Songwang Yang

List of Publications by Year in Descending Order

57 papers	2,010 citations	22 h-index	44 g-index
57 ext. papers	2,163 ext. citations	6.6 avg, IF	4.97 L-index

#	Paper	IF	Citations
57	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	9.5	4
56	Silicon Quantum Dot Luminescent Solar Concentrators and Downshifters with Antireflection Coatings for Enhancing Perovskite Solar Cell Performance. *ACS Photonics*, **2021**, 8, 2392-2399	6.3	4
55	Morphology and Defect Control of Metal Halide Perovskite Films for High-Performance Optoelectronics. *Chemistry of Materials*, **2020**, 32, 5958-5972	9.6	5
54	CsPbIBr Perovskite Solar Cells Based on Carbon Black-Containing Counter Electrodes. *ACS Applied Materials & Interfaces*, **2020**, 12, 34882-34889	9.5	22
53	Long-term stable perovskite solar cells with room temperature processed metal oxide carrier transporters. *Journal of Materials Chemistry A*, **2019**, 7, 21085-21095	13	13
52	A UV-stable Perovskite Solar Cell Based on Mo-doped TiO2 Interlayer. *Chemistry Letters*, **2019**, 48, 700-703	1.7	7
51	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	5.7	18
50	Effect of Br content on phase stability and performance of HN=CHNHPb(I Br) perovskite thin films. *Nanotechnology*, **2019**, 30, 165402	3.4	8
49	Influence of hole transport material/metal contact interface on perovskite solar cells. *Nanotechnology*, **2018**, 29, 255201	3.4	10
48	Cyclic Utilization of Lead in Carbon-Based Perovskite Solar Cells. *ACS Sustainable Chemistry and Engineering*, **2018**, 6, 7558-7564	8.3	13
47	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	6.4	25
46	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	6.4	12
45	Ultrasmooth Perovskite Film via Mixed Anti-Solvent Strategy with Improved Efficiency. *ACS Applied Materials & Interfaces*, **2017**, 9, 3667-3676	9.5	86
44	Nucleation mediated interfacial precipitation for architectural perovskite films with enhanced photovoltaic performance. *Nanoscale*, **2017**, 9, 2569-2578	7.7	22
43	Achieving High Current Density of Perovskite Solar Cells by Modulating the Dominated Facets of Room-Temperature DC Magnetron Sputtered TiO Electron Extraction Layer. *ACS Applied Materials & Interfaces*, **2017**, 9, 2016-2022	9.5	35
42	Efficient Bulk Heterojunction CHNHPbI-TiO Solar Cells with TiO Nanoparticles at Grain Boundaries of Perovskite by Multi-Cycle-Coating Strategy. *ACS Applied Materials & Interfaces*, **2017**, 9, 16202-16214	9.5	17
41	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	6.4	16

40	One step spray-coated TiO electron-transport layers for decent perovskite solar cells on large and flexible substrates. *Nanotechnology*, **2017**, 28, 01LT02	3.4	10
39	Fast Fabrication of a Stable Perovskite Solar Cell with an Ultrathin Effective Novel Inorganic Hole Transport Layer. *Langmuir*, **2017**, 33, 3624-3634	4	15
38	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	8.9	18
37	Enhanced electrical property of Ni-doped CoO hole transport layer for inverted perovskite solar cells. *Nanotechnology*, **2017**, 28, 20LT02	3.4	11
36	Mesostructured perovskite solar cells based on highly ordered TiO network scaffold via anodization of Ti thin film. *Nanotechnology*, **2017**, 28, 055403	3.4	6
35	Novel Perovskite Solar Cell Architecture Featuring Efficient Light Capture and Ultrafast Carrier Extraction. *ACS Applied Materials & Interfaces*, **2017**, 9, 23624-23634	9.5	7
34	Influence of TiO2 Blocking Layer Morphology on Planar Heterojunction Perovskite Solar Cells. *Chemistry Letters*, **2016**, 45, 592-594	1.7	13
33	Achieving high-performance planar perovskite solar cells with co-sputtered Co-doping NiOx hole transport layers by efficient extraction and enhanced mobility. *Journal of Materials Chemistry C*, **2016**, 4, 10839-10846	7.1	73
32	Fast and Controllable Crystallization of Perovskite Films by Microwave Irradiation Process. *ACS Applied Materials & Interfaces*, **2016**, 8, 7854-61	9.5	49
31	A facile way to prepare nanoporous PbI2 films and their application in fast conversion to CH3NH3PbI3. *RSC Advances*, **2016**, 6, 1611-1617	3.7	34
30	Pore Size Dependent Hysteresis Elimination in Perovskite Solar Cells Based on Highly Porous TiO2 Films with Widely Tunable Pores of 15–34 nm. *Chemistry of Materials*, **2016**, 28, 7134-7144	9.6	41
29	Study on the correlations between the structure and photoelectric properties of CH3NH3PbI3 perovskite light-harvesting material. *Journal of Power Sources*, **2015**, 285, 349-353	8.9	25
28	Characterization of Perovskite Obtained from Two-Step Deposition on Mesoporous Titania. *ACS Applied Materials & Interfaces*, **2015**, 7, 25770-6	9.5	55
27	An Effective TiO2 Blocking Layer for Perovskite Solar Cells with Enhanced Performance. *Chemistry Letters*, **2015**, 44, 624-626	1.7	33
26	Electrophoretic deposition of TiO2 nanorods for low-temperature dye-sensitized solar cells. *RSC Advances*, **2014**, 4, 7805	3.7	16
25	Hierarchically structured nanocrystalline photoanode: Self-assembled bi-functional TiO2 towards enhanced photovoltaic performance. *Nano Energy*, **2014**, 8, 247-254	17.1	4
24	Dense Core/Mesoporous Outer Layer Scattering Beads for Dye-sensitized Solar Cells. *Chemistry Letters*, **2014**, 43, 1896-1898	1.7	2
23	Novel Post-Treatment Process by La3+ Modification to TiO2 Photoanode with Enhanced Performance for DSSCs. *Advanced Materials Research*, **2013**, 860-863, 219-222	0.5	

