Jong Hyeok Park

List of Publications by Year
in descending order

350 papers	20,458 citations	8755 75 h-index	14759 127 g-index
359 all docs	359 docs citations	359 times ranked	25037 citing authors

#	Article	IF	Citations
1	Novel Carbon-Doped TiO2Nanotube Arrays with High Aspect Ratios for Efficient Solar Water Splitting. Nano Letters, 2006, 6, 24-28.	9.1	1,649
2	Highâ€Performance Perovskiteâ€“Graphene Hybrid Photodetector. Advanced Materials, 2015, 27, 41-46.	21.0	753
3	Green Synthesis of Biphasic TiO₂â€“Reduced Graphene Oxide Nanocomposites with Highly Enhanced Photocatalytic Activity. ACS Applied Materials & Interfaces, 2012, 4, 3893-3901.	8.0	509
4	Potassium Incorporation for Enhanced Performance and Stability of Fully Inorganic Cesium Lead Halide Perovskite Solar Cells. Nano Letters, 2017, 17, 2028-2033.	9.1	463
5	Efficient photoelectrochemical hydrogen production from bismuth vanadate-decorated tungsten trioxide helix nanostructures. Nature Communications, 2014, 5, 4775.	12.8	367
6	Enhancement of Donorâ€“Acceptor Polymer Bulk Heterojunction Solar Cell Power Conversion Efficiencies by Addition of Au Nanoparticles. Angewandte Chemie - International Edition, 2011, 50, 5519-5523.	13.8	334
7	Hierarchical MnCo-layered double hydroxides@Ni(OH)₂ coreâ€“shell heterostructures as advanced electrodes for supercapacitors. Journal of Materials Chemistry A, 2017, 5, 1043-1049.	10.3	296
8	Water Splitting Progress in Tandem Devices: Moving Photolysis beyond Electrolysis. Advanced Energy Materials, 2016, 6, 1600602.	19.5	268
9	Enhanced Power Conversion Efficiency in PCDTBT/PC₇₀BM Bulk Heterojunction Photovoltaic Devices with Embedded Silver Nanoparticle Clusters. Advanced Energy Materials, 2011, 1, 766-770.	19.5	242
10	An order/disorder/water junction system for highly efficient co-catalyst-free photocatalytic hydrogen generation. Energy and Environmental Science, 2016, 9, 499-503.	30.8	241
11	Capacitance properties of graphite/polypyrrole composite electrode prepared by chemical polymerization of pyrrole on graphite fiber. Journal of Power Sources, 2002, 105, 20-25.	7.8	227
12	Black phosphorene as a hole extraction layer boosting solar water splitting of oxygen evolution catalysts. Nature Communications, 2019, 10, 2001.	12.8	222
13	Growth, detachment and transfer of highly-ordered TiO2 nanotube arrays: use in dye-sensitized solar cells. Chemical Communications, 2008, , 2867.	4.1	218
14	Single-step solvothermal synthesis of mesoporous Agâ€“TiO2â€“reduced graphene oxide ternary composites with enhanced photocatalytic activity. Nanoscale, 2013, 5, 5093.	5.6	204
15	An Electrochemical Capacitor Based on a Ni(OH)[sub 2]/Activated Carbon Composite Electrode. Electrochemical and Solid-State Letters, 2002, 5, H7.	2.2	200
16	Carbon Nanotube/RuO[sub 2] Nanocomposite Electrodes for Supercapacitors. Journal of the Electrochemical Society, 2003, 150, A864.	2.9	195
17	Hybrid electrochemical capacitors based on polyaniline and activated carbon electrodes. Journal of Power Sources, 2002, 111, 185-190.	7.8	194
18	Porphyrin Sensitizers with Donor Structural Engineering for Superior Performance Dyeâ€Sensitized Solar Cells and Tandem Solar Cells for Water Splitting Applications. Advanced Energy Materials, 2017, 7, 1602117.	19.5	193

