Taiho Park

List of Publications by Year
in descending order

173	9,686	30070 54	43889 91
papers	citations	h-index	g-index

177	177	177	10739
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	A diketopyrrolopyrrole-containing hole transporting conjugated polymer for use in efficient stable organicâ€“inorganic hybrid solar cells based on a perovskite. Energy and Environmental Science, 2014, 7, 1454.	30.8	374
2	Thermally stable, planar hybrid perovskite solar cells with high efficiency. Energy and Environmental Science, 2018, 11, 3238-3247.	30.8	348
3	Dopant-free polymeric hole transport materials for highly efficient and stable perovskite solar cells. Energy and Environmental Science, 2016, 9, 2326-2333.	30.8	317
4	Donorâ€“Acceptorâ€Conjugated Polymer for Highâ€Performance Organic Fieldâ€Effect Transistors: A Progress Report. Advanced Functional Materials, 2020, 30, 1904545.	14.9	260
5	Formation of a Miscible Supramolecular Polymer Blend through Self-Assembly Mediated by a Quadruply Hydrogen-Bonded Heterocomplex. Journal of the American Chemical Society, 2006, 128, 11582-11590.	13.7	239
6	Charge Density Dependent Mobility of Organic Holeâ€Transporters and Mesoporous TiO₂ Determined by Transient Mobility Spectroscopy: Implications to Dyeâ€Sensitized and Organic Solar Cells. Advanced Materials, 2013, 25, 3227-3233.	21.0	217
7	High-Field-Effect Mobility of Low-Crystallinity Conjugated Polymers with Localized Aggregates. Journal of the American Chemical Society, 2016, 138, 8096-8103.	13.7	217
8	Green-Solvent-Processable, Dopant-Free Hole-Transporting Materials for Robust and Efficient Perovskite Solar Cells. Journal of the American Chemical Society, 2017, 139, 12175-12181.	13.7	212
9	A Highly Stable Quadruply Hydrogen-Bonded Heterocomplex Useful for Supramolecular Polymer Blends. Journal of the American Chemical Society, 2005, 127, 6520-6521.	13.7	209
10	Well-Defined Nanostructured, Single-Crystalline TiO₂ Electron Transport Layer for Efficient Planar Perovskite Solar Cells. ACS Nano, 2016, 10, 6029-6036.	14.6	196
11	Hole Transport Materials in Conventional Structural (nâ€“iâ€“p) Perovskite Solar Cells: From Past to the Future. Advanced Energy Materials, 2020, 10, 1903403.	19.5	192
12	Cascade surface modification of colloidal quantum dot inks enables efficient bulk homojunction photovoltaics. Nature Communications, 2020, 11, 103.	12.8	181
13	Systematically Optimized Bilayered Electron Transport Layer for Highly Efficient Planar Perovskite Solar Cells (Î· = 21.1%). ACS Energy Letters, 2017, 2, 2667-2673.	17.4	180
14	Free Radical Polymerization Initiated and Controlled by Visible Light Photocatalysis at Ambient Temperature. Macromolecules, 2011, 44, 7594-7599.	4.8	156
15	A Supramolecular Multi-Block Copolymer with a High Propensity for Alternation. Journal of the American Chemical Society, 2006, 128, 13986-13987.	13.7	154
16	Boosting the performance and stability of quasi-two-dimensional tin-based perovskite solar cells using the formamidinium thiocyanate additive. Journal of Materials Chemistry A, 2018, 6, 18173-18182.	10.3	149
17	Nonaromatic Greenâ€Solventâ€Processable, Dopantâ€Free, and Leadâ€Capturable Hole Transport Polymers in Perovskite Solar Cells with High Efficiency. Advanced Energy Materials, 2020, 10, 1902662.	19.5	141
18	A Quadruply Hydrogen Bonded Heterocomplex Displaying High-Fidelity Recognition. Journal of the American Chemical Society, 2005, 127, 18133-18142.	13.7	131

