Songwang Yang

List of Publications by Year
in descending order

57 papers	2,324 citations	279487 23 h-index	205818 48 g-index
57 all docs	57 docs citations	57 times ranked	4306 citing authors

#	Article	IF	Citations
1	Controlled Synthesis and Self-Assembly of CeO2Nanocubes. Journal of the American Chemical Society, 2006, 128, 9330-9331.	6.6	402
2	Facile Synthesis and Shape Evolution of Singleâ€Crystal Cuprous Oxide. Advanced Materials, 2009, 21, 2068-2071.	11.1	219
3	Forest-like TiO2 hierarchical structures for efficient dye-sensitized solar cells. Journal of Materials Chemistry, 2012, 22, 6824.	6.7	112
4	Template-Free Synthesis of Hierarchical TiO₂ Structures and Their Application in Dye-Sensitized Solar Cells. ACS Applied Materials & Interfaces, 2011, 3, 2148-2153.	4.0	98
5	Achieving high-performance planar perovskite solar cells with co-sputtered Co-doping NiO_xhole transport layers by efficient extraction and enhanced mobility. Journal of Materials Chemistry C, 2016, 4, 10839-10846.	2.7	98
6	Ultrasmooth Perovskite Film via Mixed Anti-Solvent Strategy with Improved Efficiency. ACS Applied Materials & Interfaces, 2017, 9, 3667-3676.	4.0	98
7	New Method to Prepare Nitrogenâ€Doped Titanium Dioxide and Its Photocatalytic Activities Irradiated by Visible Light. Journal of the American Ceramic Society, 2004, 87, 1803-1805.	1.9	94
8	A general precipitation strategy for large-scale synthesis of molybdate nanostructures. Chemical Communications, 2008, , 5601.	2.2	77
9	Growth of Various TiO₂ Nanostructures for Dye-Sensitized Solar Cells. Journal of Physical Chemistry C, 2011, 115, 1819-1823.	1.5	76
10	Characterization of Perovskite Obtained from Two-Step Deposition on Mesoporous Titania. ACS Applied Materials & Interfaces, 2015, 7, 25770-25776.	4.0	58
11	Fast and Controllable Crystallization of Perovskite Films by Microwave Irradiation Process. ACS Applied Materials & Interfaces, 2016, 8, 7854-7861.	4.0	58
12	Preparation of Titanium Dioxide Nanocrystallite with High Photocatalytic Activities. Journal of the American Ceramic Society, 2005, 88, 968-970.	1.9	56
13	High Efficiency Semiconductorâ€Liquid Junction Solar Cells based on Cu/Cu₂O. Advanced Functional Materials, 2012, 22, 3907-3913.	7.8	51
14	Pore Size Dependent Hysteresis Elimination in Perovskite Solar Cells Based on Highly Porous TiO₂ Films with Widely Tunable Pores of 15â€“34 nm. Chemistry of Materials, 2016, 28, 7134-7144.	3.2	50
15	Achieving High Current Density of Perovskite Solar Cells by Modulating the Dominated Facets of Room-Temperature DC Magnetron Sputtered TiO₂ Electron Extraction Layer. ACS Applied Materials & Interfaces, 2017, 9, 2016-2022.	4.0	47
16	CsPbI₂Br Perovskite Solar Cells Based on Carbon Black-Containing Counter Electrodes. ACS Applied Materials & Interfaces, 2020, 12, 34882-34889.	4.0	47
17	An Effective TiO2 Blocking Layer for Perovskite Solar Cells with Enhanced Performance. Chemistry Letters, 2015, 44, 624-626.	0.7	37
18	A facile way to prepare nanoporous PbI₂ films and their application in fast conversion to CH₃NH₃PbI₃. RSC Advances, 2016, 6, 1611-1617.	1.7	36

