Shuang Yang

List of Publications by Year
in descending order

114 papers	8,392 citations	70961 41 h-index	46693 89 g-index
118 all docs	118 docs citations	118 times ranked	10946 citing authors

#	Article	IF	Citations
1	Imperfections and their passivation in halide perovskite solar cells. Chemical Society Reviews, 2019, 48, 3842-3867.	18.7	1,257
2	Stabilizing halide perovskite surfaces for solar cell operation with wide-bandgap lead oxysalts. Science, 2019, 365, 473-478.	6.0	723
3	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.	6.6	585
4	Enhanced Thermal Stability in Perovskite Solar Cells by Assembling 2D/3D Stacking Structures. Journal of Physical Chemistry Letters, 2018, 9, 654-658.	2.1	447
5	Functionalization of perovskite thin films with moisture-tolerant molecules. Nature Energy, 2016, 1, .	19.8	439
6	Defect-Rich Ultrathin Cobaltâ€“Iron Layered Double Hydroxide for Electrochemical Overall Water Splitting. ACS Applied Materials & Interfaces, 2016, 8, 34474-34481.	4.0	345
7	Molybdenum carbide stabilized on graphene with high electrocatalytic activity for hydrogen evolution reaction. Chemical Communications, 2014, 50, 13135-13137.	2.2	235
8	Ultrathin Twoâ€Dimensional Organicâ€“Inorganic Hybrid Perovskite Nanosheets with Bright, Tunable Photoluminescence and High Stability. Angewandte Chemie - International Edition, 2017, 56, 4252-4255.	7.2	206
9	Ni₂P(O)/Fe₂P(O) Interface Can Boost Oxygen Evolution Electrocatalysis. ACS Energy Letters, 2017, 2, 2257-2263.	8.8	173
10	Single Crystal Perovskite Solar Cells: Development and Perspectives. Advanced Functional Materials, 2020, 30, 1905021.	7.8	171
11	Facet-Dependent Catalytic Activity of Platinum Nanocrystals for Triiodide Reduction in Dye-Sensitized Solar Cells. Scientific Reports, 2013, 3, 1836.	1.6	146
12	Formation Mechanism of Freestanding CH₃NH₃PbI₃ Functional Crystals: In Situ Transformation vs Dissolutionâ€“Crystallization. Chemistry of Materials, 2014, 26, 6705-6710.	3.2	143
13	Mo⁶⁺activated multimetal oxygen-evolving catalysts. Chemical Science, 2017, 8, 3484-3488.	3.7	129
14	Electrochemical etching of Î±-cobalt hydroxide for improvement of oxygen evolution reaction. Journal of Materials Chemistry A, 2016, 4, 9578-9584.	5.2	125
15	Thermal-Induced Volmerâ€“Weber Growth Behavior for Planar Heterojunction Perovskites Solar Cells. Chemistry of Materials, 2015, 27, 5116-5121.	3.2	107
16	Surface chelation of cesium halide perovskite by dithiocarbamate for efficient and stable solar cells. Nature Communications, 2020, 11, 4237.	5.8	106
17	Active sites on hydrogen evolution photocatalyst. Journal of Materials Chemistry A, 2013, 1, 15258.	5.2	96
18	Mn₃O₄ nano-octahedrons on Ni foam as an efficient three-dimensional oxygen evolution electrocatalyst. Journal of Materials Chemistry A, 2015, 3, 14101-14104.	5.2	95

