Yadong Xu

List of Publications by Year in descending order

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117	2,440	257450	254184
papers	citations	24 h-index	43 g-index

119	119	119	2101
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Centimeter-Sized Inorganic Lead Halide Perovskite CsPbBr₃ Crystals Grown by an Improved Solution Method. Crystal Growth and Design, 2017, 17, 6426-6431.	3.0	152
2	Exploring Leadâ€Free Hybrid Double Perovskite Crystals of (BA)₂CsAgBiBr₇ with Large Mobilityâ€Lifetime Product toward Xâ€Ray Detection. Angewandte Chemie - International Edition, 2019, 58, 15757-15761.	13.8	151
3	High-sensitivity X-ray detectors based on solution-grown caesium lead bromide single crystals. Journal of Materials Chemistry C, 2020, 8, 1248-1256.	5.5	108
4	Ligand-Free, Quantum-Confined Cs₂SnI₆ Perovskite Nanocrystals. Chemistry of Materials, 2017, 29, 7901-7907.	6.7	98
5	Enhanced X-ray Sensitivity of MAPbBr₃ Detector by Tailoring the Interface-States Density. ACS Applied Materials & Interfaces, 2019, 11, 7522-7528.	8.0	96
6	Optical and electronic anisotropies in perovskitoid crystals of Cs₃Bi₂I₉ studies of nuclear radiation detection. Journal of Materials Chemistry A, 2018, 6, 23388-23395.	10.3	91
7	Direct Radiation Detection by a Semiconductive Metalâ€“Organic Framework. Journal of the American Chemical Society, 2019, 141, 8030-8034.	13.7	85
8	High-Performance X-ray Detection Based on One-Dimensional Inorganic Halide Perovskite CsPbI₃. Journal of Physical Chemistry Letters, 2020, 11, 432-437.	4.6	83
9	Ultrasensitive and Robust 120ÂkeV Hard Xâ€Ray Imaging Detector based on Mixedâ€Halide Perovskite CsPbBr_{3â”}_nI_n Single Crystals. Advanced Materials, 2022, 34, e2106562.	21.0	72
10	Zero-Dimensional Cs₂TeI₆ Perovskite: Solution-Processed Thick Films with High X-ray Sensitivity. ACS Photonics, 2019, 6, 196-203.	6.6	70
11	Lead free halide perovskite Cs₃Bi₂I₉ bulk crystals grown by a low temperature solution method. CrystEngComm, 2018, 20, 4935-4941.	2.6	60
12	Defect proliferation in CsPbBr3 crystal induced by ion migration. Applied Physics Letters, 2020, 116, .	3.3	60
13	Charge Transport Behavior in Solution-Grown Methylammonium Lead Tribromide Perovskite Single Crystal Using Î± Particles. Journal of Physical Chemistry C, 2018, 122, 14355-14361.	3.1	56
14	High-Stability Flexible X-ray Detectors Based on Lead-Free Halide Perovskite Cs₂TeI₆ Films. ACS Applied Materials & Interfaces, 2021, 13, 23928-23935.	8.0	45
15	Vertical Bridgman growth and characterization of CdMnTe crystals for gamma-ray radiation detector. Journal of Crystal Growth, 2011, 318, 1062-1066.	1.5	43
16	Solution-Grown Formamidinium Hybrid Perovskite (FAPbBr₃) Single Crystals for Î±-Particle and Î³-Ray Detection at Room Temperature. ACS Applied Materials & Interfaces, 2021, 13, 15383-15390.	8.0	41
17	Enhancing Carrier Transport Properties of Melt-grown CsPbBr₃ Single Crystals by Eliminating Inclusions. Crystal Growth and Design, 2020, 20, 2424-2431.	3.0	35
18	Towards superior X-ray detection performance of two-dimensional halide perovskite crystals by adjusting the anisotropic transport behavior. Journal of Materials Chemistry A, 2021, 9, 13209-13219.	10.3	34