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19	Polymer/Gold Nanoparticle Nanocomposite Light-Emitting Diodes:Â Enhancement of Electroluminescence Stability and Quantum Efficiency of Blue-Light-Emitting Polymers. Chemistry of Materials, 2004, 16, 688-692.	6.7	180
20	Dual Oxygen and Tungsten Vacancies on a WO₃ Photoanode for Enhanced Water Oxidation. Angewandte Chemie - International Edition, 2016, 55, 11819-11823.	13.8	178
21	Transferred vertically aligned N-doped carbon nanotube arrays: use in dye-sensitized solar cells as counter electrodes. Chemical Communications, 2011, 47, 4264.	4.1	175
22	Dye-sensitized solar cells with Pt- and TCO-free counter electrodes. Chemical Communications, 2010, 46, 4505.	4.1	172
23	Balancing Light Absorptivity and Carrier Conductivity of Graphene Quantum Dots for High-Efficiency Bulk Heterojunction Solar Cells. ACS Nano, 2013, 7, 7207-7212.	14.6	171
24	Hydrogen Peroxide Production from Solar Water Oxidation. ACS Energy Letters, 2019, 4, 3018-3027.	17.4	170
25	Unveiling the Crystal Formation of Cesium Lead Mixed-Halide Perovskites for Efficient and Stable Solar Cells. Journal of Physical Chemistry Letters, 2017, 8, 2936-2940.	4.6	169
26	Near-Complete Suppression of Oxygen Evolution for Photoelectrochemical H₂O Oxidative H₂O₂ Synthesis. Journal of the American Chemical Society, 2020, 142, 8641-8648.	13.7	168
27	A roll-to-roll welding process for planarized silver nanowire electrodes. Nanoscale, 2014, 6, 11828-11834.	5.6	161
28	Conflicted Effects of a Solvent Additive on PTB7:PC₇₁BM Bulk Heterojunction Solar Cells. Journal of Physical Chemistry C, 2015, 119, 5954-5961.	3.1	155
29	Proton-conducting composite membranes derived from sulfonated hydrocarbon and inorganic materials. Journal of Power Sources, 2003, 124, 18-25.	7.8	154
30	Rheological properties and dispersion stability of magnetorheological (MR) suspensions. Rheologica Acta, 2001, 40, 211-219.	2.4	151
31	Unassisted photoelectrochemical water splitting exceeding 7% solar-to-hydrogen conversion efficiency using photon recycling. Nature Communications, 2016, 7, 11943.	12.8	144
32	Vertically Oriented MoS₂ with Spatially Controlled Geometry on Nitrogenous Graphene Sheets for Highâ€Performance Sodiumâ€Ion Batteries. Advanced Energy Materials, 2018, 8, 1703300.	19.5	144
33	Conceptual design of three-dimensional CoN/Ni₃N-coupled nanograsses integrated on N-doped carbon to serve as efficient and robust water splitting electrocatalysts. Journal of Materials Chemistry A, 2018, 6, 4466-4476.	10.3	143
34	Synthesis of transparent mesoporous tungsten trioxide films with enhanced photoelectrochemical response: application to unassisted solar water splitting. Energy and Environmental Science, 2011, 4, 1465.	30.8	142
35	Unassisted photoelectrochemical water splitting beyond 5.7% solar-to-hydrogen conversion efficiency by a wireless monolithic photoanode/dye-sensitised solar cell tandem device. Nano Energy, 2015, 13, 182-191.	16.0	138
36	Flexible and Platinumâ€Free Dyeâ€Sensitized Solar Cells with Conductingâ€Polymerâ€Coated Graphene Counter Electrodes. ChemSusChem, 2012, 5, 379-382.	6.8	133

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37	Flexible and Transparent Metallic Grid Electrodes Prepared by Evaporative Assembly. ACS Applied Materials & Interfaces, 2014, 6, 12380-12387.	8.0	128
38	Conformal Coating Strategy Comprising N-doped Carbon and Conventional Graphene for Achieving Ultrahigh Power and Cyclability of LiFePO₄. Nano Letters, 2015, 15, 6756-6763.	9.1	125
