Hong-xia Wang

List of Publications by Citations

179 papers	6,532 citations	44 h-index	73 g-index
192 ext. papers	7,902 ext. citations	7.4 avg, IF	6.51 L-index

#	Paper	IF	Citations
179	Boosting the cycling stability of transition metal compounds-based supercapacitors. *Energy Storage Materials*, **2019**, 16, 545-573	19.4	288
178	Organic–inorganic bismuth (III)-based material: A lead-free, air-stable and solution-processable light-absorber beyond organolead perovskites. *Nano Research*, **2016**, 9, 692-702	10	283
177	2-Methylimidazole-Derived Ni-Co Layered Double Hydroxide Nanosheets as High Rate Capability and High Energy Density Storage Material in Hybrid Supercapacitors. *ACS Applied Materials & Interfaces*, **2017**, 9, 15510-15524	9.5	256
176	Layered tin sulfide and selenide anode materials for Li- and Na-ion batteries. *Journal of Materials Chemistry A*, **2018**, 6, 12185-12214	13	177
175	Solid-state composite electrolyte LiI/3-hydroxypropionitrile/SiO2 for dye-sensitized solar cells. *Journal of the American Chemical Society*, **2005**, 127, 6394-401	16.4	166
174	Cerium Based Metal-Organic Frameworks as an Efficient Separator Coating Catalyzing the Conversion of Polysulfides for High Performance Lithium-Sulfur Batteries. *ACS Nano*, **2019**, 13, 1923-1931	16.7	138
173	Towards lead-free perovskite photovoltaics and optoelectronics by ab-initio simulations. *Scientific Reports*, **2017**, 7, 14025	4.9	133
172	Ultrathin NiCo2S4@graphene with a core–shell structure as a high performance positive electrode for hybrid supercapacitors. *Journal of Materials Chemistry A*, **2018**, 6, 5856-5861	13	128
171	10% Efficiency Cu2ZnSn(S,Se)4 thin film solar cells fabricated by magnetron sputtering with enlarged depletion region width. *Solar Energy Materials and Solar Cells*, **2016**, 149, 242-249	6.4	128
170	Guanidinium thiocyanate selective Ostwald ripening induced large grain for high performance perovskite solar cells. *Nano Energy*, **2017**, 41, 476-487	17.1	124
169	An efficient hole transport material composite based on poly(3-hexylthiophene) and bamboo-structured carbon nanotubes for high performance perovskite solar cells. *Journal of Materials Chemistry A*, **2015**, 3, 2784-2793	13	116
168	Kinetic and material properties of interfaces governing slow response and long timescale phenomena in perovskite solar cells. *Energy and Environmental Science*, **2019**, 12, 2054-2079	35.4	112
167	Metal oxide/graphene composite anode materials for sodium-ion batteries. *Energy Storage Materials*, **2019**, 16, 434-454	19.4	109
166	Enhanced perovskite electronic properties via a modified lead(II) chloride Lewis acid–base adduct and their effect in high-efficiency perovskite solar cells. *Journal of Materials Chemistry A*, **2017**, 5, 5195-5203	13	103
165	Transport and Interfacial Transfer of Electrons in Dye-Sensitized Solar Cells Utilizing a Co(dbbip)2 Redox Shuttle. *Journal of Physical Chemistry C*, **2010**, 114, 14300-14306	3.8	103
164	Electron Diffusion and Back Reaction in Dye-Sensitized Solar Cells: The Effect of Nonlinear Recombination Kinetics. *Journal of Physical Chemistry Letters*, **2010**, 1, 748-751	6.4	102
163	Progress in research on the stability of organometal perovskite solar cells. *Solar Energy*, **2016**, 123, 74-87	6.8	100

162	Progress in Thin Film Solar Cells Based onCu2ZnSnS4. *International Journal of Photoenergy*, **2011**, 2011, 1-10	2.1	98
161	Pseudocapacitance contribution in boron-doped graphite sheets for anion storage enables high-performance sodium-ion capacitors. *Materials Horizons*, **2018**, 5, 529-535	14.4	96
160	A Comparison of Different Methods To Determine the Electron Diffusion Length in Dye-Sensitized Solar Cells. *Journal of Physical Chemistry C*, **2009**, 113, 18125-18133	3.8	89