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19	A Gradient Heterostructure Based on Tolerance Factor in Highâ€Performance Perovskite Solar Cells with 0.84 Fill Factor. Advanced Materials, 2019, 31, e1804217.	11.1	95
20	Titania single crystals with a curved surface. Nature Communications, 2014, 5, 5355.	5.8	94
21	Oriented collagen fiber membranes formed through counter-rotating extrusion and their application in tendon regeneration. Biomaterials, 2019, 207, 61-75.	5.7	93
22	Organohalide Lead Perovskites: More Stable than Glass under Gammaâ€Ray Radiation. Advanced Materials, 2019, 31, e1805547.	11.1	92
23	Surface Electronic Modification of Perovskite Thin Film with Waterâ€Resistant Electron Delocalized Molecules for Stable and Efficient Photovoltaics. Advanced Energy Materials, 2018, 8, 1703143.	10.2	91
24	Low-temperature processed In2S3 electron transport layer for efficient hybrid perovskite solar cells. Nano Energy, 2017, 36, 102-109.	8.2	87
25	The Dominant Energy Transport Pathway in Halide Perovskites: Photon Recycling or Carrier Diffusion?. Advanced Energy Materials, 2019, 9, 1900185.	10.2	85
26	Hydrogen-treated commercial WO3 as an efficient electrocatalyst for triiodide reduction in dye-sensitized solar cells. Chemical Communications, 2013, 49, 5945.	2.2	83
27	A Bandâ€Edge Potential Gradient Heterostructure to Enhance Electron Extraction Efficiency of the Electron Transport Layer in Highâ€Performance Perovskite Solar Cells. Advanced Functional Materials, 2017, 27, 1700878.	7.8	81
28	Highly Ethyleneâ€Selective Electrocatalytic CO₂ Reduction Enabled by Isolated Cuâ^'S Motifs in Metalâ€"Organic Framework Based Precatalysts. Angewandte Chemie - International Edition, 2022, 61, .	7.2	81
29	Engineered Hematite Mesoporous Single Crystals Drive Drastic Enhancement in Solar Water Splitting. Nano Letters, 2016, 16, 427-433.	4.5	80
30	Size-controlled synthesis, magnetic property, and photocatalytic property of uniform Î±-Fe2O3 nanoparticles via a facile additive-free hydrothermal route. CrystEngComm, 2012, 14, 7915.	1.3	70
31	Highly Electrocatalytic Activity of RuO₂ Nanocrystals for Triiodide Reduction in Dyeâ€Sensitized Solar Cells. Small, 2014, 10, 484-492.	5.2	68
32	Stoichiometric Dissolution of Defective CsPbI₂Br Surfaces for Inorganic Solar Cells with 17.5% Efficiency. Advanced Energy Materials, 2022, 12, .	10.2	66
33	Selfâ€Powered FA_{0.55}MA_{0.45}PbI₃ Singleâ€Crystal Perovskite Xâ€Ray Detectors with High Sensitivity. Advanced Functional Materials, 2022, 32, 2109149.	7.8	62
34	Surface-functionalized perovskite films for stable photoelectrochemical water splitting. Journal of Materials Chemistry A, 2017, 5, 910-913.	5.2	60
35	Critical roles of co-catalysts for molecular hydrogen formation in photocatalysis. Journal of Catalysis, 2015, 330, 120-128.	3.1	59
36	Multifunctional Inverse Opalâ€Like TiO₂ Electron Transport Layer for Efficient Hybrid Perovskite Solar Cells. Advanced Science, 2015, 2, 1500105.	5.6	58

