Shuang Yang

List of Publications by Citations

110 papers	5,752 citations	36 h-index	75 g-index
118 ext. papers	7,113 ext. citations	10.8 avg, IF	6.25 L-index

#	Paper	IF	Citations
110	Imperfections and their passivation in halide perovskite solar cells. *Chemical Society Reviews*, **2019**, 48, 3842-3867	58.5	724
109	Stabilizing halide perovskite surfaces for solar cell operation with wide-bandgap lead oxysalts. *Science*, **2019**, 365, 473-478	33.3	460
108	Functionalization of perovskite thin films with moisture-tolerant molecules. *Nature Energy*, **2016**, 1,	62.3	369
107	Tailoring Passivation Molecular Structures for Extremely Small Open-Circuit Voltage Loss in Perovskite Solar Cells. *Journal of the American Chemical Society*, **2019**, 141, 5781-5787	16.4	368
106	Enhanced Thermal Stability in Perovskite Solar Cells by Assembling 2D/3D Stacking Structures. *Journal of Physical Chemistry Letters*, **2018**, 9, 654-658	6.4	313
105	Defect-Rich Ultrathin Cobalt-Iron Layered Double Hydroxide for Electrochemical Overall Water Splitting. *ACS Applied Materials & Interfaces*, **2016**, 8, 34474-34481	9.5	240
104	Molybdenum carbide stabilized on graphene with high electrocatalytic activity for hydrogen evolution reaction. *Chemical Communications*, **2014**, 50, 13135-7	5.8	194
103	Ultrathin Two-Dimensional Organic-Inorganic Hybrid Perovskite Nanosheets with Bright, Tunable Photoluminescence and High Stability. *Angewandte Chemie - International Edition*, **2017**, 56, 4252-4255	16.4	165
102	Facet-dependent catalytic activity of platinum nanocrystals for triiodide reduction in dye-sensitized solar cells. *Scientific Reports*, **2013**, 3, 1836	4.9	133
101	Formation Mechanism of Freestanding CH3NH3PbI3 Functional Crystals: In Situ Transformation vs Dissolution□Crystallization. *Chemistry of Materials*, **2014**, 26, 6705-6710	9.6	130
100	Ni2P(O)/Fe2P(O) Interface Can Boost Oxygen Evolution Electrocatalysis. *ACS Energy Letters*, **2017**, 2, 2257-2263	20.1	116
99	Single Crystal Perovskite Solar Cells: Development and Perspectives. *Advanced Functional Materials*, **2020**, 30, 1905021	15.6	100
98	Thermal-Induced Volmer□Weber Growth Behavior for Planar Heterojunction Perovskites Solar Cells. *Chemistry of Materials*, **2015**, 27, 5116-5121	9.6	92
97	Electrochemical etching of □cobalt hydroxide for improvement of oxygen evolution reaction. *Journal of Materials Chemistry A*, **2016**, 4, 9578-9584	13	91
96	Mo activated multimetal oxygen-evolving catalysts. *Chemical Science*, **2017**, 8, 3484-3488	9.4	88
95	Active sites on hydrogen evolution photocatalyst. *Journal of Materials Chemistry A*, **2013**, 1, 15258	13	81
94	Mn3O4 nano-octahedrons on Ni foam as an efficient three-dimensional oxygen evolution electrocatalyst. *Journal of Materials Chemistry A*, **2015**, 3, 14101-14104	13	80