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19	Chloride Passivation of ZnO Electrodes Improves Charge Extraction in Colloidal Quantum Dot Photovoltaics. Advanced Materials, 2017, 29, 1702350.	21.0	126
20	Size-tunable mesoporous spherical TiO2 as a scattering overlayer in high-performance dye-sensitized solar cells. Journal of Materials Chemistry, 2011, 21, 9582.	6.7	119
21	Waterâ€Processable, Stretchable, Selfâ€Healable, Thermally Stable, and Transparent Ionic Conductors for Actuators and Sensors. Advanced Materials, 2020, 32, e1906679.	21.0	119
22	pâ€Type CuI Islands on TiO₂ Electron Transport Layer for a Highly Efficient Planarâ€Perovskite Solar Cell with Negligible Hysteresis. Advanced Energy Materials, 2018, 8, 1702235.	19.5	117
23	Donorâ€“Acceptor Type Dopantâ€Free, Polymeric Hole Transport Material for Planar Perovskite Solar Cells (19.8%). Advanced Energy Materials, 2018, 8, 1701935.	19.5	116
24	Synthesis of a Redox-Responsive Quadruple Hydrogen-Bonding Unit for Applications in Supramolecular Chemistry. Journal of the American Chemical Society, 2011, 133, 17118-17121.	13.7	104
25	Improving the Performance and Stability of Inverted Planar Flexible Perovskite Solar Cells Employing a Novel NDIâ€Based Polymer as the Electron Transport Layer. Advanced Energy Materials, 2018, 8, 1702872.	19.5	104
26	Exploiting Ï€â€“Ï€ Stacking for Stretchable Semiconducting Polymers. Macromolecules, 2018, 51, 2572-2579.	4.8	104
27	Thickness of the hole transport layer in perovskite solar cells: performance versus reproducibility. RSC Advances, 2015, 5, 99356-99360.	3.6	98
28	Visible-light-induced activation of periodate that mimics dye-sensitization of TiO2: Simultaneous decolorization of dyes and production of oxidizing radicals. Applied Catalysis B: Environmental, 2017, 203, 475-484.	20.2	97
29	Highly Efficient Solar Water Splitting from Transferred TiO₂ Nanotube Arrays. Nano Letters, 2015, 15, 5709-5715.	9.1	95
30	Gradated Mixed Hole Transport Layer in a Perovskite Solar Cell: Improving Moisture Stability and Efficiency. ACS Applied Materials & Interfaces, 2017, 9, 27720-27726.	8.0	95
31	Alkali acetate-assisted enhanced electronic coupling in CsPbI3 perovskite quantum dot solids for improved photovoltaics. Nano Energy, 2019, 66, 104130.	16.0	88
32	A Facetâ€Specific Quantum Dot Passivation Strategy for Colloid Management and Efficient Infrared Photovoltaics. Advanced Materials, 2019, 31, e1805580.	21.0	87
33	Interplay of Fidelity, Binding Strength, and Structure in Supramolecular Polymers. Journal of the American Chemical Society, 2006, 128, 14236-14237.	13.7	86
34	Effect of coadsorbent properties on the photovoltaic performance of dye-sensitized solar cells. Chemical Communications, 2011, 47, 4147.	4.1	86
35	Highly Efficient and Uniform 1â€…cm² Perovskite Solar Cells with an Electrochemically Deposited NiO_{<i>x</i>} Holeâ€Extraction Layer. ChemSusChem, 2017, 10, 2660-2667.	6.8	84
36	Selective Defect Passivation and Topographical Control of 4â€Dimethylaminopyridine at Grain Boundary for Efficient and Stable Planar Perovskite Solar Cells. Advanced Energy Materials, 2021, 11, 2003382.	19.5	82