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19	Fabrication and shape-evolution of nanostructured TiO2 via a solâ€“solvothermal process based on benzeneâ€“water interfaces. Materials Chemistry and Physics, 2006, 99, 437-440.	2.0	32
20	Cyclic Utilization of Lead in Carbon-Based Perovskite Solar Cells. ACS Sustainable Chemistry and Engineering, 2018, 6, 7558-7564.	3.2	30
21	Facile and Surfactant-Free Route to Nanocrystalline Mesoporous Tin Oxide. Journal of the American Ceramic Society, 2006, 89, 1742-1744.	1.9	29
22	Minimizing the energy loss of perovskite solar cells with Cu+ doped NiOx processed at room temperature. Solar Energy Materials and Solar Cells, 2018, 182, 128-135.	3.0	28
23	Study on the correlations between the structure and photoelectric properties of CH3NH3PbI3 perovskite light-harvesting material. Journal of Power Sources, 2015, 285, 349-353.	4.0	27
24	Nucleation mediated interfacial precipitation for architectural perovskite films with enhanced photovoltaic performance. Nanoscale, 2017, 9, 2569-2578.	2.8	27
25	Fabrication of well-defined water-soluble core/shell heteronanostructures through the SiO2 spacer. Chemical Communications, 2007, , 1272.	2.2	23
26	Fabrication and Characterization of Nanostructurally Flowerlike Aggregates of TiO2via a Surfactant-free Solution Route: Effect of Various Reaction Media. Chemistry Letters, 2005, 34, 1044-1045.	0.7	22
27	Low-temperature Synthesis of Crystalline TiO2Nanorods: Mass Production Assisted by Surfactant. Chemistry Letters, 2005, 34, 964-965.	0.7	22
28	Fast Fabrication of a Stable Perovskite Solar Cell with an Ultrathin Effective Novel Inorganic Hole Transport Layer. Langmuir, 2017, 33, 3624-3634.	1.6	22
29	Enhanced interfacial electron transfer of inverted perovskite solar cells by introduction of CoSe into the electron-transporting-layer. Journal of Power Sources, 2017, 353, 123-130.	4.0	22
30	Perovskite films with a sacrificial cation for solar cells with enhanced stability based on carbon electrodes. Journal of Alloys and Compounds, 2019, 797, 811-819.	2.8	21
31	Photocatalytic activity of nitrogen doped rutile TiO2 nanoparticles under visible light irradiation. Materials Research Bulletin, 2008, 43, 1872-1876.	2.7	18
32	Electrophoretic deposition of TiO2 nanorods for low-temperature dye-sensitized solar cells. RSC Advances, 2014, 4, 7805.	1.7	18
33	Efficient Bulk Heterojunction CH₃NH₃PbI₃â€“TiO₂ Solar Cells with TiO₂ Nanoparticles at Grain Boundaries of Perovskite by Multi-Cycle-Coating Strategy. ACS Applied Materials & Interfaces, 2017, 9, 16202-16214.	4.0	18
34	Controllable deposition of TiO 2 nanopillars at room temperature for high performance perovskite solar cells with suppressed hysteresis. Solar Energy Materials and Solar Cells, 2017, 168, 172-182.	3.0	18
35	Influence of TiO₂ Blocking Layer Morphology on Planar Heterojunction Perovskite Solar Cells. Chemistry Letters, 2016, 45, 592-594.	0.7	17
36	Enhanced electrical property of Ni-doped CoO_x hole transport layer for inverted perovskite solar cells. Nanotechnology, 2017, 28, 20LT02.	1.3	17

