

Yadong Xu

List of Publications by Year in descending order

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117
papers

2,440
citations

257450

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119
all docs

119
docs citations

119
times ranked

2101
citing authors

#	ARTICLE	IF	CITATIONS
1	Effect of dimensional expansion on carrier transport behaviors of the hexagonal Bi-based perovskite crystals. <i>Journal of Energy Chemistry</i> , 2022, 66, 459-465.	12.9	16
2	Direct Detection of Fast Neutrons by Organic Semiconducting Single Crystal Detectors. <i>Advanced Functional Materials</i> , 2022, 32, 2108857.	14.9	7
3	Metal-Organic Frameworks-Based Fabry-Pérot Cavity Encapsulated TiO ₂ Nanoparticles for Selective Chemical Sensing. <i>Advanced Functional Materials</i> , 2022, 32, 2109541.	14.9	17
4	Solar-blind UV detection by ultra-wide-bandgap 4HCB organic single crystal semiconductor. <i>Applied Physics Letters</i> , 2022, 120, 013301.	3.3	0
5	Two-Dimensional Dion-Jacobson Perovskite (NH ₃ CH ₃ NH ₃) ₂ CsPb ₂ Br ₇ with High X-ray Sensitivity and Peak Discrimination of α -Particles. <i>Journal of Physical Chemistry Letters</i> , 2022, 13, 1187-1193.	4.6	13
6	Ultrasensitive and Robust 120 keV Hard X-ray Imaging Detector based on Mixed Halide Perovskite CsPbBr ₃ Single Crystals. <i>Advanced Materials</i> , 2022, 34, e2106562.	21.0	72
7	Growth of bismuth- and antimony-based chalcogenide single crystals by the physical vapor transport method. <i>CrystEngComm</i> , 2022, 24, 1094-1099.	2.6	4
8	Investigation on energy resolution of CsPbBr ₃ detectors: from charge transport behavior to device configuration. <i>Journal of Materials Chemistry C</i> , 2022, 10, 6017-6024.	5.5	6
9	Precursor Engineering for Solution Method-Grown Spectroscopy-Grade CsPbBr ₃ Crystals with High Energy Resolution. <i>Chemistry of Materials</i> , 2022, 34, 3993-4000.	6.7	14
10	Oriented preparation of Large-Area uniform Cs ₂ Tl ₆ perovskite film for high performance X-ray detector. <i>Journal of Colloid and Interface Science</i> , 2022, 624, 629-636.	9.4	11
11	Towards superior X-ray detection performance of two-dimensional halide perovskite crystals by adjusting the anisotropic transport behavior. <i>Journal of Materials Chemistry A</i> , 2021, 9, 13209-13219.	10.3	34
12	Ion Migration Controlled Stability in α -Particle Response of CsPbBr _{2.4} Cl _{0.6} Detectors. <i>Journal of Physical Chemistry C</i> , 2021, 125, 4235-4242.	3.1	12
13	Laser terahertz emission microscopy revealing the local fluctuation of terahertz generation induced by Te inclusion. <i>Applied Physics Letters</i> , 2021, 118, 131113.	3.3	0
14	Enhanced Transmission from Visible to Terahertz in ZnTe Crystals with Scalable Subwavelength Structures. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 16997-17005.	8.0	19
15	Solution-Grown Formamidinium Hybrid Perovskite (FAPbBr ₃) Single Crystals for α -Particle and γ -Ray Detection at Room Temperature. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 15383-15390.	8.0	41
16	High-Stability Flexible X-ray Detectors Based on Lead-Free Halide Perovskite Cs ₂ Tl ₆ Films. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 23928-23935.	8.0	45
17	Precursor solution-dependent secondary phase defects in CsPbBr ₃ single crystal grown by inverse temperature crystallization. <i>Journal of Materials Chemistry A</i> , 2021, 9, 27718-27726.	10.3	6
18	Effect of Ga substitution for In in LiInSe ₂ crystals on carrier transport behaviors and alpha particles detection. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2020, 949, 1627	1.6	4