159	Electrochemically exfoliated graphene for electrode films: effect of graphene flake thickness on the sheet resistance and capacitive properties. *Langmuir*, **2013**, 29, 13307-14	4	83
158	Influence of Electrolyte Cations on Electron Transport and Electron Transfer in Dye-Sensitized Solar Cells. *Journal of Physical Chemistry C*, **2012**, 116, 10468-10475	3.8	76
157	Ternary NiCoFe Layered Double Hydroxide Nanosheets Synthesized by Cation Exchange Reaction for Oxygen Evolution Reaction. *Electrochimica Acta*, **2017**, 257, 118-127	6.7	73
156	Tailoring Crystal Structure of FA0.83Cs0.17PbI3 Perovskite Through Guanidinium Doping for Enhanced Performance and Tunable Hysteresis of Planar Perovskite Solar Cells. *Advanced Functional Materials*, **2019**, 29, 1806479	15.6	64
155	Hindered Formation of Photoinactive FAPbI Phase and Hysteresis-Free Mixed-Cation Planar Heterojunction Perovskite Solar Cells with Enhanced Efficiency via Potassium Incorporation. *Journal of Physical Chemistry Letters*, **2018**, 9, 2113-2120	6.4	61
154	2D-3D Mixed Organic-Inorganic Perovskite Layers for Solar Cells with Enhanced Efficiency and Stability Induced by -Propylammonium Iodide Additives. *ACS Applied Materials & Interfaces*, **2019**, 11, 29753-29764	9.5	60
153	Effect of iodine addition on solid-state electrolyte LiI/3-hydroxypropionitrile (1:4) for dye-sensitized solar cells. *Journal of Physical Chemistry B*, **2006**, 110, 5970-4	3.4	59
152	High performance all-solid-state symmetric supercapacitor based on porous carbon made from a metal-organic framework compound. *Journal of Power Sources*, **2017**, 364, 9-15	8.9	58
151	How reliable are efficiency measurements of perovskite solar cells? The first inter-comparison, between two accredited and eight non-accredited laboratories. *Journal of Materials Chemistry A*, **2017**, 5, 22542-22558	13	55
150	Electronic and optical properties of lead-free hybrid double perovskites for photovoltaic and optoelectronic applications. *Scientific Reports*, **2019**, 9, 718	4.9	55
149	Dopant-free novel hole-transporting materials based on quinacridone dye for high-performance and humidity-stable mesoporous perovskite solar cells. *Journal of Materials Chemistry A*, **2019**, 7, 5315-5323	13	55
148	Octadecylamine-Functionalized Single-Walled Carbon Nanotubes for Facilitating the Formation of a Monolithic Perovskite Layer and Stable Solar Cells. *Advanced Functional Materials*, **2018**, 28, 1705545	15.6	53
147	Aqueous alkaline–acid hybrid electrolyte for zinc-bromine battery with 3V voltage window. *Energy Storage Materials*, **2019**, 19, 56-61	19.4	52
146	Insight into lead-free organic-inorganic hybrid perovskites for photovoltaics and optoelectronics: A first-principles study. *Organic Electronics*, **2018**, 59, 99-106	3.5	51
145	ZnO Nanocones with High-Index {101 1} Facets for Enhanced Energy Conversion Efficiency of Dye-Sensitized Solar Cells. *Journal of Physical Chemistry C*, **2013**, 117, 13836-13844	3.8	50

144	Enhancing photoactivity of TiO2(B)/anatase core-shell nanofibers by selectively doping cerium ions into the TiO2(B) core. *Chemistry - A European Journal*, **2013**, 19, 5113-9	4.8	50
143	Growth of Cu2ZnSnSe4 Film under Controllable Se Vapor Composition and Impact of Low Cu Content on Solar Cell Efficiency. *ACS Applied Materials & Interfaces*, **2016**, 8, 10283-92	9.5	50
142	Thienylvinylenethienyl and Naphthalene Core Substituted with Triphenylamines□Highly Efficient Hole Transporting Materials and Their Comparative Study for Inverted Perovskite Solar Cells. *Solar Rrl*, **2017**, 1, 1700105	7.1	49
141	CuCo2S4/reduced graphene oxide nanocomposites synthesized by one-step solvothermal method as anode materials for sodium ion batteries. *Electrochimica Acta*, **2018**, 292, 895-902	6.7	49
140	A highly efficient electrocatalyst based on amorphous Pd□Cu□S material for hydrogen evolution reaction. *Journal of Materials Chemistry A*, **2017**, 5, 18793-18800	13	47
