

X-L Zhang

List of Publications by Year in descending order

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181
papers

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times ranked

14986
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#	ARTICLE	IF	CITATIONS
1	Low trap-state density and long carrier diffusion in organolead trihalide perovskite single crystals. <i>Science</i> , 2015, 347, 519-522.	6.0	4,156
2	Oxygen Vacancy Abundant Ultrafine Co ₃ O ₄ /Graphene Composites for High-Rate Supercapacitor Electrodes. <i>Advanced Science</i> , 2018, 5, 1700659.	5.6	392
3	Dual-Function Scattering Layer of Submicrometer-Sized Mesoporous TiO ₂ Beads for High-Efficiency Dye-Sensitized Solar Cells. <i>Advanced Functional Materials</i> , 2010, 20, 1301-1305.	7.8	385
4	Lead halide-templated crystallization of methylamine-free perovskite for efficient photovoltaic modules. <i>Science</i> , 2021, 372, 1327-1332.	6.0	351
5	Alloy-like ternary polymer solar cells with over 17.2% efficiency. <i>Science Bulletin</i> , 2020, 65, 538-545.	4.3	252
6	Over 14.5% efficiency and 71.6% fill factor of ternary organic solar cells with 300 nm thick active layers. <i>Energy and Environmental Science</i> , 2020, 13, 958-967.	15.6	198
7	Two compatible polymer donors contribute synergistically for ternary organic solar cells with 17.53% efficiency. <i>Energy and Environmental Science</i> , 2020, 13, 5039-5047.	15.6	189
8	CuNi Dendritic Material: Synthesis, Mechanism Discussion, and Application as Glucose Sensor. <i>Chemistry of Materials</i> , 2007, 19, 4174-4180.	3.2	187
9	The fabrication of 1D/2D CdS nanorod@Ti ₃ C ₂ MXene composites for good photocatalytic activity of hydrogen generation and ammonia synthesis. <i>Chemical Engineering Journal</i> , 2021, 406, 127177.	6.6	187
10	Signature of Intrinsic High-Temperature Ferromagnetism in Cobalt-Doped Zinc Oxide Nanocrystals. <i>Advanced Materials</i> , 2006, 18, 2476-2480.	11.1	178
11	Recent Progress on Broadband Organic Photodetectors and their Applications. <i>Laser and Photonics Reviews</i> , 2020, 14, 2000262.	4.4	178
12	Achieving 17.4% Efficiency of Ternary Organic Photovoltaics with Two Well-Compatible Nonfullerene Acceptors for Minimizing Energy Loss. <i>Advanced Energy Materials</i> , 2020, 10, 2001404.	10.2	164
13	Over 16.7% efficiency of ternary organic photovoltaics by employing extra PC71BM as morphology regulator. <i>Science China Chemistry</i> , 2020, 63, 83-91.	4.2	160
14	Empowering hydrogen storage performance of MgH ₂ by nanoengineering and nanocatalysis. <i>Materials Today Nano</i> , 2020, 9, 100064.	2.3	153
15	Recent progress of organic photovoltaics for indoor energy harvesting. <i>Nano Energy</i> , 2021, 82, 105770.	8.2	128
16	Co doped MoS ₂ as cocatalyst considerably improved photocatalytic hydrogen evolution of g-C ₃ N ₄ in an alkaline environment. <i>Chemical Engineering Journal</i> , 2021, 421, 130016.	6.6	127
17	Photomultiplication Type Broad Response Organic Photodetectors with One Absorber Layer and One Multiplication Layer. <i>Journal of Physical Chemistry Letters</i> , 2020, 11, 366-373.	2.1	121
18	Pinecone biomass-derived hard carbon anodes for high-performance sodium-ion batteries. <i>RSC Advances</i> , 2017, 7, 41504-41511.	1.7	117