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37	Revealing defective nanostructured surfaces and their impact on the intrinsic stability of hybrid perovskites. Energy and Environmental Science, 2021, 14, 1563-1572.	15.6	55
38	A Solutionâ€Processed Transparent NiO Holeâ€Extraction Layer for Highâ€Performance Inverted Perovskite Solar Cells. Chemistry - A European Journal, 2018, 24, 2845-2849.	1.7	54
39	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.	1.2	51
40	Benign ferroelastic twin boundaries in halide perovskites for charge carrier transport and recombination. Nature Communications, 2020, 11, 2215.	5.8	47
41	Transient Energy Reservoir in 2D Perovskites. Advanced Optical Materials, 2019, 7, 1900971.	3.6	46
42	Designing Large-Area Single-Crystal Perovskite Solar Cells. ACS Energy Letters, 2020, 5, 1797-1803.	8.8	46
43	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.	5.2	42
44	LncRNA PCFL promotes cardiac fibrosis via miR-378/GRB2 pathway following myocardial infarction. Journal of Molecular and Cellular Cardiology, 2019, 133, 188-198.	0.9	40
45	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.	5.2	40
46	Antiswelling and Durable Adhesion Biodegradable Hydrogels for Tissue Repairs and Strain Sensors. Langmuir, 2020, 36, 10448-10459.	1.6	37
47	Epitaxial halide perovskite-based materials for photoelectric energy conversion. Energy and Environmental Science, 2021, 14, 127-157.	15.6	37
48	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.	5.2	36
49	Irgm1 promotes M1 but not M2 macrophage polarization in atherosclerosis pathogenesis and development. Atherosclerosis, 2016, 251, 282-290.	0.4	34
50	Ultrathin SnO₂ Scaffolds for TiO₂â€Based Heterojunction Photoanodes in Dyeâ€Sensitized Solar Cells: Oriented Charge Transport and Improved Light Scattering. Chemistry - A European Journal, 2013, 19, 9366-9370.	1.7	31
51	Chemical constituents of Lobelia chinensis. FÃ¬toterapÃ¬Ã¢, 2014, 93, 168-174.	1.1	31
52	Modulating MAPbI3 perovskite solar cells by amide molecules: Crystallographic regulation and surface passivation. Journal of Energy Chemistry, 2021, 56, 179-185.	7.1	31
53	A novel strategy to prepare a Ptâ€"SnO₂ nanocomposite as a highly efficient counter electrode for dye-sensitized solar cells. Journal of Materials Chemistry A, 2014, 2, 17253-17257.	5.2	30
54	Deepening the Valance Band Edges of NiO_{<i>x</i>} Contacts by Alkaline Earth Metal Doping for Efficient Perovskite Photovoltaics with High Openâ€Circuit Voltage. Solar Rrl, 2019, 3, 1900192.	3.1	30

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55	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.	5.2	29
56	Turning Indium Oxide into a Superior Electrocatalyst: Deterministic Heteroatoms. Scientific Reports, 2013, 3, 3109.	1.6	28
57	Structure disorder of graphitic carbon nitride induced by liquid-assisted grinding for enhanced photocatalytic conversion. RSC Advances, 2014, 4, 10676-10679.	1.7	28
58	MgOâ€“Li 2 O catalysts templated by a PDMSâ€“PEO comb-like copolymer for transesterification of vegetable oil to biodiesel. Fuel, 2016, 165, 215-223.	3.4	24
59	Mediating the Local Oxygen-Bridge Interactions of Oxysalt/Perovskite Interface for Defect Passivation of Perovskite Photovoltaics. Nano-Micro Letters, 2021, 13, 177.	14.4	24
60	Crystal shape engineering of anatase TiO₂and its biomedical applications. CrystEngComm, 2015, 17, 6617-6631.	1.3	23
61	Direct insight into crystallization and stability of hybrid perovskite CH3NH3PbI3via solvothermal synthesis. Journal of Materials Chemistry A, 2015, 3, 15854-15857.	5.2	23
62	Niâ€“Coâ€“O hole transport materials: gap state assisted hole extraction with superior electrical conductivity. Journal of Materials Chemistry A, 2019, 7, 20905-20910.	5.2	23
63	Activation of microbubbles by low-level therapeutic ultrasound enhances the antitumor effects of doxorubicin. European Radiology, 2014, 24, 2739-2753.	2.3	22
64	Ultrathin Twoâ€Dimensional Organicâ€“Inorganic Hybrid Perovskite Nanosheets with Bright, Tunable Photoluminescence and High Stability. Angewandte Chemie, 2017, 129, 4316-4319.	1.6	21
65	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.	1.8	20
66	Diammonium-Cesium Lead Halide Perovskite with Phase-Segregated Interpenetrating Morphology for Photovoltaics. Journal of Physical Chemistry Letters, 2020, 11, 747-754.	2.1	20
67	Determining In-Plane Carrier Diffusion in Two-Dimensional Perovskite Using Local Time-Resolved Photoluminescence. ACS Applied Materials & Interfaces, 2020, 12, 26384-26390.	4.0	20
68	Highly efficient overlayer derived from peroxotitanium for dye-sensitized solar cells. Journal of Materials Chemistry A, 2013, 1, 1374-1379.	5.2	18
69	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.	5.2	18
70	Antifouling and pH-Responsive Poly(Carboxybetaine)-Based Nanoparticles for Tumor Cell Targeting. Frontiers in Chemistry, 2019, 7, 770.	1.8	18
71	Layer number dependent exciton dissociation and carrier recombination in 2D Ruddlesdenâ€“Popper halide perovskites. Journal of Materials Chemistry C, 2021, 9, 8966-8974.	2.7	18
72	Selfâ€Organized Co₃O₄â€SrCO₃ Percolative Composites Enabling Nanosized Hole Transport Pathways for Perovskite Solar Cells. Advanced Functional Materials, 2021, 31, 2106121.	7.8	18

