

Andrea A Zappettini

List of Publications by Citations

Source: <https://exaly.com/author-pdf/5705691/andrea-a-zappettini-publications-by-citations.pdf>

Version: 2024-04-23

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

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

205
papers

3,803
citations

30
h-index

53
g-index

240
ext. papers

4,382
ext. citations

3.3
avg, IF

5.1
L-index

#	Paper	IF	Citations
205	Progress in the Development of CdTe and CdZnTe Semiconductor Radiation Detectors for Astrophysical and Medical Applications. <i>Sensors</i> , 2009 , 9, 3491-526	3.8	480
204	Growth of ZnO tetrapods for nanostructure-based gas sensors. <i>Sensors and Actuators B: Chemical</i> , 2010 , 144, 472-478	8.5	163
203	ZnO gas sensors: A comparison between nanoparticles and nanotetrapods-based thick films. <i>Sensors and Actuators B: Chemical</i> , 2009 , 137, 164-169	8.5	129
202	Adsorption effects of NO ₂ at ppm level on visible photoluminescence response of SnO ₂ nanobelts. <i>Applied Physics Letters</i> , 2005 , 86, 011923	3.4	123
201	Zn vacancy induced green luminescence on non-polar surfaces in ZnO nanostructures. <i>Scientific Reports</i> , 2014 , 4, 5158	4.9	118
200	Combined experimental and theoretical investigation of optical, structural, and electronic properties of CH ₃ NH ₃ SnX ₃ thin films (X=Cl,Br). <i>Physical Review B</i> , 2008 , 77,	3.3	110
199	Metal oxide nanocrystals for gas sensing. <i>Sensors and Actuators B: Chemical</i> , 2005 , 109, 2-6	8.5	102
198	Human stress monitoring through an organic cotton-fiber biosensor. <i>Journal of Materials Chemistry B</i> , 2014 , 2, 5620-5626	7.3	85
197	Aldehyde detection by ZnO tetrapod-based gas sensors. <i>Journal of Materials Chemistry</i> , 2011 , 21, 15532		73
196	A single cotton fiber organic electrochemical transistor for liquid electrolyte saline sensing. <i>Journal of Materials Chemistry</i> , 2012 , 22, 23830		70
195	Structural and optical study of SnO ₂ nanobelts and nanowires. <i>Materials Science and Engineering C</i> , 2005 , 25, 625-630	8.3	70
194	Low-temperature In ₂ O ₃ nanowire luminescence properties as a function of oxidizing thermal treatments. <i>Nanotechnology</i> , 2007 , 18, 355707	3.4	68
193	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	3.8	65
192	Growth and optical, magnetic and transport properties of (C ₄ H ₉ NH ₃) ₂ MCl ₄ organic-inorganic hybrid films (M = Cu, Sn). <i>Applied Physics A: Materials Science and Processing</i> , 2005 , 81, 963-968	2.6	54
191	Unpredicted nucleation of extended zinc blende phases in wurtzite ZnO nanotetrapod arms. <i>ACS Nano</i> , 2009 , 3, 3158-64	16.7	46
190	15% efficient Cu(In,Ga)Se ₂ solar cells obtained by low-temperature pulsed electron deposition. <i>Applied Physics Letters</i> , 2012 , 101, 132107	3.4	42
189	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> , 2011 , 13, 1707-1712	3.3	42

