE Transactions on Nuclear Science</i> , <b>2012</b> , 59, 264-267	1.7	12	
104	Electroless gold contact deposition on CdZnTe detectors by scanning pipette technique. <i>Journal of Instrumentation</i> , <b>2012</b> , 7, P08022-P08022	1	7	
103	Extended functionality of ZnO nanotetrapods by solution-based coupling with CdS nanoparticles. <i>Journal of Materials Chemistry</i> , <b>2012</b> , 22, 5694		38	
102	. IEEE Transactions on Nuclear Science, <b>2012</b> , 59, 1526-1530	1.7	6	
101	Control of the interface shape in vertical Bridgman grown CdZnTe crystals for X-ray detector applications. <i>CrystEngComm</i> , <b>2012</b> , 14, 5992	3.3	7	
100	15% efficient Cu(In,Ga)Se2 solar cells obtained by low-temperature pulsed electron deposition. <i>Applied Physics Letters</i> , <b>2012</b> , 101, 132107	3.4	42	
99	A single cotton fiber organic electrochemical transistor for liquid electrolyte saline sensing. <i>Journal of Materials Chemistry</i> , <b>2012</b> , 22, 23830		70	

98	Directionally Selective Sensitization of ZnO Nanorods by TiOPc: A Novel Approach to Functionalized Nanosystems. <i>Journal of Physical Chemistry C</i> , <b>2012</b> , 116, 8223-8229	3.8	6
97	New Approaches for Making Large-Volume and Uniform CdZnTe and CdMnTe Detectors. <i>IEEE Transactions on Nuclear Science</i> , <b>2012</b> , 59, 1510-1515	1.7	16
96	Solution-free and catalyst-free synthesis of ZnO-based nanostructured TCOs by PED and vapor phase growth techniques. <i>Nanotechnology</i> , <b>2012</b> , 23, 194008	3.4	17
95	Development status of a CZT spectrometer prototype with 3D spatial resolution for hard x-ray astronomy <b>2012</b> ,		2
94	Low temperature thermal evaporation growth of aligned ZnO nanorods on ZnO film: a growth mechanism promoted by Zn nanoclusters on polar surfaces. <i>CrystEngComm</i> , <b>2011</b> , 13, 1707-1712	3.3	42
93	New insights for uniform and large-volume CdZnTe and CdMnTe detectors <b>2011</b> ,		1
92	Aldehyde detection by ZnO tetrapod-based gas sensors. <i>Journal of Materials Chemistry</i> , <b>2011</b> , 21, 15532	<u>!</u>	73
91	Spectroscopic Response of CZT Detectors Obtained by the Boron Oxide Encapsulated Vertical Bridgman Method. <i>IEEE Transactions on Nuclear Science</i> , <b>2011</b> , 58, 552-558	1.7	9
90	Development of a combined SEM and ICP-MS approach for the qualitative and quantitative analyses of metal nano and microparticles in food products [corrected]. <i>Analytical and Bioanalytical Chemistry</i> , <b>2011</b> , 401, 1401-9	4.4	24
89	Three-dimensional mapping of tellurium inclusions in CdZnTe crystals by means of improved optical microscopy. <i>Journal of Crystal Growth</i> , <b>2011</b> , 318, 1167-1170	1.6	10
88	On the Role of Boron in CdTe and CdZnTe Crystals. <i>Journal of Electronic Materials</i> , <b>2011</b> , 40, 2043-2050	1.9	9
87	Pd/PdO functionalization of SnO2 nanowires and ZnO nanotetrapods. <i>Crystal Research and Technology</i> , <b>2011</b> , 46, 847-851	1.3	7
86	Growth and Characterization of CZT Crystals by the Vertical Bridgman Method for X-Ray Detector Applications. <i>IEEE Transactions on Nuclear Science</i> , <b>2011</b> , 58, 2352-2356	1.7	29
85	Ion Beam (RBS) and XRF Analysis of Metal Contacts Deposited on CdZnTe and CdTe Crystals. <i>IEEE Transactions on Nuclear Science</i> , <b>2011</b> , 58, 1964-1971	1.7	5
84	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> , <b>2011</b> ,	1.2	4
83	633, \$92-\$94 Charge transport properties in CdZnTe detectors grown by the vertical Bridgman technique.  Journal of Applied Physics, <b>2011</b> , 110, 124502	2.5	22
82	Crystal defects and charge collection in CZT x-ray and gamma detectors <b>2010</b> ,		4
81	Charge transport properties in CZT detectors grown by the vertical bridgman technique 2010,		2

80	Development of a 3D CZT detector prototype for Laue Lens telescope <b>2010</b> ,		4
79	Vapour-phase growth, purification and large-area deposition of ZnO tetrapod nanostructures. <i>Crystal Research and Technology</i> , <b>2010</b> , 45, 667-671	1.3	13