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37	Various metal (Fe, Mo, V, Co)-doped Ni2P nanowire arrays as overall water splitting electrocatalysts and their applications in unassisted solar hydrogen production with STH 14 %. Applied Catalysis B: Environmental, 2021, 297, 120434.	20.2	82
38	Carbazole-Based Copolymers: Effects of Conjugation Breaks and Steric Hindrance. Macromolecules, 2011, 44, 1909-1919.	4.8	75
39	Solution Processable Inorganicâ€"Organic Doubleâ€Layered Hole Transport Layer for Highly Stable Planar Perovskite Solar Cells. Advanced Energy Materials, 2018, 8, 1801386.	19.5	75
40	A Short Review on Interface Engineering of Perovskite Solar Cells: A Selfâ€Assembled Monolayer and Its Roles. Solar Rrl, 2020, 4, 1900251.	5.8	75
41	Amine-Functionalized Covalent Organic Framework for Efficient SO2 Capture with High Reversibility. Scientific Reports, 2017, 7, 557.	3.3	73
42	Freestanding doubly open-ended TiO2 nanotubes for efficient photocatalytic degradation of volatile organic compounds. Applied Catalysis B: Environmental, 2017, 205, 386-392.	20.2	73
43	A Facile Surface Passivation Enables Thermally Stable and Efficient Planar Perovskite Solar Cells Using a Novel IDTTâ€Based Small Molecule Additive. Advanced Energy Materials, 2021, 11, 2003829.	19.5	72
44	New Hybrid Hole Extraction Layer of Perovskite Solar Cells with a Planar pâ€"iâ€"n Geometry. Journal of Physical Chemistry C, 2015, 119, 27285-27290.	3.1	71
45	Highâ€Performance Small Molecule via Tailoring Intermolecular Interactions and its Application in Largeâ€Area Organic Photovoltaic Modules. Advanced Energy Materials, 2016, 6, 1600228.	19.5	69
46	Hydrophobic stabilizer-anchored fully inorganic perovskite quantum dots enhance moisture resistance and photovoltaic performance. Nano Energy, 2020, 75, 104985.	16.0	69
47	Switchable Photovoltaic Effects in Hexagonal Manganite Thin Films Having Narrow Band Gaps. Chemistry of Materials, 2015, 27, 7425-7432.	6.7	67
48	Cross-Linkable Fullerene Derivatives for Solution-Processed nâ€"iâ€"p Perovskite Solar Cells. ACS Energy Letters, 2016, 1, 648-653.	17.4	67
49	Recent Progress and Challenges of Electron Transport Layers in Organicâ€"Inorganic Perovskite Solar Cells. Energies, 2020, 13, 5572.	3.1	66
50	Transient Optical Studies of Interfacial Energetic Disorder at Nanostructured Dye-Sensitised Inorganic/Organic Semiconductor Heterojunctions. ChemPhysChem, 2003, 4, 89-93.	2.1	65
51	Sulfur-incorporated carbon quantum dots with a strong long-wavelength absorption band. Journal of Materials Chemistry C, 2013, 1, 2002.	5.5	65
52	Interfacial electron accumulation for efficient homo-junction perovskite solar cells. Nano Energy, 2016, 28, 269-276.	16.0	63
53	Inducing swift nucleation morphology control for efficient planar perovskite solar cells by hot-air quenching. Journal of Materials Chemistry A, 2017, 5, 3812-3818.	10.3	61
54	Activated Electronâ€Transport Layers for Infrared Quantum Dot Optoelectronics. Advanced Materials, 2018, 30, e1801720.	21.0	57

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55	A Review on Reducing Grain Boundaries and Morphological Improvement of Perovskite Solar Cells from Methodology and Materialâ€Based Perspectives. Small Methods, 2020, 4, 1900569.	8.6	56
56	A Tuned Alternating Dâ€“A Copolymer Holeâ€Transport Layer Enables Colloidal Quantum Dot Solar Cells with Superior Fill Factor and Efficiency. Advanced Materials, 2020, 32, e2004985.	21.0	56