93	Hydrogen-treated commercial WO3 as an efficient electrocatalyst for triiodide reduction in dye-sensitized solar cells. *Chemical Communications*, **2013**, 49, 5945-7	5.8	78
92	Low-temperature processed In2S3 electron transport layer for efficient hybrid perovskite solar cells. *Nano Energy*, **2017**, 36, 102-109	17.1	74
91	Titania single crystals with a curved surface. *Nature Communications*, **2014**, 5, 5355	17.4	73
90	A Gradient Heterostructure Based on Tolerance Factor in High-Performance Perovskite Solar Cells with 0.84 Fill Factor. *Advanced Materials*, **2019**, 31, e1804217	24	70
89	Engineered Hematite Mesoporous Single Crystals Drive Drastic Enhancement in Solar Water Splitting. *Nano Letters*, **2016**, 16, 427-33	11.5	65
88	Highly electrocatalytic activity of RuO□hanocrystals for triiodide reduction in dye-sensitized solar cells. *Small*, **2014**, 10, 484-92, 483	11	65
87	Surface Electronic Modification of Perovskite Thin Film with Water-Resistant Electron Delocalized Molecules for Stable and Efficient Photovoltaics. *Advanced Energy Materials*, **2018**, 8, 1703143	21.8	62
86	Size-controlled synthesis, magnetic property, and photocatalytic property of uniform □Fe2O3 nanoparticles via a facile additive-free hydrothermal route. *CrystEngComm*, **2012**, 14, 7915	3.3	62
85	Surface chelation of cesium halide perovskite by dithiocarbamate for efficient and stable solar cells. *Nature Communications*, **2020**, 11, 4237	17.4	62
84	The Dominant Energy Transport Pathway in Halide Perovskites: Photon Recycling or Carrier Diffusion?. *Advanced Energy Materials*, **2019**, 9, 1900185	21.8	61
83	A Band-Edge Potential Gradient Heterostructure to Enhance Electron Extraction Efficiency of the Electron Transport Layer in High-Performance Perovskite Solar Cells. *Advanced Functional Materials* , **2017**, 27, 1700878	15.6	58
82	Multifunctional Inverse Opal-Like TiO Electron Transport Layer for Efficient Hybrid Perovskite Solar Cells. *Advanced Science*, **2015**, 2, 1500105	13.6	54
81	Oriented collagen fiber membranes formed through counter-rotating extrusion and their application in tendon regeneration. *Biomaterials*, **2019**, 207, 61-75	15.6	51
80	Organohalide Lead Perovskites: More Stable than Glass under Gamma-Ray Radiation. *Advanced Materials*, **2019**, 31, e1805547	24	51
79	Critical roles of co-catalysts for molecular hydrogen formation in photocatalysis. *Journal of Catalysis*, **2015**, 330, 120-128	7.3	48
78	Surface-functionalized perovskite films for stable photoelectrochemical water splitting. *Journal of Materials Chemistry A*, **2017**, 5, 910-913	13	44
77	A Solution-Processed Transparent NiO Hole-Extraction Layer for High-Performance Inverted Perovskite Solar Cells. *Chemistry - A European Journal*, **2018**, 24, 2845-2849	4.8	40
76	Sonodynamic therapy induces the interplay between apoptosis and autophagy in K562 cells through ROS. *International Journal of Biochemistry and Cell Biology*, **2015**, 60, 82-92	5.6	37

75	A low-temperature processed flower-like TiO2 array as an electron transport layer for high-performance perovskite solar cells. *Journal of Materials Chemistry A*, **2016**, 4, 6521-6526	13	36
74	A sulfur-assisted strategy to decorate MWCNTs with highly dispersed Pt nanoparticles for counter electrode in dye-sensitized solar cells. *Journal of Materials Chemistry A*, **2013**, 1, 1982-1986	13	35
73	Transient Energy Reservoir in 2D Perovskites. *Advanced Optical Materials*, **2019**, 7, 1900971	8.1	33
72	Ultrathin SnO2 scaffolds for TiO2-based heterojunction photoanodes in dye-sensitized solar cells: oriented charge transport and improved light scattering. *Chemistry - A European Journal*, **2013**, 19, 9366-70	4.8	29
71	Designing Large-Area Single-Crystal Perovskite Solar Cells. *ACS Energy Letters*, **2020**, 5, 1797-1803	20.1	28
70	LncRNA PCFL promotes cardiac fibrosis via miR-378/GRB2 pathway following myocardial infarction. *Journal of Molecular and Cellular Cardiology*, **2019**, 133, 188-198	5.8	27
69	A novel strategy to prepare a PtSnO2 nanocomposite as a highly efficient counter electrode for dye-sensitized solar cells. *Journal of Materials Chemistry A*, **2014**, 2, 17253-17257	13	27
68	Turning indium oxide into a superior electrocatalyst: deterministic heteroatoms. *Scientific Reports*, **2013**, 3, 3109	4.9	27
67	Benign ferroelastic twin boundaries in halide perovskites for charge carrier transport and recombination. *Nature Communications*, **2020**, 11, 2215	17.4	26
66	A free radical assisted strategy for preparing ultra-small Pt decorated CNTs as a highly efficient counter electrode for dye-sensitized solar cells. *Journal of Materials Chemistry A*, **2014**, 2, 614-619	13	25
65	Chemical constituents of Lobelia chinensis. *Fitoterap*, **2014**, 93, 168-74	3.2	24
64	Deepening the Valance Band Edges of NiOx Contacts by Alkaline Earth Metal Doping for Efficient Perovskite Photovoltaics with High Open-Circuit Voltage. *Solar Rrl*, **2019**, 3, 1900192	7.1	23
63	Irgm1 promotes M1 but not M2 macrophage polarization in atherosclerosis pathogenesis and development. *Atherosclerosis*, **2016**, 251, 282-290	3.1	23
62	MgOi2O catalysts templated by a PDMSEO comb-like copolymer for transesterification of vegetable oil to biodiesel. *Fuel*, **2016**, 165, 215-223	7.1	23
61	Structure disorder of graphitic carbon nitride induced by liquid-assisted grinding for enhanced photocatalytic conversion. *RSC Advances*, **2014**, 4, 10676-10679	3.7	23
60	Revealing defective nanostructured surfaces and their impact on the intrinsic stability of hybrid perovskites. *Energy and Environmental Science*, **2021**, 14, 1563-1572	35.4	22
59	Crystal shape engineering of anatase TiO2 and its biomedical applications. *CrystEngComm*, **2015**, 17, 6617-6631	3.3	21
58	Activation of microbubbles by low-level therapeutic ultrasound enhances the antitumor effects of doxorubicin. *European Radiology*, **2014**, 24, 2739-53	8	21