78	Growth of ZnO tetrapods for nanostructure-based gas sensors. <i>Sensors and Actuators B: Chemical</i> , <b>2010</b> , 144, 472-478	8.5	163
77	Study of Surface Treatment Effects on the Metal-CdZnTe Interface. <i>IEEE Transactions on Nuclear Science</i> , <b>2009</b> , 56, 1823-1826	1.7	41
76	Dewetting During the Crystal Growth of (Cd,Zn)Te:In Under Microgravity. <i>IEEE Transactions on Nuclear Science</i> , <b>2009</b> , 56, 1747-1751	1.7	5
75	Boron Oxide Encapsulated Vertical Bridgman Grown CdZnTe Crystals as X-Ray Detector Material. <i>IEEE Transactions on Nuclear Science</i> , <b>2009</b> , 56, 1743-1746	1.7	30
74	Unpredicted nucleation of extended zinc blende phases in wurtzite ZnO nanotetrapod arms. <i>ACS Nano</i> , <b>2009</b> , 3, 3158-64	16.7	46
73	Deposition of CdTe films under microgravity: Foton M3 mission. <i>Crystal Research and Technology</i> , <b>2009</b> , 44, 1059-1066	1.3	1
72	ZnO gas sensors: A comparison between nanoparticles and nanotetrapods-based thick films. <i>Sensors and Actuators B: Chemical</i> , <b>2009</b> , 137, 164-169	8.5	129
71	Progress in the Development of CdTe and CdZnTe Semiconductor Radiation Detectors for Astrophysical and Medical Applications. <i>Sensors</i> , <b>2009</b> , 9, 3491-526	3.8	480
70	Characterization of Bulk and Surface Transport Mechanisms by Means of the Photocurrent Technique. <i>IEEE Transactions on Nuclear Science</i> , <b>2009</b> , 56, 3591-3596	1.7	23
69	Combined experimental and theoretical investigation of optical, structural, and electronic properties of CH3NH3SnX3 thin films (X=Cl,Br). <i>Physical Review B</i> , <b>2008</b> , 77,	3.3	110
68	Large-area self-catalysed and selective growth of ZnO nanowires. <i>Nanotechnology</i> , <b>2008</b> , 19, 325603	3.4	33
67	Boron oxide encapsulated vertical Bridgman grown CdZnTe crystals as X-ray detector material <b>2008</b> ,		3
66	Sputtered Ge-Si heteroepitaxial thin films for photodetection in third window 2008,		2
65	Spectroscopic response of CZT detectors obtained by the boron encapsulated vertical Bridgman method <b>2008</b> ,		1
64	A three-dimensional CZT detector as a focal plane prototype for a Laue Lens telescope 2008,		3
63	Mosaic GaAs crystals for hard x-ray astronomy <b>2008</b> ,		4

62	Investigations on 40 MeV Li3+ ions irradiated GaN epilayers. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , <b>2008</b> , 266, 1799-1803	1.2	7
61	Full encapsulated CdZnTe crystals by the vertical Bridgman method. <i>Journal of Crystal Growth</i> , <b>2008</b> , 310, 2072-2075	1.6	28
60	Off-stoichiometry determination of IIIVI bulk crystals. <i>Journal of Crystal Growth</i> , <b>2008</b> , 310, 2080-2084	1.6	2
59	Boron Oxide Encapsulated Vertical Bridgman: A Method for Preventing Crystal-Crucible Contact in the CdZnTe Growth. <i>IEEE Transactions on Nuclear Science</i> , <b>2007</b> , 54, 798-801	1.7	13
58	Low-temperature In2O3nanowire luminescence properties as a function of oxidizing thermal treatments. <i>Nanotechnology</i> , <b>2007</b> , 18, 355707	3.4	68
57	In-catalyzed growth of high-purity indium oxide nanowires. <i>Chemical Physics Letters</i> , <b>2007</b> , 445, 251-254	<b>l</b> 2.5	25
56	Boron oxide fully encapsulated CdZnTe crystals grown by the vertical Bridgman technique. <i>Journal of Crystal Growth</i> , <b>2007</b> , 307, 283-288	1.6	34
55	Enhanced luminescence of CuCl microcrystals in a organic-inorganic hybrid matrix. <i>Applied Physics A: Materials Science and Processing</i> , <b>2007</b> , 88, 235-237	2.6	2
54	Visible-Range Luminescence Study in Indium Oxide Nanowires. <i>Materials Research Society Symposia Proceedings</i> , <b>2007</b> , 1010, 1		
53	CZT X-ray detectors obtained by the boron encapsulated vertical Bridgman method <b>2007</b> ,		2
52	Thienylene polyazomethines and polyazines as third-order nonlinear optical materials. <i>Journal of the Optical Society of America B: Optical Physics</i> , <b>2007</b> , 24, 1505	1.7	8