188	Study of Surface Treatment Effects on the Metal-CdZnTe Interface. <i>IEEE Transactions on Nuclear Science</i> , 2009 , 56, 1823-1826	1.7	41
187	The Proteomic Response of Arabidopsis thaliana to Cadmium Sulfide Quantum Dots, and Its Correlation with the Transcriptomic Response. <i>Frontiers in Plant Science</i> , 2015 , 6, 1104	6.2	40
186	Extended functionality of ZnO nanotetrapods by solution-based coupling with CdS nanoparticles. <i>Journal of Materials Chemistry</i> , 2012 , 22, 5694		38
185	Exposure of Cucurbita pepo to binary combinations of engineered nanomaterials: physiological and molecular response. <i>Environmental Science: Nano</i> , 2017 , 4, 1579-1590	7.1	37
184	An in vivo biosensing, biomimetic electrochemical transistor with applications in plant science and precision farming. <i>Scientific Reports</i> , 2017 , 7, 16195	4.9	35
183	Boron oxide fully encapsulated CdZnTe crystals grown by the vertical Bridgman technique. <i>Journal of Crystal Growth</i> , 2007 , 307, 283-288	1.6	34
182	Large-area self-catalysed and selective growth of ZnO nanowires. <i>Nanotechnology</i> , 2008 , 19, 325603	3.4	33
181	Third order optical characterisation of a π -conjugated polydiacetylene by Maker fringes technique. <i>Synthetic Metals</i> , 2002 , 127, 143-146	3.6	33
180	Photoluminescence and photoconductivity in CdTe crystals doped with Bi. <i>Journal of Applied Physics</i> , 2006 , 100, 104901	2.5	32
179	Titania inverse opals for infrared optical applications. <i>Optical Materials</i> , 2001 , 17, 11-14	3.3	32
178	Enzymatic sensing with laccase-functionalized textile organic biosensors. <i>Organic Electronics</i> , 2017 , 40, 51-57	3.5	30
177	Boron Oxide Encapsulated Vertical Bridgman Grown CdZnTe Crystals as X-Ray Detector Material. <i>IEEE Transactions on Nuclear Science</i> , 2009 , 56, 1743-1746	1.7	30
176	Ion selective textile organic electrochemical transistor for wearable sweat monitoring. <i>Organic Electronics</i> , 2020 , 78, 105579	3.5	30
175	Detection of Nuclear Sources by UAV Teleoperation Using a Visuo-Haptic Augmented Reality Interface. <i>Sensors</i> , 2017 , 17,	3.8	29
174	Growth and Characterization of CZT Crystals by the Vertical Bridgman Method for X-Ray Detector Applications. <i>IEEE Transactions on Nuclear Science</i> , 2011 , 58, 2352-2356	1.7	29
173	Full encapsulated CdZnTe crystals by the vertical Bridgman method. <i>Journal of Crystal Growth</i> , 2008 , 310, 2072-2075	1.6	28
172	Sputtered stoichiometric TeO ₂ glass films: Dispersion of linear and nonlinear optical properties. <i>Journal of Applied Physics</i> , 2003 , 94, 1654-1661	2.5	28
171	A new process for synthesizing high-purity stoichiometric cadmium telluride. <i>Journal of Crystal Growth</i> , 2000 , 214-215, 14-18	1.6	28

170	Point defects and diffusion in cadmium telluride. <i>Progress in Crystal Growth and Characterization of Materials</i> , 2004 , 48-49, 209-244	3.5	27
169	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> , 2016 , 835, 1-12	1.2	27
168	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, 84-93	5.3	26
167	Heat treatment in semi-closed ampoule for obtaining stoichiometrically controlled cadmium telluride. <i>Journal of Crystal Growth</i> , 2002 , 237-239, 1720-1725	1.6	26
166	In-catalyzed growth of high-purity indium oxide nanowires. <i>Chemical Physics Letters</i> , 2007 , 445, 251-254	2.5	25
165	Nanoscale mapping of plasmon and exciton in ZnO tetrapods coupled with Au nanoparticles. <i>Scientific Reports</i> , 2016 , 6, 19168	4.9	24
164	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> , 2011 , 401, 1401-9	4.4	24
163	Proteomic, gene and metabolite characterization reveal the uptake and toxicity mechanisms of cadmium sulfide quantum dots in soybean plants. <i>Environmental Science: Nano</i> , 2019 , 6, 3010-3026	7.1	23
162	Characterization of Bulk and Surface Transport Mechanisms by Means of the Photocurrent Technique. <i>IEEE Transactions on Nuclear Science</i> , 2009 , 56, 3591-3596	1.7	23
161	Growth and Deep Level Characterisation of Undoped High Resistivity CdTe Crystals. <i>Physica Status Solidi (B): Basic Research</i> , 2002 , 229, 15-18	1.3	23
160	Phenotyping for the Early Detection of Drought Stress in Tomato. <i>Plant Phenomics</i> , 2019 , 2019, 61682097		23
159	Nucleo-mitochondrial interaction of yeast in response to cadmium sulfide quantum dot exposure. <i>Journal of Hazardous Materials</i> , 2017 , 324, 744-752	12.8	22
158	Branched gold nanoparticles on ZnO 3D architecture as biomedical SERS sensors. <i>RSC Advances</i> , 2015 , 5, 93644-93651	3.7	22
157	Charge transport properties in CdZnTe detectors grown by the vertical Bridgman technique. <i>Journal of Applied Physics</i> , 2011 , 110, 124502	2.5	22
156	Surface coating determines the response of soybean plants to cadmium sulfide quantum dots. <i>NanoImpact</i> , 2019 , 14, 100151	5.6	21
155	Characterization of electro-optic shielding effect in bulk CdTe:In crystals. <i>Journal of Crystal Growth</i> , 2000 , 214-215, 913-917	1.6	21
154	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	3	19
153	Development of new CdZnTe detectors for room-temperature high-flux radiation measurements. <i>Journal of Synchrotron Radiation</i> , 2017 , 24, 429-438	2.4	18

