Yaoming Xiao

List of Publications by Year
in descending order

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117 papers	4,441 citations	101543 36 h-index	118850 62 g-index
117 all docs	117 docs citations	117 times ranked	5302 citing authors

#	Article	IF	Citations
1	Facile preparation of polypyrrole/graphene oxide nanocomposites with large areal capacitance using electrochemical codeposition forAsupercapacitors. Journal of Power Sources, 2014, 263, 259-267.	7.8	235
2	Pulse electropolymerization of high performance PEDOT/MWCNT counter electrodes for Pt-free dye-sensitized solar cells. Journal of Materials Chemistry, 2012, 22, 19919.	6.7	189
3	High performance platinum-free counter electrode of molybdenum sulfideâ€“carbon used in dye-sensitized solar cells. Journal of Materials Chemistry A, 2013, 1, 1495-1501.	10.3	185
4	A catalytic composite film of MoS2/graphene flake as a counter electrode for Pt-free dye-sensitized solar cells. Electrochimica Acta, 2012, 85, 162-168.	5.2	152
5	A Largeâ€Area Lightâ€Weight Dyeâ€Sensitized Solar Cell based on All Titanium Substrates with an Efficiency of 6.69% Outdoors. Advanced Materials, 2012, 24, 1884-1888.	21.0	146
6	The Applications of Polymers in Solar Cells: A Review. Polymers, 2019, 11, 143.	4.5	146
7	An all-solid-state perovskite-sensitized solar cell based on the dual function polyaniline as the sensitizer and p-type hole-transporting material. Journal of Power Sources, 2014, 267, 1-8.	7.8	130
8	Mesoporous carbon nanofibers with large cage-like pores activated by tin dioxide and their use in supercapacitor and catalyst support. Carbon, 2014, 70, 295-307.	10.3	111
9	Application of Poly(3,4-ethylenedioxythiophene):Polystyrenesulfonate/Polypyrrole Counter Electrode for Dye-Sensitized Solar Cells. Journal of Physical Chemistry C, 2012, 116, 18057-18063.	3.1	108
10	Pulse electrodeposition of CoS on MWCNT/Ti as a high performance counter electrode for a Pt-free dye-sensitized solar cell. Journal of Materials Chemistry A, 2013, 1, 1289-1295.	10.3	95
11	Glucose Aided Preparation of Tungsten Sulfide/Multi-Wall Carbon Nanotube Hybrid and Use as Counter Electrode in Dye-Sensitized Solar Cells. ACS Applied Materials & Interfaces, 2012, 4, 6530-6536.	8.0	94
12	A high performance Pt-free counter electrode of nickel sulfide/multi-wall carbon nanotube/titanium used in dye-sensitized solar cells. Journal of Materials Chemistry A, 2013, 1, 13885.	10.3	89
13	An Interconnected Ternary MIn₂S₄ (M=Fe, Co, Ni) Thiospinel Nanosheet Array: A Type of Efficient Platinumâ€Free Counter Electrode for Dyeâ€Sensitized Solar Cells. Angewandte Chemie - International Edition, 2017, 56, 9146-9150.	13.8	88
14	Dye-sensitized solar cells with high-performance polyaniline/multi-wall carbon nanotube counter electrodes electropolymerized by a pulse potentiostatic technique. Journal of Power Sources, 2013, 233, 320-325.	7.8	83
15	Electrospun lead-doped titanium dioxide nanofibers and the in situ preparation of perovskite-sensitized photoanodes for use in high performance perovskite solar cells. Journal of Materials Chemistry A, 2014, 2, 16856-16862.	10.3	81
16	Dual functions of YF3:Eu3+ for improving photovoltaic performance of dye-sensitized solar cells. Scientific Reports, 2013, 3, 2058.	3.3	80
17	High performance of Pt-free dye-sensitized solar cells based on two-step electropolymerized polyaniline counter electrodes. Journal of Materials Chemistry A, 2014, 2, 3452-3460.	10.3	80
18	Investigation of perovskite-sensitized nanoporous titanium dioxide photoanodes with different thicknesses in perovskite solar cells. Journal of Power Sources, 2015, 286, 118-123.	7.8	72