139	New insight into solvent engineering technology from evolution of intermediates via one-step spin-coating approach. *Science China Materials*, **2017**, 60, 392-398	7.1	46
138	Novel ruthenium bipyridyl dyes with S-donor ligands and their application in dye-sensitized solar cells. *Journal of Photochemistry and Photobiology A: Chemistry*, **2009**, 202, 196-204	4.7	46
137	Mechanical, bactericidal and osteogenic behaviours of hydrothermally synthesised TiO nanowire arrays. *Journal of the Mechanical Behavior of Biomedical Materials*, **2018**, 80, 311-319	4.1	44
136	Effect of Inorganic Iodides on Performance of Dye-Sensitized Solar Cells. *Journal of Physical Chemistry C*, **2007**, 111, 15125-15131	3.8	44
135	Ultrafast near infrared sintering of TiO2 layers on metal substrates for dye-sensitized solar cells. *Progress in Photovoltaics: Research and Applications*, **2011**, 19, 482-486	6.8	43
134	MnO Quantum Dots Supported on Nitrogen-Doped Partially Exfoliated Multiwall Carbon Nanotubes as Oxygen Reduction Electrocatalysts for High-Performance Zn-Air Batteries. *ACS Applied Materials & Interfaces*, **2018**, 10, 23900-23909	9.5	43
133	Phase-selective hydrothermal synthesis of Cu2ZnSnS4 nanocrystals: the effect of the sulphur precursor. *CrystEngComm*, **2014**, 16, 4306-4313	3.3	42
132	Acene-based organic semiconductors for organic light-emitting diodes and perovskite solar cells. *Journal of Materials Chemistry C*, **2018**, 6, 9017-9029	7.1	41
131	Free-standing amorphous nanoporous nickel cobalt phosphide prepared by electrochemically delloying process as a high performance energy storage electrode material. *Energy Storage Materials*, **2019**, 17, 300-308	19.4	41
130	Kinetics of electron recombination of dye-sensitized solar cells based on TiO2 nanorod arrays sensitized with different dyes. *Physical Chemistry Chemical Physics*, **2011**, 13, 17359-66	3.6	41
129	Driving forces of national and regional carbon intensity changes in China: Temporal and spatial multiplicative structural decomposition analysis. *Journal of Cleaner Production*, **2019**, 213, 1380-1410	10.3	41
128	All-solid-state flexible asymmetric supercapacitors with high energy and power densities based on NiCo2S4@MnS and active carbon. *Journal of Energy Chemistry*, **2017**, 26, 1260-1266	12	40
127	Enhanced Electron Lifetime of CdSe/CdS Quantum Dot (QD) Sensitized Solar Cells Using ZnSe Core□Shell Structure with Efficient Regeneration of Quantum Dots. *Journal of Physical Chemistry C*, **2015**, 150123143809004	3.8	40

126	Graphene-covered perovskites: an effective strategy to enhance light absorption and resist moisture degradation. *RSC Advances*, **2015**, 5, 82346-82350	3.7	40
125	Interface Engineering to Eliminate Hysteresis of Carbon-Based Planar Heterojunction Perovskite Solar Cells via CuSCN Incorporation. *ACS Applied Materials & Interfaces*, **2019**, 11, 28431-28441	9.5	40
124	Fast Hole Surface Conduction Observed for Indoline Sensitizer Dyes Immobilized at Fluorine-Doped Tin Oxide□TiO2 Surfaces. *Journal of Physical Chemistry C*, **2010**, 114, 11822-11828	3.8	40
123	Characterization of Electron Trapping in Dye-Sensitized Solar Cells by Near-IR Transmittance Measurements. *Journal of Physical Chemistry C*, **2009**, 113, 8532-8536	3.8	40
122	Multi-biofunctional properties of three species of cicada wings and biomimetic fabrication of nanopatterned titanium pillars. *Journal of Materials Chemistry B*, **2019**, 7, 1300-1310	7.3	39
121	Molecular Engineering of Simple Benzene-Arylamine Hole-Transporting Materials for Perovskite Solar Cells. *ACS Applied Materials & Interfaces*, **2017**, 9, 27657-27663	9.5	39
120	On the growth process of Cu2ZnSn(S,Se)4 absorber layer formed by selenizing Cu□ZnS□SnS precursors and its photovoltaic performance. *Solar Energy Materials and Solar Cells*, **2015**, 132, 363-371	6.4	38