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73	Chemical Vapor Deposition of FeOCl Nanosheet Arrays and Their Conversion to Porous Î±â€Fe₂O₃ Photoanodes for Photoelectrochemical Water Splitting. Chemistry - A European Journal, 2015, 21, 18024-18028.	1.7	17
74	Synthesis and bioevaluation of diarylpyrazoles as antiproliferative agents. European Journal of Medicinal Chemistry, 2019, 171, 1-10.	2.6	17
75	Kanglexin accelerates diabetic wound healing by promoting angiogenesis via FGFR1/ERK signaling. Biomedicine and Pharmacotherapy, 2020, 132, 110933.	2.5	17
76	Hierarchical structure engineering of brookite TiO2 crystals for enhanced photocatalytic and external antitumor property. Science Bulletin, 2016, 61, 1818-1825.	4.3	16
77	Zn(ii)-doped Î³-Fe2O3 single-crystalline nanoplates with high phase-transition temperature, superparamagnetic property and good photocatalytic property. RSC Advances, 2013, 3, 21994.	1.7	15
78	Formation of high-quality perovskite thin film for planar heterojunction solar cells. RSC Advances, 2015, 5, 69502-69508.	1.7	15
79	Key role of collagen fibers orientation in casing-meat adhesion. Food Research International, 2016, 89, 439-447.	2.9	15
80	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, 134-139.	1.8	12
81	cRGD peptide-conjugated polyethylenimine-based lipid nanoparticle for intracellular delivery of siRNA in hepatocarcinoma therapy. Drug Delivery, 2021, 28, 995-1006.	2.5	12
82	Boric Acid Mediated Formation and Doping of NiO_{<i>x</i>} Layers for Perovskite Solar Cells with Efficiency over 21%. Solar Rrl, 2021, 5, 2000810.	3.1	12
83	Strain-free hybrid perovskite films based on a molecular buffer interface for efficient solar cells. Journal of Materials Chemistry A, 2022, 10, 10865-10871.	5.2	12
84	Precisely controlled heterogeneous nucleation sites for TiO₂crystal growth. CrystEngComm, 2014, 16, 7502.	1.3	11
85	Kang Le Xin Reduces Blood Pressure Through Inducing Endothelial-Dependent Vasodilation by Activating the AMPK-eNOS Pathway. Frontiers in Pharmacology, 2019, 10, 1548.	1.6	11
86	Efficacy of combined therapy with paclitaxel and low-level ultrasound in human chronic myelogenous leukemia cell line K562. Journal of Drug Targeting, 2013, 21, 874-884.	2.1	10
87	Anatase TiO₂ with nanopores for dye-sensitized solar cells. Physical Chemistry Chemical Physics, 2014, 16, 23038-23043.	1.3	9
88	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.	2.6	9
89	Solution-processable nickelâ€“chromium ternary oxide as an efficient hole transport layer for inverted planar perovskite solar cells. Journal of Materials Chemistry A, 2021, 9, 21792-21798.	5.2	8
90	Homogeneous doping of entire perovskite solar cells <i>via</i> alkali cation diffusion from the hole transport layer. Journal of Materials Chemistry A, 2021, 9, 9266-9271.	5.2	8

