Jianhua Han

List of Publications by Year
in descending order

48 papers	1,648 citations	218662 26 h-index	289230 40 g-index
48 all docs	48 docs citations	48 times ranked	2374 citing authors

#	Article	IF	Citations
1	High-efficiency photoelectrochemical electrodes based on ZnIn2S4 sensitized ZnO nanotube arrays. Applied Catalysis B: Environmental, 2015, 163, 179-188.	20.2	128
2	Hybrid PbS Quantumâ€Dotâ€inâ€Perovskite for Highâ€Efficiency Perovskite Solar Cell. Small, 2018, 14, e1801016	10.0	111
3	ZnO/CuInS2 core/shell heterojunction nanoarray for photoelectrochemical water splitting. International Journal of Hydrogen Energy, 2012, 37, 15029-15037.	7.1	85
4	AgSbS2 modified ZnO nanotube arrays for photoelectrochemical water splitting. Applied Catalysis B: Environmental, 2015, 179, 61-68.	20.2	81
5	Enhancing the Performance of Perovskite Solar Cells by Hybridizing SnS Quantum Dots with CH₃NH₃PbI₃. Small, 2017, 13, 1700953.	10.0	73
6	Efficiently Improving the Stability of Inverted Perovskite Solar Cells by Employing Polyethylenimine-Modified Carbon Nanotubes as Electrodes. ACS Applied Materials & Interfaces, 2018, 10, 31384-31393.	8.0	68
7	Enhancing electron transport <i>via</i> graphene quantum dot/SnO₂ composites for efficient and durable flexible perovskite photovoltaics. Journal of Materials Chemistry A, 2019, 7, 1878-1888.	10.3	67
8	<i>In situ</i> formation of a 2D/3D heterostructure for efficient and stable CsPbI₂Br solar cells. Journal of Materials Chemistry A, 2019, 7, 22675-22682.	10.3	63
9	Critical roles of potassium in charge-carrier balance and diffusion induced defect passivation for efficient inverted perovskite solar cells. Journal of Materials Chemistry A, 2019, 7, 5666-5676.	10.3	62
10	PEC electrode of ZnO nanorods sensitized by CdS with different size and its photoelectric properties. International Journal of Hydrogen Energy, 2013, 38, 10226-10234.	7.1	58
11	The synergistic effect with S-vacancies and built-in electric field on a TiO₂/MoS₂ photoanode for enhanced photoelectrochemical performance. Sustainable Energy and Fuels, 2021, 5, 509-517.	4.9	57
12	High-Efficiency AgInS₂-Modified ZnO Nanotube Array Photoelectrodes for All-Solid-State Hybrid Solar Cells. ACS Applied Materials & Interfaces, 2014, 6, 17119-17125.	8.0	55
13	Synergistic effect of charge separation and defect passivation using zinc porphyrin dye incorporation for efficient and stable perovskite solar cells. Journal of Materials Chemistry A, 2019, 7, 26334-26341.	10.3	44
14	Trilaminar ZnO/ZnS/Sb2S3 nanotube arrays for efficient inorganicâ€“organic hybrid solar cells. RSC Advances, 2014, 4, 23807.	3.6	40
15	Ultrathin Zn2SnO4 (ZTO) passivated ZnO nanocone arrays for efficient and stable perovskite solar cells. Chemical Engineering Journal, 2019, 361, 60-66.	12.7	39
16	Cu-doping ZnO/ZnS nanorods serve as the photoanode to enhance photocurrent and conversion efficiency. Microelectronic Engineering, 2013, 103, 12-16.	2.4	38
17	Optimization and Modulation Strategies of Zinc Oxide-based Photoanodes for Highly Efficient Photoelectrochemical Water Splitting. ACS Applied Energy Materials, 2021, 4, 1004-1013.	5.1	38
18	Efficient visible light photocatalytic activity of pâ€“n junction CuO/TiO₂ loaded on natural zeolite. RSC Advances, 2015, 5, 64495-64502.	3.6	37

