Zhang Jingquan

List of Publications by Year
in descending order

64	960	516710 16	477307 29
papers	citations	h-index	g-index

65	65	65	1324
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Wide-bandgap organicâ€“inorganic hybrid and all-inorganic perovskite solar cells and their application in all-perovskite tandem solar cells. Energy and Environmental Science, 2021, 14, 5723-5759.	30.8	114
2	Unveiling Roles of Tin Fluoride Additives in Highâ€Efficiency Lowâ€Bandgap Mixed Tinâ€Lead Perovskite Solar Cells. Advanced Energy Materials, 2021, 11, 2101045.	19.5	101
3	Controlling CH₃NH₃PbI_{3â€“x}Cl_x Film Morphology with Two-Step Annealing Method for Efficient Hybrid Perovskite Solar Cells. ACS Applied Materials & Interfaces, 2015, 7, 16330-16337.	8.0	86
4	MXene-Modulated Electrode/SnO₂ Interface Boosting Charge Transport in Perovskite Solar Cells. ACS Applied Materials & Interfaces, 2020, 12, 53973-53983.	8.0	71
5	Direct laser-patterned MXeneâ€“perovskite image sensor arrays for visible-near infrared photodetection. Materials Horizons, 2020, 7, 1901-1911.	12.2	68
6	Preparation and Properties of SnO₂Film Deposited by Magnetron Sputtering. International Journal of Photoenergy, 2012, 2012, 1-6.	2.5	42
7	Cd₂SnO₄ transparent conductive oxide: a promising alternative candidate for highly efficient hybrid halide perovskite solar cells. RSC Advances, 2017, 7, 8295-8302.	3.6	31
8	The study of CdSe thin film prepared by pulsed laser deposition for CdSe/CdTe solar cell. Journal of Materials Science: Materials in Electronics, 2016, 27, 7233-7239.	2.2	27
9	Band diagrams and performance of CdTe solar cells with a Sb2Te3 back contact buffer layer. AIP Advances, 2011, 1, .	1.3	26
10	Top-Seed Solution-Based Growth of Perovskite Cs₃Bi₂I₉ Single Crystal for High Performance X-ray Detection. ACS Photonics, 2022, 9, 641-651.	6.6	25
11	Preparation and Characterization of<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mrow><mml:mtext>Sb</mml:mtext></mml:mrow><mml:mtext>2</mml:mtext></mml:msub></mml:mrow></mml:math> Films by Coevaporation. International Journal of Photoenergy, 2010, 2010, 1-4.	2.1	22
12	Interface Engineering of Perovskite Solar Cells with Air Plasma Treatment for Improved Performance. ChemPhysChem, 2017, 18, 2939-2946.	2.1	21
13	Suppression of Nonradiative Recombination by Vacuumâ€Assisted Process for Efficient Leadâ€Free Tin Perovskite Solar Cells. Advanced Materials Interfaces, 2021, 8, 2100135.	3.7	20
14	Preparation of novel CdS/ZnS composite window layer for CdTe thin film solar cell. Journal of Materials Science: Materials in Electronics, 2015, 26, 9985-9990.	2.2	19
15	Doping-Enhanced Visible-Light Absorption of CH₃NH₃PbBr₃ by the Bi³⁺-Induced Impurity Band without Sacrificing a Band gap. Journal of Physical Chemistry C, 2019, 123, 8578-8587.	3.1	18
16	Interface Study of ITO/ZnO and ITO/SnO₂Complex Transparent Conductive Layers and Their Effect on CdTe Solar Cells. International Journal of Photoenergy, 2013, 2013, 1-8.	2.5	17
17	Efficient wide-bandgap perovskite solar cells enabled by doping a bromine-rich molecule. Nanophotonics, 2021, 10, 2059-2068.	6.0	17
18	AlSb THIN FILMS PREPARED BY DC MAGNETRON SPUTTERING AND ANNEALING. International Journal of Modern Physics B, 2008, 22, 2275-2283.	2.0	16