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91	Inverted perovskite solar cells based on potassium salt-modified NiO_X hole transport layers. Materials Chemistry Frontiers, 2021, 5, 3614-3620.	3.2	8
92	Stabilization Techniques of Lead Halide Perovskite for Photovoltaic Applications. Solar Rrl, 2022, 6, .	3.1	8
93	Controlled Oriented Attachment of Bipyramidalâ€Shaped Anatase TiO₂ and Their Enhanced Performance in Dyeâ€Sensitized Solar Cells. ChemPlusChem, 2015, 80, 805-809.	1.3	7
94	Oriented inorganic perovskite absorbers processed by colloidal-phase fumigation. Science China Materials, 2021, 64, 2421-2429.	3.5	7
95	Thermally Induced Crystallization of High Quality CH₃NH₃PbI₃ Film with Large Grains for Highly Efficient Perovskite Solar Cells. Chemistry - A European Journal, 2017, 23, 5658-5662.	1.7	6
96	Novel PtO decorated MWCNTs as a highly efficient counter electrode for dye-sensitized solar cells. RSC Advances, 2015, 5, 8307-8310.	1.7	5
97	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.	6.9	5
98	Fabrication of Poly(ethylene glycol) Capsules via Emulsion Templating Method for Targeted Drug Delivery. Polymers, 2020, 12, 1124.	2.0	5
99	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.	1.1	5
100	Highly Ethyleneâ€Selective Electrocatalytic CO₂ Reduction Enabled by Isolated Cuâˆ'S Motifs in Metalâ€"Organic Framework Based Precatalysts. Angewandte Chemie, 2022, 134, .	1.6	5
101	A Dendriteâ€Structured RbX (X=Br, I) Interlayer for CsPbI₂Br Perovskite Solar Cells with Over 15â€‰% Stabilized Efficiency. ChemSusChem, 2020, 13, 5443-5448.	3.6	4
102	Spontaneous Passivation of Perovskite Solar Cells by Titanium Tetrafluoride. ACS Applied Energy Materials, 2020, 3, 4121-4126.	2.5	4
103	Thin MAPb0.5Sn0.5I3 Perovskite Single Crystals for Sensitive Infrared Light Detection. Frontiers in Chemistry, 2021, 9, 821699.	1.8	4
104	Non-selective adsorption of organic cations enables conformal surface capping of perovskite grains for stabilized photovoltaic operation. Cell Reports Physical Science, 2022, 3, 100760.	2.8	4
105	A Selfâ€Formed Stable PbI₂/NiO_x Interface with Increased Ni³⁺ Centers for Perovskite Photovoltaics. Chemistry - A European Journal, 2022, 28, e202200202.	1.7	4
106	Synthesis and characterization of heterometallic complexes as nanofibers by a solvothermal route. RSC Advances, 2013, 3, 11640.	1.7	3
107	Solar Cells: Highly Electrocatalytic Activity of RuO2Nanocrystals for Triiodide Reduction in Dye-Sensitized Solar Cells (Small 3/2014). Small, 2014, 10, 483-483.	5.2	3
108	TiO₂ cement for high-performance dye-sensitized solar cells. RSC Advances, 2016, 6, 83802-83807.	1.7	3

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109	Molten Salt-Assisted Growth of Perovskite Films with Submillimeter-Sized Grains. Industrial & Engineering Chemistry Research, 2017, 56, 524-529.	1.8	3
110	Inducing Intermediates in Biotransformation of Natural Polyacetylene and A Novel Spiro-Î³-Lactone from Red Ginseng by Solid Co-Culture of Two Gut Chaetomium globosum and The Potential Bioactivity Modification by Oxidative Metabolism. Molecules, 2020, 25, 1216.	1.7	2
111	Kanglexin protects against cardiac fibrosis and dysfunction in mice by TGF-Î²1/ERK1/2 noncanonical pathway. Frontiers in Pharmacology, 2020, 11, 572637.	1.6	2
112	Dynamic Output Feedback MPC for Interval Type-2 T-S Fuzzy Networked Control Systems with Packet Loss. , 2018, , .		2
113	A Dendriteâ€Structured RbX (X=Br, I) Interlayer for CsPbI 2 Br Perovskite Solar Cells with Over 15â€‰% Stabilized Efficiency. ChemSusChem, 2020, 13, 5342-5342.	3.6	1
114	Frontispiece: Chemical Vapor Deposition of FeOCl Nanosheet Arrays and Their Conversion to Porous Î±â€Fe₂O₃ Photoanodes for Photoelectrochemical Water Splitting. Chemistry - A European Journal, 2015, 21, .	1.7	0