39	CdS or CdSe decorated TiO2 nanotube arrays from spray pyrolysis deposition: use in photoelectrochemical cells. Chemical Communications, 2010, 46, 2385.	4.1	124
40	Amorphous Phosphorus-Incorporated Cobalt Molybdenum Sulfide on Carbon Cloth: An Efficient and Stable Electrocatalyst for Enhanced Overall Water Splitting over Entire pH Values. ACS Applied Materials & Interfaces, 2017, 9, 37739-37749.	8.0	122
41	Rheological Properties and Stabilization of Magnetorheological Fluids in a Water-in-Oil Emulsion. Journal of Colloid and Interface Science, 2001, 240, 349-354.	9.4	121
42	Plasmon-Sensitized Graphene/TiO₂ Inverse Opal Nanostructures with Enhanced Charge Collection Efficiency for Water Splitting. ACS Applied Materials & Interfaces, 2017, 9, 7075-7083.	8.0	121
43	Fabrication of an Efficient Dye-Sensitized Solar Cell with Stainless Steel Substrate. Journal of the Electrochemical Society, 2008, 155, F145.	2.9	118
44	Sequential Processing: Control of Nanomorphology in Bulk Heterojunction Solar Cells. Nano Letters, 2011, 11, 3163-3168.	9.1	114
45	Stacked Porous Iron-Doped Nickel Cobalt Phosphide Nanoparticle: An Efficient and Stable Water Splitting Electrocatalyst. ACS Sustainable Chemistry and Engineering, 2018, 6, 6146-6156.	6.7	113
46	Transferable Graphene Oxide by Stamping Nanotechnology: Electronâ€Transport Layer for Efficient Bulkâ€Heterojunction Solar Cells. Angewandte Chemie - International Edition, 2013, 52, 2874-2880.	13.8	112
47	Hierarchical Construction of Self-Standing Anodized Titania Nanotube Arrays and Nanoparticles for Efficient and Cost-Effective Front-Illuminated Dye-Sensitized Solar Cells. ACS Nano, 2011, 5, 5088-5093.	14.6	110
48	Photoelectrochemical cells with tungsten trioxide/Mo-doped BiVO4 bilayers. Physical Chemistry Chemical Physics, 2012, 14, 11119.	2.8	107
49	Graphene/Acid Coassisted Synthesis of Ultrathin MoS₂ Nanosheets with Outstanding Rate Capability for a Lithium Battery Anode. Inorganic Chemistry, 2013, 52, 9807-9812.	4.0	106
50	Controllable sulfuration engineered NiO nanosheets with enhanced capacitance for high rate supercapacitors. Journal of Materials Chemistry A, 2017, 5, 4543-4549.	10.3	105
51	Photoelectrochemical water splitting at titanium dioxide nanotubes coated with tungsten trioxide. Applied Physics Letters, 2006, 89, 163106.	3.3	103
52	Molecular Chemistry-Controlled Hybrid Ink-Derived Efficient Cu₂ZnSnS₄ Photocathodes for Photoelectrochemical Water Splitting. ACS Energy Letters, 2016, 1, 1127-1136.	17.4	103
53	White emission from polymer/quantum dot ternary nanocomposites by incomplete energy transfer. Nanotechnology, 2004, 15, 1217-1220.	2.6	100
54	Controlled Synthesis of Vertically Aligned Hematite on Conducting Substrate for Photoelectrochemical Cells: Nanorods versus Nanotubes. ACS Applied Materials & Interfaces, 2011, 3, 1852-1858.	8.0	100

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55	Polymerâ€Clay Nanocomposite Solidâ€State Electrolyte with Selective Cation Transport Boosting and Retarded Lithium Dendrite Formation. Advanced Energy Materials, 2020, 10, 2003114.	19.5	99
56	Surface Localization of Defects in Black TiO₂: Enhancing Photoactivity or Reactivity. Journal of Physical Chemistry Letters, 2017, 8, 199-207.	4.6	97
57	Defect-Induced Epitaxial Growth for Efficient Solar Hydrogen Production. Nano Letters, 2017, 17, 6676-6683.	9.1	96