57	A Strategy to Design a Donorâ€“Ï€â€“Acceptor Polymeric Hole Conductor for an Efficient Perovskite Solar Cell. Advanced Energy Materials, 2015, 5, 1500471.	19.5	55
58	Substituents engineered deep-red to near-infrared phosphorescence from tris-heteroleptic iridium(<scp>iii</scp>) complexes for solution processable red-NIR organic light-emitting diodes. Journal of Materials Chemistry C, 2018, 6, 10640-10658.	5.5	55
59	NiMoFe and NiMoFeP as Complementary Electrocatalysts for Efficient Overall Water Splitting and Their Application in PVâ€Electrolysis with STH 12.3%. Small, 2019, 15, e1905501.	10.0	55
60	Surface modified fullerene electron transport layers for stable and reproducible flexible perovskite solar cells. Nano Energy, 2018, 49, 324-332.	16.0	52
61	Green-solvent processable semiconducting polymers applicable in additive-free perovskite and polymer solar cells: molecular weights, photovoltaic performance, and thermal stability. Journal of Materials Chemistry A, 2018, 6, 5538-5543.	10.3	51
62	Controlling Ambipolar Charge Transport in Isoindigoâ€Based Conjugated Polymers by Altering Fluorine Substitution Position for Highâ€Performance Organic Fieldâ€Effect Transistors. Advanced Functional Materials, 2019, 29, 1805994.	14.9	51
63	Green-solvent-processable organic semiconductors and future directions for advanced organic electronics. Journal of Materials Chemistry A, 2020, 8, 21455-21473.	10.3	51
64	Simple post annealing-free method for fabricating uniform, large grain-sized, and highly crystalline perovskite films. Nano Energy, 2017, 34, 181-187.	16.0	50
65	Enhanced Openâ€Circuit Voltage in Colloidal Quantum Dot Photovoltaics via Reactivityâ€Controlled Solutionâ€Phase Ligand Exchange. Advanced Materials, 2017, 29, 1703627.	21.0	49
66	A novel quasi-solid state dye-sensitized solar cell fabricated using a multifunctional network polymer membrane electrolyte. Energy and Environmental Science, 2013, 6, 1559.	30.8	48
67	Improving the Photovoltaic Performance and Mechanical Stability of Flexible All-Polymer Solar Cells via Tailoring Intermolecular Interactions. Chemistry of Materials, 2019, 31, 5047-5055.	6.7	48
68	Morphological Control of Donor/Acceptor Interfaces in All-Polymer Solar Cells Using a Pentafluorobenzene-Based Additive. Chemistry of Materials, 2017, 29, 6793-6798.	6.7	47
69	Study of Burnâ€In Loss in Green Solventâ€Processed Ternary Blended Organic Photovoltaics Derived from UVâ€Crosslinkable Semiconducting Polymers and Nonfullerene Acceptors. Advanced Energy Materials, 2019, 9, 1901829.	19.5	47
70	Stabilizing Surface Passivation Enables Stable Operation of Colloidal Quantum Dot Photovoltaic Devices at Maximum Power Point in an Air Ambient. Advanced Materials, 2020, 32, e1906497.	21.0	47
71	Heat dissipation effects on the stability of planar perovskite solar cells. Energy and Environmental Science, 2020, 13, 5059-5067.	30.8	44
72	Stable Dyeâ€Sensitized Solar Cells by Encapsulation of N719â€Sensitized TiO₂ Electrodes Using Surfaceâ€Induced Crossâ€Linking Polymerization. Advanced Energy Materials, 2012, 2, 219-224.	19.5	43

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73	Synthesis and Self-Assembly of Thiophene-Based All-Conjugated Amphiphilic Diblock Copolymers with a Narrow Molecular Weight Distribution. Macromolecules, 2012, 45, 5058-5068.	4.8	42
74	Fidelity in the supramolecular assembly of triply and quadruply hydrogen-bonded complexes. Israel Journal of Chemistry, 2005, 45, 381-389.	2.3	41