#	Article	IF	Citations
19	Perovskite/Poly[bis(4-phenyl)(2,4,6-trimethylphenyl)amine] Bulk Heterojunction for High-Efficient Carbon-Based Large-Area Solar Cells by Gradient Engineering. ACS Applied Materials & Interfaces, 2018, 10, 42328-42334.	8.0	37
20	Synthesis of metal sulfide sensitized zinc oxide-based core/shell/shell nanorods and their photoelectrochemical properties. Journal of Power Sources, 2014, 268, 388-396.	7.8	36
21	Fabrication of ZnO/CuS core/shell nanoarrays for inorganicâ€“organic heterojunction solar cells. Materials Chemistry and Physics, 2013, 141, 804-809.	4.0	31
22	Preparation and enhanced photoelectrochemical performance of selenite-sensitized zinc oxide core/shell composite structure. Journal of Materials Chemistry A, 2015, 3, 4239-4247.	10.3	30
23	Higher-efficiency photoelectrochemical electrodes of titanium dioxide-based nanoarrays sensitized simultaneously with plasmonic silver nanoparticles and multiple metal sulfides photosensitizers. Journal of Power Sources, 2015, 285, 185-194.	7.8	30
24	Improved Moisture Stability of Perovskite Solar Cells Using N719 Dye Molecules. Solar Rrl, 2019, 3, 1900345.	5.8	30
25	Jalpaite Ag3CuS2: a novel promising ternary sulfide absorber material for solar cells. Chemical Communications, 2015, 51, 2597-2600.	4.1	28
26	An Excellent Modifier: Carbon Quantum Dots for Highly Efficient Carbonâ€Electrodeâ€Based Methylammonium Lead Iodide Solar Cells. Solar Rrl, 2019, 3, 1900146.	5.8	27
27	Zinc ferrite-based pâ€“n homojunction with multi-effect for efficient photoelectrochemical water splitting. Chemical Communications, 2020, 56, 13205-13208.	4.1	24
28	Highly efficient inverted perovskite solar cells based on self-assembled graphene derivatives. Journal of Materials Chemistry A, 2018, 6, 20702-20711.	10.3	22
29	Three-dimensional flower-like hybrid BiOIâ€“zeolite composites with highly efficient adsorption and visible light photocatalytic activity. RSC Advances, 2014, 4, 45540-45547.	3.6	20
30	Synthesis of ZnO/Cu2S core/shell nanorods and their enhanced photoelectric performance. Journal of Sol-Gel Science and Technology, 2014, 72, 92-99.	2.4	18
31	Improved phase stability of Î³-CsPbI₃ perovskite nanocrystals using the interface effect using iodine modified graphene oxide. Journal of Materials Chemistry C, 2020, 8, 2569-2578.	5.5	18
32	Simultaneous Modulation of Interface Reinforcement, Crystallization, Antiâ€Reflection, and Carrier Transport in Sb Gradientâ€Doped SnO₂/Sb₂S₃ Heterostructure for Efficient Photoelectrochemical Cell. Small, 2022, 18, e2105026.	10.0	18
33	TiO2 nanotubes/nanoparticles composite film with higher light harvesting and electron transfer for dye-sensitized solar cells. Electronic Materials Letters, 2012, 8, 481-484.	2.2	17
34	A novel quaternary solid solution photo-absorber material for photoelectrochemical hydrogen generation. Chemical Communications, 2015, 51, 13678-13681.	4.1	17
35	A ZnO@CuO coreâ€“shell heterojunction photoanode modified with ZnFe-LDH for efficient and stable photoelectrochemical performance. Dalton Transactions, 2021, 50, 4593-4603.	3.3	17
36	Trilaminar graphene/tremella-like CuInS2/graphene oxide nanofilms and the enhanced activity for photoelectrochemical water splitting. Journal of Nanoparticle Research, 2015, 17, 1.	1.9	14

#	Article	IF	Citations
37	Inverted Perovskite Solar Cells with Efficient Mixedâ€Fullerene Derivative Charge Extraction Layers. ChemistrySelect, 2018, 3, 6802-6809.	1.5	13
38	Laser-Induced Flash-Evaporation Printing CH₃NH₃PbI₃ Thin Films for High-Performance Planar Solar Cells. ACS Applied Materials & Interfaces, 2018, 10, 26206-26212.	8.0	10
39	Zeolite-based CuO nanotubes catalysts: investigating the characterization, mechanism, and decolouration process of methylene blue. Journal of Nanoparticle Research, 2014, 16, 1.	1.9	9
40	Reduced Graphene Oxide/CZTS_xSe_{1â€x} Composites as a Novel Holeâ€Transport Functional Layer in Perovskite Solar Cells. ChemElectroChem, 2019, 6, 1500-1507.	3.4	9
41	High Efficient Large-area Perovskite Solar Cells Based on Paintable Carbon Electrode with NiO Nanocrystal-carbon Intermediate Layer. Chemistry Letters, 2019, 48, 734-737.	1.3	8
42	Controlling Superhydrophobicity of Aluminum with Hierarchical Microâ€Nanostructure Film for Superb Selfâ€Cleaning and Antiâ€Corrosion. ChemistrySelect, 2022, 7, .	1.5	5
43	Preparation of cauliflower-like CdS/ZnS/ZnO nanostructure and its photoelectric properties. Journal of Nanoparticle Research, 2014, 16, 1.	1.9	4
44	Preparation and Photocatalysis of Schlumbergera bridgesii-Like CdS Modified One-Dimensional TiO2 Nanowires on Zeolite. Journal of Materials Engineering and Performance, 2015, 24, 700-708.	2.5	4
45	All Solutionâ€Processed Cu₂ZnSnS₄ Solar Cell by Using Highâ€Boilingâ€Point Solvent Treated Ballâ€Milling Process with Efficiency Exceeding 6%. ChemistrySelect, 2019, 4, 982-989.	1.5	4
46	Fabrication and Photoelectric Properties of Large Area ZnO Nanorod with Au Nanospheres. Plasmonics, 2016, 11, 131-137.	3.4	2
47	Allâ€Layer Sputteringâ€Free Cu2Zn1â€xCdxSnS4 Solar Cell with Efficiency Exceeding 7.5%. ChemistrySelect, 2019, 4, 5979-5983.	1.5	1
48	Improved Moisture Stability of Perovskite Solar Cells Using N719 Dye Molecules. Solar Rrl, 2019, 3, 1970115.	5.8	1