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19	Polypyrrole/graphene oxide deposited on two metalized surfaces of porous polypropylene films as all-in-one flexible supercapacitors. Electrochimica Acta, 2018, 270, 490-500.	5.2	71
20	Low temperature preparation of a high performance Pt/SWCNT counter electrode for flexible dye-sensitized solar cells. Electrochimica Acta, 2011, 56, 8545-8550.	5.2	68
21	Enhanced performance of low-cost dye-sensitized solar cells with pulse-electropolymerized polyaniline counter electrodes. Electrochimica Acta, 2013, 90, 468-474.	5.2	65
22	Application of Y₂O₃:Er³⁺ Nanorods in Dyeâ€Sensitized Solar Cells. ChemSusChem, 2012, 5, 1307-1312.	6.8	64
23	Preparation of high performance perovskite-sensitized nanoporous titanium dioxide photoanodes by in situ method for use in perovskite solar cells. Journal of Materials Chemistry A, 2014, 2, 16531-16537.	10.3	62
24	Highly stable multi-wall carbon nanotubes@poly(3,4-ethylenedioxythiophene)/poly(styrene sulfonate) coreâ€“shell composites with three-dimensional porous nano-network for electrochemical capacitors. Journal of Power Sources, 2015, 274, 229-236.	7.8	61
25	Efficient bifacial perovskite solar cell based on a highly transparent poly(3,4-ethylenedioxythiophene) as the p-type hole-transporting material. Journal of Power Sources, 2016, 306, 171-177.	7.8	61
26	Acetylcholinesterase biosensor based on electrochemically inducing 3D graphene oxide network/multi-walled carbon nanotube composites for detection of pesticides. RSC Advances, 2017, 7, 53570-53577.	3.6	54
27	The preparation of titania nanotubes and its application in flexible dye-sensitized solar cells. Electrochimica Acta, 2010, 55, 4573-4578.	5.2	52
28	An efficient titanium foil based perovskite solar cell: using a titanium dioxide nanowire array anode and transparent poly(3,4-ethylenedioxythiophene) electrode. RSC Advances, 2016, 6, 2778-2784.	3.6	51
29	An Interconnected Ternary MIn₂S₄ (M=Fe, Co, Ni) Thiospinel Nanosheet Array: A Type of Efficient Platinumâ€Free Counter Electrode for Dyeâ€Sensitized Solar Cells. Angewandte Chemie, 2017, 129, 9274-9278.	2.0	49
30	Serrated, flexible and ultrathin polyaniline nanoribbons: An efficient counter electrode for the dye-sensitized solar cell. Journal of Power Sources, 2016, 322, 155-162.	7.8	46
31	Electro-polymerization of polypyrrole/multi-wall carbon nanotube counter electrodes for use in platinum-free dye-sensitized solar cells. Electrochimica Acta, 2016, 190, 720-728.	5.2	42
32	Three-dimensional hollow platinumâ€“nickel bimetallic nanoframes for use in dye-sensitized solar cells. Journal of Power Sources, 2015, 278, 149-155.	7.8	41
33	Honeycomb-like poly(3,4-ethylenedioxythiophene) as an effective and transparent counter electrode in bifacial dye-sensitized solar cells. Journal of Power Sources, 2017, 342, 709-716.	7.8	41
34	A comparative study on long and short carbon nanotubes-incorporated polypyrrole/poly(sodium) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 1 Metals, 2015, 209, 405-411.	3.9	39
35	Flexible dye-sensitized solar cell based on PCBM/P3HT heterojunction. Science Bulletin, 2011, 56, 325-330.	1.7	38
36	Integrated flexible supercapacitor based on poly (3, 4-ethylene dioxythiophene) deposited on Au/porous polypropylene film/Au. Journal of Power Sources, 2018, 395, 228-236.	7.8	38

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37	Performance enhancement of perovskite solar cells using trimesic acid additive in the two-step solution method. Journal of Power Sources, 2019, 426, 11-15.	7.8	38
