Jiahua Tao

List of Publications by Year
in descending order

71 papers	1,889 citations	257450 24 h-index	289244 40 g-index
73 all docs	73 docs citations	73 times ranked	1790 citing authors

#	Article	IF	Citations
1	Enhancing photovoltaic performance of carbon-based planar Cs3Sb2I9-xClx solar cells by using P3HT as hole transport material. Journal of Alloys and Compounds, 2022, 897, 162741.	5.5	7
2	Co-electrodeposition of Cu3BiS3 thin films in weakly alkaline aqueous solutions for photovoltaic application. Journal of Materials Science: Materials in Electronics, 2022, 33, 585-595.	2.2	5
3	Band gap modulation and improved magnetism of double perovskite Sr2KMoO6 (K = Fe, Co, Ni, Mn) doped BaTiO3 ceramics. Ceramics International, 2022, 48, 7629-7635.	4.8	9
4	Controllable vapor transport deposition of efficient Sb2(S,Se)3 solar cells via adjusting evaporation source area. Journal of Alloys and Compounds, 2022, 906, 164320.	5.5	5
5	Vapor Transport Deposition of Sb₂(S,Se)₃ Solar Cells with Continuously Tunable Band Gaps. ACS Applied Energy Materials, 2022, 5, 7240-7248.	5.1	13
6	Multi-source cation/anion doping towards efficient carbon-based CsPbIBr2 solar cells with superior open voltage up to 1.37ÂV. Solar Energy Materials and Solar Cells, 2021, 221, 110918.	6.2	21
7	Electronâ€"Hole Plasma Lasing Dynamics in CsPbCl_mBr_{3-m} Microplate Lasers. ACS Photonics, 2021, 8, 787-797.	6.6	22
8	Influence of CsPbBr3/TiO2 interfaces deposited with magnetron sputtering and spin-coating methods on the open voltage deficit and efficiency of all-inorganic CsPbBr3 planar solar cells. Journal of Alloys and Compounds, 2021, 860, 157900.	5.5	9
9	RF magnetron sputtering processed transparent conductive aluminum doped ZnO thin films with excellent optical and electrical properties. Journal of Materials Science: Materials in Electronics, 2021, 32, 9106-9114.	2.2	13
10	Vapor Transport Deposition of Highly Efficient Sb₂(S,Se)₃ Solar Cells via Controllable Orientation Growth. Advanced Functional Materials, 2021, 31, 2101476.	14.9	38
11	Fabricating over 7%-efficient Sb2(S,Se)3 thin-film solar cells by vapor transport deposition using Sb2Se3 and Sb2S3 mixed powders as the evaporation source. Journal of Power Sources, 2021, 493, 229737.	7.8	32
12	Improving the performance of Sb2S3 thin-film solar cells by optimization of VTD source-substrate proximity. Solar Energy, 2021, 220, 942-948.	6.1	17
13	CdxZn1-xS/Sb2Se3 thin film photocathode for efficient solar water splitting. Applied Catalysis B: Environmental, 2021, 286, 119872.	20.2	37
14	Room-temperature ferromagnetism in (K0.5Na0.5)NbO3-xBaNi0.5Nb0.5O3-Î´ ferroelectric ceramics with narrow bandgap. Ceramics International, 2021, 47, 20003-20008.	4.8	3
15	Vapor Transport Deposition: Vapor Transport Deposition of Highly Efficient Sb₂(S,Se)₃ Solar Cells via Controllable Orientation Growth (Adv. Funct.) Tj ETQq1 1 0.784314 rgBT /Overlock	[illegible]	[illegible]
16	Superior single-mode lasing in a self-assembly CsPbX₃ microcavity over an ultrawide pumping wavelength range. Photonics Research, 2021, 9, 54.	7.0	13
17	Importance of Interfacial Passivation in the High Efficiency of Sb₂Se₃ Thin-Film Solar Cells: Numerical Evidence. ACS Applied Energy Materials, 2020, 3, 10415-10422.	5.1	12
18	Resistive Effects on the Spatially Resolved Absolute Electroluminescence of Thin-Film Cu(In,) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 67 Td 112859-112866.	4.2	7