57	Direct insight into crystallization and stability of hybrid perovskite CH3NH3PbI3via solvothermal synthesis. *Journal of Materials Chemistry A*, **2015**, 3, 15854-15857	13	20
56	Antiswelling and Durable Adhesion Biodegradable Hydrogels for Tissue Repairs and Strain Sensors. *Langmuir*, **2020**, 36, 10448-10459	4	20
55	Self-Powered FA0.55MA0.45PbI3 Single-Crystal Perovskite X-Ray Detectors with High Sensitivity. *Advanced Functional Materials*,2109149	15.6	19
54	Water assisted formation of highly oriented CsPbI2Br perovskite films with the solar cell efficiency exceeding 16%. *Journal of Materials Chemistry A*, **2020**, 8, 17670-17674	13	19
53	NiO hole transport materials: gap state assisted hole extraction with superior electrical conductivity. *Journal of Materials Chemistry A*, **2019**, 7, 20905-20910	13	17
52	In situ growth of mirror-like platinum as highly-efficient counter electrode with light harvesting function for dye-sensitized solar cells. *Journal of Materials Chemistry A*, **2014**, 2, 1641-1646	13	17
51	Highly efficient overlayer derived from peroxotitanium for dye-sensitized solar cells. *Journal of Materials Chemistry A*, **2013**, 1, 1374-1379	13	17
50	Impurity-Free Synthesis of Cube-Like Single-Crystal Anatase TiO2 for High Performance Dye-Sensitized Solar Cell. *Industrial & Engineering Chemistry Research*, **2013**, 52, 4098-4102	3.9	17
49	Epitaxial halide perovskite-based materials for photoelectric energy conversion. *Energy and Environmental Science*, **2021**, 14, 127-157	35.4	17
48	Ultrathin Two-Dimensional Organic–Inorganic Hybrid Perovskite Nanosheets with Bright, Tunable Photoluminescence and High Stability. *Angewandte Chemie*, **2017**, 129, 4316-4319	3.6	15
47	Formation of high-quality perovskite thin film for planar heterojunction solar cells. *RSC Advances*, **2015**, 5, 69502-69508	3.7	15
46	Chemical Vapor Deposition of FeOCl Nanosheet Arrays and Their Conversion to Porous α-Fe2 O3 Photoanodes for Photoelectrochemical Water Splitting. *Chemistry - A European Journal*, **2015**, 21, 18024-8	4.8	15
45	Stoichiometric Dissolution of Defective CsPbI 2 Br Surfaces for Inorganic Solar Cells with 17.5% Efficiency. *Advanced Energy Materials*,2103933	21.8	15
44	Determining In-Plane Carrier Diffusion in Two-Dimensional Perovskite Using Local Time-Resolved Photoluminescence. *ACS Applied Materials & Interfaces*, **2020**, 12, 26384-26390	9.5	14
43	Modulating MAPbI3 perovskite solar cells by amide molecules: Crystallographic regulation and surface passivation. *Journal of Energy Chemistry*, **2021**, 56, 179-185	12	13
42	Zn(II)-doped α-Fe2O3 single-crystalline nanoplates with high phase-transition temperature, superparamagnetic property and good photocatalytic property. *RSC Advances*, **2013**, 3, 21994	3.7	12
41	Hierarchical structure engineering of brookite TiO 2 crystals for enhanced photocatalytic and external antitumor property. *Science Bulletin*, **2016**, 61, 1818-1825	10.6	12
40	Key role of collagen fibers orientation in casing-meat adhesion. *Food Research International*, **2016**, 89, 439-447	7	12