152	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	2.5	18
151	A theoretical model for the time varying current in organic electrochemical transistors in a dynamic regime. <i>Organic Electronics</i> , 2016 , 35, 59-64	3.5	18
150	Composite multifunctional nanostructures based on ZnO tetrapods and superparamagnetic Fe ₃ O ₄ nanoparticles. <i>Nanotechnology</i> , 2013 , 24, 135601	3.4	17
149	Low temperature sensing properties of a nano hybrid material based on ZnO nanotetrapods and titanil phthalocyanine. <i>Sensors</i> , 2013 , 13, 3445-53	3.8	17
148	Solution-free and catalyst-free synthesis of ZnO-based nanostructured TCOs by PED and vapor phase growth techniques. <i>Nanotechnology</i> , 2012 , 23, 194008	3.4	17
147	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	2.4	16
146	Selective response inversion to NO ₂ and acetic acid in ZnO and CdS nanocomposite gas sensor. <i>Nanotechnology</i> , 2014 , 25, 365502	3.4	16
145	New Approaches for Making Large-Volume and Uniform CdZnTe and CdMnTe Detectors. <i>IEEE Transactions on Nuclear Science</i> , 2012 , 59, 1510-1515	1.7	16
144	Crystal growth of undoped semi-insulating CdTe. <i>Journal of Crystal Growth</i> , 2002 , 234, 184-189	1.6	16
143	A new method to integrate ZnO nano-tetrapods on MEMS micro-hotplates for large scale gas sensor production. <i>Nanotechnology</i> , 2016 , 27, 385503	3.4	16
142	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> , 2017 , 245, 166-170	8.5	15
141	Geometrical Patterning of Super-Hydrophobic Biosensing Transistors Enables Space and Time Resolved Analysis of Biological Mixtures. <i>Scientific Reports</i> , 2016 , 6, 18992	4.9	15
140	Modeling, Fabrication and Testing of a Customizable Micromachined Hotplate for Sensor Applications. <i>Sensors</i> , 2016 , 17,	3.8	15
139	The LAUE project and its main results 2013 ,		15
138	Boron oxide encapsulated Bridgman growth of high-purity high-resistivity cadmium telluride crystals. <i>Journal of Crystal Growth</i> , 2004 , 260, 291-297	1.6	15
137	Strong mechanical adhesion of gold electroless contacts on CdZnTe deposited by alcoholic solutions. <i>Journal of Instrumentation</i> , 2017 , 12, P02018-P02018	1	14
136	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	2.4	14
135	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	2.4	14

134	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,	3.8	14
133	Stoichiometric deviations and partial-pressure measurements in solid-vapour cadmium telluride system. <i>Materials Chemistry and Physics</i> , 2000 , 66, 138-142	4.4	14
132	Cadmium sulfide quantum dots impact Arabidopsis thaliana physiology and morphology. <i>Chemosphere</i> , 2020 , 240, 124856	8.4	14
131	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	12.8	13
130	Ring-shaped corona proteins influence the toxicity of engineered nanoparticles to yeast. <i>Environmental Science: Nano</i> , 2018 , 5, 1428-1440	7.1	13
129	Vapour-phase growth, purification and large-area deposition of ZnO tetrapod nanostructures. <i>Crystal Research and Technology</i> , 2010 , 45, 667-671	1.3	13
128	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	1.7	13
127	Crystal Defects in CdZnTe Crystals Grown by the Modified Low-Pressure Bridgman Method. <i>IEEE Transactions on Nuclear Science</i> , 2012 , 59, 264-267	1.7	12
126	Study and characterization of bent crystals for Laue lenses. <i>Experimental Astronomy</i> , 2014 , 38, 401-416	1.3	12
125	All-Polymeric Pressure Sensors Based on PEDOT:PSS-Modified Polyurethane Foam. <i>ACS Applied Polymer Materials</i> , 2021 , 3, 1563-1572	4.3	12
124	Live-monitoring of Te inclusions laser-induced thermo-diffusion and annealing in CdZnTe crystals. <i>Applied Physics Letters</i> , 2014 , 104, 252105	3.4	11
123	Electrical and optical properties of semi-insulating InP obtained by wafer and ingot annealing. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 1997 , 45, 147-151	3.1	11
122	Growth and characterization of Ga ₂ O ₃ nanowires obtained on not-catalyzed and Au/Pt catalyzed substrates. <i>Journal of Crystal Growth</i> , 2017 , 457, 255-261	1.6	10
121	A 3D CZT high resolution detector for x- and gamma-ray astronomy 2014 ,		10
120	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	1.6	10
119	Off stoichiometry determination in cadmium telluride crystals. <i>Journal of Alloys and Compounds</i> , 2004 , 371, 89-92	5.7	10
118	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	1.6	10
117	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	2.4	10