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37	Synthesis and magnetic properties of Coâ€“Snâ€“O nanorings. Chemical Communications, 2007, , 4372.	2.2	16
38	One step spray-coated TiO₂ electron-transport layers for decent perovskite solar cells on large and flexible substrates. Nanotechnology, 2017, 28, 01LT02.	1.3	16
39	Long-term stable perovskite solar cells with room temperature processed metal oxide carrier transporters. Journal of Materials Chemistry A, 2019, 7, 21085-21095.	5.2	16
40	Growthâ€“regimeâ€“controlled synthesis of CdSâ€“Bi2S3 and Bi2S3 nanocrystals during the dissolutionâ€“recrystallization processes. CrystEngComm, 2010, 12, 3413.	1.3	14
41	Room-temperature processible TiO2 electron selective layers with controllable crystallinity for high efficiency perovskite photovoltaics. Solar Energy Materials and Solar Cells, 2017, 163, 15-22.	3.0	14
42	Silicon Quantum Dot Luminescent Solar Concentrators and Downshifters with Antireflection Coatings for Enhancing Perovskite Solar Cell Performance. ACS Photonics, 2021, 8, 2392-2399.	3.2	14
43	Influence of hole transport material/metal contact interface on perovskite solar cells. Nanotechnology, 2018, 29, 255201.	1.3	13
44	Vacuum-Assisted Drying Process for Screen-Printable Carbon Electrodes of Perovskite Solar Cells with Enhanced Performance Based on Cuprous Thiocyanate as a Hole Transporting Layer. ACS Applied Materials & Interfaces, 2021, 13, 22684-22693.	4.0	13
45	Effect of Br content on phase stability and performance of H₂N=CHNH₂Pb(I_{1â^’<i>x</i>}Br<i> _x </i>)₃ perovskite thin films. Nanotechnology, 2019, 30, 165402.	1.3	11
46	A UV-stable Perovskite Solar Cell Based on Mo-doped TiO₂ Interlayer. Chemistry Letters, 2019, 48, 700-703.	0.7	10
47	A Facile and One-pot Synthesis of High Aspect Ratio Anatase Nanorods Based on Aqueous Solution. Chemistry Letters, 2005, 34, 972-973.	0.7	9
48	Novel Perovskite Solar Cell Architecture Featuring Efficient Light Capture and Ultrafast Carrier Extraction. ACS Applied Materials & Interfaces, 2017, 9, 23624-23634.	4.0	8
49	Morphology and Defect Control of Metal Halide Perovskite Films for High-Performance Optoelectronics. Chemistry of Materials, 2020, 32, 5958-5972.	3.2	8
50	Flexible Perovskite Solar Cells with Enhanced Performance Based on a Void-Free Imbedded Interface via a Thin Layer of Mesoporous TiO₂. ACS Applied Energy Materials, 2022, 5, 2242-2251.	2.5	8
51	Mesostructured perovskite solar cells based on highly ordered TiO₂ network scaffold via anodization of Ti thin film. Nanotechnology, 2017, 28, 055403.	1.3	7
52	Mixed Chalcogenideâ€Halides for Stable, Leadâ€Free and Defectâ€Tolerant Photovoltaics: Computational Screening and Experimental Validation of CuBiSCl₂ with Ideal Band Gap. Advanced Functional Materials, 2022, 32, .	7.8	7
53	CNTs/Ta3N5Nanocomposite with Enhanced Photocatalytic Activity Under Visible Light Irradiation. Journal of the American Ceramic Society, 2007, 90, 1309-1311.	1.9	6
54	Hierarchically structured nanocrystalline photoanode: Self-assembled bi-functional TiO2 towards enhanced photovoltaic performance. Nano Energy, 2014, 8, 247-254.	8.2	4

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55	Synthesis and Characterization of Porous Single-Crystalline Titanium Dioxide Nanorods. Journal of the American Ceramic Society, 2006, 89, 720-723.	1.9	3
56	Dense Coreâ€"Mesoporous Outer Layer Scattering Beads for Dye-sensitized Solar Cells. Chemistry Letters, 2014, 43, 1896-1898.	0.7	2
57	Novel Post-Treatment Process by La³⁺ Modification to TiO₂ Photoanode with Enhanced Performance for DSSCs. Advanced Materials Research, 0, 860-863, 219-222.	0.3	0