58	Highly Efficient Solar Water Splitting from Transferred TiO₂ Nanotube Arrays. Nano Letters, 2015, 15, 5709-5715.	9.1	95
59	Solution-processed yolkâ€“shell-shaped WO₃/BiVO₄ heterojunction photoelectrodes for efficient solar water splitting. Journal of Materials Chemistry A, 2018, 6, 2585-2592.	10.3	95
60	Roles of Interlayers in Efficient Organic Photovoltaic Devices. Macromolecular Rapid Communications, 2010, 31, 2095-2108.	3.9	92
61	Enhancing Mo:BiVO₄ Solar Water Splitting with Patterned Au Nanospheres by Plasmonâ€Induced Energy Transfer. Advanced Energy Materials, 2018, 8, 1701765.	19.5	92
62	Self-Position of Au NPs in Perovskite Solar Cells: Optical and Electrical Contribution. ACS Applied Materials & Interfaces, 2016, 8, 449-454.	8.0	91
63	A Structurable Gelâ€Polymer Electrolyte for Sodium Ion Batteries. Advanced Functional Materials, 2017, 27, 1701768.	14.9	90
64	Double-Deck Inverse Opal Photoanodes: Efficient Light Absorption and Charge Separation in Heterojunction. Chemistry of Materials, 2014, 26, 5592-5597.	6.7	88
65	Tuning the charge transfer route by pâ€“n junction catalysts embedded with CdS nanorods for simultaneous efficient hydrogen and oxygen evolution. Journal of Materials Chemistry A, 2015, 3, 4803-4810.	10.3	87
66	Cylindrical nanostructured MoS₂ directly grown on CNT composites for lithium-ion batteries. Nanoscale, 2015, 7, 3404-3409.	5.6	86
67	Preparation of a trilayer separator and its application to lithium-ion batteries. Journal of Power Sources, 2010, 195, 8302-8305.	7.8	85
68	Bulk layered heterojunction as an efficient electrocatalyst for hydrogen evolution. Science Advances, 2017, 3, e1602215.	10.3	85
69	Catalytic Oxidation of Methane to Oxygenated Products: Recent Advancements and Prospects for Electrocatalytic and Photocatalytic Conversion at Low Temperatures. Advanced Science, 2020, 7, 2001946.	11.2	85
70	Inorganic thin layer coated porous separator with high thermal stability for safety reinforced Li-ion battery. Journal of Power Sources, 2012, 212, 22-27.	7.8	84
71	The preparation of highly ordered TiO2 nanotube arrays by an anodization method and their applications. Chemical Communications, 2012, 48, 6456.	4.1	83
72	Unconventional Pore and Defect Generation in Molybdenum Disulfide: Application in Highâ€Rate Lithiumâ€Ion Batteries and the Hydrogen Evolution Reaction. ChemSusChem, 2014, 7, 2489-2495.	6.8	82

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73	Edge-On MoS₂ Thin Films by Atomic Layer Deposition for Understanding the Interplay between the Active Area and Hydrogen Evolution Reaction. Chemistry of Materials, 2017, 29, 7604-7614.	6.7	82
74	Tunable Bandgap Energy and Promotion of H₂O₂ Oxidation for Overall Water Splitting from Carbon Nitride Nanowire Bundles. Advanced Energy Materials, 2016, 6, 1502352.	19.5	79
75	Mediator- and co-catalyst-free direct Z-scheme composites of Bi₂WO₆â€“Cu₃P for solar-water splitting. Nanoscale, 2018, 10, 3026-3036.	5.6	79
76	Metallic Ni₃S₂ Films Grown by Atomic Layer Deposition as an Efficient and Stable Electrocatalyst for Overall Water Splitting. ACS Applied Materials & Interfaces, 2018, 10, 12807-12815.	8.0	78
77	Cyclohexylammoniumâ€Based 2D/3D Perovskite Heterojunction with Funnelâ€Like Energy Band Alignment for Efficient Solar Cells (23.91%). Advanced Energy Materials, 2021, 11, 2102236.	19.5	77
