Shen Hui

List of Publications by Year
in descending order

73 papers	1,453 citations	361413 20 h-index	361022 35 g-index
73 all docs	73 docs citations	73 times ranked	2272 citing authors

#	Article	IF	Citations
1	Enhanced Hole Extraction of WO_x/V₂O_x Dopantâ€Free Contact for pâ€type Silicon Solar Cell. Advanced Materials Interfaces, 2022, 9, .	3.7	7
2	Gadolinium Fluoride as a High-Thickness-Tolerant Electron-Selective Contact Material for Solar Cells. ACS Applied Energy Materials, 2022, 5, 4351-4357.	5.1	8
3	Influence of Oxygen on Sputtered Titaniumâ€Doped Indium Oxide Thin Films and Their Application in Silicon Heterojunction Solar Cells. Solar Rrl, 2021, 5, 2000501.	5.8	15
4	Dopantâ€Free Bifacial Silicon Solar Cells. Solar Rrl, 2021, 5, 2000771.	5.8	11
5	Yttrium Fluoride-Based Electron-Selective Contacts for Crystalline Silicon Solar Cells. ACS Applied Energy Materials, 2021, 4, 2158-2164.	5.1	14
6	Highâ€Performance Europium Fluoride Electronâ€Selective Contacts for Efficient Crystalline Silicon Solar Cells. Solar Rrl, 2021, 5, 2100057.	5.8	11
7	Cerous Fluoride Dopantâ€Free Electronâ€Selective Contact for Crystalline Silicon Solar Cells. Physica Status Solidi - Rapid Research Letters, 2021, 15, 2100135.	2.4	11
8	Dopantâ€Free Backâ€Contacted Silicon Solar Cells with an Efficiency of 22.1%. Physica Status Solidi - Rapid Research Letters, 2020, 14, 1900688.	2.4	27
9	Degradation Mechanism and Stability Improvement of Dopant-Free ZnO/LiF<i>_x</i>/Al Electron Nanocontacts in Silicon Heterojunction Solar Cells. ACS Applied Nano Materials, 2020, 3, 11391-11398.	5.0	18
10	Development of Conductive SiCx:H as a New Hydrogenation Technique for Tunnel Oxide Passivating Contacts. ACS Applied Materials & Interfaces, 2020, 12, 29986-29992.	8.0	2
11	Highâ€Performance and Stable Dopantâ€Free Silicon Solar Cells with Magnesium Acetylacetonate Electronâ€Selective Contacts. Physica Status Solidi - Rapid Research Letters, 2020, 14, 2000103.	2.4	9
12	Mass production of industrial tunnel oxide passivated contacts (iâ€TOPCon) silicon solar cells with average efficiency over 23% and modules over 345ÂW. Progress in Photovoltaics: Research and Applications, 2019, 27, 827-834.	8.1	131
13	Efficient silicon solar cells applying cuprous sulfide as hole-selective contact. Journal of Materials Science, 2019, 54, 12650-12658.	3.7	13
14	Lowâ€Temperature Growth of Hard Carbon with Graphite Crystal for Sodiumâ€Ion Storage with High Initial Coulombic Efficiency: A General Method. Advanced Energy Materials, 2019, 9, 1803648.	19.5	132
15	12.29% Low Temperatureâ€“Processed Dopantâ€Free CdS/pâ€Si Heterojunction Solar Cells. Advanced Materials Interfaces, 2019, 6, 1900367.	3.7	29
16	Chromium Trioxide Hole-Selective Heterocontacts for Silicon Solar Cells. ACS Applied Materials & Interfaces, 2018, 10, 13645-13651.	8.0	35
17	Efficiency enhancement of bifacial PERC solar cells with laserâ€doped selective emitter and doubleâ€screenâ€printed Al grid. Progress in Photovoltaics: Research and Applications, 2018, 26, 752-760.	8.1	24
18	Fully Solutionâ€Processed TCOâ€Free Semitransparent Perovskite Solar Cells for Tandem and Flexible Applications. Advanced Energy Materials, 2018, 8, 1701569.	19.5	77