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19	Conductive CuCo-Based Bimetal Organic Framework for Efficient Hydrogen Evolution. <i>Advanced Materials</i> , 2021, 33, e2106781.	11.1	116
20	Preparation of Dendritic Copper Nanostructures and Their Characterization for Electroreduction. <i>Journal of Physical Chemistry C</i> , 2009, 113, 15891-15896.	1.5	106
21	Semitransparent organic solar cells exhibiting 13.02% efficiency and 20.2% average visible transmittance. <i>Journal of Materials Chemistry A</i> , 2021, 9, 6797-6804.	5.2	106
22	Enhanced open-circuit voltage of p-type DSC with highly crystalline NiO nanoparticles. <i>Chemical Communications</i> , 2011, 47, 4808.	2.2	104
23	Photomultiplication type organic photodetectors based on electron tunneling injection. <i>Nanoscale</i> , 2020, 12, 1091-1099.	2.8	99
24	TiO ₂ -supported copper nanoparticles prepared via ion exchange for photocatalytic hydrogen production. <i>Journal of Materials Chemistry A</i> , 2014, 2, 6432-6438.	5.2	92
25	N-doped carbon nanotube arrays on reduced graphene oxide as multifunctional materials for energy devices and absorption of electromagnetic wave. <i>Carbon</i> , 2021, 177, 216-225.	5.4	88
26	Elemental red phosphorus-based materials for photocatalytic water purification and hydrogen production. <i>Nanoscale</i> , 2020, 12, 13297-13310.	2.8	86
27	Solvent Annealing Enables 15.39% Efficiency All-Small-Molecule Solar Cells through Improved Molecule Interconnection and Reduced Non-Radiative Loss. <i>Advanced Energy Materials</i> , 2021, 11, 2100800.	10.2	86
28	Atomically dispersed cobalt anchored on N-doped graphene aerogels for efficient electromagnetic wave absorption with an ultralow filler ratio. <i>Applied Physics Reviews</i> , 2022, 9, .	5.5	86
29	Enhanced performances of dye-sensitized solar cells based on Au-TiO ₂ and Ag-TiO ₂ plasmonic hybrid nanocomposites. <i>Applied Surface Science</i> , 2018, 430, 415-423.	3.1	84
30	Efficient ternary organic photovoltaics with two polymer donors by minimizing energy loss. <i>Journal of Materials Chemistry A</i> , 2020, 8, 1265-1272.	5.2	84
31	Highly efficient quaternary organic photovoltaics by optimizing photogenerated exciton distribution and active layer morphology. <i>Nano Energy</i> , 2020, 70, 104496.	8.2	82
32	14.46% Efficiency small molecule organic photovoltaics enabled by the well trade-off between phase separation and photon harvesting. <i>Journal of Energy Chemistry</i> , 2021, 57, 610-617.	7.1	81
33	Phosphorous-doped 1T-MoS ₂ decorated nitrogen-doped g-C ₃ N ₄ nanosheets for enhanced photocatalytic nitrogen fixation. <i>Journal of Colloid and Interface Science</i> , 2022, 605, 320-329.	5.0	81
34	A Critical Review on Efficient Thick-Film Organic Solar Cells. <i>Solar Rrl</i> , 2020, 4, 2000364.	3.1	80
35	Nitrogen and Sulfur Vacancies in Carbon Shell to Tune Charge Distribution of Co ₆ Ni ₃ S ₈ Core and Boost Sodium Storage. <i>Advanced Energy Materials</i> , 2020, 10, 1904147.	10.2	80
36	Hierarchically hollow structured NiCo ₂ S ₄ @NiS for high-performance flexible hybrid supercapacitors. <i>Nanoscale</i> , 2020, 12, 4686-4694.	2.8	80