78	Resolving Hysteresis in Perovskite Solar Cells with Rapid Flameâ€Processed Cobaltâ€Doped TiO₂. Advanced Energy Materials, 2018, 8, 1801717.	19.5	76
79	Oriented Grains with Preferred Lowâ€Angle Grain Boundaries in Halide Perovskite Films by Pressureâ€Induced Crystallization. Advanced Energy Materials, 2018, 8, 1702369.	19.5	74
80	Ultrahigh Electrocatalytic Conversion of Methane at Room Temperature. Advanced Science, 2017, 4, 1700379.	11.2	73
81	Synthesis and photoelectrochemical cell properties of vertically grown Î±-Fe2O3 nanorod arrays on a gold nanorod substrate. Journal of Materials Chemistry, 2010, 20, 2247.	6.7	71
82	Dual Oxygen and Tungsten Vacancies on a WO₃ Photoanode for Enhanced Water Oxidation. Angewandte Chemie, 2016, 128, 11998-12002.	2.0	71
83	Inverse opal structured Î±-Fe2O3 on graphene thin films: enhanced photo-assisted water splitting. Nanoscale, 2013, 5, 1939.	5.6	70
84	Halide Perovskite Nanopillar Photodetector. ACS Nano, 2018, 12, 8564-8571.	14.6	70
85	Opto-electronic properties of TiO₂nanohelices with embedded HC(NH₂)₂PbI₃perovskite solar cells. Journal of Materials Chemistry A, 2015, 3, 9179-9186.	10.3	67
86	Photoelectrochemical Tandem Cell with Bipolar Dye-Sensitized Electrodes for Vectorial Electron Transfer for Water Splitting. Electrochemical and Solid-State Letters, 2006, 9, E5-E8.	2.2	66
87	Controlled growth of vertically oriented hematite/Pt composite nanorod arrays: use for photoelectrochemical water splitting. Nanotechnology, 2011, 22, 175703.	2.6	65
88	Improved Electrorheological Effect in Polyaniline Nanocomposite Suspensions. Journal of Colloid and Interface Science, 2002, 245, 198-203.	9.4	64
89	Nanopatterned conductive polymer films as a Pt, TCO-free counter electrode for low-cost dye-sensitized solar cells. Nanoscale, 2013, 5, 7838.	5.6	64
90	General Characterization Methods for Photoelectrochemical Cells for Solar Water Splitting. ChemSusChem, 2015, 8, 3192-3203.	6.8	64

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91	A two-photon tandem black phosphorus quantum dot-sensitized BiVO₄ photoanode for solar water splitting. Energy and Environmental Science, 2022, 15, 672-679.	30.8	64
92	Aligned Heterointerfaceâ€Induced 1Tâ€MoS₂ Monolayer with Nearâ€Ideal Gibbs Free for Stable Hydrogen Evolution Reaction. Small, 2019, 15, e1804903.	10.0	63
93	Controlled TiO[sub 2] Nanotube Arrays as an Active Material for High Power Energy-Storage Devices. Journal of the Electrochemical Society, 2009, 156, A584.	2.9	62
94	Solution-processable polymer solar cells from a poly(3-hexylthiophene)/[6,6]-phenyl C61-butyric acidmethyl ester concentration graded bilayers. Applied Physics Letters, 2009, 95, 043505.	3.3	62
95	Efficient photodegradation of volatile organic compounds by iron-based metal-organic frameworks with high adsorption capacity. Applied Catalysis B: Environmental, 2020, 263, 118284.	20.2	62
96	Overcoming Charge Collection Limitation at Solid/Liquid Interface by a Controllable Crystal Deficient Overlayer. Advanced Energy Materials, 2017, 7, 1600923.	19.5	61
97	Design of TiO2 nanotube array-based water-splitting reactor for hydrogen generation. Journal of Power Sources, 2008, 184, 284-287.	7.8	60
98	Enhanced High-Temperature Long-Term Stability of Polymer Solar Cells with a Thermally Stable TiOx Interlayer. Journal of Physical Chemistry C, 2009, 113, 17268-17273.	3.1	60
