Shanpeng Wen

List of Publications by Year
in descending order

49 papers	1,880 citations	236925 25 h-index	254184 43 g-index
50 all docs	50 docs citations	50 times ranked	3185 citing authors

#	Article	IF	Citations
1	Passivation agent with dipole moment for surface modification towards efficient and stable perovskite solar cells. Journal of Energy Chemistry, 2022, 64, 55-61.	12.9	17
2	Using Ligand Engineering to Produce Efficient and Stable Pbâ€"Sn Perovskite Solar Cells with Antioxidative 2D Capping Layers. ACS Applied Materials & Interfaces, 2022, 14, 14729-14738.	8.0	8
3	Effects of BTA2 as the third component on the charge carrier generation and recombination behavior of PTB7:PC71BM photovoltaic system. Frontiers of Chemical Science and Engineering, 2021, 15, 127-137.	4.4	6
4	Hybrid Lead Halide Perovskite Films with Large Grain Size Via Spinâ€Coating Free Fabrication. Physica Status Solidi (A) Applications and Materials Science, 2021, 218, 2000650.	1.8	1
5	Molecular Doping Inhibits Charge Trapping in Low-Temperature-Processed ZnO toward Flexible Organic Solar Cells. ACS Applied Materials & Interfaces, 2021, 13, 14423-14432.	8.0	13
6	Efficient Perovskite Solar Cells Achieved using the 2-Methoxyethanol Additive: Morphology and Composition Control of Intermediate Film. ACS Applied Energy Materials, 2021, 4, 2681-2689.	5.1	10
7	Enhanced open-circuit voltages and efficiencies: the role of oxidation state of molybdenum oxide buffer layer in polymer solar cells. RSC Advances, 2021, 11, 35141-35146.	3.6	2
8	The effects of Zr-doping on improving the sensitivity and selectivity of a one-dimensional Î±-MoO₃-based xylene gas sensor. Inorganic Chemistry Frontiers, 2020, 7, 1704-1712.	6.0	29
9	Energy Level Modification with Carbon Dot Interlayers Enables Efficient Perovskite Solar Cells and Quantum Dot Based Lightâ€Emitting Diodes. Advanced Functional Materials, 2020, 30, 1910530.	14.9	72
10	High-Efficiency and Stable Perovskite Solar Cells Prepared Using Chlorobenzene/Acetonitrile Antisolvent. ACS Applied Materials & Interfaces, 2019, 11, 34989-34996.	8.0	38
11	Highly efficient polymer solar cells based on low-temperature processed ZnO: application of a bifunctional Au@CNTs nanocomposite. Journal of Materials Chemistry C, 2019, 7, 2676-2685.	5.5	9
12	Oxygen vacancies dominated CuO@ZnFe2O4 yolk-shell microspheres for robust and selective detection of xylene. Sensors and Actuators B: Chemical, 2019, 295, 117-126.	7.8	47
13	Delicate Energy-Level Adjustment and Interfacial Defect Passivation of ZnO Electron Transport Layers in Organic Solar Cells by Constructing ZnO/In Nanojunctions. Journal of Physical Chemistry C, 2019, 123, 16546-16555.	3.1	16
14	Enhanced Electronic Quality of Perovskite via a Novel C₆₀ o-Quinodimethane Bisadducts toward Efficient and Stable Perovskite Solar Cells. ACS Sustainable Chemistry and Engineering, 2019, 7, 8579-8586.	6.7	12
15	Efficiency of MAPbI₃-Based Planar Solar Cell Analyzed by Its Thickness-Dependent Exciton Formation, Morphology, and Crystallinity. ACS Applied Materials & Interfaces, 2019, 11, 14810-14820.	8.0	10
16	Employing Pentacene To Balance the Charge Transport in Inverted Organic Solar Cells. Journal of Physical Chemistry C, 2018, 122, 17110-17117.	3.1	6
17	Suppressing TiO₂/Perovskite Interfacial Electron Trapping in Perovskite Solar Cell for Efficient Charge Extraction and Improved Device Performance. ACS Sustainable Chemistry and Engineering, 2018, 6, 11295-11302.	6.7	18
18	Polyelectrolyte interlayers with a broad processing window for high efficiency inverted organic solar cells towards mass production. Journal of Materials Chemistry A, 2018, 6, 17662-17670.	10.3	13