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19	Solution-Grown Hypervalent CsI ₃ Crystal for High-Sensitive X-Ray Detection. <i>Physica Status Solidi (B): Basic Research</i> , 2020, 257, 1900290.	1.5	3
20	High-sensitivity X-ray detectors based on solution-grown caesium lead bromide single crystals. <i>Journal of Materials Chemistry C</i> , 2020, 8, 1248-1256.	5.5	108
21	High-Performance X-ray Detection Based on One-Dimensional Inorganic Halide Perovskite CsPbI ₃ . <i>Journal of Physical Chemistry Letters</i> , 2020, 11, 432-437.	4.6	83
22	Enhanced ultrabroadband antireflection properties of ZnTe crystal with sub-wavelength surface structures by maskless reactive ion etching method. <i>Superlattices and Microstructures</i> , 2020, 137, 106353.	3.1	2
23	MAPbBr ₃ Crystals Improved by Accurate Solution-Grown Procedure for Alpha Particle Detection. <i>Frontiers in Physics</i> , 2020, 7, .	2.1	9
24	Anisotropic dielectric behavior of layered perovskite-like Cs ₃ Bi ₂ I ₉ crystals in the terahertz region. <i>Physical Chemistry Chemical Physics</i> , 2020, 22, 24555-24560.	2.8	6
25	Self-trap-state-adjustable photoluminescence of quasi-one-dimensional RbPbI ₃ and Cs substitutional counterparts. <i>Journal of Materials Chemistry C</i> , 2020, 8, 12108-12112.	5.5	4
26	Anisotropic Performance of High-Quality MAPbBr ₃ Single-Crystal Wafers. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 51616-51627.	8.0	20
27	Photoconductive gain under low-flux X-ray irradiation in 4HCB organic single crystal detectors. <i>Applied Physics Express</i> , 2020, 13, 071004.	2.4	4
28	Enhancing Carrier Transport Properties of Melt-grown CsPbBr ₃ Single Crystals by Eliminating Inclusions. <i>Crystal Growth and Design</i> , 2020, 20, 2424-2431.	3.0	35
29	Secondary Phase Particles in Cesium Lead Bromide Perovskite Crystals: An Insight into the Formation of Matrix-Controlled Inclusion. <i>Journal of Physical Chemistry Letters</i> , 2020, 11, 5625-5631.	4.6	11
30	Melt-grown large-sized Cs ₂ TeI ₆ crystals for X-ray detection. <i>CrystEngComm</i> , 2020, 22, 5130-5136.	2.6	27
31	Solution-Grown Hypervalent CsI ₃ Crystal for High-Sensitive X-Ray Detection. <i>Physica Status Solidi (B): Basic Research</i> , 2020, 257, 2070012.	1.5	1
32	Low-Temperature Solution Growth and Characterization of Halogen (Cl, I)-Doped CsPbBr ₃ Crystals. <i>Crystal Growth and Design</i> , 2020, 20, 1638-1645.	3.0	25
33	Defect proliferation in CsPbBr ₃ crystal induced by ion migration. <i>Applied Physics Letters</i> , 2020, 116, .	3.3	60
34	Purely organic 4HCB single crystals exhibiting high hole mobility for direct detection of ultralow-dose X-radiation. <i>Journal of Materials Chemistry A</i> , 2020, 8, 5217-5226.	10.3	21
35	SiO ₂ aerogel-embedded carbon foam composite with Co-Enhanced thermal insulation and mechanical properties. <i>Ceramics International</i> , 2019, 45, 23393-23398.	4.8	27
36	Exploring Lead-Free Hybrid Double Perovskite Crystals of (BA) ₂ CsAgBiBr ₇ with Large Mobility-Lifetime Product toward X-Ray Detection. <i>Angewandte Chemie</i> , 2019, 131, 15904-15908.	2.0	25