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19	Conductive Cuprous Iodide Hole-Selective Contacts with Thermal and Ambient Stability for Silicon Solar Cells. ACS Applied Materials & Interfaces, 2018, 10, 43699-43706.	8.0	19
20	Chromium Trioxide Hole-Selective Heterocontacts for Silicon Solar Cells. , 2018, , .		1
21	Surface modification of micro-sized CuO by in situ-growing heterojunctions CuO/Cu2O and CuO/Cu2O/Cu: effect on surface charges and photogenerated carrier lifetime. Applied Physics A: Materials Science and Processing, 2018, 124, 1.	2.3	16
22	22% efficient dopant-free interdigitated back contact silicon solar cells. AIP Conference Proceedings, 2018, , .	0.4	20
23	Growth of a Large-Area, Free-Standing, Highly Conductive and Fully Foldable Silver Film with Inverted Pyramids for Wearable Electronics Applications. ACS Applied Materials & Interfaces, 2017, 9, 5312-5318.	8.0	2
24	Dopant-free multilayer back contact silicon solar cells employing V₂O_x/metal/V₂O_x as an emitter. RSC Advances, 2017, 7, 23851-23858.	3.6	48
25	>20.5% Diamond Wire Sawn Multicrystalline Silicon Solar Cells With Maskless Inverted Pyramid Like Texturing. IEEE Journal of Photovoltaics, 2017, 7, 1264-1269.	2.5	20
26	Preparation and optimization of a molybdenum electrode for CIGS solar cells. AIP Advances, 2016, 6, .	1.3	11
27	Silicon based solar cells using a multilayer oxide as emitter. AIP Advances, 2016, 6, 085304.	1.3	11
28	Magnetic fluidsâ€™ stability improved by oleic acid bilayer-coated structure via one-pot synthesis. Chemical Papers, 2016, 70, .	2.2	14
29	Dopantâ€free back contact silicon heterojunction solar cells employing transition metal oxide emitters. Physica Status Solidi - Rapid Research Letters, 2016, 10, 662-667.	2.4	62
30	Investigation of shunt solar cellsâ€™ currents based on equivalent circuit model. Science China Technological Sciences, 2016, 59, 1391-1398.	4.0	4
31	Reconstructing ZnO quantum dot assembled tubular structures from nanotubes within graphene matrix via ongoing pulverization towards high-performance lithium storage. Journal of Materials Chemistry A, 2016, 4, 19123-19131.	10.3	18
32	Growth of vertically aligned MoS₂ nanosheets on a Ti substrate through a self-supported bonding interface for high-performance lithium-ion batteries: a general approach. Journal of Materials Chemistry A, 2016, 4, 5932-5941.	10.3	51
33	One-step synthesis of Nb-doped TiO2 rod@Nb2O5 nanosheet coreâ€“shell heterostructures for stable high-performance lithium-ion batteries. RSC Advances, 2016, 6, 27094-27101.	3.6	16
34	Hydrophilic Magnetochromatic Nanoparticles with Controllable Sizes and Super-high Magnetization for Visualization of Magnetic Field Intensity. Scientific Reports, 2015, 5, 17063.	3.3	29
35	Progress in Photovoltaic Devices and Systems. International Journal of Photoenergy, 2015, 2015, 1-3.	2.5	0
36	Confined-space synthesis of single crystal TiO2 nanowires in atmospheric vessel at low temperature: a generalized approach. Scientific Reports, 2015, 5, 8129.	3.3	20

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37	Controlled synthesis of series NixCo3-xO4 products: Morphological evolution towards quasi-single-crystal structure for high-performance and stable lithium-ion batteries. Scientific Reports, 2015, 5, 11584.	3.3	16
38	Constructing hierarchical submicrotubes from interconnected TiO2 nanocrystals for high reversible capacity and long-life lithium-ion batteries. Scientific Reports, 2015, 4, 4479.	3.3	41
39	Investigating the Impact of Shading Effect on the Characteristics of a Large-Scale Grid-Connected PV Power Plant in Northwest China. International Journal of Photoenergy, 2014, 2014, 1-9.	2.5	25
40	Thermal Field Analysis and Simulation of an Infrared Belt Furnace Used for Solar Cells. International Journal of Photoenergy, 2014, 2014, 1-7.	2.5	1
41	Al-alloyed local contacts for industrial PERC cells by local printing. , 2014, , .		7
42	Preparation of self-assembled Ag nanoparticles for effective light-trapping in crystalline silicon solar cells. RSC Advances, 2014, 4, 13757.	3.6	13
43	Synergistic assembly of nanoparticle aggregates and texture nanosheets into hierarchical TiO2 coreâ€“shell structures for enhanced light harvesting in dye-sensitized solar cells. Journal of Materials Chemistry A, 2013, 1, 6175.	10.3	9
44	One-step ammoniahydrothermal synthesis of single crystal anatase TiO₂nanowires for highly efficient dye-sensitized solar cells. Journal of Materials Chemistry A, 2013, 1, 2110-2117.	10.3	39
45	Layer-by-Layer CdS-ModifiedTiO2Film Electrodes for Enhancing the Absorption and Energy Conversion Efficiency of Solar Cells. International Journal of Photoenergy, 2012, 2012, 1-5.	2.5	2
46	Structure simulation of screen printed local back surface field for rear passivated silicon solar cells. , 2012, , .		2
47	Synthesis of long TiO2 nanowire arrays with high surface areas via synergistic assembly route for highly efficient dye-sensitized solar cells. Journal of Materials Chemistry, 2012, 22, 17531.	6.7	74
48	Specific contact resistance measurements on C-Si solar cells by novel TLM method. , 2012, , .		4
49	Hierarchical rutile TiO2 mesocrystals assembled by nanocrystals-oriented attachment mechanism. CrystEngComm, 2012, 14, 2278.	2.6	35
50	Study of crystalline silicon solar cells with integrated bypass diodes. Science China Technological Sciences, 2012, 55, 594-599.	4.0	20
51	Analysis of industrial câ€Si solar cell's front metallization by advanced numerical simulation. Progress in Photovoltaics: Research and Applications, 2012, 20, 490-500.	8.1	21
52	In situ controlled synthesis of various TiO2 nanostructured materials via a facile hydrothermal route. Journal of Nanoparticle Research, 2011, 13, 1855-1863.	1.9	10
53	Flexible TiO2 nanotube-based dye-sensitized solar cells using laser-drilled microhole array electrodes. Applied Physics A: Materials Science and Processing, 2011, 102, 127-130.	2.3	13
54	Fabrication of three-dimensional ZnO with hierarchical structure via an electrodeposition process. Applied Physics A: Materials Science and Processing, 2011, 103, 463-466.	2.3	5