#	Article	IF	Citations
19	Efficient carbon-based planar CsPbBr3 perovskite solar cells with Li-doped amorphous Nb2O5 layer. Journal of Alloys and Compounds, 2020, 842, 155984.	5.5	21
20	Lasing operation in the CsPbBr3 perovskite micron hemisphere cavity grown by chemical vapor deposition. Chemical Engineering Journal, 2020, 389, 124395.	12.7	21
21	Growth control and defect passivation toward efficient and low-temperature processed carbon based CsPbIBr2 solar cell. Organic Electronics, 2020, 83, 105731.	2.6	24
22	Effects of working pressure and power on photovoltaic and defect properties of magnetron sputtered Sb₂Se₃ thin-film solar cells. Applied Optics, 2020, 59, 948.	1.8	13
23	Investigation of CsPbBr₃ films with controllable morphology and its influence on the photovoltaic properties for carbon-based planar perovskite solar cells. Applied Optics, 2020, 59, 5481.	1.8	2
24	5.91%-efficient Sb2Se3 solar cells with a radio-frequency magnetron-sputtered CdS buffer layer. Applied Materials Today, 2019, 16, 367-374.	4.3	49
25	Enhanced performance of carbon-based planar CsPbBr3 perovskite solar cells with room-temperature sputtered Nb2O5 electron transport layer. Solar Energy, 2019, 191, 263-271.	6.1	37
26	Efficient and Holeâ€Transportingâ€Layerâ€Free CsPbI 2 Br Planar Heterojunction Perovskite Solar Cells through Rubidium Passivation. ChemSusChem, 2019, 12, 960-960.	6.8	1
27	Grain growth enhancing through preheating treatment of a sputtered stacked metallic precursor for Cu(In, Al)Se2 thin film solar cells application. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2019, 242, 31-36.	3.5	5
28	Solution-processed SnO2 interfacial layer for highly efficient Sb2Se3 thin film solar cells. Nano Energy, 2019, 60, 802-809.	16.0	111
29	Investigation of electronic transport mechanisms in Sb2Se3 thin-film solar cells. Solar Energy Materials and Solar Cells, 2019, 197, 1-6.	6.2	61
30	Efficient and Holeâ€Transportingâ€Layerâ€Free CsPbI₂Br Planar Heterojunction Perovskite Solar Cells through Rubidium Passivation. ChemSusChem, 2019, 12, 983-989.	6.8	79
31	The role of tuning Se/(Sâ€¯+â€¯Se) ratio in the improvement of Cu2MnSn(S, Se)4 thin films properties and photovoltaic device performance. Solar Energy, 2019, 179, 279-285.	6.1	6
32	Improvement performance of two-step electrodepositing Cu 2 MnSnS 4 thin film solar cells by tuning Cu-Sn alloy layer deposition time. Materials Chemistry and Physics, 2018, 211, 382-388.	4.0	13
33	Interface Modification for Planar Perovskite Solar Cell Using Room-Temperature Deposited Nb₂O₅ as Electron Transportation Layer. ACS Applied Energy Materials, 2018, 1, 2000-2006.	5.1	41
34	RF sputtered CdS films as independent or buffered electron transport layer for efficient planar perovskite solar cell. Solar Energy Materials and Solar Cells, 2018, 178, 186-192.	6.2	39
35	Effects of bismuth-doping on the properties of Cu(In, Al)Se2 thin films prepared by selenization of sputtered stacked precursors. Materials Letters, 2018, 213, 19-22.	2.6	3
36	An 8.7% efficiency co-electrodeposited Cu₂ZnSnS₄ photovoltaic device fabricated <i>via</i> a pressurized post-sulfurization process. Journal of Materials Chemistry C, 2018, 6, 13275-13282.	5.5	34

#	Article	IF	Citations
37	The role of sulfurization temperature on the morphological, structural and optical properties of electroplated Cu2MnSnS4 absorbers for photovoltaics. Materials Letters, 2018, 233, 111-114.	2.6	12
38	Low temperature solution deposited niobium oxide films as efficient electron transport layer for planar perovskite solar cell. Solar Energy Materials and Solar Cells, 2018, 188, 66-72.	6.2	18
39	Effect of sulfurization temperature of solution-processed Cu2SnS3 absorber for low cost photovoltaic cells. Materials Letters, 2018, 228, 447-449.	2.6	15
40	Investigation of electrically-active defects in Sb2Se3 thin-film solar cells with up to 5.91% efficiency via admittance spectroscopy. Solar Energy Materials and Solar Cells, 2018, 186, 324-329.	6.2	63
41	Improving the efficiency of Sb2Se3 thin-film solar cells by post annealing treatment in vacuum condition. Solar Energy Materials and Solar Cells, 2018, 187, 170-175.	6.2	69
42	Effect of potassium doping for ultrasonic sprayed Cu2SnS3 thin films for solar cell application. Journal of Materials Science: Materials in Electronics, 2018, 29, 12824-12829.	2.2	12
43	Influence of deposition potential on Cu2ZnSnS4 thinâ€"film solar cells coâ€"electrodeposited on fluorineâ€"doped tin oxide substrates. Journal of Alloys and Compounds, 2017, 701, 465-473.	5.5	21
44	Effects of sulfurization temperature on the structural and optical properties of Cu 2 CdSnS 4 thin films prepared by direct liquid method. Materials Letters, 2017, 193, 206-209.	2.6	19
45	Effect of the post-selenization time on the structural and optical properties of Cu 2 MnSn(S,Se) 4 thin films synthesized by sol-gel technique. Materials Letters, 2017, 201, 185-188.	2.6	10
46	Synthesis of Cu2MnSnS4 thin film deposited on seeded fluorine doped tin oxide substrate via a green and low-cost electrodeposition method. Materials Letters, 2017, 191, 186-188.	2.6	25
47	Microstructural and morphological properties of spin-coated Cu 2 MnSn(S,Se) 4 thin films for solar cell applications. Materials Letters, 2017, 206, 249-252.	2.6	3
48	Cation substitution induced structural transition, band gap engineering and grain growth of Cu2Cd Zn1âˆ'SnS4 thin films. Journal of Alloys and Compounds, 2017, 695, 482-488.	5.5	35
49	Antimony-induced grain growth and properties modification of Cu(In, Al)Se2 thin films fabricated by selenization of sputtered stacked precursors. Journal of Alloys and Compounds, 2016, 689, 21-29.	5.5	8
50	Heating rate tuning in structure, morphology and electricity properties of Cu2FeSnS4 thin films prepared by sulfurization of metallic precursors. Journal of Alloys and Compounds, 2016, 680, 446-451.	5.5	52
51	A large-volume manufacturing of multi-crystalline silicon solar cells with 18.8% efficiency incorporating practical advanced technologies. RSC Advances, 2016, 6, 58046-58054.	3.6	10
52	Co-electrodeposited Cu₂ZnSnS₄ thin-film solar cells with over 7% efficiency fabricated via fine-tuning of the Zn content in absorber layers. Journal of Materials Chemistry A, 2016, 4, 3798-3805.	10.3	79
53	Strategic improvement of Cu2MnSnS4 films by two distinct post-annealing processes for constructing thin film solar cells. Acta Materialia, 2016, 109, 1-7.	7.9	38
54	7.1% efficient co-electroplated Cu₂ZnSnS₄ thin film solar cells with sputtered CdS buffer layers. Green Chemistry, 2016, 18, 550-557.	9.0	104