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19	Characterization of CdZnTe Crystals Grown Using a Seeded Modified Vertical Bridgman Method. IEEE Transactions on Nuclear Science, 2009, 56, 2808-2813.	2.0	31
20	Morphology of X-ray detector Cs₂TeI₆ perovskite thick films grown by electrospray method. Journal of Materials Chemistry C, 2019, 7, 8712-8719.	5.5	29
21	Solution growth of In-doped CdMnTe crystals by the vertical Bridgman method with the ACRT technique. Journal of Crystal Growth, 2012, 355, 33-37.	1.5	27
22	SiO2 aerogel-embedded carbon foam composite with Co-Enhanced thermal insulation and mechanical properties. Ceramics International, 2019, 45, 23393-23398.	4.8	27
23	Melt-grown large-sized Cs₂TeI₆ crystals for X-ray detection. CrystEngComm, 2020, 22, 5130-5136.	2.6	27
24	Matrix-controlled morphology evolution of Te inclusions in CdZnTe single crystal. Scripta Materialia, 2012, 67, 5-8.	5.2	26
25	Exploring Leadâ€Free Hybrid Double Perovskite Crystals of (BA)₂CsAgBiBr₇ with Large Mobilityâ€Lifetime Product toward Xâ€Ray Detection. Angewandte Chemie, 2019, 131, 15904-15908.	2.0	25
26	Low-Temperature Solution Growth and Characterization of Halogen (Cl, I)-Doped CsPbBr₃ Crystals. Crystal Growth and Design, 2020, 20, 1638-1645.	3.0	25
27	Effects of sub-bandgap illumination on electrical properties and detector performances of CdZnTe:In. Applied Physics Letters, 2014, 104, .	3.3	24
28	Temperature dependence of photoluminescence properties of In-doped cadmium zinc telluride. Journal of Materials Research, 2008, 23, 1389-1392.	2.6	21
29	Study on temperature dependent resistivity of indium-doped cadmium zinc telluride. Journal Physics D: Applied Physics, 2009, 42, 035105.	2.8	21
30	Radiation damage on CdZnTe:In crystals under high dose 60Co Î³-rays. CrystEngComm, 2013, 15, 10304.	2.6	21
31	Purely organic 4HCB single crystals exhibiting high hole mobility for direct detection of ultralow-dose X-radiation. Journal of Materials Chemistry A, 2020, 8, 5217-5226.	10.3	21
32	Study on the behaviors of impurities in cadmium zinc telluride. Journal of Crystal Growth, 2007, 304, 313-316.	1.5	20
33	Investigation of Te inclusion induced glides and the corresponding dislocations in CdZnTe crystal. CrystEngComm, 2012, 14, 417-420.	2.6	20
34	Anisotropic Performance of High-Quality MAPbBr₃ Single-Crystal Wafers. ACS Applied Materials & Interfaces, 2020, 12, 51616-51627.	8.0	20
35	Influence of deep level defects on carrier lifetime in CdZnTe:In. Journal of Applied Physics, 2015, 117, .	2.5	19
36	Cu₂I₂Se₆: A Metalâ€“Inorganic Framework Wide-Bandgap Semiconductor for Photon Detection at Room Temperature. Journal of the American Chemical Society, 2018, 140, 1894-1899.	13.7	19