99	Delocalized Electron Accumulation at Nanorod Tips: Origin of Efficient H₂ Generation. Advanced Functional Materials, 2016, 26, 4527-4534.	14.9	60
100	Controlled Dissolution of Polystyrene Nanobeads: Transition from Liquid Electrolyte to Gel Electrolyte. Nano Letters, 2012, 12, 2233-2237.	9.1	58
101	Enhanced light harvesting in bulk heterojunction photovoltaic devices with shape-controlled Ag nanomaterials: Ag nanoparticles versus Ag nanoplates. RSC Advances, 2012, 2, 7268.	3.6	57
102	Surface-Engineered Graphene Quantum Dots Incorporated into Polymer Layers for High Performance Organic Photovoltaics. Scientific Reports, 2015, 5, 14276.	3.3	56
103	Highly Conductive Freestanding Graphene Films as Anode Current Collectors for Flexible Lithium-Ion Batteries. ACS Applied Materials & Interfaces, 2014, 6, 11158-11166.	8.0	54
104	Origin of White Electroluminescence in Graphene Quantum Dots Embedded Host/Guest Polymer Light Emitting Diodes. Scientific Reports, 2015, 5, 11032.	3.3	54
105	Disordered layers on WO₃ nanoparticles enable photochemical generation of hydrogen from water. Journal of Materials Chemistry A, 2019, 7, 221-227.	10.3	54
106	An ultrathin inorganic-organic hybrid layer on commercial polymer separators for advanced lithium-ion batteries. Journal of Power Sources, 2019, 416, 89-94.	7.8	54
107	Nano carbon conformal coating strategy for enhanced photoelectrochemical responses and long-term stability of ZnO quantum dots. Nano Energy, 2015, 13, 258-266.	16.0	53
108	Methodologies toward Efficient and Stable Cesium Lead Halide Perovskiteâ€Based Solar Cells. Advanced Science, 2018, 5, 1800509.	11.2	53

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109	Double 2-dimensional H 2 -evoluting catalyst tipped photocatalyst nanowires: A new avenue for high-efficiency solar to H 2 generation. Nano Energy, 2017, 34, 481-490.	16.0	51
110	Understanding the positive effects of (Coâ€“Pi) co-catalyst modification in inverse-opal structured Î±-Fe2O3-based photoelectrochemical cells. International Journal of Hydrogen Energy, 2013, 38, 12725-12732.	7.1	50
111	Defect Dominated Hierarchical Tiâ€Metalâ€Organic Frameworks via a Linker Competitive Coordination Strategy for Toluene Removal. Advanced Functional Materials, 2021, 31, 2102511.	14.9	50
112	Polyanilineâ€Based Conducting Polymer Compositions with a High Work Function for Holeâ€Injection Layers in Organic Lightâ€Emitting Diodes: Formation of Ohmic Contacts. ChemSusChem, 2011, 4, 363-368.	6.8	49
113	Stability comparison: A PCDTBT/PC71BM bulk-heterojunction versus a P3HT/PC71BM bulk-heterojunction. Solar Energy Materials and Solar Cells, 2012, 101, 249-255.	6.2	49
114	Graphene oxide-assisted production of carbon nitrides using a solution process and their photocatalytic activity. Carbon, 2014, 66, 119-125.	10.3	49
115	Strategy for Boosting Li-Ion Current in Silicon Nanoparticles. ACS Energy Letters, 2018, 3, 2252-2258.	17.4	49
116	Artificial photosynthesis for highâ€valueâ€added chemicals: Old material, new opportunity. , 2022, 4, 21-44.		49
117	A magnetic field assisted self-assembly strategy towards strongly coupled Fe3O4 nanocrystal/rGO paper for high-performance lithium ion batteries. Journal of Materials Chemistry A, 2014, 2, 9636.	10.3	48
118	Black TiO₂: What are exact functions of disorder layer. , 2020, 2, 44-53.		48