75	3,6-Carbazole Incorporated into Poly[9,9-dioctylfluorene-<i>alt</i>-(bisthienyl)benzothiadiazole]s Improving the Power Conversion Efficiency. Macromolecules, 2012, 45, 3004-3009.	4.8	41
76	Polymeric vesicles with a hydrophobic interior formed by a thiophene-based all-conjugated amphiphilic diblock copolymer. Chemical Communications, 2011, 47, 4697.	4.1	40
77	Optimized vertical phase separation via systematic Y6 inner side-chain modulation for non-halogen solvent processed inverted organic solar cells. Nano Energy, 2022, 101, 107574.	16.0	40
78	A supramolecular approach to lithium ion solvation at nanostructured dye sensitised inorganic/organic heterojunctionsElectronic Supplementary Information (ESI) available: experimental details and absorption spectra. See http://www.rsc.org/suppdata/cc/b3/b306604e/. Chemical Communications, 2003, , 2878.	4.1	39
79	Facile fabrication of aligned doubly open-ended TiO2 nanotubes, via a selective etching process, for use in front-illuminated dye sensitized solar cells. Chemical Communications, 2012, 48, 8748.	4.1	39
80	Characterization of polyisoprene by temperature gradient interaction chromatography. Macromolecular Chemistry and Physics, 2000, 201, 320-325.	2.2	38
81	Interface engineering for solid-state dye-sensitised nanocrystalline solar cells: the use of an organic redox cascade. Chemical Communications, 2006, , 535-537.	4.1	38
82	Reduced charge recombination by the formation of an interlayer using a novel dendron coadsorbent in solid-state dye-sensitized solar cells. RSC Advances, 2012, 2, 3467.	3.6	38
83	Thermodynamic Control over the Competitive Anchoring of N719 Dye on Nanocrystalline TiO₂ for Improving Photoinduced Electron Generation. Langmuir, 2011, 27, 14647-14653.	3.5	35
84	Chemical compatibility between a hole conductor and organic dye enhances the photovoltaic performance of solid-state dye-sensitized solar cells. Journal of Materials Chemistry, 2012, 22, 8641.	6.7	34
85	Effective Management of Nucleation and Crystallization Processes in Perovskite Formation via Facile Control of Antisolvent Temperature. ACS Applied Energy Materials, 2020, 3, 1506-1514.	5.1	34
86	In situ modulation of the vertical distribution in a blend of P3HT and PC60BM via the addition of a composition gradient inducer. Nanoscale, 2014, 6, 2440.	5.6	33
87	A Benzodithiophene-Based Novel Electron Transport Layer for a Highly Efficient Polymer Solar Cell. ACS Applied Materials & Interfaces, 2014, 6, 15875-15880.	8.0	33
88	Understanding of Face-On Crystallites Transitioning to Edge-On Crystallites in Thiophene-Based Conjugated Polymers. Chemistry of Materials, 2021, 33, 4541-4550.	6.7	33
89	Aggregation-induced phosphorescence enhancement in deep-red and near-infrared emissive iridium(<scp>iii</scp>) complexes for solution-processable OLEDs. Journal of Materials Chemistry C, 2020, 8, 4789-4800.	5.5	32
90	A Competitive Electron Transport Mechanism in Hierarchical Homogeneous Hybrid Structures Composed of TiO2 Nanoparticles and Nanotubes. Chemistry of Materials, 2015, 27, 1359-1366.	6.7	30

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91	Enhanced Efficiency and Stability of an Aqueous Lead-Nitrate-Based Organometallic Perovskite Solar Cell. ACS Applied Materials & Interfaces, 2017, 9, 14023-14030.	8.0	30