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37	Enhanced Transmission from Visible to Terahertz in ZnTe Crystals with Scalable Subwavelength Structures. ACS Applied Materials & Interfaces, 2021, 13, 16997-17005.	8.0	19
38	Dislocation-mediated coupling mechanism between the microstructural defects and Te inclusions in CdZnTe single crystals. Scripta Materialia, 2014, 82, 17-20.	5.2	18
39	Effects of deep-level defects on carrier mobility in CdZnTe crystals. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2014, 767, 318-321.	1.6	17
40	Research into the electrical property variation of undoped CdTe and ZnTe crystals grown under Te-rich conditions. Journal of Alloys and Compounds, 2014, 612, 392-397.	5.5	17
41	Growth and Characterization of Detector-Grade Cd0.9Zn0.1Te Crystals by the Traveling Heater Method with the Accelerated Crucible Rotation Technique. Journal of Electronic Materials, 2018, 47, 1125-1130.	2.2	17
42	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
43	Metalâ€“Organic Frameworksâ€Based Fabryâ€“PÃ©rot Cavity Encapsulated TiO₂ Nanoparticles for Selective Chemical Sensing. Advanced Functional Materials, 2022, 32, 2109541.	14.9	17
44	Migration of Te inclusions in CdZnTe single crystals under the temperature gradient annealing. Journal of Crystal Growth, 2014, 402, 15-21.	1.5	16
45	Stoichiometric Effects on the Photoelectric Properties of LiInSe₂ Crystals for Neutron Detection. Crystal Growth and Design, 2018, 18, 2864-2870.	3.0	16
46	Effect of dimensional expansion on carrier transport behaviors of the hexagonal Bi-based perovskite crystals. Journal of Energy Chemistry, 2022, 66, 459-465.	12.9	16
47	Investigation on defect levels in CdZnTeâ€‰:â€‰Al using thermally stimulated current spectroscopy. Journal Physics D: Applied Physics, 2010, 43, 345104.	2.8	15
48	Morphology evolution of micron-scale secondary phases in CdZnTe crystals grown by vertical Bridgman method. Journal of Alloys and Compounds, 2011, 509, 2338-2342.	5.5	15
49	Role of Stoichiometry in the Growth of Large Pb₂P₂Se₆ Crystals for Nuclear Radiation Detection. ACS Photonics, 2018, 5, 566-573.	6.6	15
50	The preparation and characterization of quasi-one-dimensional lead based perovskite CsPbI3 crystals from HI aqueous solutions. Journal of Crystal Growth, 2018, 498, 1-4.	1.5	14
51	Precursor Engineering for Solution Method-Grown Spectroscopy-Grade CsPbBr₃ Crystals with High Energy Resolution. Chemistry of Materials, 2022, 34, 3993-4000.	6.7	14
52	Indentation-introduced dislocation rosettes and their effects on the carrier transport properties of CdZnTe crystal. CrystEngComm, 2016, 18, 5667-5673.	2.6	13
53	Two-Dimensional Dionâ€“Jacobson Perovskite (NH₃C₄H₈NH₃)CsPb₂Br₇ with High X-ray Sensitivity and Peak Discrimination of Î±-Particles. Journal of Physical Chemistry Letters, 2022, 13, 1187-1193.	4.6	13
54	Ion Migration Controlled Stability in Î±-Particle Response of CsPbBr_{2.4}Cl_{0.6} Detectors. Journal of Physical Chemistry C, 2021, 125, 4235-4242.	3.1	12