119	Earth-abundant amorphous catalysts for electrolysis of water. *Chinese Journal of Catalysis*, **2017**, 38, 991-1005	11.3	37
118	One-step synthesis of high quality kesterite Cu2ZnSnS4 nanocrystals - a hydrothermal approach. *Beilstein Journal of Nanotechnology*, **2014**, 5, 438-46	3	37
117	Novel fabrication of Ni3S2/MnS composite as high performance supercapacitor electrode. *Journal of Alloys and Compounds*, **2017**, 722, 662-668	5.7	36
116	Size-dependent photodegradation of CdS particles deposited onto TiO2 mesoporous films by SILAR method. *Journal of Nanoparticle Research*, **2012**, 14, 1	2.3	35
115	Reduced electron recombination of dye-sensitized solar cells based on TiO(2) spheres consisting of ultrathin nanosheets with [001] facet exposed. *Beilstein Journal of Nanotechnology*, **2012**, 3, 378-87	3	35
114	Carbon concentration dependent grain growth of Cu2ZnSnS4 thin films. *RSC Advances*, **2015**, 5, 20178-20185	3.7	34
113	Preparation of mulberry-like RuO2 electrode material for supercapacitors. *Rare Metals*, **2021**, 40, 440-447	5.5	34
112	Facile synthesis of SbS/MoS heterostructure as anode material for sodium-ion batteries. *Nanotechnology*, **2018**, 29, 335401	3.4	34
111	Alkaline-earth bis(trifluoromethanesulfonimide) additives for efficient and stable perovskite solar cells. *Nano Energy*, **2020**, 69, 104412	17.1	33
110	Low Hysteresis Perovskite Solar Cells Using an Electron-Beam Evaporated WO3□ Thin Film as the Electron Transport Layer. *ACS Applied Energy Materials*, **2019**, 2, 5456-5464	6.1	32
109	Spiro-OMeTAD or CuSCN as a preferable hole transport material for carbon-based planar perovskite solar cells. *Journal of Materials Chemistry A*, **2020**, 8, 12723-12734	13	32

108	Increased charge transfer of Poly (ethylene oxide) based electrolyte by addition of small molecule and its application in dye-sensitized solar cells. *Electrochimica Acta*, **2013**, 87, 526-531	6.7	32
107	Lithium bis(trifluoromethanesulfonyl)imide assisted dual-functional separator coating materials based on covalent organic frameworks for high-performance lithium–selenium sulfide batteries. *Journal of Materials Chemistry A*, **2019**, 7, 16323-16329	13	30
106	Tuning the Amount of Oxygen Vacancies in Sputter-Deposited SnO films for Enhancing the Performance of Perovskite Solar Cells. *ChemSusChem*, **2018**, 11, 3096-3103	8.3	30
105	An alternative ionic liquid based electrolyte for dye-sensitized solar cells. *Photochemical and Photobiological Sciences*, **2004**, 3, 918-9	4.2	30
104	A zinc bromine "supercapattery" system combining triple functions of capacitive, pseudocapacitive and battery-type charge storage. *Materials Horizons*, **2020**, 7, 495-503	14.4	30
103	Enhanced morphology and stability of high-performance perovskite solar cells with ultra-smooth surface and high fill factor via crystal growth engineering. *Sustainable Energy and Fuels*, **2017**, 1, 907-914	5.8	27
102	Free-standing NiCo2S4@VS2 nanoneedle array composite electrode for high performance asymmetric supercapacitor application. *Journal of Alloys and Compounds*, **2019**, 771, 274-280	5.7	27
101	Plasma-induced on-surface sulfur vacancies in NiCo2S4 enhance the energy storage performance of supercapatteries. *Journal of Materials Chemistry A*, **2020**, 8, 9278-9291	13	27
100	Characterization of Interactions among 3-Hydroxypropionitrile/LiI Electrolytes. *Electrochemical and Solid-State Letters*, **2004**, 7, A302		26
99	Enhanced visible-light-driven photocatalytic performance of Ag/AgGaO2 metal semiconductor heterostructures. *Journal of Alloys and Compounds*, **2017**, 701, 16-22	5.7	25
98	Protic ionic liquid assisted solution processing of lead halide perovskites with water, alcohols and acetonitrile. *Nano Energy*, **2018**, 51, 632-638	17.1	25
97	How real time pricing modifies Chinese households' electricity consumption. *Journal of Cleaner Production*, **2018**, 178, 776-790	10.3	24