39	Synthesis and bioevaluation of diarylpyrazoles as antiproliferative agents. *European Journal of Medicinal Chemistry*, **2019**, 171, 1-10	6.8	12
38	Chiral separation of two diastereomeric pairs of enantiomers of novel alkaloid-lignan hybrids from Lobelia chinensis and determination of the tentative absolute configuration. *Journal of Chromatography A*, **2013**, 1311, 134-9	4.5	11
37	Efficacy of combined therapy with paclitaxel and low-level ultrasound in human chronic myelogenous leukemia cell line K562. *Journal of Drug Targeting*, **2013**, 21, 874-84	5.4	10
36	Kang Le Xin Reduces Blood Pressure Through Inducing Endothelial-Dependent Vasodilation by Activating the AMPK-eNOS Pathway. *Frontiers in Pharmacology*, **2019**, 10, 1548	5.6	9
35	Anatase TiO2 with nanopores for dye-sensitized solar cells. *Physical Chemistry Chemical Physics*, **2014**, 16, 23038-43	3.6	9
34	Diammonium-Cesium Lead Halide Perovskite with Phase-Segregated Interpenetrating Morphology for Photovoltaics. *Journal of Physical Chemistry Letters*, **2020**, 11, 747-754	6.4	9
33	Antifouling and pH-Responsive Poly(Carboxybetaine)-Based Nanoparticles for Tumor Cell Targeting. *Frontiers in Chemistry*, **2019**, 7, 770	5	9
32	Mediating the Local Oxygen-Bridge Interactions of Oxysalt/Perovskite Interface for Defect Passivation of Perovskite Photovoltaics. *Nano-Micro Letters*, **2021**, 13, 177	19.5	9
31	Precisely controlled heterogeneous nucleation sites for TiO2 crystal growth. *CrystEngComm*, **2014**, 16, 7502	3.3	8
30	Controlled Oriented Attachment of Bipyramidal-Shaped Anatase TiO and Their Enhanced Performance in Dye-Sensitized Solar Cells. *ChemPlusChem*, **2015**, 80, 805-809	2.8	7
29	Kanglexin accelerates diabetic wound healing by promoting angiogenesis via FGFR1/ERK signaling. *Biomedicine and Pharmacotherapy*, **2020**, 132, 110933	7.5	7
28	Thermally Induced Crystallization of High Quality CH NH PbI Film with Large Grains for Highly Efficient Perovskite Solar Cells. *Chemistry - A European Journal*, **2017**, 23, 5658-5662	4.8	6
27	Layer number dependent exciton dissociation and carrier recombination in 2D Ruddlesden Popper halide perovskites. *Journal of Materials Chemistry C*, **2021**, 9, 8966-8974	7.1	6
26	Self-Organized Co3O4-SrCO3 Percolative Composites Enabling Nanosized Hole Transport Pathways for Perovskite Solar Cells. *Advanced Functional Materials*,2106121	15.6	6
25	Novel PtO decorated MWCNTs as a highly efficient counter electrode for dye-sensitized solar cells. *RSC Advances*, **2015**, 5, 8307-8310	3.7	5
24	Highly Ethylene-Selective Electrocatalytic CO Reduction Enabled by Isolated Cu-S Motifs in Metal-Organic Framework Based Precatalysts. *Angewandte Chemie - International Edition*, **2021**,	16.4	5
23	Boric Acid Mediated Formation and Doping of NiOx Layers for Perovskite Solar Cells with Efficiency over 21%. *Solar Rrl*, **2021**, 5, 2000810	7.1	5
22	Amorphous ferric oxide as a hole-extraction and transfer layer on nanoporous bismuth vanadate photoanode for water oxidation. *Chinese Journal of Catalysis*, **2017**, 38, 1045-1051	11.3	4

