Jianhui Chen Chen

List of Publications by Year
in descending order

34 papers	612 citations	687335 13 h-index	610883 24 g-index
36 all docs	36 docs citations	36 times ranked	825 citing authors

#	Article	IF	Citations
1	Ultra-thin MoOx as cathode buffer layer for the improvement of all-inorganic CsPbIBr2 perovskite solar cells. Nano Energy, 2017, 41, 75-83.	16.0	190
2	Carbon Nanotubes for Photovoltaics: From Lab to Industry. Advanced Energy Materials, 2021, 11, 2002880.	19.5	59
3	Front and Backâ€Junction Carbon Nanotubeâ€Silicon Solar Cells with an Industrial Architecture. Advanced Functional Materials, 2020, 30, 2000484.	14.9	33
4	Electrochemical grafting passivation of silicon via electron transfer at polymer/silicon hybrid interface. Electrochimica Acta, 2017, 247, 826-834.	5.2	29
5	A Polymer/Carbonâ€Nanotube Ink as a Boronâ€Dopant/Inorganicâ€Passivation Free Carrier Selective Contact for Silicon Solar Cells with over 21% Efficiency. Advanced Functional Materials, 2020, 30, 2004476.	14.9	29
6	Silicon surface passivation by polystyrenesulfonate thin films. Applied Physics Letters, 2017, 110, .	3.3	28
7	Conductive Holeâ€Selective Passivating Contacts for Crystalline Silicon Solar Cells. Advanced Energy Materials, 2020, 10, 1903851.	19.5	28
8	Magnesium thin film as a doping-free back surface field layer for hybrid solar cells. Applied Physics Letters, 2017, 110, .	3.3	27
9	ZnS thin film functionalized as back surface field in Si solar cells. Materials Science in Semiconductor Processing, 2018, 74, 309-312.	4.0	27
10	Vacuum-Free, Room-Temperature Organic Passivation of Silicon: Toward Very Low Recombination of Micro-/Nanotextured Surface Structures. ACS Applied Materials & Interfaces, 2018, 10, 44890-44896.	8.0	23
11	Zn(O,S)-based electron-selective contacts with tunable band structure for silicon heterojunction solar cells. Journal of Materials Chemistry C, 2019, 7, 4449-4458.	5.5	16
12	Establishment of a novel functional group passivation system for the surface engineering of c-Si solar cells. Solar Energy Materials and Solar Cells, 2019, 195, 99-105.	6.2	16
13	The Reverse Lateral Photovoltaic Effect in Boron-Diffused Si p-n Junction Structure. IEEE Electron Device Letters, 2016, 37, 201-204.	3.9	14
14	On the light-induced enhancement in photovoltaic performance of PEDOT:PSS/Si organic-inorganic hybrid solar cells. Applied Physics Letters, 2017, 111, 183904.	3.3	13
15	Polymer/Si Heterojunction Hybrid Solar Cells with Rubrene:DMSO Organic Semiconductor Film as an Electron-Selective Contact. Journal of Physical Chemistry C, 2018, 122, 23371-23376.	3.1	13
16	Stable Organic Passivated Carbon Nanotubeâ€"Silicon Solar Cells with an Efficiency of 22%. Advanced Science, 2021, 8, e2102027.	11.2	12
17	Polymer Thin Films for Antiâ€Reflection and Passivation on the Front Surface of Interdigitated Back Contact câ€Si Solar Cell. Solar Rrl, 2017, 1, 1700079.	5.8	9
18	Low work function intermetallic thin film as a back surface field material for hybrid solar cells. Solar Energy, 2018, 162, 397-402.	6.1	8

#	Article	IF	Citations
19	Achievement of two logical states through a polymer/silicon interface for organic-inorganic hybrid memory. Applied Physics Letters, 2017, 111, 191601.	3.3	6
20	Hafnium Thin Film as a Rear Metallization Scheme for Polymer/Silicon Hybrid Solar Cells. Physica Status Solidi - Rapid Research Letters, 2018, 12, 1800089.	2.4	6
21	Singleâ€Side Heterojunction Solar Cell with Microcrystalline Silicon Oxide Emitter and Diffused Back Surface Field. Physica Status Solidi (A) Applications and Materials Science, 2017, 214, 1700193.	1.8	5
22	Improving the Passivation Stability of a Polymer Thin Film on Si by the Introduction of MoO₃ Nanoparticles Into the Polymer Matrix. Physica Status Solidi - Rapid Research Letters, 2017, 11, 1700206.	2.4	4
23	Ferroelectric-like organicâ€“inorganic interfaces. Journal of Materials Chemistry C, 2020, 8, 15677-15684.	5.5	4
24	Carbon Nanotubes: Carbon Nanotubes for Photovoltaics: From Lab to Industry (Adv. Energy Mater.) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 5	19.5	4
25	Solution processable in situ passivated silicon nanowires. Nanoscale, 2021, 13, 11439-11445.	5.6	3
26	Considerably Improved Photovoltaic Performances of ITO/Si Heterojunction Solar Cells by Incorporating Hydrogen Into Near-Interface Region. IEEE Journal of Photovoltaics, 2022, 12, 1102-1108.	2.5	2
27	Improving the Passivation Stability of a Polymer Thin Film on Si by the Introduction of MoO₃ Nanoparticles Into the Polymer Matrix (Phys. Status Solidi RRL 9/2017). Physica Status Solidi - Rapid Research Letters, 2017, 11, 1770347.	2.4	1
28	Polymer Thin Films for Antiâ€Reflection and Passivation on the Front Surface of Interdigitated Back Contact câ€Si Solar Cell (Solar RRL 7â^•2017). Solar Rrl, 2017, 1, 1770125.	5.8	1
29	V oc transient in silicon heterojunction solar cells with Âµc-SiOx:H window layers. Journal Physics D: Applied Physics, 2018, 51, 305501.	2.8	1
30	First-principles study of polymer-passivated silicon nanowire outer-shell defects. Physical Chemistry Chemical Physics, 2022, 24, 11169-11174.	2.8	1
31	Control of epitaxial growth at a-Si:H/c-Si heterointerface by the working pressure in PECVD. Chinese Physics B, 2016, 25, 118801.	1.4	0
32	Influence of metals for rear metallization on c-Si solar cells. Journal of Materials Science: Materials in Electronics, 2018, 29, 20312-20318.	2.2	0
33	Electron-Selective Epitaxial/Amorphous Germanium Stack Contact for Organic-Crystalline Silicon Hybrid Solar Cells. ACS Applied Energy Materials, 2018, 1, 4899-4905.	5.1	0
34	Self-formed point-contact PERC solar cells. Zhongguo Kexue Jishu Kexue/Scientia Sinica Technologica, 2017, 47, 965-971.	0.5	0