96	Inorganic p-type semiconductors and carbon materials based hole transport materials for perovskite solar cells. *Chinese Chemical Letters*, **2018**, 29, 1242-1250	8.1	24
95	Strategically Constructed Bilayer Tin (IV) Oxide as Electron Transport Layer Boosts Performance and Reduces Hysteresis in Perovskite Solar Cells. *Small*, **2020**, 16, e1901466	11	23
94	One-pot synthesis of 2D Ti3C2/Ni2CO3(OH)2 composite as electrode material with superior capacity and high stability for hybrid supercapacitor. *Electrochimica Acta*, **2018**, 292, 168-179	6.7	23
93	High performance carbon-based planar perovskite solar cells by hot-pressing approach. *Solar Energy Materials and Solar Cells*, **2020**, 210, 110517	6.4	22
92	Enhancing cycling stability of transition metal-based layered double hydroxides through a self-sacrificial strategy for hybrid supercapacitors. *Electrochimica Acta*, **2020**, 334, 135586	6.7	22
91	Bimetallic Ni/Co-ZIF-67 derived NiCo2Se4/N-doped porous carbon nanocubes with excellent sodium storage performance. *Electrochimica Acta*, **2020**, 353, 136532	6.7	20

90	High capacitive amorphous barium nickel phosphate nanofibers for electrochemical energy storage. *RSC Advances*, **2016**, 6, 45986-45992	3.7	20
89	Facile synthesis of MSnO3 (M=Mn, Co, Zn)/reduced graphene oxide nanocomposites as anode materials for sodium-ion batteries. *Journal of Alloys and Compounds*, **2019**, 784, 88-95	5.7	20
88	Binary NiCu layered double hydroxide nanosheets for enhanced energy storage performance as supercapacitor electrode. *Science China Materials*, **2018**, 61, 296-302	7.1	20
87	Flexible quasi-solid-state dual-ion asymmetric supercapacitor based on Ni(OH)2 and Nb2O5 nanosheet arrays. *Green Energy and Environment*, **2019**, 4, 382-390	5.7	19
86	One-step synthesis of titanium oxide with trilayer structure for dye-sensitized solar cells. *Applied Physics Letters*, **2011**, 98, 133113	3.4	19
85	Ion transport in small-molecule electrolytes based on LiI/3-hydroxypropionitrile with high salt contents. *Electrochimica Acta*, **2007**, 52, 2039-2044	6.7	19
84	High-Performance Plasma-Enabled Biorefining of Microalgae to Value-Added Products. *ChemSusChem*, **2019**, 12, 4976-4985	8.3	18
83	Dimensionality-Controlled Surface Passivation for Enhancing Performance and Stability of Perovskite Solar Cells via Triethylenetetramine Vapor. *ACS Applied Materials & Interfaces*, **2020**, 12, 6651-6661	9.5	18
82	Effects of metal ion concentration on electrodeposited CuZnSn film and its application in kesterite Cu2ZnSnS4 solar cells. *RSC Advances*, **2015**, 5, 65114-65122	3.7	17
81	Prospects of e-beam evaporated molybdenum oxide as a hole transport layer for perovskite solar cells. *Journal of Applied Physics*, **2017**, 122, 123105	2.5	16
80	Polymer-in-salt like conduction behavior of small-molecule electrolytes. *Chemical Communications*, **2004**, 2186-7	5.8	16
79	Sulfophilic and lithophilic sites in bimetal nickel-zinc carbide with fast conversion of polysulfides for high-rate Li-S battery. *Chemical Engineering Journal*, **2021**, 404, 126566	14.7	16
78	Metallic Nanomesh with Disordered Dual-Size Apertures As Wide-Viewing-Angle Transparent Conductive Electrode. *ACS Applied Materials & Interfaces*, **2016**, 8, 22768-73	9.5	15
77	Ab initio atomistic insights into lead-free formamidinium based hybrid perovskites for photovoltaics and optoelectronics. *Computational Materials Science*, **2019**, 169, 109118	3.2	15
76	Synthesis of Co Ni1-S2 electrode material with a greatly enhanced electrochemical performance for supercapacitors by in-situ solid-state transformation. *Journal of Alloys and Compounds*, **2019**, 803, 950-957	5.7	15
75	An ultraviolet selective photodetector based on a nanocrystalline TiO2 photoelectrochemical cell. *Sensors and Actuators A: Physical*, **2011**, 171, 87-92	3.9	15