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37	Theoretical Investigation of Single and Double Transition Metals Anchored on Graphyne Monolayer for Nitrogen Reduction Reaction. <i>Journal of Physical Chemistry C</i> , 2020, 124, 15295-15301.	1.5	79
38	Crumple Durable Ultraflexible Organic Solar Cells with an Excellent Powerâ€perâ€Weight Performance. <i>Advanced Functional Materials</i> , 2021, 31, 2102694.	7.8	78
39	Au nanorods decorated TiO ₂ nanobelts with enhanced full solar spectrum photocatalytic antibacterial activity and the sterilization file cabinet application. <i>Chinese Chemical Letters</i> , 2021, 32, 1523-1526.	4.8	76
40	Fe atoms anchored on defective nitrogen doped hollow carbon spheres as efficient electrocatalysts for oxygen reduction reaction. <i>Nano Research</i> , 2021, 14, 1069-1077.	5.8	71
41	Oxygen vacancies for promoting the electrochemical nitrogen reduction reaction. <i>Journal of Materials Chemistry A</i> , 2021, 9, 6694-6709.	5.2	71
42	Facile preparation of metallic 1T phase molybdenum selenide as cocatalyst coupled with graphitic carbon nitride for enhanced photocatalytic H ₂ production. <i>Journal of Colloid and Interface Science</i> , 2021, 598, 172-180.	5.0	68
43	Research progress of nanocellulose for electrochemical energy storage: A review. <i>Journal of Energy Chemistry</i> , 2020, 51, 342-361.	7.1	67
44	ZIF-67 derived hollow Ni-Co-Se nano-polyhedrons for flexible hybrid supercapacitors with remarkable electrochemical performances. <i>Chinese Chemical Letters</i> , 2020, 31, 2007-2012.	4.8	66
45	Advances in design engineering and merits of electron transporting layers in perovskite solar cells. <i>Materials Horizons</i> , 2020, 7, 2276-2291.	6.4	66
46	Preparation of Magnetic Hybrid Copolymerâ€Cobalt Hierarchical Hollow Spheres by Localized Ostwald Ripening. <i>Chemistry of Materials</i> , 2007, 19, 6485-6491.	3.2	63
47	Double transition metal atoms anchored on Graphdiyne as promising catalyst for electrochemical nitrogen reduction reaction. <i>Journal of Materials Science and Technology</i> , 2021, 77, 244-251.	5.6	63
48	Surface modifications of CdS/CdSe co-sensitized TiO ₂ photoelectrodes for solid-state quantum-dot-sensitized solar cells. <i>Journal of Materials Chemistry</i> , 2011, 21, 17534.	6.7	62
49	Sensitization of nickel oxide: improved carrier lifetime and charge collection by tuning nanoscale crystallinity. <i>Chemical Communications</i> , 2012, 48, 9885.	2.2	60
50	Over 15.7% Efficiency of Ternary Organic Solar Cells by Employing Two Compatible Acceptors with Similar LUMO Levels. <i>Small</i> , 2020, 16, e2000441.	5.2	59
51	Recent progress in all-small-molecule organic photovoltaics. <i>Journal of Materials Chemistry A</i> , 2022, 10, 6291-6329.	5.2	58
52	Two-step sequential blade-coating of high quality perovskite layers for efficient solar cells and modules. <i>Journal of Materials Chemistry A</i> , 2020, 8, 8447-8454.	5.2	57
53	Confined synthesis of 2D ultrathin ZnO/Co ₃ O ₄ nanomeshes heterostructure for superior triethylamine detection at low temperature. <i>Sensors and Actuators B: Chemical</i> , 2021, 346, 130486.	4.0	55
54	Highly sensitive photomultiplication type polymer photodetectors by manipulating interfacial trapped electron density. <i>Chemical Engineering Journal</i> , 2022, 435, 134973.	6.6	55