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37	Exploring Lead-Free Hybrid Double Perovskite Crystals of $(\text{BA})_2\text{CsAgBiBr}_7$ with Large Mobility Lifetime Product toward X-Ray Detection. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 15757-15761.	13.8	151
38	First- and second-order phonon-phonon interactions and optical parameters of ZnTe crystal: a broadband terahertz time-domain spectroscopy study. <i>Journal Physics D: Applied Physics</i> , 2019, 52, 455101.	2.8	5
39	Enhanced X-ray Sensitivity of MAPbBr_3 Detector by Tailoring the Interface-States Density. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 7522-7528.	8.0	96
40	Homogenization of Te-rich grown ZnTe bulk crystals by annealing under Zn vapor. <i>CrystEngComm</i> , 2019, 21, 283-289.	2.6	5
41	Morphology of X-ray detector Cs_2Te_6 perovskite thick films grown by electrospray method. <i>Journal of Materials Chemistry C</i> , 2019, 7, 8712-8719.	5.5	29
42	Purification and Improved Nuclear Radiation Detection of Tl_6Sl_4 Semiconductor. <i>Crystal Growth and Design</i> , 2019, 19, 4738-4744.	3.0	4
43	Direct Radiation Detection by a Semiconductive Metal-Organic Framework. <i>Journal of the American Chemical Society</i> , 2019, 141, 8030-8034.	13.7	85
44	The establishment and performance of IBIC microscopy at Fudan University. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2019, 450, 122-126.	1.4	1
45	Controlling the Vapor Transport Crystal Growth of $\text{Hg}_3\text{Se}_2\text{I}_2$ Hard Radiation Detector Using Organic Polymer. <i>Crystal Growth and Design</i> , 2019, 19, 2074-2080.	3.0	7
46	Spin reorientation functionality in antiferromagnetic $\text{TmFe}_1-x\text{In}_x\text{O}_3$ polycrystalline samples. <i>Journal of Alloys and Compounds</i> , 2019, 789, 80-89.	5.5	9
47	Centimeter size BiSeI crystal grown by physical vapor transport method. <i>Journal of Crystal Growth</i> , 2019, 517, 7-11.	1.5	10
48	Zero-Dimensional Cs_2Te_6 Perovskite: Solution-Processed Thick Films with High X-ray Sensitivity. <i>ACS Photonics</i> , 2019, 6, 196-203.	6.6	70
49	Controlled thermal shrinking of gold nanoparticle-decorated polystyrene substrate for advanced surface-enhanced Raman spectroscopy. <i>Applied Surface Science</i> , 2019, 466, 262-267.	6.1	3
50	Terahertz emission from layered GaTe crystal due to surface lattice reorganization and in-plane noncubic mobility anisotropy. <i>Photonics Research</i> , 2019, 7, 518.	7.0	10
51	Stoichiometric Effects on the Photoelectric Properties of LiInSe_2 Crystals for Neutron Detection. <i>Crystal Growth and Design</i> , 2018, 18, 2864-2870.	3.0	16
52	An Effective Purification Process for the Nuclear Radiation Detector Tl_6Se_4 . <i>Crystal Growth and Design</i> , 2018, 18, 3484-3493.	3.0	9
53	Preparation, Structure Evolution, and Metal-Insulator Transition of Na_xRhO_2 Crystals (0.25 $\leq x \leq 1$). <i>Inorganic Chemistry</i> , 2018, 57, 2730-2735.	4.0	9
54	Studies on Cr electrode of CdZnTe detector for high energy radiation detection. <i>Journal of Materials Science: Materials in Electronics</i> , 2018, 29, 5049-5056.	2.2	2

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55	Cu ₂ I ₂ Se ₆ : A Metal-Inorganic Framework Wide-Bandgap Semiconductor for Photon Detection at Room Temperature. Journal of the American Chemical Society, 2018, 140, 1894-1899.	13.7	19
56	Preparation of indium tin oxide contact to n-CdZnTe gamma-ray detector. Applied Physics Letters, 2018, 112, 112101.	3.3	10
57	Growth and Characterization of Detector-Grade Cd _{0.9} Zn _{0.1} Te Crystals by the Traveling Heater Method with the Accelerated Crucible Rotation Technique. Journal of Electronic Materials, 2018, 47, 1125-1130.	2.2	17
58	Role of Stoichiometry in the Growth of Large Pb ₂ P ₂ Se ₆ Crystals for Nuclear Radiation Detection. ACS Photonics, 2018, 5, 566-573.	6.6	15
59	Optical and electronic anisotropies in perovskitoid crystals of Cs ₃ Bi ₂ I ₉ studies of nuclear radiation detection. Journal of Materials Chemistry A, 2018, 6, 23388-23395.	10.3	91
60	Twin boundary dominated electric field distribution in CdZnTe detectors. Chinese Physics B, 2018, 27, 117202.	1.4	6
61	The preparation and characterization of quasi-one-dimensional lead based perovskite CsPbI ₃ crystals from HI aqueous solutions. Journal of Crystal Growth, 2018, 498, 1-4.	1.5	14
62	Optical and electrical properties of vanadium-doped ZnTe crystals grown by the temperature gradient solution method. Optical Materials Express, 2018, 8, 431.	3.0	17
63	Enhanced terahertz response of diluted magnetic semiconductor Zn _{1-x} MnxTe crystals. Optical Materials Express, 2018, 8, 157.	3.0	4
64	Lead free halide perovskite Cs ₃ Bi ₂ I ₉ bulk crystals grown by a low temperature solution method. CrystEngComm, 2018, 20, 4935-4941.	2.6	60
65	Charge Transport Behavior in Solution-Grown Methylammonium Lead Tribromide Perovskite Single Crystal Using I± Particles. Journal of Physical Chemistry C, 2018, 122, 14355-14361.	3.1	56
66	Improvement of the THz response of Zn _{1-x} MnxTe bulk crystals grown by a temperature gradient solution method. CrystEngComm, 2017, 19, 3051-3057.	2.6	2
67	Centimeter-Sized Inorganic Lead Halide Perovskite CsPbBr ₃ Crystals Grown by an Improved Solution Method. Crystal Growth and Design, 2017, 17, 6426-6431.	3.0	152
68	Ligand-Free, Quantum-Confined Cs ₂ SnI ₆ Perovskite Nanocrystals. Chemistry of Materials, 2017, 29, 7901-7907.	6.7	98
69	Study on the local stress induced dislocations on CsPbBr_3 perovskite nanocrystals. $\text{xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si1.gif"}$		