116	Functionalization of carbon fiber tows with ZnO nanorods for stress sensor integration in smart composite materials. <i>Nanotechnology</i> , 2018 , 29, 335501	3.4	10
115	Cortical-like mini-columns of neuronal cells on zinc oxide nanowire surfaces. <i>Scientific Reports</i> , 2019 , 9, 4021	4.9	9
114	The Effect of Low-Temperature Annealing on a CdZnTe Detector. <i>IEEE Transactions on Nuclear Science</i> , 2016 , 63, 2278-2282	1.7	9
113	Facile synthesis of hierarchical CuO nanostructures with enhanced photocatalytic activity. <i>Crystal Research and Technology</i> , 2014 , 49, 594-598	1.3	9
112	Unmanned aerial vehicle equipped with spectroscopic CdZnTe detector for detection and identification of radiological and nuclear material 2015 ,		9
111	Spectroscopic Response of CZT Detectors Obtained by the Boron Oxide Encapsulated Vertical Bridgman Method. <i>IEEE Transactions on Nuclear Science</i> , 2011 , 58, 552-558	1.7	9
110	On the Role of Boron in CdTe and CdZnTe Crystals. <i>Journal of Electronic Materials</i> , 2011 , 40, 2043-2050	1.9	9
109	Composition Study of CdTe Charges Synthesized by the Travelling Heater Method. <i>IEEE Transactions on Nuclear Science</i> , 2007 , 54, 782-785	1.7	9
108	Deep level characterization of undoped CdTe crystals. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2003 , 881-884		9
107	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	1.2	8
106	Electric Field Reconstruction and Transport Parameter Evaluation in CZT X-Ray Detectors. <i>IEEE Transactions on Nuclear Science</i> , 2017 , 64, 2706-2712	1.7	8
105	Turning carbon fiber into a stress-sensitive composite material. <i>Journal of Materials Chemistry A</i> , 2016 , 4, 10486-10492	1.3	8
104	Haptic guided UAV for detection of radiation sources in outdoor environments 2015 ,		8
103	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	1.6	8
102	Thienylene polyazomethines and polyazines as third-order nonlinear optical materials. <i>Journal of the Optical Society of America B: Optical Physics</i> , 2007 , 24, 1505	1.7	8
101	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		8
100	Defect-induced luminescence in high-resistivity high-purity undoped CdTe crystals. <i>Journal of Physics Condensed Matter</i> , 2002 , 14, 13203-13209	1.8	8
99	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> , 2016 , 830, 243-250	1.2	8