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55	Fabrication of Hierarchical ZnO Nanostructures via a Surfactant-Directed Process. <i>Crystal Growth and Design</i> , 2009, 9, 2906-2910.	1.4	54
56	Enabling efficient electrocatalytic conversion of N ₂ to NH ₃ by Ti ₃ C ₂ MXene loaded with semi-metallic 1Tâ€²-MoS ₂ nanosheets. <i>Applied Catalysis B: Environmental</i> , 2022, 310, 121277.	10.8	54
57	Titanium carbide MXenes coupled with cadmium sulfide nanosheets as two-dimensional/two-dimensional heterostructures for photocatalytic hydrogen production. <i>Journal of Colloid and Interface Science</i> , 2022, 613, 644-651.	5.0	53
58	Flexible and waterproof nitrogen-doped carbon nanotube arrays on cotton-derived carbon fiber for electromagnetic wave absorption and electric-thermal conversion. <i>Chemical Engineering Journal</i> , 2022, 433, 133794.	6.6	52
59	ZnO@Ti ₃ C ₂ MXene interfacial Schottky junction for boosting spatial charge separation in photocatalytic degradation. <i>Journal of Alloys and Compounds</i> , 2022, 905, 164025.	2.8	51
60	Layered optimization strategy enables over 17.8% efficiency of layer-by-layer organic photovoltaics. <i>Chemical Engineering Journal</i> , 2022, 442, 136368.	6.6	50
61	Partially contacted Ni _x S _y @N, S-codoped carbon yolk-shelled structures for efficient microwave absorption. <i>Carbon</i> , 2021, 182, 276-286.	5.4	47
62	18.4% efficiency achieved by the cathode interface engineering in non-fullerene polymer solar cells. <i>Nano Today</i> , 2021, 41, 101289.	6.2	47
63	Inorganic Cluster Synthesis and Characterization of Transition-Metal-Doped ZnO Hollow Spheres. <i>Crystal Growth and Design</i> , 2008, 8, 2609-2613.	1.4	46
64	Stabilizing lithium metal anode by molecular beam epitaxy grown uniform and ultrathin bismuth film. <i>Nano Energy</i> , 2020, 76, 105068.	8.2	46
65	Ruthenium nanoclusters anchored on cobalt phosphide hollow microspheres by green phosphating process for full water splitting in acidic electrolyte. <i>Chinese Chemical Letters</i> , 2021, 32, 511-515.	4.8	46
66	Tunable electrochemical preparation of cobalt micro/nanostructures and their morphology-dependent wettability property. <i>Electrochimica Acta</i> , 2011, 58, 699-706.	2.6	45
67	NaYF ₄ :Yb,Er,Nd@NaYF ₄ :Nd Upconversion Nanocrystals Capped with Mn:TiO ₂ for 808 nm NIR-Triggered Photocatalytic Applications. <i>Journal of Physical Chemistry C</i> , 2019, 123, 22959-22970.	1.5	45
68	Highly sensitive all-polymer photodetectors with ultraviolet-visible to near-infrared photo-detection and their application as an optical switch. <i>Journal of Materials Chemistry C</i> , 2021, 9, 5349-5355.	2.7	45
69	Morphological Transformation of Co(OH) ₂ Microspheres from Solid to Flowerlike Hollow Core-Shell Structures. <i>Chemistry - A European Journal</i> , 2009, 15, 1886-1892.	1.7	44
70	Hierarchical nanostructures of nickel-doped zinc oxide: Morphology controlled synthesis and enhanced visible-light photocatalytic activity. <i>Journal of Alloys and Compounds</i> , 2015, 618, 318-325.	2.8	44
71	High-Efficiency Thermal-Annealing-Free Organic Solar Cells Based on an Asymmetric Acceptor with Improved Thermal and Air Stability. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 57271-57280.	4.0	44
72	Structure engineering of hierarchical layered perovskite interface for efficient and stable wide bandgap photovoltaics. <i>Nano Energy</i> , 2020, 75, 104917.	8.2	44

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73	Chemical Synthesis and Silica Encapsulation of NiPt Nanoparticles. <i>Journal of Physical Chemistry C</i> , 2007, 111, 10747-10750.	1.5	43
74	Underfocus Laser Induced Ni Nanoparticles Embedded Metallic MoN Microrods as Patterned Electrode for Efficient Overall Water Splitting. <i>Advanced Science</i> , 2022, 9, e2105869.	5.6	43
75	Large-Scale Synthesis of Perpendicular Side-Faceted One-Dimensional ZnO Nanocrystals. <i>Inorganic Chemistry</i> , 2006, 45, 4186-4190.	1.9	42
76	Preparation and Reversible Phase Transfer of CoFe ₂ O ₄ Nanoparticles. <i>Journal of Physical Chemistry C</i> , 2007, 111, 7875-7878.	1.5	42
77	Charge transport in photocathodes based on the sensitization of NiO nanorods. <i>Journal of Materials Chemistry</i> , 2012, 22, 7005.	6.7	42
78	Boosted Efficiency Over 18.1% of Polymer Solar Cells by Employing Large Extinction Coefficients Material as the Third Component. <i>Macromolecular Rapid Communications</i> , 2022, 43, e2200345.	2.0	42
79	Fabrication of Superparamagnetic Cobalt Nanoparticles-Embedded Block Copolymer Microcapsules. <i>Journal of Physical Chemistry C</i> , 2007, 111, 2426-2429.	1.5	41
80	Active facet regulation of highly aligned molybdenum carbide porous octahedrons via crystal engineering for hydrogen evolution reaction. <i>Nano Energy</i> , 2020, 77, 105056.	8.2	41
81	Effect of Mesoporous TiO ₂ Bead Diameter in Working Electrodes on the Efficiency of Dye-Sensitized Solar Cells. <i>ChemSusChem</i> , 2011, 4, 1498-1503.	3.6	40
82	Fabrication and photovoltaic performance of niobium doped TiO ₂ hierarchical microspheres with exposed {001} facets and high specific surface area. <i>Applied Surface Science</i> , 2017, 410, 241-248.	3.1	39
83	Laser patterned and bifunctional Ni@N-doped carbon nanotubes as electrocatalyst and photothermal conversion layer for water splitting driven by thermoelectric device. <i>Applied Catalysis B: Environmental</i> , 2021, 283, 119647.	10.8	39
84	Interface engineering for high-efficiency perovskite solar cells. <i>Journal of Applied Physics</i> , 2021, 129, .	1.1	38
85	A cation exchange strategy to construct Rod-shell CdS/Cu ₂ S nanostructures for broad spectrum photocatalytic hydrogen production. <i>Journal of Colloid and Interface Science</i> , 2022, 608, 158-163.	5.0	37
86	Ti ₃ C ₂ MXene coupled with CdS nanoflowers as 2D/3D heterostructures for enhanced photocatalytic hydrogen production activity. <i>International Journal of Hydrogen Energy</i> , 2022, 47, 22045-22053.	3.8	37
87	Over 8% efficient CsSnI ₃ -based mesoporous perovskite solar cells enabled by two-step thermal annealing and surface cationic coordination dual treatment. <i>Journal of Materials Chemistry A</i> , 2022, 10, 3642-3649.	5.2	35
88	Dye-Sensitized Back-Contact Solar Cells. <i>Advanced Materials</i> , 2010, 22, 4270-4274.	11.1	34
89	Phosphorus-Doped Iron Nitride Nanoparticles Encapsulated by Nitrogen-Doped Carbon Nanosheets on Iron Foam In Situ Derived from <i>Saccharomyces Cerevisiae</i> for Electrocatalytic Overall Water Splitting. <i>Small</i> , 2020, 16, e2001980.	5.2	34
90	Synergistic Enhancement of Electrocatalytic Nitrogen Reduction over Few-Layer MoSe ₂ -Decorated Ti ₃ C ₂ MXene. <i>ACS Catalysis</i> , 2022, 12, 6385-6393.	5.5	33