38	Application of upconversion luminescence in dye-sensitized solar cells. Science Bulletin, 2011, 56, 96-101.	1.7	36
39	Electrodeposition of high performance PEDOT/Ti counter electrodes on Ti meshes for large-area flexible dye-sensitized solar cells. Electrochimica Acta, 2012, 85, 432-437.	5.2	36
40	A dye-sensitized solar cell based on PEDOT:PSS counter electrode. Science Bulletin, 2013, 58, 559-566.	1.7	36
41	Polypyrrole doped with dodecyl benzene sulfonate electrodeposited on carbon fibers for flexible capacitors with high-performance. Electrochimica Acta, 2015, 176, 594-603.	5.2	36
42	A dual function of high performance counter-electrode for stable quasi-solid-state dye-sensitized solar cells. Journal of Power Sources, 2013, 241, 373-378.	7.8	35
43	Properties of Porous Carbon Derived from Cornstalk Core in Highâ€Performance Electrochemical Capacitors. ChemElectroChem, 2016, 3, 323-331.	3.4	35
44	High-performance supercapacitors based on the reduced graphene oxide hydrogels modified by trace amounts of benzenediols. Chemical Engineering Journal, 2017, 328, 25-34.	12.7	34
45	Nickel sulfide counter electrodes enhanced by hydrosulphuric acid hydrothermal treatments for use in Pt-free dye-sensitized solar cells. Electrochimica Acta, 2015, 155, 103-109.	5.2	33
46	Enhanced photovoltaic performances of the dye-sensitized solar cell by utilizing rare-earth modified tin oxide compact layer. Organic Electronics, 2017, 43, 121-129.	2.6	33
47	An Efficient and Stable Perovskite Solar Cell with Suppressed Defects by Employing Dithizone as a Lead Indicator. Angewandte Chemie - International Edition, 2020, 59, 21409-21413.	13.8	33
48	Preparation of Gd2O3:Eu3+ downconversion luminescent material and its application in dye-sensitized solar cells. Science Bulletin, 2011, 56, 3114-3118.	1.7	31
49	The surface treatment of Ti meshes for use in large-area flexible dye-sensitized solar cells. Journal of Power Sources, 2012, 208, 197-202.	7.8	31
50	Efficient hydrothermal-processed platinumâ€“nickel bimetallic nano-catalysts for use in dye-sensitized solar cells. Journal of Power Sources, 2015, 294, 8-15.	7.8	30
51	Effects of methylammonium acetate on the perovskite film quality for the perovskite solar cell. Organic Electronics, 2019, 65, 201-206.	2.6	30
52	Flexible electrochemical capacitors based on polypyrrole/carbon fibers via chemical polymerization of pyrrole vapor. Applied Surface Science, 2016, 377, 274-282.	6.1	29
53	Asymmetric supercapacitor based on reduced graphene oxide/MnO2 and polypyrrole deposited on carbon foam derived from melamine sponge. Journal of Physics and Chemistry of Solids, 2019, 130, 100-110.	4.0	29
54	Preparing Ni3S2 composite with neural network-like structure for high-performance flexible asymmetric supercapacitors. Electrochimica Acta, 2019, 317, 322-332.	5.2	26

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55	The dye-sensitized solar cells based on the interconnected ternary cobalt diindium sulfide nanosheet array counter electrode. Materials Research Bulletin, 2018, 107, 204-212.	5.2	25
56	Template-free synthesis of a hierarchical flower-like platinum counter electrode and its application in dye-sensitized solar cells. RSC Advances, 2012, 2, 5034.	3.6	22
57	Flexible and compressible electrochemical capacitors based on polypyrrole/carbon fibers integrated into sponge. Journal of Alloys and Compounds, 2017, 708, 1206-1215.	5.5	22
58	Purified nitrogen-doped reduced graphene oxide hydrogels for high-performance supercapacitors. Journal of Electroanalytical Chemistry, 2019, 834, 206-215.	3.8	22