21	A Dendrite-Structured RbX (X=Br, I) Interlayer for CsPbI Br Perovskite Solar Cells with Over 15 % Stabilized Efficiency. *ChemSusChem*, **2020**, 13, 5443-5448	8.3	4
20	Oriented inorganic perovskite absorbers processed by colloidal-phase fumigation. *Science China Materials*, **2021**, 64, 2421-2429	7.1	4
19	cRGD peptide-conjugated polyethylenimine-based lipid nanoparticle for intracellular delivery of siRNA in hepatocarcinoma therapy. *Drug Delivery*, **2021**, 28, 995-1006	7	4
18	Homogeneous doping of entire perovskite solar cells via alkali cation diffusion from the hole transport layer. *Journal of Materials Chemistry A*, **2021**, 9, 9266-9271	13	4
17	Molten Salt-Assisted Growth of Perovskite Films with Submillimeter-Sized Grains. *Industrial & Engineering Chemistry Research*, **2017**, 56, 524-529	3.9	3
16	Solar Cells: Highly Electrocatalytic Activity of RuO2 Nanocrystals for Triiodide Reduction in Dye-Sensitized Solar Cells (Small 3/2014). *Small*, **2014**, 10, 483-483	11	3
15	Synthesis and characterization of heterometallic complexes as nanofibers by a solvothermal route. *RSC Advances*, **2013**, 3, 11640	3.7	3
14	Stabilization Techniques of Lead Halide Perovskite for Photovoltaic Applications. *Solar Rrl*,2100710	7.1	3
13	Highly ordered mesoporous Co3O4 cubes/graphene oxide heterostructure as efficient counter electrodes in dye-sensitized solar cells. *Journal of Materials Science: Materials in Electronics*, **2021**, 32, 16519-16527	2.1	3
12	Spontaneous Passivation of Perovskite Solar Cells by Titanium Tetrafluoride. *ACS Applied Energy Materials*, **2020**, 3, 4121-4126	6.1	3
11	Inverted perovskite solar cells based on potassium salt-modified NiOX hole transport layers. *Materials Chemistry Frontiers*, **2021**, 5, 3614-3620	7.8	3
10	Fabrication of Poly(ethylene glycol) Capsules via Emulsion Templating Method for Targeted Drug Delivery. *Polymers*, **2020**, 12,	4.5	2
9	Dynamic Output Feedback MPC for Interval Type-2 T-S Fuzzy Networked Control Systems with Packet Loss **2018**,		2
8	TiO2 cement for high-performance dye-sensitized solar cells. *RSC Advances*, **2016**, 6, 83802-83807	3.7	2
7	Design, synthesis and biological evaluation of sphingosine-1-phosphate receptor 2 antagonists as potent 5-FU-resistance reversal agents for the treatment of colorectal cancer. *European Journal of Medicinal Chemistry*, **2021**, 225, 113775	6.8	2
6	Thin MAPbSnI Perovskite Single Crystals for Sensitive Infrared Light Detection.. *Frontiers in Chemistry*, **2021**, 9, 821699	5	1
5	Solution-processable nickel□hromium ternary oxide as an efficient hole transport layer for inverted planar perovskite solar cells. *Journal of Materials Chemistry A*,	13	1
4	A Self-Formed Stable PbI /NiO Interface with Increased Ni Centers for Perovskite Photovoltaics.. *Chemistry - A European Journal*, **2022**, e202200202	4.8	1

3	Non-selective adsorption of organic cations enables conformal surface capping of perovskite grains for stabilized photovoltaic operation. *Cell Reports Physical Science*, **2022**, 3, 100760	6.1	0
2	Kanglexin protects against cardiac fibrosis and dysfunction in mice by TGF-β1/ERK1/2 noncanonical pathway. *Frontiers in Pharmacology*, **2020**, 11, 572637	5.6	0
1	A Dendrite-Structured RbX (X=Br, I) Interlayer for CsPbI Br Perovskite Solar Cells with Over 15 % Stabilized Efficiency. *ChemSusChem*, **2020**, 13, 5342	8.3	