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91	The metallic 1T-WS ₂ as cocatalysts for promoting photocatalytic N ₂ fixation performance of Bi ₅ O ₇ Br nanosheets. Chinese Chemical Letters, 2021, 32, 3501-3504.	4.8	32
92	One-dimensional screw-like MoS ₂ with oxygen partially replacing sulfur as an electrocatalyst for the N ₂ reduction reaction. Chemical Engineering Journal, 2022, 433, 134504.	6.6	32
93	Nickel-cobalt double oxides with rich oxygen vacancies by B-doping for asymmetric supercapacitors with high energy densities. Applied Surface Science, 2020, 512, 145621.	3.1	31
94	Hierarchically three-dimensional structure assembled with yolk-shelled spheres-supported nitrogen-doped carbon nanotubes for electromagnetic wave absorption. Carbon, 2021, 185, 177-185.	5.4	31
95	In-situ growth of graphene on carbon nanofiber from lignin. Carbon, 2020, 169, 446-454.	5.4	30
96	Ultraviolet to near-infrared broadband organic photodetectors with photomultiplication. Organic Electronics, 2020, 83, 105739.	1.4	29
97	Non-thermal radiation heating synthesis of nanomaterials. Science Bulletin, 2021, 66, 386-406.	4.3	29
98	Fully Inorganic CsSnI ₃ Mesoporous Perovskite Solar Cells with High Efficiency and Stability via Coadditive Engineering. Solar Rrl, 2021, 5, 2100069.	3.1	29
99	Tailoring the conduction band of titanium oxide by doping tungsten for efficient electron injection in a sensitized photoanode. Nanoscale, 2014, 6, 3875-3880.	2.8	28
100	Single-Iron Supported on Defective Graphene as Efficient Catalysts for Oxygen Reduction Reaction. Journal of Physical Chemistry C, 2020, 124, 13283-13290.	1.5	28
101	Simple-Structured Blue Thermally Activated Delayed Fluorescence Emitter for Solution-Processed Organic Light-Emitting Diodes with External Quantum Efficiency of over 20%. ACS Applied Materials & Interfaces, 2021, 13, 12305-12312.	4.0	27
102	Open porous BiVO ₄ nanomaterials: Electrospinning fabrication and enhanced visible light photocatalytic activity. Materials Research Bulletin, 2016, 74, 258-264.	2.7	26
103	Benzotriazole-Based p-Type Polymers with Thieno[3,2- <i>b</i>]thiophene ĩ-Bridges and Fluorine Substituents To Realize High V_{OC}. ACS Applied Polymer Materials, 2019, 1, 906-913.	2.0	26
104	The fabrication of graphitic carbon nitride hollow nanocages with semi-metal 1T' phase molybdenum disulfide as co-catalysts for excellent photocatalytic nitrogen fixation. Journal of Colloid and Interface Science, 2022, 608, 1229-1237.	5.0	26
105	Multifunctional electrocatalyst of NiCo-NiCoP nanoparticles embedded into P-doped carbon nanotubes for Energy-Saving hydrogen production and upgraded conversion of formaldehyde. Chemical Engineering Journal, 2021, 426, 129214.	6.6	25
106	Heterostructuring 2D TiO ₂ nanosheets in situ grown on Ti ₃ C ₂ T MXene to improve the electrocatalytic nitrogen reduction. Chinese Journal of Catalysis, 2022, 43, 1937-1944.	6.9	25
107	Preparation of monodisperse Co and Fe nanoparticle using precursor of M ²⁺ -oleate ₂ (M=Co, Fe). Current Applied Physics, 2006, 6, 786-790.	1.1	24
108	Rational Design of Graphene-Supported Single-Atom Catalysts for Electroreduction of Nitrogen. Inorganic Chemistry, 2021, 60, 18314-18324.	1.9	24