98	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	1.2	8
97	Study of the anomalous zinc distribution in vertical Bridgman grown CdZnTe crystals. <i>CrystEngComm</i> , 2013 , 15, 2227-2231	3.3	7
96	Electroless gold contact deposition on CdZnTe detectors by scanning pipette technique. <i>Journal of Instrumentation</i> , 2012 , 7, P08022-P08022	1	7
95	Control of the interface shape in vertical Bridgman grown CdZnTe crystals for X-ray detector applications. <i>CrystEngComm</i> , 2012 , 14, 5992	3.3	7
94	Pd/PdO functionalization of SnO ₂ nanowires and ZnO nanotetrapods. <i>Crystal Research and Technology</i> , 2011 , 46, 847-851	1.3	7
93	Investigations on 40 MeV Li ³⁺ ions irradiated GaN epilayers. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2008 , 266, 1799-1803	1.2	7
92	Stoichiometry related defects in CdTe crystals. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2004 , 1, 735-738		7
91	In Vivo-In Vitro Comparative Toxicology of Cadmium Sulphide Quantum Dots in the Model Organism. <i>Nanomaterials</i> , 2019 , 9,	5.4	6
90	. <i>IEEE Transactions on Nuclear Science</i> , 2012 , 59, 1526-1530	1.7	6
89	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	3.8	6
88	Oriented orthorhombic Lead Oxide film grown by vapour phase deposition for X-ray detector applications. <i>Crystal Research and Technology</i> , 2013 , 48, 245-250	1.3	6
87	Room-temperature performance of 3 mm-thick cadmium-zinc-telluride pixel detectors with sub-millimetre pixelization. <i>Journal of Synchrotron Radiation</i> , 2020 , 27, 1180-1189	2.4	6
86	A mathematical model of OECTs with variable internal geometry. <i>Sensors and Actuators A: Physical</i> , 2020 , 304, 111894	3.9	5
85	Defect Characterization in Fully Encapsulated CdZnTe. <i>IEEE Transactions on Nuclear Science</i> , 2013 , 60, 2870-2874	1.7	5
84	Controllable vapor phase growth of vertically aligned ZnO nanorods on TCO/Glass substrates. <i>Crystal Research and Technology</i> , 2014 , 49, 558-563	1.3	5
83	Ion Beam (RBS) and XRF Analysis of Metal Contacts Deposited on CdZnTe and CdTe Crystals. <i>IEEE Transactions on Nuclear Science</i> , 2011 , 58, 1964-1971	1.7	5
82	Dewetting During the Crystal Growth of (Cd,Zn)Te:In Under Microgravity. <i>IEEE Transactions on Nuclear Science</i> , 2009 , 56, 1747-1751	1.7	5
81	Optical properties of reactively sputtered TeO _x amorphous films. <i>Applied Optics</i> , 2005 , 44, 534-7	1.7	5

80	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		5
79	RF-sputtering growth of stoichiometric amorphous TeO ₂ thin films. <i>Crystal Research and Technology</i> , 2005 , 40, 1023-1027	1.3	5
78	Erbium-doped crystalline YAG planar and ridge waveguides on quartz and sapphire substrates: deposition and material characterisation. <i>Optical Materials</i> , 2001 , 17, 251-254	3.3	5
77	Incorporation and electrical activity of Fe in LEC InP. <i>Semiconductor Science and Technology</i> , 1998 , 13, 512-516	1.8	5
76	A study of iron incorporation in LEC-grown indium phosphide. <i>Journal of Crystal Growth</i> , 1996 , 166, 572-577		5
75	Transforming diatomaceous earth into sensing devices by surface modification with gold nanoparticles. <i>Micro and Nano Engineering</i> , 2019 , 2, 29-34	3.4	4
74	Haptic Teleoperation of UAV Equipped with Gamma-Ray Spectrometer for Detection and Identification of Radio-Active Materials in Industrial Plants 2019 , 197-214		4
73	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	1.6	4
72	Crystal defects and charge collection in CZT x-ray and gamma detectors 2010 ,		4
71	Development of a 3D CZT detector prototype for Laue Lens telescope 2010 ,		4
70	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	1.2	4
69	Mosaic GaAs crystals for hard x-ray astronomy 2008 ,		4
68	Growth and characterization of hybrid (C _n H _{2n+1} NH ₃) ₂ CuCl ₄ self-assembled films. <i>Crystal Research and Technology</i> , 2005 , 40, 1028-1032	1.3	4
67	Engineered Nanomaterial Exposure Affects Organelle Genetic Material Replication in .. <i>ACS Nano</i> , 2022 ,	16.7	4
66	Interaction of hyperaccumulating plants with Zn and Cd nanoparticles.. <i>Science of the Total Environment</i> , 2022 , 817, 152741	10.2	4
65	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> , 2021 , 11, 4729	2.6	4
64	Energy Recovery of Multiple Charge Sharing Events in Room Temperature Semiconductor Pixel Detectors. <i>Sensors</i> , 2021 , 21,	3.8	4
63	Characterisation of pixelated CdZnTe sensors using MAXIPIX. <i>Journal of Instrumentation</i> , 2019 , 14, C12009-C12009		