92	Efficiency Limit of Colloidal Quantum Dot Solar Cells: Effect of Optical Interference on Active Layer Absorption. ACS Energy Letters, 2020, 5, 248-251.	17.4	30
93	Synergy Effect of a Ï€â€Conjugated Ionic Compound: Dual Interfacial Energy Level Regulation and Passivation to Promote <i>V</i>_{oc} and Stability of Planar Perovskite Solar Cells. Angewandte Chemie - International Edition, 2022, 61, .	13.8	30
94	A novel hole transport material for iodine-free solid state dye-sensitized solar cells. Chemical Communications, 2011, 47, 10395.	4.1	28
95	Novel cathode interfacial layer using creatine for enhancing the photovoltaic properties of perovskite solar cells. Journal of Materials Chemistry A, 2020, 8, 21721-21728.	10.3	28
96	Improved Eco-Friendly Photovoltaics Based on Stabilized AgBiS₂ Nanocrystal Inks. Chemistry of Materials, 2020, 32, 10007-10014.	6.7	28
97	Physically Stable Polymerâ€Membrane Electrolytes for Highly Efficient Solidâ€State Dyeâ€Sensitized Solar Cells with Longâ€Term Stability. Advanced Energy Materials, 2014, 4, 1300489.	19.5	27
98	Design Strategy of Quantum Dot Thinâ€Film Solar Cells. Small, 2020, 16, e2002460.	10.0	27
99	Ancillary ligand-assisted robust deep-red emission in iridium(<scp>iii</scp>) complexes for solution-processable phosphorescent OLEDs. Journal of Materials Chemistry C, 2019, 7, 4143-4154.	5.5	26
100	Monodisperse Perovskite Colloidal Quantum Dots Enable High-Efficiency Photovoltaics. ACS Energy Letters, 2021, 6, 2229-2237.	17.4	26
101	3D Interaction of Zwitterions for Highly Stable and Efficient Inorganic CsPbI₃ Solar Cells. Advanced Functional Materials, 2022, 32, .	14.9	24
102	Concentration-Dependent Pyrene-Driven Self-Assembly in Benzo[1,2-<i>b</i>:4,5-<i>b</i>â€²]dithiophene (BDT)â€“Thienothiophene (TT)â€“Pyrene Copolymers. Macromolecules, 2015, 48, 3509-3515.	4.8	23
103	Pt-Free Counter Electrodes with Carbon Black and 3D Network Epoxy Polymer Composites. Scientific Reports, 2016, 6, 22987.	3.3	23
104	Improving the Electrical Connection of n-Type Conjugated Polymers through Fluorine-Induced Robust Aggregation. Chemistry of Materials, 2019, 31, 4864-4872.	6.7	23
105	Efficient and Stable Colloidal Quantum Dot Solar Cells with a Greenâ€Solvent Holeâ€Transport Layer. Advanced Energy Materials, 2020, 10, 2002084.	19.5	23
106	Blending isomers of fluorine-substituted sulfonyldibenzene as hole transport materials to achieve high efficiency beyond 21% in perovskite solar cells. Chemical Engineering Journal, 2021, 424, 130396.	12.7	23
107	Synthesis and characterization of all-conjugated diblock copolymers consisting of thiophenes with a hydrophobic alkyl and a hydrophilic alkoxy side chain. Polymer, 2011, 52, 3704-3709.	3.8	22
108	Relationship between HOMO energy level and open circuit voltage of polymer solar cells. Organic Electronics, 2012, 13, 2185-2191.	2.6	22

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109	Requirements for Forming Efficient 3-D Charge Transport Pathway in Diketopyrrolopyrrole-Based Copolymers: Film Morphology vs Molecular Packing. ACS Applied Materials & Interfaces, 2016, 8, 12307-12315.	8.0	22
110	Designs and understanding of small molecule-based non-fullerene acceptors for realizing commercially viable organic photovoltaics. Chemical Science, 2021, 12, 14004-14023.	7.4	22
111	Simultaneously Grasping and Selfâ€Organizing Photoactive Polymers for Highly Reproducible Organic Solar Cells with Improved Efficiency. Advanced Energy Materials, 2013, 3, 1018-1024.	19.5	21