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55	Study of large area hydrogenated microcrystalline silicon p-layers for back surface field in crystalline silicon solar cells. Science China Technological Sciences, 2011, 54, 63-69.	4.0	1
56	Effects of high temperature annealing on the dislocation density and electrical properties of upgraded metallurgical grade multicrystalline silicon. Science Bulletin, 2011, 56, 695-699.	1.7	9
57	Study on the SiN x /Al rear reflectance performance of crystalline silicon solar cells. Science China Technological Sciences, 2010, 53, 3209-3213.	4.0	3
58	ZnO microsheet modified TiO2 nanoparticle composite films for dye-sensitized solar cells. Science Bulletin, 2010, 55, 1945-1948.	1.7	4
59	Growth behavior of polycrystalline silicon thin films deposited by RTCVD on quartz substrates. Science Bulletin, 2010, 55, 2057-2062.	1.7	2
60	Observation on Defects in Poly-Si Films Prepared by RTCVD Under Nonideal Conditions. Journal of Electronic Materials, 2010, 39, 732-737.	2.2	1
61	Shunt removal and patching for crystalline silicon solar cells using infrared imaging and laser cutting. Progress in Photovoltaics: Research and Applications, 2010, 18, 54-60.	8.1	19
62	The use of Ti meshes with selfâ€organized TiO₂ nanotubes as photoanodes of allâ€Ti dyeâ€sensitized solar cells. Progress in Photovoltaics: Research and Applications, 2010, 18, 285-290.	8.1	10
63	CdS/CdSe cosensitized oriented single-crystalline TiO2 nanowire array for solar cell application. Journal of Applied Physics, 2010, 108, .	2.5	27
64	Determination of the specific shunt resistances under and away from the front contacts of solar cell. Science in China Series D: Earth Sciences, 2009, 52, 3082-3084.	0.9	3
65	Hydrothermal growth of large-scale macroporous TiO2 nanowires and its application in 3D dye-sensitized solar cells. Applied Physics A: Materials Science and Processing, 2009, 97, 25-29.	2.3	48
66	Frontside illuminated TiO2 nanotube dye-sensitized solar cells using multifunctional microchannel array electrodes. Applied Physics Letters, 2009, 95, .	3.3	15
67	Effects of magnetic fluids on crystallization characterizations in a multi-component and multiphase system. Science in China Series B: Chemistry, 2008, 51, 347-353.	0.8	1
68	Novel photoelectrochromic cells fabricated with wirelike photo-electrode. Science Bulletin, 2008, 53, 3173-3177.	9.0	5
69	Study on the improved structure of dye-sensitized solar cells for enhancing light absorption. Frontiers of Materials Science in China, 2007, 1, 293-296.	0.5	4
70	Surface chemistry of nanoscale Fe3O4 dispersed in magnetic fluids. Science in China Series B: Chemistry, 2007, 50, 754-758.	0.8	6
71	A novel solar cell fabricated with spiral photo-electrode for capturing sunlight 3-dimensionally. Science in China Series D: Earth Sciences, 2006, 49, 663-673.	0.9	7
72	Preparation of two kinds of superparamagnetic carriers-supported cis-platinum complexes and the comparison of their characteristics. Science Bulletin, 2006, 51, 151-157.	1.7	5

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73	A new improved structure of dye-sensitized solar cells with reflection film. Science Bulletin, 2006, 51, 369-373.	1.7	10