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19	The Band Structures of Zn1â^'xMgxO(In) and the Simulation of CdTe Solar Cells with a Zn1â^'xMgxO(In) Window Layer by SCAPS. Energies, 2019, 12, 291.	3.1	16
20	Synthesis and Characterization of CZTS Thin Films by Sol-Gel Method without Sulfurization. International Journal of Photoenergy, 2014, 2014, 1-6.	2.5	14
21	Progress in Perovskite Solar Cells towards Commercializationâ€"A Review. Materials, 2021, 14, 6569.	2.9	10
22	Efficient Environmentâ€friendly Leadâ€free Tin Perovskite Solar Cells Enabled by Incorporating <scp>4â€Fluorobenzylammonium</scp> Iodide Additives. Energy and Environmental Materials, 2023, 6, .	12.8	10
23	Highly reproducible perovskite solar cells with excellent CH₃NH₃PbI_{3â^'x}Cl_x film morphology fabricated via high precursor concentration. RSC Advances, 2016, 6, 51279-51285.	3.6	9
24	The study of oxygen concentration in the CdTe thin film prepared by vapor transport deposition for CdTe photovoltaic devices. Journal of Materials Science: Materials in Electronics, 2017, 28, 9442-9449.	2.2	9
25	CuTe Nanoparticles/Carbon Nanotubes as Back Contact for CdTe Solar Cells. Journal of Electronic Materials, 2018, 47, 1250-1258.	2.2	9
26	Grain boundary passivation by CdCl2 treatment in CdTe solar cells revealed by Kelvin probe force microscopy. Journal of Materials Science: Materials in Electronics, 2018, 29, 20718-20725.	2.2	9
27	Spatially Resolved Identification of Shunt Defects in Thin Film Solar Cells via Current Transport Efficiency Imaging Combined with 3D Finite Element Modeling. Solar Rrl, 2019, 3, 1800342.	5.8	9
28	Characterization of Cu_{1.4}Te Thin Films for CdTe Solar Cells. International Journal of Photoenergy, 2014, 2014, 1-5.	2.5	8
29	Effect of ZnTe/ZnTe:Cu complex back-contact on device characteristics of CdTe solar cells. Science in China Series D: Earth Sciences, 2007, 50, 199-205.	0.9	7
30	Studies of key technologies for CdTe solar modules. Science in China Series D: Earth Sciences, 2008, 51, 33-39.	0.9	7
31	Admittance spectroscopy characterize graphite paste for back contact of CdTe thin film solar cells. Science China Technological Sciences, 2010, 53, 2337-2341.	4.0	7
32	Annealing atmosphere effects on the surface properties of Cd2SnO4 thin films obtained by RF sputtering. Materials Science in Semiconductor Processing, 2018, 75, 269-275.	4.0	7
33	Semitransparent CdTe solar cell with over 70% near-infrared transmittance. Journal of Materials Science: Materials in Electronics, 2020, 31, 18198-18208.	2.2	7
34	GABr Post-Treatment for High-Performance MAPbI3 Solar Cells on Rigid Glass and Flexible Substrate. Nanomaterials, 2021, 11, 750.	4.1	7
35	Ultrahigh sensitive transient absorption spectrometer. Review of Scientific Instruments, 2021, 92, 053002.	1.3	7
36	The Structure and Stability of Molybdenum Ditelluride Thin Films. International Journal of Photoenergy, 2014, 2014, 1-6.	2.5	6