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109	A Universal Process: Self-Templated and Orientated Fabrication of XMoO_4 (X: Ni, Co, or Fe) Nanosheets on MoO_2 Nanoplates as Electrocatalysts for Efficient Water Splitting. ACS Applied Materials & Interfaces, 2020, 12, 33785-33794.	4.0	23
110	Synthesis of functional microcapsules by in situ polymerization for electrophoretic image display elements. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2008, 313-314, 347-350.	2.3	22
111	Waste yeast biomass as nitrogen/phosphorus sources and carbon template: Environmentally friendly synthesis of $\text{N}_2\text{P}_2\text{Mo}_2\text{C}$ nanoparticles on porous carbon matrix for efficient hydrogen evolution. Chinese Chemical Letters, 2022, 33, 3231-3235.	4.8	22
112	Heterostructuring noble-metal-free 1T' phase MoS_2 with g- C_3N_4 hollow nanocages to improve the photocatalytic H_2 evolution activity. Green Energy and Environment, 2023, 8, 864-873.	4.7	22
113	Synthesis and investigation of SmCo_5 magnetic nanoparticles. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2008, 313-314, 621-624.	2.3	21
114	$\text{AgBi}_3\text{I}_{10}$ ruddorffite for photovoltaic application. Solar Energy, 2020, 206, 436-442.	2.9	21
115	Laser-assisted synthesis of cobalt@N-doped carbon nanotubes decorated channels and pillars of wafer-sized silicon as highly efficient three-dimensional solar evaporator. Chinese Chemical Letters, 2021, 32, 3090-3094.	4.8	21
116	How to fabricate efficient perovskite solar mini-modules in lab. Journal of Power Sources, 2020, 466, 228321.	4.0	21
117	Ink Engineering for Blade Coating FA-Dominated Perovskites in Ambient Air for Efficient Solar Cells and Modules. ACS Applied Materials & Interfaces, 2021, 13, 18724-18732.	4.0	20
118	Organic solar cells based on small molecule donor and polymer acceptor. Chinese Chemical Letters, 2022, 33, 123-132.	4.8	20
119	Understanding the Effect of Sequential Deposition Processing for High-Efficient Organic Photovoltaics to Harvest Sunlight and Artificial Light. ACS Applied Materials & Interfaces, 2021, 13, 20405-20416.	4.0	19
120	$\text{Ti}_3\text{C}_2\text{T}_x$ /PEDOT:PSS Composite Interface Enables over 17% Efficiency Non-fullerene Organic Solar Cells. ACS Applied Materials & Interfaces, 2021, 13, 45789-45797.	4.0	19
121	Structure engineering of 1T/2H multiphase MoS_2 via oxygen incorporation over 2D layered porous g- C_3N_4 for remarkably enhanced photocatalytic hydrogen evolution. Materials Today Nano, 2022, 18, 100204.	2.3	19
122	Synthesis and Magnetic Properties of One-Dimensional Zinc Nickel Oxide Solid Solution. Journal of Physical Chemistry A, 2007, 111, 4195-4198.	1.1	17
123	Controlled growth and ion intercalation mechanism of monocrystalline niobium pentoxide nanotubes for advanced rechargeable aluminum-ion batteries. Nanoscale, 2020, 12, 12531-12540.	2.8	17
124	Is the strain responsible to instability of inorganic perovskites and their photovoltaic devices?. Materials Today Energy, 2021, 19, 100601.	2.5	17
125	The effect of defects in tin-based perovskites and their photovoltaic devices. Materials Today Physics, 2021, 21, 100513.	2.9	17
126	Mechanistic Insights into Direct Methane Oxidation to Methanol on Single-Atom Transition-Metal-Modified Graphyne. ACS Applied Nano Materials, 2021, 4, 12006-12016.	2.4	17