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55	Investigation of dislocation migration in substrate-grade CdZnTe crystals during post-annealing. Journal of Crystal Growth, 2017, 457, 343-348.	1.5	11
56	Secondary Phase Particles in Cesium Lead Bromide Perovskite Crystals: An Insight into the Formation of Matrix-Controlled Inclusion. Journal of Physical Chemistry Letters, 2020, 11, 5625-5631.	4.6	11
57	Oriented preparation of Large-Area uniform Cs2TeI6 perovskite film for high performance X-ray detector. Journal of Colloid and Interface Science, 2022, 624, 629-636.	9.4	11
58	Interplay mechanism between secondary phase particles and extended dislocations in CdZnTe crystals. CrystEngComm, 2015, 17, 8639-8644.	2.6	10
59	Effects of Te inclusions on charge-carrier transport properties in CdZnTe radiation detectors. Nuclear Instruments & Methods in Physics Research B, 2015, 343, 89-93.	1.4	10
60	Quality improvement of CdMnTe:In single crystals by an effective post-growth annealing. Journal of Crystal Growth, 2016, 451, 194-199.	1.5	10
61	Preparation of indium tin oxide contact to n-CdZnTe gamma-ray detector. Applied Physics Letters, 2018, 112, 112101.	3.3	10
62	Centimeter size BiSeI crystal grown by physical vapor transport method. Journal of Crystal Growth, 2019, 517, 7-11.	1.5	10
63	Terahertz emission from layered GaTe crystal due to surface lattice reorganization and in-plane noncubic mobility anisotropy. Photonics Research, 2019, 7, 518.	7.0	10
64	The study on Schottky contact between Au and clean CdZnTe. Surface Science, 2006, 600, 2629-2632.	1.9	9
65	Irradiation-Induced Defects in Cd0.9Zn0.1Te:Al. Journal of Electronic Materials, 2012, 41, 3044-3049.	2.2	9
66	Axial distribution of deep-level defects in as-grown CdZnTe:In ingots and their effects on the material×³s electrical properties. Journal of Crystal Growth, 2015, 409, 71-74.	1.5	9
67	An Effective Purification Process for the Nuclear Radiation Detector Tl₆SeI₄. Crystal Growth and Design, 2018, 18, 3484-3493.	3.0	9
68	Preparation, Structure Evolution, and Metalâ€“Insulator Transition of Na_xRhO₂ Crystals (0.25 â‰¤ x â‰¤ 1). Inorganic Chemistry, 2018, 57, 2730-2735.	4.0	9
69	Spin reorientation functionality in antiferromagnetic TmFe1-xInxO3 polycrystalline samples. Journal of Alloys and Compounds, 2019, 789, 80-89.	5.5	9
70	MAPbBr3â^'xIx Crystals Improved by Accurate Solution-Grown Procedure for Alpha Particle Detection. Frontiers in Physics, 2020, 7, .	2.1	9
71	Narrow shape distribution of Te inclusions in ZnTe single crystals grown from Te solution. Journal of Crystal Growth, 2014, 404, 14-19.	1.5	8
72	Effects of Crystal Growth Methods on Deep-Level Defects and Electrical Properties of CdZnTe:In Crystals. Journal of Electronic Materials, 2015, 44, 518-523.	2.2	8

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73	Comparison of ZnTe bulk crystals grown by the temperature gradient solvent method using elemental and compound materials. Optical Materials Express, 2016, 6, 3309.	3.0	8
74	Study on twin boundaries and Te particles in CdMnTe crystals for nuclear detector application. Journal of Crystal Growth, 2013, 364, 128-132.	1.5	7
75	Controlling the Vapor Transport Crystal Growth of Hg₃Se₂I₂ Hard Radiation Detector Using Organic Polymer. Crystal Growth and Design, 2019, 19, 2074-2080.	3.0	7
76	Direct Detection of Fast Neutrons by Organic Semiconducting Single Crystal Detectors. Advanced Functional Materials, 2022, 32, 2108857.	14.9	7
77	Size and distribution of Te inclusions in detector-grade CdZnTe ingots. Progress in Natural Science: Materials International, 2011, 21, 66-72.	4.4	6
78	Correlated analysis of 2 MeV proton-induced radiation damage in CdZnTe crystals using photoluminescence and thermally stimulated current techniques. Nuclear Instruments & Methods in Physics Research B, 2016, 386, 16-21.	1.4	6
79	Te inclusion-induced electrical field perturbation in CdZnTe single crystals revealed by Kelvin probe force microscopy. Micron, 2016, 88, 48-53.	2.2	6
80	Study on the local stress induced dislocations on <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si1.gif"		