51	Composition Study of CdTe Charges Synthesized by the Travelling Heater Method. <i>IEEE Transactions on Nuclear Science</i> , <b>2007</b> , 54, 782-785	1.7	9
50	Photoluminescence and photoconductivity in CdTe crystals doped with Bi. <i>Journal of Applied Physics</i> , <b>2006</b> , 100, 104901	2.5	32
49	On the Role of Oxygen Vacancies in the Determination of the Gas-Sensing Properties of Tin-Oxide Nanowires. <i>Materials Research Society Symposia Proceedings</i> , <b>2006</b> , 915, 1		2
48	Characterization of Sb/sub 2/Te/sub 3/ ohmic contacts on P-type CdTe single crystals. <i>IEEE Transactions on Nuclear Science</i> , <b>2005</b> , 52, 1961-1963	1.7	2
47	Optical properties of reactively sputtered TeOx amorphous films. <i>Applied Optics</i> , <b>2005</b> , 44, 534-7	1.7	5
46	Adsorption effects of NO2 at ppm level on visible photoluminescence response of SnO2 nanobelts. <i>Applied Physics Letters</i> , <b>2005</b> , 86, 011923	3.4	123
45	Optical monitoring of partial vapor pressures in CdTe and CdZnTe systems: a new tool for material technology development. <i>IEEE Transactions on Nuclear Science</i> , <b>2005</b> , 52, 3079-3084	1.7	2

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44	A method for an accurate determination of stoichiometric deviations in CdTe and CdZnTe bulk crystals. <i>Journal of Crystal Growth</i> , <b>2005</b> , 275, e571-e575	1.6	10
43	Rf-sputtering growth of stoichiometric amorphous TeO2 thin films. <i>Crystal Research and Technology</i> , <b>2005</b> , 40, 1023-1027	1.3	5
42	Growth and characterization of hybrid (CnH2n+1NH3)2CuCl4 self-assembled films. <i>Crystal Research and Technology</i> , <b>2005</b> , 40, 1028-1032	1.3	4
41	Revealing of defects in CdTe crystals by DSL etching. Crystal Research and Technology, 2005, 40, 1060-	10 <u>6.3</u>	3
40	Growth and optical, magnetic and transport properties of (C4H9NH3)2MCl4 organic-inorganic hybrid films (M = Cu, Sn). <i>Applied Physics A: Materials Science and Processing</i> , <b>2005</b> , 81, 963-968	2.6	54
39	Structural and optical study of SnO2 nanobelts and nanowires. <i>Materials Science and Engineering C</i> , <b>2005</b> , 25, 625-630	8.3	70
38	Metal oxide nanocrystals for gas sensing. Sensors and Actuators B: Chemical, 2005, 109, 2-6	8.5	102
37	Point defects and diffusion in cadmium telluride. <i>Progress in Crystal Growth and Characterization of Materials</i> , <b>2004</b> , 48-49, 209-244	3.5	27
36	A study of the electro-optic shielding effect in II/VI semiconductors. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , <b>2004</b> , 1, 698-701		
35	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> , <b>2004</b> , 1, 997-1000		8
34	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> , <b>2004</b> , 1, 1001-1004		5
33	Stoichiometry related defects in CdTe crystals. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , <b>2004</b> , 1, 735-738		7
32	Evidence of a stoichiometry-related compensation in undoped high-resistivity CdTe crystals. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , <b>2004</b> , 1, 739-742		3
31	Boron oxide encapsulated Bridgman growth of high-purity high-resistivity cadmium telluride crystals. <i>Journal of Crystal Growth</i> , <b>2004</b> , 260, 291-297	1.6	15
30	Off stoichiometry determination in cadmium telluride crystals. <i>Journal of Alloys and Compounds</i> , <b>2004</b> , 371, 89-92	5.7	10
29	Deep level characterization of undoped CdTe crystals. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , <b>2003</b> , 881-884		9
28	Sputtered stoichiometric TeO2 glass films: Dispersion of linear and nonlinear optical properties. Journal of Applied Physics, 2003, 94, 1654-1661	2.5	28
27	Growth and Deep Level Characterisation of Undoped High Resistivity CdTe Crystals. <i>Physica Status</i>		

26	CdTe-Based Auston Switch for Optically-Driven Integrated Optics Devices. <i>Physica Status Solidi (B): Basic Research</i> , <b>2002</b> , 229, 1077-1080	1.3	
25	Crystal growth of undoped semi-insulating CdTe. <i>Journal of Crystal Growth</i> , <b>2002</b> , 234, 184-189	1.6	16