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73	Comparison of ZnTe bulk crystals grown by the temperature gradient solvent method using elemental and compound materials. <i>Optical Materials Express</i> , 2016, 6, 3309.	3.0	8
74	Quality improvement of CdMnTe:In single crystals by an effective post-growth annealing. <i>Journal of Crystal Growth</i> , 2016, 451, 194-199.	1.5	10
75	Correlated analysis of 2 MeV proton-induced radiation damage in CdZnTe crystals using photoluminescence and thermally stimulated current techniques. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2016, 386, 16-21.	1.4	6
76	Te inclusion-induced electrical field perturbation in CdZnTe single crystals revealed by Kelvin probe force microscopy. <i>Micron</i> , 2016, 88, 48-53.	2.2	6
77	Study on the bias-dependent effects of proton-induced damage in CdZnTe radiation detectors using ion beam induced charge microscopy. <i>Micron</i> , 2016, 88, 54-59.	2.2	3
78	Indentation-introduced dislocation rosettes and their effects on the carrier transport properties of CdZnTe crystal. <i>CrystEngComm</i> , 2016, 18, 5667-5673.	2.6	13
79	Effects of Ga ^δ Te interface layer on the potential barrier height of CdTe/GaAs heterointerface. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 2639-2645.	2.8	3
80	Barrier controlled carrier trapping of extended defects in CdZnTe detector. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2015, 794, 62-66.	1.6	5
81	Comparison of In doped and In, Pb co-doped Cd _{0.9} Zn _{0.1} Te. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2015, 790, 10-13.	1.6	4
82	Space-Charge Manipulation Under Sub-bandgap Illumination in Detector-Grade CdZnTe. <i>Journal of Electronic Materials</i> , 2015, 44, 3229-3235.	2.2	4
83	Interplay mechanism between secondary phase particles and extended dislocations in CdZnTe crystals. <i>CrystEngComm</i> , 2015, 17, 8639-8644.	2.6	10
84	Influence of deep level defects on carrier lifetime in CdZnTe:In. <i>Journal of Applied Physics</i> , 2015, 117, .	2.5	19
85	Effects of Crystal Growth Methods on Deep-Level Defects and Electrical Properties of CdZnTe:In Crystals. <i>Journal of Electronic Materials</i> , 2015, 44, 518-523.	2.2	8
86	Effects of Te inclusions on charge-carrier transport properties in CdZnTe radiation detectors. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2015, 343, 89-93.	1.4	10
87	Characterization of CdZnTe co-doped with indium and lead. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2015, 770, 48-51.	1.6	5
88	Axial distribution of deep-level defects in as-grown CdZnTe:In ingots and their effects on the material's electrical properties. <i>Journal of Crystal Growth</i> , 2015, 409, 71-74.	1.5	9
89	Correlation of fundamental photorefectance spectra with surface quality of bulk ZnTe semiconductor grown from Te solution. <i>Crystal Research and Technology</i> , 2014, 49, 353-359.	1.3	1
90	Migration of Te inclusions in CdZnTe single crystals under the temperature gradient annealing. <i>Journal of Crystal Growth</i> , 2014, 402, 15-21.	1.5	16