74	Flower-like Cu5Sn2S7/ZnS nanocomposite for high performance supercapacitor. *Chinese Chemical Letters*, **2019**, 30, 1115-1120	8.1	15
73	Crack-free perovskite layers for high performance and reproducible devices via improved control of ambient conditions during fabrication. *Applied Surface Science*, **2017**, 407, 427-433	6.7	14

72	Potassium Doping to Enhance Green Photoemission of Light-Emitting Diodes Based on CsPbBr3 Perovskite Nanocrystals. *Advanced Optical Materials*, **2020**, 8, 2000742	8.1	14
71	In-Situ Grown Ni(OH)2Nanosheets on Ni Foam for Hybrid Supercapacitors with High Electrochemical Performance. *Journal of the Electrochemical Society*, **2018**, 165, A882-A890	3.9	14
70	One-step synthesis of Pt-Pd catalyst nanoparticles supported on few-layer graphene for methanol oxidation. *Current Applied Physics*, **2018**, 18, 898-904	2.6	14
69	N-Aryl stilbazolium dyes as sensitizers for solar cells. *Dyes and Pigments*, **2012**, 92, 766-777	4.6	14
68	Three-Dimensional (3D) Nanostructured Skeleton Substrate Composed of Hollow Carbon Fiber/Carbon Nanosheet/ZnO for Stable Lithium Anode. *ACS Applied Materials & Interfaces*, **2021**, 13, 3078-3088	9.5	14
67	Size-dependent capacitive behavior of homogeneous MnO nanoparticles on carbon cloth as electrodes for symmetric solid-state supercapacitors with high performance. *Electrochimica Acta*, **2019**, 307, 442-450	6.7	13
66	Bacteria Death and Osteoblast Metabolic Activity Correlated to Hydrothermally Synthesised TiO Surface Properties. *Molecules*, **2019**, 24,	4.8	13
65	Dinuclear Ru Ru Complexes: Electronic Characterisation and Application to Dye-Sensitised Solar Cells. *European Journal of Inorganic Chemistry*, **2011**, 2011, 589-596	2.3	13
64	Highly efficient dye-sensitized solar cells using a composite electrolyte. *Comptes Rendus Chimie*, **2006**, 9, 627-630	2.7	13
63	Carbon-encapsulated Bi2Te3 derived from metal-organic framework as anode for highly durable lithium and sodium storage. *Journal of Alloys and Compounds*, **2020**, 837, 155536	5.7	13
62	Boosting Capacitive Sodium-Ion Storage in Electrochemically Exfoliated Graphite for Sodium-Ion Capacitors. *ACS Applied Materials & Interfaces*, **2020**, 12, 52635-52642	9.5	13
61	Strain Mediated Bandgap Reduction, Light Spectrum Broadening, and Carrier Mobility Enhancement of Methylammonium Lead/Tin Iodide Perovskites. *Particle and Particle Systems Characterization*, **2017**, 34, 1600288	3.1	12
60	One-Pot Synthesis of CuCo2S4 Sub-Microspheres for High-Performance Lithium-/Sodium-Ion Batteries. *ChemElectroChem*, **2019**, 6, 1558-1566	4.3	12
59	The effect of ethylene-amine ligands enhancing performance and stability of perovskite solar cells. *Journal of Power Sources*, **2020**, 463, 228210	8.9	12
58	A Precursor Stacking Strategy to Boost Open-Circuit Voltage of Cu2ZnSnS4 Thin-Film Solar Cells. *IEEE Journal of Photovoltaics*, **2018**, 8, 856-863	3.7	12
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56	Highly Efficient Dye-Sensitized Solar Cells Using a Composite Electrolyte Consisting of LiI(CH 3 OH) 4 -I 2 , SiO 2 Nano-Particles and an Ionic Liquid. *Chinese Physics Letters*, **2004**, 21, 1828-1830	1.8	12
55	Structural, electronic and optical properties of lead-free antimony-copper based hybrid double perovskites for photovoltaics and optoelectronics by first principles calculations. *Computational Materials Science*, **2021**, 186, 110009	3.2	12

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53	Sulfur-doped mesoporous carbon thermal reduction of CS by Mg for high-performance supercapacitor electrodes and Li-ion battery anodes.. *RSC Advances*, **2018**, 8, 19964-19970	3.7	11
52	Effect of different thermo-treatment at relatively low temperatures on the properties of indium-tin-oxide thin films. *Thin Solid Films*, **2017**, 636, 702-709	2.2	11