59	A transparent honeycomb-like poly(3,4-ethylenedioxythiophene)/multi-wall carbon nanotube counter electrode for bifacial dye-sensitized solar cells. Organic Electronics, 2017, 50, 161-169.	2.6	21
60	Internal tandem flexible and compressible electrochemical capacitor based on polypyrrole/carbon fibers. Electrochimica Acta, 2017, 257, 335-344.	5.2	20
61	Synthesis of highly active cobalt molybdenum sulfide nanosheets by a one-step hydrothermal method for use in dye-sensitized solar cells. Journal of Materials Science, 2017, 52, 13541-13551.	3.7	20
62	One-pot synthesis of PdBi/reduced graphene oxide catalyst under microwave irradiation used for formic acid electrooxidation. Catalysis Communications, 2014, 46, 146-149.	3.3	18
63	Investigation of carbon coating approach on electrochemical performance of Li4Ti5O12/C composite anodes for high-rate lithium-ion batteries. Journal of Solid State Electrochemistry, 2018, 22, 1851-1861.	2.5	18
64	Enhanced stability and efficiency of perovskite solar cells via bifunctional group passivation with thiosalicylic acid. Organic Electronics, 2020, 81, 105681.	2.6	18
65	Preparation of a three-dimensional interpenetrating network of TiO2 nanowires for large-area flexible dye-sensitized solar cells. RSC Advances, 2012, 2, 10550.	3.6	17
66	Cobalt sulfide counter electrodes enhanced by a hydro-thermal treatment for use in platinum-free dye-sensitized solar cells. Materials Research Bulletin, 2015, 68, 9-15.	5.2	17
67	Performance of flexible capacitors based on polypyrrole/carbon fiber electrochemically prepared from various phosphate electrolytes. Applied Surface Science, 2016, 387, 902-911.	6.1	17
68	Honeycomb-like polypyrrole/multi-wall carbon nanotube films as an effective counter electrode in bifacial dye-sensitized solar cells. Journal of Materials Science, 2017, 52, 8421-8431.	3.7	17
69	Enhanced stability and solar cell performance via Ï€-conjugated Lewis base passivation of organic inorganic lead halide perovskites. Organic Electronics, 2020, 77, 105519.	2.6	17
70	Preparation of porous nanoparticle TiO2 films for flexible dye-sensitized solar cells. Science Bulletin, 2011, 56, 2649-2653.	1.7	16
71	Titanium dioxide/zinc indium sulfide hetero-junction: An efficient photoanode for the dye-sensitized solar cell. Journal of Power Sources, 2016, 328, 578-585.	7.8	16
72	Multifunctional Rareâ€Earthâ€Doped Tin Oxide Compact Layers for Improving Performances of Photovoltaic Devices. Advanced Materials Interfaces, 2016, 3, 1600881.	3.7	16

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73	Monolithic porous carbon derived from polyvinyl alcohol for electrochemical double layer capacitors. Electrochimica Acta, 2016, 188, 175-183.	5.2	16
74	Effect of starting materials on electrochemical performance of sol-gel-synthesized Li4Ti5O12 anode materials for lithium-ion batteries. Journal of Solid State Electrochemistry, 2016, 20, 1625-1631.	2.5	16
75	Electrodeposition of nanostructured TiO2 thin film as an efficient bifunctional layer for perovskite solar cells. Electrochimica Acta, 2019, 295, 662-667.	5.2	16
76	Potential-reversal electrodeposited MoS2 thin film as an efficient electrocatalytic material for bifacial dye-sensitized solar cells. Solar Energy, 2020, 206, 163-170.	6.1	16
77	Interfacial chemical bridge constructed by l-cysteine for highly efficient perovskite solar cells. Materials Research Bulletin, 2022, 149, 111698.	5.2	16
78	Facile synthesis of an Al-doped carbon-coated Li₄Ti₅O₁₂ anode for high-rate lithium-ion batteries. RSC Advances, 2016, 6, 77151-77160.	3.6	15