#	ARTICLE	IF	CITATIONS
55	A sputtered CdS buffer layer for co-electrodeposited Cu₂ZnSnS₄ solar cells with 6.6% efficiency. Chemical Communications, 2015, 51, 10337-10340.	4.1	83
56	Composition dependence of the structure and optical properties of Cu2MnxZn1âˆ’xSnS4 thin films. Journal of Alloys and Compounds, 2015, 627, 388-392.	5.5	53
57	Microstructural and morphological properties of sputtered Cu(In, Al)Se2 thin films for solar cell applications. Materials Letters, 2015, 157, 42-44.	2.6	10
58	Influence of different S/Se ratio on the properties of Cu2Sn(S x Se1-x)3 thin films fabricated by annealing stacked metal precursors. Journal of Materials Science: Materials in Electronics, 2015, 26, 6723-6729.	2.2	15
59	Cu content dependence of morphological, structural and optical properties for Cu2ZnGeS4 thin films synthesized by sulfurization of sputtered precursors. Materials Letters, 2015, 159, 1-4.	2.6	16
60	Structural and optical tunability by reaction time of selenization in Cu2FeSnSe4 thin films. Journal of Alloys and Compounds, 2015, 646, 68-72.	5.5	5
61	Influence of annealing temperature on structural and optical properties of Cu2MnSnS4 thin films fabricated by solâ€“gel technique. Journal of Alloys and Compounds, 2015, 640, 23-28.	5.5	53
62	Synthesis and characterization of Cu-based selenide photovoltaic materials: Cu2FeSnSe4 and Cu(In,) Tj ETQq0 0 0 rgBT /Overlock 10 Tf	5.5	13
63	Synthesis and characterization of earth-abundant Cu₂MnSnS₄ thin films using a non-toxic solution-based technique. RSC Advances, 2015, 5, 84295-84302.	3.6	51
64	Long-term reliability of silicon wafer-based traditional backsheet modules and double glass modules. RSC Advances, 2015, 5, 65768-65774.	3.6	27
65	Investigation of microstructural and optical properties of Cu(In, Al)Se 2 thin films with various copper content. Journal of Alloys and Compounds, 2015, 651, 208-213.	5.5	12
66	Effect of deposition potential on the properties of Cu2ZnSnS4 films for solar cell applications. Materials Letters, 2014, 135, 8-10.	2.6	19
67	Synthesis and characterization of Cu₂ZnSnS₄ thin films by the sulfurization of co-electrodeposited Cuâ€“Znâ€“Snâ€“S precursor layers for solar cell applications. RSC Advances, 2014, 4, 23977-23984.	3.6	63
68	Effect of selenization time on the growth of Cu2ZnSnSe4 thin films obtained from rapid thermal processing of stacked metallic layers. Materials Letters, 2014, 126, 1-4.	2.6	11
69	Influence of rare-earth elements doping on structure and optical properties of BiFeO3 thin films fabricated by pulsed laser deposition. Applied Surface Science, 2014, 307, 543-547.	6.1	14
70	Influence of Se supply for selenization of Cu(In,Ga)Se2 precursors deposited by sputtering from a single quaternary target. Materials Letters, 2014, 118, 21-23.	2.6	19
71	Composition control in Cu2ZnSnS4 thin films by a solâ€“gel technique without sulfurization. Journal of Materials Science: Materials in Electronics, 2014, 25, 2703-2709.	2.2	7