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19	Self-Sacrificial Template-Driven LaFeO₃/Î±-Fe₂O₃ Porous Nano-Octahedrons for Acetone Sensing. ACS Applied Nano Materials, 2018, 1, 4671-4681.	5.0	65
20	Combining plasmonic trap filling and optical backscattering for highly efficient third generation solar cells. Journal of Materials Chemistry A, 2017, 5, 3995-4002.	10.3	19
21	Highâ€Performance Colorful Semitransparent Polymer Solar Cells with Ultrathin Hybridâ€Metal Electrodes and Fineâ€Tuned Dielectric Mirrors. Advanced Functional Materials, 2017, 27, 1605908.	14.9	157
22	Enhanced Photovoltaic Performance of Tetrazine-Based Small Molecules with Conjugated Side Chains. ACS Sustainable Chemistry and Engineering, 2017, 5, 8684-8692.	6.7	10
23	Synthesis of Ni-doped Î±-MoO3 nanolamella and their improved gas sensing properties. Sensors and Actuators B: Chemical, 2017, 252, 757-763.	7.8	65
24	Small molecules based on tetrazine unit for efficient performance solution-processed organic solar cells. Solar Energy Materials and Solar Cells, 2016, 155, 30-37.	6.2	18
25	Optimization of PDTS-DTffBT-Based Solar Cell Performance through Control of Polymer Molecular Weight. Journal of Physical Chemistry C, 2016, 120, 19513-19520.	3.1	8
26	Bright Perovskite Nanocrystal Films for Efficient Light-Emitting Devices. Journal of Physical Chemistry Letters, 2016, 7, 4602-4610.	4.6	288
27	Efficiency Improvement of Organic Solar Cells via Introducing Combined Anode Buffer Layer To Facilitate Hole Extraction. Journal of Physical Chemistry C, 2016, 120, 13954-13962.	3.1	16
28	Three dimensions sphere formaldehyde nanosensor applications: preparation and sensing properties. RSC Advances, 2015, 5, 50336-50343.	3.6	14
29	Synthesis and photovoltaic properties of dithieno[3,2-b:2â€²,3â€²-d]silole-based conjugated copolymers. Journal of Materials Chemistry A, 2015, 3, 13794-13800.	10.3	18
30	Humidity sensing properties of CeO2â€"NiO nanocomposite materials. Journal of Materials Science: Materials in Electronics, 2015, 26, 3083-3089.	2.2	4
31	Visible-light photodetector with enhanced performance based on a ZnO@CdS heterostructure. Journal of Materials Chemistry C, 2015, 3, 2231-2236.	5.5	43
32	Special nanostructure control of ethanol sensing characteristics based on Au@In₂O₃ sensor with good selectivity and rapid response. RSC Advances, 2015, 5, 9884-9890.	3.6	40
33	A new type of acetylene gas sensor based on a hollow heterostructure. RSC Advances, 2015, 5, 61521-61527.	3.6	32
34	Synergistically improved formaldehyde gas sensing properties of SnO2 microspheres by indium and palladium co-doping. Ceramics International, 2015, 41, 7329-7336.	4.8	55
35	Improved Efficiency in Dithieno[3,2-b:2â€²,3â€²-d]silole-Based Polymer Solar Cells by the Insertion of ZnO Optical Spacer. Journal of Physical Chemistry C, 2015, 119, 20817-20822.	3.1	13
36	Gas Sensors Based on Metal Sulfide Zn_{1â€"<i>x</i>}Cd_{<i>x</i>}S Nanowires with Excellent Performance. ACS Applied Materials & Interfaces, 2015, 7, 20793-20800.	8.0	60

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37	Hierarchical Fe3O4@Co3O4 coreâ€“shell microspheres: Preparation and acetone sensing properties. Sensors and Actuators B: Chemical, 2014, 199, 346-353.	7.8	98
38	Humidity sensing properties of FeCl3-NH2-MIL-125(Ti) composites. Sensors and Actuators B: Chemical, 2014, 201, 281-285.	7.8	34
39	Fe3O4â€“NiO coreâ€“shell composites: Hydrothermal synthesis and toluene sensing properties. Materials Letters, 2014, 132, 167-170.	2.6	35
40	Effects of growth substrates on the morphologies of TiO2 nanowire arrays and the performance of assembled UV detectors. Applied Surface Science, 2014, 315, 55-58.	6.1	26
41	Low temperature operating In2âˆ'xNixO3 sensors with high response and good selectivity for NO2 gas. Journal of Alloys and Compounds, 2013, 581, 653-658.	5.5	23
42	A novel humidity sensor based on NH2-MIL-125(Ti) metal organic framework with high responsiveness. Journal of Nanoparticle Research, 2013, 15, 1.	1.9	76
43	Donorâ€“acceptor copolymers incorporating polybenzo[1,2-b:4,5-bâ€²]dithiophene and tetrazine for high open circuit voltage polymer solar cells. Organic Electronics, 2013, 14, 2124-2131.	2.6	31
44	Synthesis and Photovoltaic Properties of Thieno[3,4â€<i>c</i>]pyrroleâ€4,6â€dioneâ€based donorâ€“acceptor Copolymers. Journal of Polymer Science Part A, 2012, 50, 3758-3766.	2.3	32
45	A benzo[1,2-b:4,5-bâ€²]dithiophene-based copolymer with deep HOMO level for efficient polymer solar cells. Solar Energy Materials and Solar Cells, 2012, 100, 239-245.	6.2	30
46	Synthesis and photovoltaic properties of lowâ€bandgap 4,7â€dithienâ€2â€ylâ€2,1,3â€benzothiadiazoleâ€based poly(heteroarylenevinylene)s. Journal of Polymer Science Part A, 2011, 49, 2715-2724.	2.3	26
47	Synthesis and photovoltaic properties of poly(p â€phenylenevinylene) derivatives containing oxadiazole. Journal of Polymer Science Part A, 2009, 47, 1003-1012.	2.3	27
48	Energy Level and Molecular Structure Engineering of Conjugated Donorâˆ'Acceptor Copolymers for Photovoltaic Applications. Macromolecules, 2009, 42, 4491-4499.	4.8	118
49	Synthesis of 4,7-Diphenyl-2,1,3-Benzothiadiazole-Based Copolymers and Their Photovoltaic Applications. Macromolecules, 2009, 42, 4977-4984.	4.8	72