22	Forest-like TiO2 hierarchical structures for efficient dye-sensitized solar cells. *Journal of Materials Chemistry*, **2012**, 22, 6824		110
21	High Efficiency Semiconductor-Liquid Junction Solar Cells based on Cu/Cu2O. *Advanced Functional Materials*, **2012**, 22, 3907-3913	15.6	44
20	Template-free synthesis of hierarchical TiO2 structures and their application in dye-sensitized solar cells. *ACS Applied Materials & Interfaces*, **2011**, 3, 2148-53	9.5	89
19	Growth of Various TiO2 Nanostructures for Dye-Sensitized Solar Cells. *Journal of Physical Chemistry C*, **2011**, 115, 1819-1823	3.8	67
18	Growth regime controlled synthesis of CdS Bi2S3 and Bi2S3 nanocrystals during the dissolution recrystallization processes. *CrystEngComm*, **2010**, 12, 3413	3.3	14
17	Facile Synthesis and Shape Evolution of Single-Crystal Cuprous Oxide. *Advanced Materials*, **2009**, 21, 2068-2071	24	200
16	Photocatalytic activity of nitrogen doped rutile TiO2 nanoparticles under visible light irradiation. *Materials Research Bulletin*, **2008**, 43, 1872-1876	5.1	17
15	A general precipitation strategy for large-scale synthesis of molybdate nanostructures. *Chemical Communications*, **2008**, 5601-3	5.8	71
14	Synthesis and magnetic properties of Co-Sn-O nanorings. *Chemical Communications*, **2007**, 4372-4	5.8	16
13	CNTs/Ta3N5 Nanocomposite with Enhanced Photocatalytic Activity Under Visible Light Irradiation. *Journal of the American Ceramic Society*, **2007**, 90, 1309-1311	3.8	6
12	Fabrication of well-defined water-soluble core/shell heteronanostructures through the SiO2 spacer. *Chemical Communications*, **2007**, 1272-4	5.8	23
11	Fabrication and shape-evolution of nanostructured TiO2 via a sol solvothermal process based on benzene water interfaces. *Materials Chemistry and Physics*, **2006**, 99, 437-440	4.4	27
10	Synthesis and Characterization of Porous Single-Crystalline Titanium Dioxide Nanorods. *Journal of the American Ceramic Society*, **2006**, 89, 720-723	3.8	3
9	Facile and Surfactant-Free Route to Nanocrystalline Mesoporous Tin Oxide. *Journal of the American Ceramic Society*, **2006**, 89, 1742-1744	3.8	27
8	Controlled synthesis and self-assembly of CeO2 nanocubes. *Journal of the American Chemical Society*, **2006**, 128, 9330-1	16.4	376
7	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	1.7	19
6	A Facile and One-pot Synthesis of High Aspect Ratio Anatase Nanorods Based on Aqueous Solution. *Chemistry Letters*, **2005**, 34, 972-973	1.7	8
5	Low-temperature Synthesis of Crystalline TiO2Nanorods: Mass Production Assisted by Surfactant. *Chemistry Letters*, **2005**, 34, 964-965	1.7	20

4	Preparation of Titanium Dioxide Nanocrystallite with High Photocatalytic Activities. *Journal of the American Ceramic Society*, **2005**, 88, 968-970	3.8	55
3	New Method to Prepare Nitrogen-Doped Titanium Dioxide and Its Photocatalytic Activities Irradiated by Visible Light. *Journal of the American Ceramic Society*, **2004**, 87, 1803-1805	3.8	88
2	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*,	6.1	1
1	Mixed Chalcogenide-Halides for Stable, Lead-Free and Defect-Tolerant Photovoltaics: Computational Screening and Experimental Validation of CuBiSCl 2 with Ideal Band Gap. *Advanced Functional Materials*,2112682	15.6	