24	Heat treatment in semi-closed ampoule for obtaining stoichiometrically controlled cadmium telluride. <i>Journal of Crystal Growth</i> , <b>2002</b> , 237-239, 1720-1725	1.6	26
23	Defect-induced luminescence in high-resistivity high-purity undoped CdTe crystals. <i>Journal of Physics Condensed Matter</i> , <b>2002</b> , 14, 13203-13209	1.8	8
22	Third order optical characterisation of a Econjugated polydiacetylene by Maker fringes technique. <i>Synthetic Metals</i> , <b>2002</b> , 127, 143-146	3.6	33
21	Near-IR comparative characterization of optical second-order nonlinearities in Te-based semiconductors. <i>Journal of Electronic Materials</i> , <b>2001</b> , 30, 738-742	1.9	1
20	High-pressure bridgman grown CdZnTe for electro-optic applications. <i>Journal of Electronic Materials</i> , <b>2001</b> , 30, 743-747	1.9	3
19	Titania inverse opals for infrared optical applications. <i>Optical Materials</i> , <b>2001</b> , 17, 11-14	3.3	32
18	Erbium-doped crystalline YAG planar and ridge waveguides on quartz and sapphire substrates: deposition and material characterisation. <i>Optical Materials</i> , <b>2001</b> , 17, 251-254	3.3	5
17	Experimental characterization of ternary Cd_09Zn_01Te as a basic material for all-optical processing in the 15-th range. <i>Journal of the Optical Society of America B: Optical Physics</i> , <b>2001</b> , 18, 176	1.7	
16	Determination of ionic and pure electronic contributions to the electro-optic coefficient of cadmium telluride and gallium arsenide single crystals. <i>Synthetic Metals</i> , <b>2001</b> , 124, 257-259	3.6	2
15	Efficient near-IR second harmonic generation in III/I semiconductors. Synthetic Metals, 2001, 124, 261-2	<b>63</b> .6	1
14	A new process for synthesizing high-purity stoichiometric cadmium telluride. <i>Journal of Crystal Growth</i> , <b>2000</b> , 214-215, 14-18	1.6	28
13	Sub-nanosecond all-optical switching in CdZnTe. <i>Journal of Crystal Growth</i> , <b>2000</b> , 214-215, 866-869	1.6	3
12	Characterization of electro-optic shielding effect in bulk CdTe:In crystals. <i>Journal of Crystal Growth</i> , <b>2000</b> , 214-215, 913-917	1.6	21
11	Two-dimensional mapping of residual stress-induced birefringence in differently-grown semiconductors for optical communication applications. <i>Materials Science &amp; amp; Engineering A: Structural Materials: Properties, Microstructure and Processing,</i> <b>2000</b> , 288, 205-208	5.3	1
10	Stoichiometric deviations and partial-pressure measurements in solidNapour cadmium telluride system. <i>Materials Chemistry and Physics</i> , <b>2000</b> , 66, 138-142	4.4	14
9	Measurements of second-order susceptibility at 월1.5 th in CdTe-based ternary alloys for efficient wavelength conversion. <i>Journal of Applied Physics</i> , <b>2000</b> , 88, 4913	2.5	3

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8	Optically induced switching in CdZnTe. <i>IEEE Photonics Technology Letters</i> , <b>2000</b> , 12, 1037-1039	2.2		
7	Incorporation and electrical activity of Fe in LEC InP. <i>Semiconductor Science and Technology</i> , <b>1998</b> , 13, 512-516	1.8	5	
6	Room temperature photoinduced Faraday rotation in Hg1 MnxTe alloys at 1550 nm. <i>Applied Physics Letters</i> , <b>1998</b> , 72, 3417-3419	3.4	2	
5	Conductivity conversion of lightly Fe-doped InP induced by thermal annealing: A method for semi-insulating material production. <i>Journal of Applied Physics</i> , <b>1997</b> , 81, 7604-7611	2.5	18	
4	Growth of semi-insulating InP with uniform axial Fe doping by a double-crucible LEC technique. <i>Journal of Crystal Growth</i> , <b>1997</b> , 179, 57-66	1.6	2	
3	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	3.1	11	
2	A study of iron incorporation in LEC-grown indium phosphide. <i>Journal of Crystal Growth</i> , <b>1996</b> , 166, 572	2-5767	5	
1	Effect of Growth Parameters on Iron Incorporation in Semi-Insulating LEC Indium Phosphide. <i>Materials Science Forum</i> , <b>1996</b> , 203, 1-6	0.4	1	