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91	The analysis of X-ray response of CdZnTe detectors. Science China Technological Sciences, 2012, 55, 2295-2299.	4.0	4
92	One pillared-layer Î±-Po framework with a rare tetracobalt-formate (4,4) sheet exhibiting a field-induced magnetic transition. Inorganic Chemistry Communication, 2014, 41, 58-61.	3.9	4
93	HRTEM study on the ordered phases in Hg₃In₂Te₆ crystals grown by Bridgman method. CrystEngComm, 2014, 16, 5073-5079.	2.6	4
94	Comparison of In doped and In, Pb co-doped Cd0.9Zn0.1Te. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2015, 790, 10-13.	1.6	4
95	Space-Charge Manipulation Under Sub-bandgap Illumination in Detector-Grade CdZnTe. Journal of Electronic Materials, 2015, 44, 3229-3235.	2.2	4
96	Enhanced terahertz response of diluted magnetic semiconductor Zn_1-xMnxTe crystals. Optical Materials Express, 2018, 8, 157.	3.0	4
97	Purification and Improved Nuclear Radiation Detection of Tl₆SI₄ Semiconductor. Crystal Growth and Design, 2019, 19, 4738-4744.	3.0	4
98	Effect of Ga substitution for In in LiInSe<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" id="d1e866" altimg="si108.svg"><mml:msub><mml:mrow /><mml:mrow><mml:mn>2</mml:mn></mml:mrow></mml:msub></mml:math> crystals on carrier transport behaviors and alpha particles detection. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2020, 949, 1627	1.6	4
99	Self-trap-state-adjustable photoluminescence of quasi-one-dimensional RbPbI₃ and Cs substitutional counterparts. Journal of Materials Chemistry C, 2020, 8, 12108-12112.	5.5	4
100	Photoconductive gain under low-flux X-ray irradiation in 4HCB organic single crystal detectors. Applied Physics Express, 2020, 13, 071004.	2.4	4
101	Growth of bismuth- and antimony-based chalcohalide single crystals by the physical vapor transport method. CrystEngComm, 2022, 24, 1094-1099.	2.6	4
102	Study of Te nanoprecipitates in CdZnTe crystals. Journal of Materials Research, 2010, 25, 1298-1303.	2.6	3
103	Defects in CdMnTe crystals for nuclear detector applications. Journal of Semiconductors, 2013, 34, 043003.	3.7	3
104	Study on the bias-dependent effects of proton-induced damage in CdZnTe radiation detectors using ion beam induced charge microscopy. Micron, 2016, 88, 54-59.	2.2	3
105	Effects of Gaâ€“Te interface layer on the potential barrier height of CdTe/GaAs heterointerface. Physical Chemistry Chemical Physics, 2016, 18, 2639-2645.	2.8	3
106	Controlled thermal shrinking of gold nanoparticle-decorated polystyrene substrate for advanced surface-enhanced Raman spectroscopy. Applied Surface Science, 2019, 466, 262-267.	6.1	3
107	Solutionâ€Grown Hypervalent CsI 3 Crystal for Highâ€Sensitive Xâ€Ray Detection. Physica Status Solidi (B): Basic Research, 2020, 257, 1900290.	1.5	3
108	TEM study on HgIn2Te4 precipitates in Hg3In2Te6 crystals grown by the Bridgman method. CrystEngComm, 2014, 16, 7660-7666.	2.6	2

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109	Improvement of the THz response of Zn_{1â^'x}Mn_xTe bulk crystals grown by a temperature gradient solution method. CrystEngComm, 2017, 19, 3051-3057.	2.6	2
110	Resolving electronic inhomogeneity in CdZnTe bulk crystal via scanning microwave impedance microscopy. Physica Status Solidi (B): Basic Research, 2017, 254, 1600474.	1.5	2
111	Studies on Cr electrode of CdZnTe detector for high energy radiation detection. Journal of Materials Science: Materials in Electronics, 2018, 29, 5049-5056.	2.2	2
112	Enhanced ultrabroadband antireflection properties of ZnTe crystal with sub-wavelength surface structures by maskless reactive ion etching method. Superlattices and Microstructures, 2020, 137, 106353.	3.1	2
113	Correlation of fundamental photoreflectance spectra with surface quality of bulk ZnTe semiconductor grown from Te solution. Crystal Research and Technology, 2014, 49, 353-359.	1.3	1
114	The establishment and performance of IBIC microscopy at Fudan University. Nuclear Instruments & Methods in Physics Research B, 2019, 450, 122-126.	1.4	1
115	Solutionâ€Grown Hypervalent CsI₃ Crystal for Highâ€Sensitive Xâ€Ray Detection. Physica Status Solidi (B): Basic Research, 2020, 257, 2070012.	1.5	1
116	Laser terahertz emission microscopy revealing the local fluctuation of terahertz generation induced by Te inclusion. Applied Physics Letters, 2021, 118, 131113.	3.3	0
117	Solar-blind UV detection by ultra-wide-bandgap 4HCB organic single crystal semiconductor. Applied Physics Letters, 2022, 120, 013301.	3.3	0