62	Cadmium telluride and cadmium zinc telluride 2019 , 273-301		4
61	Incomplete Charge Collection at Inter-Pixel Gap in Low- and High-Flux Cadmium Zinc Telluride Pixel Detectors.. <i>Sensors</i> , 2022 , 22,	3.8	4
60	. <i>IEEE Sensors Journal</i> , 2019 , 19, 11753-11758	4	3
59	. <i>IEEE Transactions on Nuclear Science</i> , 2020 , 67, 2273-2277	1.7	3
58	Data on miRNome changes in human cells exposed to nano- or ionic- forms of Cadmium. <i>Data in Brief</i> , 2020 , 30, 105636	1.2	3
57	High energy resolution pixel detectors based on boron oxide vertical Bridgman grown CdZnTe crystals 2014 ,		3
56	X-ray diffraction efficiency of bent GaAs mosaic crystals for the Laue project. <i>Optical Engineering</i> , 2014 , 53, 047104	1.1	3
55	Boron oxide encapsulated vertical Bridgman grown CdZnTe crystals as X-ray detector material 2008 ,		3
54	A three-dimensional CZT detector as a focal plane prototype for a Laue Lens telescope 2008 ,		3
53	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		3
52	Revealing of defects in CdTe crystals by DSL etching. <i>Crystal Research and Technology</i> , 2005 , 40, 1060-1063		3
51	High-pressure bridgman grown CdZnTe for electro-optic applications. <i>Journal of Electronic Materials</i> , 2001 , 30, 743-747	1.9	3
50	Sub-nanosecond all-optical switching in CdZnTe. <i>Journal of Crystal Growth</i> , 2000 , 214-215, 866-869	1.6	3
49	Measurements of second-order susceptibility at $\mu\text{m}1.5$ in CdTe-based ternary alloys for efficient wavelength conversion. <i>Journal of Applied Physics</i> , 2000 , 88, 4913	2.5	3
48	Improved electroless platinum contacts on CdZnTe X- and γ -rays detectors. <i>Scientific Reports</i> , 2020 , 10, 13762	4.9	3
47	Comparative Analysis of Proteins Regulated during Cadmium Sulfide Quantum Dots Response in Wild Type and Tolerant Mutants. <i>Nanomaterials</i> , 2021 , 11,	5.4	3
46	Tailoring super-hydrophobic properties of electrochemical biosensor for early cancer detection. <i>MRS Advances</i> , 2016 , 1, 3545-3552	0.7	3
45	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	1.2	3

44	Real-time monitoring of <i>Arundo donax</i> response to saline stress through the application of in vivo sensing technology. <i>Scientific Reports</i> , 2021 , 11, 18598	4.9	3
43	Charge-separation enhancement in inverted polymer solar cells by molecular-level triple heterojunction: NiO-np:P3HT:PCBM. <i>Nanotechnology</i> , 2017 , 28, 035403	3.4	2
42	Proteomic Analysis Identifies Markers of Exposure to Cadmium Sulphide Quantum Dots (CdS QDs). <i>Nanomaterials</i> , 2020 , 10,	5.4	2
41	InZnO nanorods obtained via zinc vapour phase deposition on liquid indium seeded substrates. <i>CrystEngComm</i> , 2014 , 16, 1696	3.3	2
40	Synthesis of high purity, stoichiometric controlled, TeO ₂ powders. <i>Materials Chemistry and Physics</i> , 2012 , 133, 804-807	4.4	2
39	Mechanically stable metal layers for ohmic and blocking contacts on CdZnTe detectors by electroless deposition 2015 ,		2
38	Crystal bending by surface damaging in mosaic GaAs crystals for the LAUE project 2013 ,		2
37	Charge transport properties in CZT detectors grown by the vertical bridgman technique 2010 ,		2
36	Development status of a CZT spectrometer prototype with 3D spatial resolution for hard x-ray astronomy 2012 ,		2
35	Growth of semi-insulating InP with uniform axial Fe doping by a double-crucible LEC technique. <i>Journal of Crystal Growth</i> , 1997 , 179, 57-66	1.6	2
34	Sputtered Ge-Si heteroepitaxial thin films for photodetection in third window 2008 ,		2
33	Enhanced luminescence of CuCl microcrystals in a organic-inorganic hybrid matrix. <i>Applied Physics A: Materials Science and Processing</i> , 2007 , 88, 235-237	2.6	2
32	Off-stoichiometry determination of IIIV bulk crystals. <i>Journal of Crystal Growth</i> , 2008 , 310, 2080-2084	1.6	2
31	CZT X-ray detectors obtained by the boron encapsulated vertical Bridgman method 2007 ,		2
30	Characterization of Sb/sub 2/Te/sub 3/ ohmic contacts on P-type CdTe single crystals. <i>IEEE Transactions on Nuclear Science</i> , 2005 , 52, 1961-1963	1.7	2
29	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> , 2005 , 52, 3079-3084	1.7	2
28	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> , 2006 , 915, 1		2
27	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	3.6	2