119	Rheological properties and stability of magnetorheological fluids using viscoelastic medium and nanoadditives. Korean Journal of Chemical Engineering, 2001, 18, 580-585.	2.7	47
120	Facile Synthesis of TiO₂ Inverse Opal Electrodes for Dye-Sensitized Solar Cells. Langmuir, 2011, 27, 856-860.	3.5	47
121	Heterojunction Photoanode of Atomic-Layer-Deposited MoS₂ on Single-Crystalline CdS Nanorod Arrays. ACS Applied Materials & Interfaces, 2019, 11, 37586-37594.	8.0	47
122	Multiple Heterojunction in Single Titanium Dioxide Nanoparticles for Novel Metal-Free Photocatalysis. Nano Letters, 2018, 18, 4257-4262.	9.1	45
123	Siâ€“Mn/Reduced Graphene Oxide Nanocomposite Anodes with Enhanced Capacity and Stability for Lithium-Ion Batteries. ACS Applied Materials & Interfaces, 2014, 6, 1702-1708.	8.0	44
124	Clay Nanosheets in Skeletons of Controlled Phase Inversion Separators for Thermally Stable Liâ€Ion Batteries. Advanced Functional Materials, 2015, 25, 3399-3404.	14.9	44
125	Dye-sensitized solar cells with TiO2 nano-particles on TiO2 nano-tube-grown Ti substrates. Journal of Materials Chemistry, 2011, 21, 3558.	6.7	43
126	Dye molecules in electrolytes: new approach for suppression of dye-desorption in dye-sensitized solar cells. Scientific Reports, 2013, 3, .	3.3	43

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127	Design of a porous gel polymer electrolyte for sodium ion batteries. Journal of Membrane Science, 2018, 566, 122-128.	8.2	43
128	Electric-Field-Assisted Layer-by-Layer Assembly of Weakly Charged Polyelectrolyte Multilayers. Macromolecules, 2011, 44, 2866-2872.	4.8	42
129	Photoelectrochemical cell/dye-sensitized solar cell tandem water splitting systems with transparent and vertically aligned quantum dot sensitized TiO2 nanorod arrays. Journal of Power Sources, 2013, 225, 263-268.	7.8	42
130	Continuous Oxygen Vacancy Gradient in TiO₂ Photoelectrodes by a Photoelectrochemicalâ€Driven â€œSelfâ€Purificationâ€•Process. Advanced Energy Materials, 2022, 12, .	19.5	42
131	High-efficiency polymer photovoltaic cells using a solution-processable insulating interfacial nanolayer: the role of the insulating nanolayer. Journal of Materials Chemistry, 2012, 22, 25148.	6.7	41
132	Understanding the synergistic effect of WO3â€“BiVO4 heterostructures by impedance spectroscopy. Physical Chemistry Chemical Physics, 2016, 18, 9255-9261.	2.8	41
133	Two-terminal DSSC/silicon tandem solar cells exceeding 18% efficiency. Energy and Environmental Science, 2016, 9, 3657-3665.	30.8	41
134	Improved asymmetric electrochemical capacitor using Zn-Co co-doped Ni(OH)2 positive electrode material. Applied Physics A: Materials Science and Processing, 2006, 82, 593-597.	2.3	40
135	Efficiency Increase in Flexible Bulk Heterojunction Solar Cells with a Nanoâ€Patterned Indium Zinc Oxide Anode. Advanced Energy Materials, 2012, 2, 1319-1322.	19.5	40
136	Retarded Chargeâ€“Carrier Recombination in Photoelectrochemical Cells from Plasmonâ€Induced Resonance Energy Transfer. Advanced Energy Materials, 2020, 10, 2000570.	19.5	40
137	Morphology and electrochemical behaviour of ruthenium oxide thin film deposited on carbon paper. Journal of Power Sources, 2002, 109, 121-126.	7.8	39
138	Hematite modified tungsten trioxide nanoparticle photoanode for solar water oxidation. Journal of Power Sources, 2012, 210, 32-37.	7.8	39
139	Electrochemical CH4 oxidation into acids and ketones on ZrO2:NiCo2O4 quasi-solid solution nanowire catalyst. Applied Catalysis B: Environmental, 2019, 259, 118095.	20.2	39