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37	Effect of Deposition Temperature on the Properties of CdTe Thin Films Prepared by Close-Spaced Sublimation. Journal of Electronic Materials, 2015, 44, 2786-2791.	2.2	6
38	STUDY ON AlSb POLYCRYSTALLINE THIN FILMS PREPARED BY VACUUM CO-EVAPORATION. International Journal of Modern Physics B, 2011, 25, 1747-1755.	2.0	5
39	Process study about silica anti-reflection coatings prepared by solâ€“gel method for cadmium telluride solar cells. Journal of Materials Science, 2018, 53, 15588-15599.	3.7	5
40	Preparation and Characterization of Coevaporated<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mrow><mml:mtext>Cd</mml:mtext></mml:mrow><mml:mtext>x</mml:mtext></mml:msub></mml:mrow Thin Films. International Journal of Photoenergy, 2011, 2011, 1-5.	2.5	4
41	The effect of irradiation on the mechanism of charge transport of CdTe solar cell. , 2013, , .		4
42	Correlation of Interfacial Transportation Properties of CdS/CdTe Heterojunction and Performance of CdTe Polycrystalline Thin-Film Solar Cells. International Journal of Photoenergy, 2015, 2015, 1-8.	2.5	4
43	Effects of different CdCl2 annealing methods on the performance of CdS/CdTe polycrystalline thin film solar cells. Science China Technological Sciences, 2015, 58, 876-880.	4.0	3
44	Impact of In Situ Annealing Time on CdTe Polycrystalline Film and Device Performance. Journal of Electronic Materials, 2019, 48, 853-860.	2.2	3
45	Research on FTO/CBD-CdS: Cl thin film photodetector with a vertical structure. Applied Physics A: Materials Science and Processing, 2021, 127, 1.	2.3	3
46	Performance improvement of CdS/CdTe solar cells by incorporation of CdSe layers. Journal of Materials Science: Materials in Electronics, 2021, 32, 19083-19094.	2.2	3
47	Preparation and properties of CdTe polycrystalline films for solar cells. Journal Wuhan University of Technology, Materials Science Edition, 2006, 21, 65-68.	1.0	2
48	The effect of post-annealing under CdCl2 atmosphere on the properties of ITO thin films deposited by DC magnetron sputtering. Journal of Materials Science: Materials in Electronics, 2010, 21, 441-444.	2.2	2
49	Effect of Annealing on the Properties of Antimony Telluride Thin Films and Their Applications in CdTe Solar Cells. International Journal of Photoenergy, 2014, 2014, 1-6.	2.5	2
50	Deposition methods and properties of polycrystalline CdS thin films. Journal Wuhan University of Technology, Materials Science Edition, 2015, 30, 307-310.	1.0	2
51	Effects of CdCl2 annealing temperatures on the properties of pulsed laser deposited CdS thin films and CdS/CdTe solar cells. Journal of Materials Science: Materials in Electronics, 2017, 28, 9828-9835.	2.2	2
52	Properties of CdSe1â^'xSx films by magnetron sputtering and their role in CdTe solar cells. Journal of Materials Science: Materials in Electronics, 2020, 31, 21455-21466.	2.2	2
53	Efficient Perovskite Solar Cells with a Gradient Light Absorption Layer and Low VOC Loss Obtained by Interface Engineering. ACS Applied Energy Materials, 2021, 4, 3584-3592.	5.1	2
54	The Electrical and Optical Properties of CSS CDTE Thin Films Deposited in AR+O2 Atmosphere. , 2006, , .		1

#	Article	IF	Citations
55	Produce Technology of CdTe Thin Film Modules and Design of Manufacture Line. , 2006, , .		1
56	Study on AlSb films deposited by Co-sputtering. , 2010, , .		1
57	Thin Films with Low Zn Content Prepared by Chemical Bath Deposition. International Journal of Photoenergy, 2012, 2012, 1-5.	2.5	1
58	The Influence of Hydrogen on the Properties of Zinc Sulfide Thin Films Deposited by Magnetron Sputtering. International Journal of Photoenergy, 2014, 2014, 1-6.	2.5	1
59	Application of Lithium Chloride Dopant in Fabrication of CdTe Solar Cells. Journal of Electronic Materials, 2017, 46, 1331-1338.	2.2	1
60	Study on the Stability of Unpackaged CdS/CdTe Solar Cells with Different Structures. International Journal of Photoenergy, 2019, 2019, 1-8.	2.5	1
61	The Energy Band Structures of Cd1-xZnx Te Polycrystalline Thin films and their Applications for Photovoltaic Devices. Materials Research Society Symposia Proceedings, 2002, 744, 1.	0.1	0
62	Optical Constants of Cd0.8Zn0.2S Thin Films from Transmission Spectrum. , 2010, , .		0
63	Electrical Properties of Si-Doped AlSb Polycrystalline Films by Co-Sputtering. , 2010, , .		0
64	Investigation of the Surface and Interfacial Properties of Polycrystalline CdTe/Monocrystalline Si Structure. Journal of Electronic Materials, 0, , .	2.2	0