79	Preparation of mesoporous titanium dioxide anode by a film- and pore-forming agent for the dye-sensitized solar cell. Materials Research Bulletin, 2016, 76, 140-146.	5.2	15
80	Facile Synthesis of Pdâ€Ni Nanoparticles on Reduced Graphene Oxide under Microwave Irradiation for Formic Acid Oxidation. Chinese Journal of Chemistry, 2017, 35, 1405-1410.	4.9	15
81	Synthesis of ternary nickel cobalt phosphide nanowires through phosphorization for use in platinum-free dye-sensitized solar cells. Journal of Alloys and Compounds, 2019, 771, 117-123.	5.5	15
82	High performance platinum nanofibers with interconnecting structure using in dye-sensitized solar cells. Organic Electronics, 2016, 37, 239-244.	2.6	13
83	Dimethyl sulfoxide and bromide methylamine co-treatment inducing defect healing for effective and stable perovskite solar cells. Materials Research Bulletin, 2019, 112, 165-173.	5.2	13
84	Low temperature fabrication of high performance p-n junction on the Ti foil for use in large-area flexible dye-sensitized solar cells. Electrochimica Acta, 2014, 117, 1-8.	5.2	12
85	Effects of thiourea concentration on electrocatalytic performances of nickel sulfide counter electrodes for use in dye-sensitized solar cells. Materials Research Bulletin, 2015, 61, 326-332.	5.2	12
86	Moiety effect on the luminescent property of star-shaped triphenylamine (TPA) derivatives as mechanochromic materials. RSC Advances, 2017, 7, 35672-35680.	3.6	12
87	One-step hydrothermal synthesis of feather duster-like NiS@MoS2 with hierarchical array structure for the Pt-free dye-sensitized solar cell. Journal of Nanoparticle Research, 2018, 20, 1.	1.9	12
88	Multiwalled carbon nanotubes/polypyrrole/graphene/nonwoven fabric composites used as electrodes of electrochemical capacitor. Journal of Applied Polymer Science, 2014, 131, .	2.6	11
89	The properties of highly compressible electrochemical capacitors based on polypyrrole/melamine sponge-carbon fibers. Journal of Alloys and Compounds, 2019, 786, 668-676.	5.5	11
90	Low temperature fabrication of high performance and transparent Pt counter electrodes for use in flexible dye-sensitized solar cells. Science Bulletin, 2012, 57, 2329-2334.	1.7	10

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91	Efficiently cubic platinum-cobalt bimetallic nano-catalysts for use in low-cost dye-sensitized solar cells. Electrochimica Acta, 2015, 174, 770-777.	5.2	10
92	Capacitive Performances of Reduced Graphene Oxide Hydrogel Prepared by Using Sodium Hypophosphite as Reducer. Chinese Journal of Chemistry, 2016, 34, 89-97.	4.9	10
93	Electrospun ytterbium and europium ions co-doped stannic oxide nanofibers and application in dye-sensitized solar cells. Materials Research Bulletin, 2017, 92, 90-98.	5.2	10
94	Preparation of titanium dioxide-double-walled carbon nanotubes and its application in flexible dye-sensitized solar cells. Frontiers of Optoelectronics, 2012, 5, 224-230.	3.7	9
95	Effective iron-molybdenum-disulfide counter electrodes for use in platinum-free dye-sensitized solar cells. Science China Materials, 2018, 61, 1278-1284.	6.3	9
96	Enhanced efficiency and stability of perovskite solar cells by synergistic effect of magnesium acetate introducing into CH3NH3PbI3. Materials Science in Semiconductor Processing, 2019, 104, 104671.	4.0	8
97	Analysis of the Oxygen Passivation Effects on MAPbI₃and MAPbBr₃in Fresh and Aged Solar Cells by the Transient Photovoltage Technique. ChemPlusChem, 2021, 86, 1316-1321.	2.8	8