140	Tuning Selectivity of Photoelectrochemical Water Oxidation via Facet-Engineered Interfacial Energetics. ACS Energy Letters, 2021, 6, 4071-4078.	17.4	39
141	Unassisted Water Splitting from Bipolar Ptâ•Dye-Sensitizedâ€,TiO[sub 2] Photoelectrode Arrays. Electrochemical and Solid-State Letters, 2005, 8, G371.	2.2	38
142	Photovoltaic Devices with an Active Layer from a Stamping Transfer Technique: Single Layer Versus Double Layer. Langmuir, 2010, 26, 9584-9588.	3.5	38
143	Constructing inverse opal structured hematite photoanodes via electrochemical process and their application to photoelectrochemical water splitting. Physical Chemistry Chemical Physics, 2013, 15, 11717.	2.8	38
144	Investigation of porosity and heterojunction effects of a mesoporous hematite electrode on photoelectrochemical water splitting. Physical Chemistry Chemical Physics, 2013, 15, 9775.	2.8	38

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145	Multi-Functionality of Macroporous TiO₂ Spheres in Dye-Sensitized and Hybrid Heterojunction Solar Cells. Langmuir, 2014, 30, 3010-3018.	3.5	38
146	Core-Shelled Low-Oxidation State Oxides@Reduced Graphene Oxides Cubes via Pressurized Reduction for Highly Stable Lithium Ion Storage. Advanced Functional Materials, 2016, 26, 2959-2965.	14.9	38
147	Low vacuum process for polymer solar cells: Effect of TiOx interlayer. Applied Physics Letters, 2008, 92, 143504.	3.3	37
148	Unexpected solidâ€“solid intermixing in a bilayer of poly(3-hexylthiophene) and [6,6]-phenyl C61-butyric acidmethyl ester via stamping transfer. Organic Electronics, 2010, 11, 1376-1380.	2.6	37
149	Chemically Modified Graphene Oxide-Wrapped Quasi-Micro Ag Decorated Silver Trimolybdate Nanowires for Photocatalytic Applications. Journal of Physical Chemistry C, 2013, 117, 24023-24032.	3.1	37
150	Enhancement of Photostability in Blue-Light-Emitting Polymers Doped with Gold Nanoparticles. Macromolecular Rapid Communications, 2003, 24, 331-334.	3.9	36
151	Hybrid Silver Mesh Electrode for ITOâ€Free Flexible Polymer Solar Cells with Good Mechanical Stability. ChemSusChem, 2016, 9, 1042-1049.	6.8	36
152	Effect of polymer-insulating nanolayers on electron injection in polymer light-emitting diodes. Applied Physics Letters, 2004, 84, 1783-1785.	3.3	35
153	Inverse opal tungsten trioxide films with mesoporous skeletons: synthesis and photoelectrochemical responses. Chemical Communications, 2012, 48, 11939.	4.1	35
154	A facile chemical synthesis of ZnO@multilayer graphene nanoparticles with fast charge separation and enhanced performance for application in solar energy conversion. Nano Energy, 2016, 25, 9-17.	16.0	35
155	In situ electrochemically synthesized Pt-MoO3â^'x nanostructure catalysts for efficient hydrogen evolution reaction. Journal of Catalysis, 2020, 381, 1-13.	6.2	35
156	White polymer light-emitting devices from ternary-polymer blend with concentration gradient. Chemical Physics Letters, 2005, 403, 293-297.	2.6	34
157	Highly conductive PEDOT/silicate hybrid anode for ITO-free polymer solar cells. Solar Energy Materials and Solar Cells, 2010, 94, 471-477.	6.2	34
158	Rapid Formation of a Disordered Layer on Monoclinic BiVO₄: Coâ€Catalystâ€Free Photoelectrochemical Solar Water Splitting. ChemSusChem, 2018, 11, 933-940.	6.8	34
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