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127	S-scheme heterostructure based on ultrathin 2D CdS coated W18O49 nanosheets-assembled network for highly-efficient photocatalytic H ₂ evolution. <i>Journal of Alloys and Compounds</i> , 2022, 918, 165652.	2.8	17
128	Controllable growth and flexible optoelectronic devices of regularly-assembled Bi ₂ S ₃ semiconductor nanowire bifurcated junctions and crosslinked networks. <i>Nano Research</i> , 2020, 13, 2226-2232.	5.8	16
129	A novel semi-metallic 1Tâ€²-MoReS ₃ co-catalyst. <i>Chemical Engineering Journal</i> , 2021, 425, 130525.	6.6	16
130	Recent progress in inorganic tin perovskite solar cells. <i>Materials Today Energy</i> , 2022, 23, 100891.	2.5	16
131	Metal-organic framework interface engineering for highly efficient oxygen evolution reaction. <i>Journal of Colloid and Interface Science</i> , 2022, 619, 148-157.	5.0	16
132	Oxygen-induced defect-healing and photo-brightening of halide perovskite semiconductors: science and application. <i>Journal of Materials Chemistry A</i> , 2021, 9, 4379-4414.	5.2	15
133	High-efficiency separation and transfer of photo-induced charge carrier in graphene/TiO ₂ via heterostructure in magnetic field. <i>Journal of Alloys and Compounds</i> , 2021, 862, 158283.	2.8	15
134	Nitrogen-functionalized carbon nanotube-supported bimetallic PtNi nanoparticles for hydrogen generation from hydrous hydrazine. <i>Chemical Communications</i> , 2021, 57, 8324-8327.	2.2	15
135	Low-temperature synthesis and shape control of ZnO nanorods. <i>Current Applied Physics</i> , 2006, 6, 796-800.	1.1	14
136	High efficiency solid-state dye-sensitized solar cells using a cobalt(<i>ii</i>) redox mediator. <i>Journal of Materials Chemistry C</i> , 2017, 5, 4875-4883.	2.7	14
137	A novel carbonâ€“PEDOT composite counter electrode for monolithic dye-sensitized solar cells. <i>Journal Physics D: Applied Physics</i> , 2013, 46, 024007.	1.3	13
138	Minimizing energy loss in two-dimensional tin halide perovskite solar cellsâ€“A perspective. <i>APL Materials</i> , 2021, 9, .	2.2	13
139	Over 16% Efficiency of Thickâ€“Film Organic Photovoltaics with Symmetric and Asymmetric Nonâ€“Fullerene Materials as Alloyed Acceptor. <i>Solar Rrl</i> , 2021, 5, 2100365.	3.1	13
140	Controlling Quantum-Well Width Distribution and Crystal Orientation in Two-Dimensional Tin Halide Perovskites via a Strong Interlayer Electrostatic Interaction. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 49907-49915.	4.0	13
141	Investigation of Co nanoparticle assemblies induced by magnetic field. <i>Journal of Industrial and Engineering Chemistry</i> , 2008, 14, 22-27.	2.9	12
142	2D Materials as Electron Transport Layer for Lowâ€“Temperature Solutionâ€“Processed Perovskite Solar Cells. <i>Solar Rrl</i> , 2021, 5, 2000566.	3.1	12
143	p-Block element-doped silicon nanowires for nitrogen reduction reaction: a DFT study. <i>Nanoscale</i> , 2021, 13, 14935-14944.	2.8	12
144	Modulation of the Fluorination Site on Side-Chain Thiophene Improved Efficiency in All-Small-Molecule Organic Solar Cells. <i>ACS Applied Materials & Interfaces</i> , 2022, 14, 33234-33241.	4.0	12

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