26	Room temperature photoinduced Faraday rotation in Hg _{1-x} MnxTe alloys at 1550 nm. <i>Applied Physics Letters</i> , 1998 , 72, 3417-3419	3.4	2
25	Gamma-Ray Spectral Unfolding of CdZnTe-Based Detectors Using a Genetic Algorithm. <i>Sensors</i> , 2020 , 20,	3.8	2
24	High Performance CZT Detectors for In-Line Non-destructive X-Ray Based Density Measurements 2018 ,		2
23	Potentialities of High-Resolution 3-D CZT Drift Strip Detectors for Prompt Gamma-Ray Measurements in BNCT.. <i>Sensors</i> , 2022 , 22,	3.8	2
22	2016 ,		1
21	Development of a CZT spectroscopic 3D imager prototype for hard X ray astronomy 2013 ,		1
20	X-ray diffraction efficiency of bent GaAs mosaic crystals for the LAUE project 2013 ,		1
19	New insights for uniform and large-volume CdZnTe and CdMnTe detectors 2011 ,		1
18	Deposition of CdTe films under microgravity: Foton M3 mission. <i>Crystal Research and Technology</i> , 2009 , 44, 1059-1066	1.3	1
17	Spectroscopic response of CZT detectors obtained by the boron encapsulated vertical Bridgman method 2008 ,		1
16	Near-IR comparative characterization of optical second-order nonlinearities in Te-based semiconductors. <i>Journal of Electronic Materials</i> , 2001 , 30, 738-742	1.9	1
15	Two-dimensional mapping of residual stress-induced birefringence in differently-grown semiconductors for optical communication applications. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2000 , 288, 205-208	5.3	1
14	Efficient near-IR second harmonic generation in II-VI semiconductors. <i>Synthetic Metals</i> , 2001 , 124, 261-263	3.6	1
13	Effect of Growth Parameters on Iron Incorporation in Semi-Insulating LEC Indium Phosphide. <i>Materials Science Forum</i> , 1996 , 203, 1-6	0.4	1
12	Multiscale modification of the conductive PEDOT:PSS polymer for the analysis of biological mixtures in a super-hydrophobic drop. <i>Microelectronic Engineering</i> , 2016 , 158, 80-84	2.5	1
11	Al ₂ O ₃ Coating as Passivation Layer for CZT-based Detectors 2018 ,		1
10	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> , 2018 , 908, 411-415	1.2	1
9	Data on the interaction of hyperaccumulating plants with nanoscale metals Zn and Cd.. <i>Data in Brief</i> , 2022 , 42, 108171	1.2	1

- | | | | |
|---|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|---|
| 8 | 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 | 4.9 | 0 |
| 7 | Surface-treated self-standing curved crystals as high-efficiency elements for X- and Ray optics: theory and experiment. <i>Journal of Applied Crystallography</i> , 2015 , 48, 666-671 | 3.8 | |
| 6 | Guest Editors Preface. <i>Crystal Research and Technology</i> , 2014 , 49, 533-534 | 1.3 | |
| 5 | Visible-Range Luminescence Study in Indium Oxide Nanowires. <i>Materials Research Society Symposia Proceedings</i> , 2007 , 1010, 1 | | |
| 4 | A study of the electro-optic shielding effect in II/VI semiconductors. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2004 , 1, 698-701 | | |
| 3 | CdTe-Based Auston Switch for Optically-Driven Integrated Optics Devices. <i>Physica Status Solidi (B): Basic Research</i> , 2002 , 229, 1077-1080 | 1.3 | |
| 2 | Optically induced switching in CdZnTe. <i>IEEE Photonics Technology Letters</i> , 2000 , 12, 1037-1039 | 2.2 | |
| 1 | Experimental characterization of ternary Cd _{0.9} Zn _{0.1} Te as a basic material for all-optical processing in the 15- μ m range. <i>Journal of the Optical Society of America B: Optical Physics</i> , 2001 , 18, 176 | 1.7 | |