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91	One pillared-layer $\hat{1}\pm$ -Po framework with a rare tetracobalt-formate (4,4) sheet exhibiting a field-induced magnetic transition. <i>Inorganic Chemistry Communication</i> , 2014, 41, 58-61.	3.9	4
92	TEM study on HgIn ₂ Te ₄ precipitates in Hg ₃ In ₂ Te ₆ crystals grown by the Bridgman method. <i>CrystEngComm</i> , 2014, 16, 7660-7666.	2.6	2
93	Effects of sub-bandgap illumination on electrical properties and detector performances of CdZnTe:In. <i>Applied Physics Letters</i> , 2014, 104, .	3.3	24
94	Narrow shape distribution of Te inclusions in ZnTe single crystals grown from Te solution. <i>Journal of Crystal Growth</i> , 2014, 404, 14-19.	1.5	8
95	HRTEM study on the ordered phases in Hg ₃ In ₂ Te ₆ crystals grown by Bridgman method. <i>CrystEngComm</i> , 2014, 16, 5073-5079.	2.6	4
96	Effects of deep-level defects on carrier mobility in CdZnTe crystals. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2014, 767, 318-321.	1.6	17
97	Dislocation-mediated coupling mechanism between the microstructural defects and Te inclusions in CdZnTe single crystals. <i>Scripta Materialia</i> , 2014, 82, 17-20.	5.2	18
98	Research into the electrical property variation of undoped CdTe and ZnTe crystals grown under Te-rich conditions. <i>Journal of Alloys and Compounds</i> , 2014, 612, 392-397.	5.5	17
99	Defects in CdMnTe crystals for nuclear detector applications. <i>Journal of Semiconductors</i> , 2013, 34, 043003.	3.7	3
100	Radiation damage on CdZnTe:In crystals under high dose ⁶⁰ Co $\hat{1}\beta$ -rays. <i>CrystEngComm</i> , 2013, 15, 10304.	2.6	21
101	Study on twin boundaries and Te particles in CdMnTe crystals for nuclear detector application. <i>Journal of Crystal Growth</i> , 2013, 364, 128-132.	1.5	7
102	Investigation of Te inclusion induced glides and the corresponding dislocations in CdZnTe crystal. <i>CrystEngComm</i> , 2012, 14, 417-420.	2.6	20
103	Solution growth of In-doped CdMnTe crystals by the vertical Bridgman method with the ACRT technique. <i>Journal of Crystal Growth</i> , 2012, 355, 33-37.	1.5	27
104	Irradiation-Induced Defects in Cd _{0.9} Zn _{0.1} Te:Al. <i>Journal of Electronic Materials</i> , 2012, 41, 3044-3049.	2.2	9
105	The analysis of X-ray response of CdZnTe detectors. <i>Science China Technological Sciences</i> , 2012, 55, 2295-2299.	4.0	4
106	Matrix-controlled morphology evolution of Te inclusions in CdZnTe single crystal. <i>Scripta Materialia</i> , 2012, 67, 5-8.	5.2	26
107	Morphology evolution of micron-scale secondary phases in CdZnTe crystals grown by vertical Bridgman method. <i>Journal of Alloys and Compounds</i> , 2011, 509, 2338-2342.	5.5	15
108	Size and distribution of Te inclusions in detector-grade CdZnTe ingots. <i>Progress in Natural Science: Materials International</i> , 2011, 21, 66-72.	4.4	6

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109	Vertical Bridgman growth and characterization of CdMnTe crystals for gamma-ray radiation detector. Journal of Crystal Growth, 2011, 318, 1062-1066.	1.5	43
110	Study of Te nanoprecipitates in CdZnTe crystals. Journal of Materials Research, 2010, 25, 1298-1303.	2.6	3
111	Investigation on defect levels in CdZnTe:Al using thermally stimulated current spectroscopy. Journal Physics D: Applied Physics, 2010, 43, 345104.	2.8	15
112	Characterization of CdZnTe Crystals Grown Using a Seeded Modified Vertical Bridgman Method. IEEE Transactions on Nuclear Science, 2009, 56, 2808-2813.	2.0	31
113	Study on temperature dependent resistivity of indium-doped cadmium zinc telluride. Journal Physics D: Applied Physics, 2009, 42, 035105.	2.8	21
114	Temperature dependence of photoluminescence properties of In-doped cadmium zinc telluride. Journal of Materials Research, 2008, 23, 1389-1392.	2.6	21
115	Study on the behaviors of impurities in cadmium zinc telluride. Journal of Crystal Growth, 2007, 304, 313-316.	1.5	20
116	The effect of dislocations in Cd _{0.96} Zn _{0.04} Te single crystal on IR transmittance. Materials Science in Semiconductor Processing, 2006, 9, 160-163.	4.0	5
117	The study on Schottky contact between Au and clean CdZnTe. Surface Science, 2006, 600, 2629-2632.	1.9	9