51	1D Pyrrolidinium Lead Iodide for Efficient and Stable Perovskite Solar Cells. *Energy Technology*, **2020**, 8, 1900918	3.5	11
50	Low-Dimensional-Networked Perovskites with A-Site-Cation Engineering for Optoelectronic Devices.. *Small Methods*, **2021**, 5, e2001147	12.8	11
49	Fluorine substitution enabling pseudocapacitive intercalation of sodium ions in niobium oxyfluoride. *Journal of Materials Chemistry A*, **2019**, 7, 20813-20823	13	10
48	Highly accessible hierarchical porous carbon from a bi-functional ionic liquid bulky gel: high-performance electrochemical double layer capacitors. *Journal of Materials Chemistry A*, **2019**, 7, 25297-25304	13	10
47	Spectroscopic Insight into Efficient and Stable Hole Transfer at the Perovskite/Spiro-OMeTAD Interface with Alternative Additives. *ACS Applied Materials & Interfaces*, **2021**, 13, 5752-5761	9.5	10
46	Towards the environmentally friendly solution processing of metal halide perovskite technology. *Green Chemistry*, **2021**, 23, 5302-5336	10	10
45	UV-ozone induced surface passivation to enhance the performance of Cu2ZnSnS4 solar cells. *Solar Energy Materials and Solar Cells*, **2019**, 200, 109892	6.4	9
44	Perovskite Solar Cells Based on Nanocrystalline SnO2 Material with Extremely Small Particle Sizes. *Australian Journal of Chemistry*, **2015**, 68, 1783	1.2	9
43	A facile, environmentally friendly synthesis of strong photo-emissive methylammonium lead bromide perovskite nanocrystals enabled by ionic liquids. *Green Chemistry*, **2020**, 22, 3433-3440	10	9
42	Low-cost, large-scale, one-pot synthesis of C/Ni3(NO3)2(OH)4 composites for high performance supercapacitor. *Materials Chemistry and Physics*, **2018**, 217, 291-299	4.4	9
41	Biorefining of sugarcane bagasse to fermentable sugars and surface oxygen group-rich hierarchical porous carbon for supercapacitors. *Renewable Energy*, **2020**, 162, 2306-2317	8.1	9
40	Improving the performance of arylamine-based hole transporting materials in perovskite solar cells: Extending □conjugation length or increasing the number of side groups?. *Journal of Energy Chemistry*, **2018**, 27, 1409-1414	12	9
39	Electrochemically induced surface reconstruction of Ni-Co oxide nanosheet arrays for hybrid supercapacitors. *Exploration*, **2021**, 1, 20210178		9
38	Efficiency enhancement of Cu2ZnSnS4 thin film solar cells by chromium doping. *Solar Energy Materials and Solar Cells*, **2019**, 201, 110057	6.4	8
37	Perovskite solar cells based self-charging power packs: Fundamentals, applications and challenges. *Nano Energy*, **2022**, 94, 106910	17.1	8

36	In-situ growth of nanowire WO2.72 on carbon cloth as a binder-free electrode for flexible asymmetric supercapacitors with high performance. *Journal of Energy Chemistry*, **2019**, 29, 58-64	12	8
35	Self-assembled carbon dot-wrapped perovskites enable light trapping and defect passivation for efficient and stable perovskite solar cells. *Journal of Materials Chemistry A*, **2021**, 9, 7508-7521	13	8
34	Electrochemical performances of Na2MnSiO4 as an energy storage material in sodium-ion capacitors. *Journal of Applied Electrochemistry*, **2017**, 47, 343-349	2.6	7
33	Evaluation of Particle Beam Lithography for Fabrication of Metallic Nano-structures. *Procedia Manufacturing*, **2019**, 30, 261-267	1.5	7
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31	Fabrication of dual function disposable substrates for spectroelectrochemical nanosensing. *Sensors and Actuators B: Chemical*, **2019**, 287, 9-17	8.5	6
30	Facile synthesis of Sb/CNT nanocomposite as anode material for sodium-ion batteries. *Functional Materials Letters*, **2018**, 11, 1850004	1.2	6
29	Enlarging Surface/Bulk Ratios of NiO Nanoparticles toward High Utilization and Rate Capability for Supercapacitors. *Particle and Particle Systems Characterization*, **2020**, 37, 1900344	3.1	6
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