Hao Wang

List of Publications by Year
in descending order

37 papers	1,635 citations	331259 21 h-index	360668 35 g-index
37 all docs	37 docs citations	37 times ranked	2191 citing authors

#	Article	IF	Citations
1	Highly Efficient Thermally Co-evaporated Perovskite Solar Cells and Mini-modules. Joule, 2020, 4, 1035-1053.	11.7	257
2	High efficiency planar Si/organic heterojunction hybrid solar cells. Applied Physics Letters, 2012, 100, 073503.	1.5	148
3	Over 20% Efficient CIGSâ€“Perovskite Tandem Solar Cells. ACS Energy Letters, 2017, 2, 807-812.	8.8	135
4	Highly efficient Si-nanorods/organic hybrid core-sheath heterojunction solar cells. Applied Physics Letters, 2011, 99, .	1.5	102
5	Highâ€Efficiency Si/Polymer Hybrid Solar Cells Based on Synergistic Surface Texturing of Si Nanowires on Pyramids. Small, 2012, 8, 1664-1668.	5.2	95
6	Si photocathode with Ag-supported dendritic Cu catalyst for CO₂reduction. Energy and Environmental Science, 2019, 12, 1068-1077.	15.6	93
7	Bifacial, Color-Tunable Semitransparent Perovskite Solar Cells for Building-Integrated Photovoltaics. ACS Applied Materials & Interfaces, 2020, 12, 484-493.	4.0	80
8	Simple Approach of Fabricating High Efficiency Si Nanowire/Conductive Polymer Hybrid Solar Cells. IEEE Electron Device Letters, 2011, 32, 1406-1408.	2.2	77
9	Highly Efficient Semitransparent Perovskite Solar Cells for Four Terminal Perovskite-Silicon Tandems. ACS Applied Materials & Interfaces, 2019, 11, 34178-34187.	4.0	71
10	Si Nanowires Organic Semiconductor Hybrid Heterojunction Solar Cells Toward 10% Efficiency. ACS Applied Materials & Interfaces, 2012, 4, 1704-1708.	4.0	69
11	Characteristics of a Silicon Nanowires/PEDOT:PSS Heterojunction and Its Effect on the Solar Cell Performance. ACS Applied Materials & Interfaces, 2015, 7, 5830-5836.	4.0	50
12	Effects of nanowire texturing on the performance of Si/organic hybrid solar cells fabricated with a 2.2â€‰Î¼m thin-film Si absorber. Applied Physics Letters, 2012, 100, 103104.	1.5	47
13	High Efficiency Silicon Nanowire/organic Hybrid Solar Cell with Two-step Surface Treatment. Nanoscale, 2015, 7, 4559-65.	2.8	40
14	Coâ€Evaporated MAPbI₃ with Graded Fermi Levels Enables Highly Performing, Scalable, and Flexible pâ€inâ€n Perovskite Solar Cells. Advanced Functional Materials, 2021, 31, 2103252.	7.8	40
15	Colorful Perovskite Solar Cells: Progress, Strategies, and Potentials. Journal of Physical Chemistry Letters, 2021, 12, 1321-1329.	2.1	39
16	Halide Perovskite Solar Cells for Building Integrated Photovoltaics: Transforming Building FaÃ§ades into Power Generators. Advanced Materials, 2022, 34, e2104661.	11.1	37
17	Design principles for plasmonic thin film GaAs solar cells with high absorption enhancement. Journal of Applied Physics, 2012, 112, 054326.	1.1	33
18	High efficiency silicon nanohole/organic heterojunction hybrid solar cell. Applied Physics Letters, 2014, 104, 053104.	1.5	30

#	Article	IF	Citations
19	Design guidelines for slanting silicon nanowire arrays for solar cell application. Journal of Applied Physics, 2013, 114, .	1.1	29
20	Hybrid Si nanocones/PEDOT:PSS solar cell. Nanoscale Research Letters, 2015, 10, 191.	3.1	26
21	Thin Film Silicon Nanowire/PEDOT:PSS Hybrid Solar Cells with Surface Treatment. Nanoscale Research Letters, 2016, 11, 311.	3.1	23
22	Crystallization and surface texturing of amorphous-Si induced by UV laser for photovoltaic application. Journal of Applied Physics, 2012, 111, .	1.1	16
23	Design guideline of Si nanohole/PEDOT:PSS hybrid structure for solar cell application. Nanotechnology, 2013, 24, 355301.	1.3	15
24	Fourâ€Terminal Perovskite on Silicon Tandem Solar Cells Optimal Measurement Schemes. Energy Technology, 2020, 8, 1901267.	1.8	13
25	Interlayer Engineering for Flexible Large-Area Planar Perovskite Solar Cells. ACS Applied Energy Materials, 2020, 3, 777-784.	2.5	13
26	Simulated optical absorption enhancement in random silicon nanohole structure for solar cell application. Journal of Applied Physics, 2014, 116, .	1.1	9
27	Light trapping in hybrid nanopyramid and nanohole structure silicon solar cell beyond the Lambertian limit. Journal of Applied Physics, 2014, 116, 074310.	1.1	9
28	Efficient bandgap widening in co-evaporated MAPbI₃ perovskite. Sustainable Energy and Fuels, 2022, 6, 2428-2438.	2.5	8
29	11.3% efficient planar Si-PEDOT: PSS hybrid solar cell with a thin interfacial oxide. , 2012, , .		7
30	Towards Perfect Anti-Reflection and Absorption for Nanodome-Array Thin Film Silicon Solar Cell. Energy Procedia, 2013, 33, 150-156.	1.8	6
31	Enhanced Conversion Efficiency for Si Nanowireâ€"Organic Hybrid Solar Cells through the Incorporation of Organic Small Molecule. Japanese Journal of Applied Physics, 2012, 51, 10NE36.	0.8	5
32	Optical absorption enhancement in a Si nanohole structure with hexagonal unit cell for solar cell application. Nanotechnology, 2014, 25, 415303.	1.3	4
33	High-Efficiency Planar Thin-Film Si/PEDOT:PSS Hybrid Solar Cell. IEEE Journal of Photovoltaics, 2016, 6, 217-222.	1.5	3
34	Surface Nanostructure Optimization for GaAs Solar Cell Application. Japanese Journal of Applied Physics, 2012, 51, 10ND13.	0.8	2
35	Si/PEDOT:PSS hybrid solar cells incorporated with silver plasmonic nanospheres. Thin Solid Films, 2016, 599, 37-41.	0.8	2
36	Enhanced Conversion Efficiency for Si Nanowireâ€"Organic Hybrid Solar Cells through the Incorporation of Organic Small Molecule. Japanese Journal of Applied Physics, 2012, 51, 10NE36.	0.8	2

#	Article	IF	Citations
37	Nanohole structure as efficient antireflection layer for silicon solar cell fabricated by maskless laser annealing. , 2012, , .		0