98	Sulfonated Graphene Synthesized via a Green Route and Its Capacitive Properties. Chinese Journal of Chemistry, 2016, 34, 98-106.	4.9	7
99	Multifunctional stannum oxide compact bilayer modified by europium and erbium respectively doped ytterbium fluoride for high-performance dye-sensitized solar cell. Electrochimica Acta, 2017, 248, 333-341.	5.2	7
100	Dimethyl sulfoxide post-treatment inducing defect healing and crystal growth for effective perovskite solar cells. Materials Letters, 2018, 230, 170-172.	2.6	7
101	Potassium nitrilotriacetate as a multifunctional modifier of the buried interface for hysteresis-reduced perovskite solar cells. Chemical Communications, 2022, 58, 5638-5641.	4.1	7
102	Flexible solar cells based on PCBM/P3HT heterojunction. Frontiers of Optoelectronics in China, 2011, 4, 108-113.	0.2	6
103	Efficiency improvement of flexible dye-sensitized solar cells by introducing mesoporous TiO2 microsphere. Science China Chemistry, 2013, 56, 1470-1477.	8.2	6
104	Stable and near-infrared absorption enhanced dye-sensitized solar cell based on silver nanoplates@silica nanocrystals. Materials Research Bulletin, 2018, 104, 164-172.	5.2	6
105	Quantum dot-sensitized solar cells employing Pt/C60 counter electrode provide an efficiency exceeding 2%. Science China Chemistry, 2013, 56, 93-100.	8.2	5
106	Capacitive Properties of the Binderâ€Free Electrode Prepared from Carbon Derived from Cotton and Reduced Graphene Oxide. Chinese Journal of Chemistry, 2017, 35, 1844-1852.	4.9	5
107	Electrochemical formation of TiO2 porous layer for perovskite solar cells. Thin Solid Films, 2018, 660, 720-724.	1.8	5
108	Fabricating reduced graphene oxide films with high volumetric capacitive performances via thermal and acid treatment. Journal of Materials Science, 2018, 53, 12295-12309.	3.7	5

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109	Use of organic bulk-heterojunction solar cells as selective contacts in wide band-gap perovskite solar cells: advantages and limitations. Journal of Materials Chemistry A, 2021, 9, 13979-13985.	10.3	5
110	Codoping triiodide anion in polypyrrole cathode: An effective route to increase the capacity of zinc-ion battery. Journal of Electroanalytical Chemistry, 2022, 912, 116232.	3.8	5
111	Application of Poly (3, 4-ethylenedioxythiophene): polystyrenesulfonate counter electrode in polymer heterojunction dye-sensitized solar cells. Frontiers of Optoelectronics in China, 2011, 4, 369-377.	0.2	4
112	Using formic acid vapor as reducer to prepare Pt nanoparticles supported on carbon nanofiber mats for methanol electrooxidation. Catalysis Communications, 2014, 51, 86-89.	3.3	4
113	Depositing reduced graphene oxide on electroless plating Ni/organic polymer fibrous membrane for flexible supercapacitors. Journal of Electroanalytical Chemistry, 2019, 851, 113466.	3.8	3
114	Flexible supercapacitor electrode with high performance prepared from graphene oxide films assembled in the presence of p-phenylenediamine and urea. Journal of Materials Science: Materials in Electronics, 2019, 30, 7216-7225.	2.2	3
115	Semitransparent, flexible electrochemical capacitors with excellent stability fabricated with polypyrroleâ€“titanium mesh electrodes. Journal of Applied Polymer Science, 2017, 134, 45235.	2.6	2
116	Synergistic effect of guanidine thiocyanate additive and dimethyl sulfoxide post-treatment towards efficient and stable perovskite solar cell. Thin Solid Films, 2019, 689, 137495.	1.8	1
117	An Efficient and Stable Perovskite Solar Cell with Suppressed Defects by Employing Dithizone as a Lead Indicator. Angewandte Chemie, 2020, 132, 21593-21597.	2.0	1