112	Dye-Sensitized Solar Cells Employing Doubly or Singly Open-Ended TiO₂ Nanotube Arrays: Structural Geometry and Charge Transport. ACS Applied Materials & Interfaces, 2014, 6, 15388-15394.	8.0	21
113	Study on the Aging Mechanism of Boron Potassium Nitrate (BKNO3) for Sustainable Efficiency in Pyrotechnic Mechanical Devices. Scientific Reports, 2018, 8, 11745.	3.3	21
114	Suppression of hydroxylation on the surface of colloidal quantum dots to enhance the open-circuit voltage of photovoltaics. Journal of Materials Chemistry A, 2020, 8, 4844-4849.	10.3	21
115	A donorâ€"acceptor semiconducting polymer with a random configuration for efficient, green-solvent-processable flexible solar cells. Journal of Materials Chemistry A, 2018, 6, 24580-24587.	10.3	20
116	Infrared Cavity-Enhanced Colloidal Quantum Dot Photovoltaics Employing Asymmetric Multilayer Electrodes. ACS Energy Letters, 2018, 3, 2908-2913.	17.4	20
117	Control of Crystallite Orientation in Diketopyrrolopyrrole-Based Semiconducting Polymers via Tuning of Intermolecular Interactions. ACS Applied Materials & Interfaces, 2019, 11, 10751-10757.	8.0	20
118	Parameters influencing the molecular weight of 3,6â€carbazoleâ€based Dâ€Ï€â€Aâ€type copolymers. Journal of Polymer Science Part A, 2011, 49, 4368-4378.	2.3	19
119	Recyclable and stable ruthenium catalyst for free radical polymerization at ambient temperature initiated by visible light photocatalysis. Green Chemistry, 2012, 14, 618.	9.0	19
120	Lowâ€bandgap quinoxalineâ€based Dâ€"Aâ€type copolymers: Synthesis, characterization, and photovoltaic properties. Journal of Polymer Science Part A, 2013, 51, 372-382.	2.3	19
121	Solid-solvent hybrid additive for the simultaneous control of the macro- and micro-morphology in non-fullerene-based organic solar cells. Nano Energy, 2022, 93, 106878.	16.0	19
122	Key Factors Affecting the Stability of CsPbI₃ Perovskite Quantum Dot Solar Cells: A Comprehensive Review. Advanced Materials, 2023, 35, .	21.0	19
123	Aerosol OT/Water System Coupled with Triiodide/Iodide (I₃^{âˆ'}/I^{âˆ'}) Redox Electrolytes for Highly Efficient Dyeâ€Sensitized Solar Cells. Advanced Energy Materials, 2013, 3, 1344-1350.	19.5	18
124	Tunable Nanoporous Network Polymer Nanocomposites having Sizeâ€Selective Ion Transfer for Dyeâ€Sensitized Solar Cells. Advanced Energy Materials, 2013, 3, 184-192.	19.5	18
125	Effects of Regioregularity and Molecular Weight on the Growth of Polythiophene Nanofibrils and Mixes of Short and Long Nanofibrils To Enhance the Hole Transport. ACS Applied Materials & Interfaces, 2015, 7, 27694-27702.	8.0	18
126	A comparative study on the thermal- and microwave-assisted Stille coupling polymerization of a benzodithiophene-based donorâ€"acceptor polymer (PTB7). Journal of Materials Chemistry A, 2017, 5, 3330-3335.	10.3	18

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127	Doubly open-ended TiO₂nanotube arrays decorated with a few nm-sized TiO₂nanoparticles for highly efficient dye-sensitized solar cells. Journal of Materials Chemistry A, 2014, 2, 14380.	10.3	17
128	Role of Disorder in the Extent of Interchain Delocalization and Polaron Generation in Polythiophene Crystalline Domains. Journal of Physical Chemistry Letters, 2018, 9, 3173-3180.	4.6	17
129	Monolithic Organic/Colloidal Quantum Dot Hybrid Tandem Solar Cells via Buffer Engineering. Advanced Materials, 2020, 32, e2004657.	21.0	16
130	Charge Trapping in a Low-Crystalline High-Mobility Conjugated Polymer and Its Effects on the Operational Stability of Organic Field-Effect Transistors. ACS Applied Materials & Interfaces, 2021, 13, 16722-16731.	8.0	16
131	Exploring the Heterogeneous Interfaces in Organic or Ruthenium Dye-Sensitized Liquid- and Solid-State Solar Cells. ACS Applied Materials & Interfaces, 2012, 4, 3141-3147.	8.0	14
132	Improved photovoltaic performance by enhanced crystallinity of poly(3-hexyl)thiophene. Organic Electronics, 2013, 14, 3046-3051.	2.6	14
133	The effect of irregularity from asymmetric random Ï€-conjugated polymers on the photovoltaic performance of fullerene-free organic solar cells. Polymer Chemistry, 2019, 10, 4407-4412.	3.9	14
134	Strategic Halogen Substitution to Enable Highâ€Performance Smallâ€Moleculeâ€Based Tandem Solar Cell with over 15% Efficiency. Advanced Energy Materials, 2020, 10, 1903846.	19.5	14
135	Electron-Transfer Kinetics through Interfaces between Electron-Transport and Ion-Transport Layers in Solid-State Dye-Sensitized Solar Cells Utilizing Solid Polymer Electrolyte. Journal of Physical Chemistry C, 2016, 120, 2494-2500.	3.1	13
136	A Highly Versatile and Adaptable Artificial Leaf with Floatability and Planar Compact Design Applicable in Various Natural Environments. Advanced Materials, 2017, 29, 1702431.	21.0	13
137	Effect of the length of a symmetric branched side chain on charge transport in thienoisoindigo-based polymer field-effect transistors. Organic Electronics, 2019, 65, 251-258.	2.6	13
138	Tripleâ€Layer Structured Composite Separator Membranes with Dual Pore Structures and Improved Interfacial Contact for Sustainable Dyeâ€Sensitized Solar Cells. Advanced Energy Materials, 2014, 4, 1400477.	19.5	12
139	Perovskite Solar Cells: Donorâ€"Acceptor Type Dopantâ€Free, Polymeric Hole Transport Material for Planar Perovskite Solar Cells (19.8%) (Adv. Energy Mater. 4/2018). Advanced Energy Materials, 2018, 8, 1870018.	19.5	12
140	A Highly Efficient Bifunctional Electrode Fashioned with In Situ Exsolved NiFe Alloys for Reversible Solid Oxide Cells. ACS Sustainable Chemistry and Engineering, 2022, 10, 7595-7602.	6.7	12
141	Composition tuning of a mixture of thienothiophene-based polymer (PTB7) and PC 70 BM using a novel additive, tetrabromothiophene (Br-ADD). Organic Electronics, 2014, 15, 3268-3273.	2.6	11
142	Backbone Randomization in Conjugated Polymer-Based Hole-Transport Materials to Enhance the Efficiencies of Perovskite Solar Cells. Chemistry of Materials, 2022, 34, 4856-4864.	6.7	11
143	Well-Defined All-Conducting Block Copolymer Bilayer Hybrid Nanostructure: Selective Positioning of Lithium Ions and Efficient Charge Collection. ACS Nano, 2014, 8, 6893-6901.	14.6	10
144	Cyanoacetic acid tethered thiophene for well-matched LUMO level in Ru(II)-terpyridine dye sensitized solar cells. Dyes and Pigments, 2016, 126, 270-278.	3.7	10

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145	Effect of Ion-Chelating Chain Lengths in Thiophene-Based Monomers on in Situ Photoelectrochemical Polymerization and Photovoltaic Performances. ACS Applied Materials & Interfaces, 2015, 7, 11482-11489.	8.0	8
146	Stereoisomers of an azine-linked donorâ€"acceptor conjugated polymer: the impact of molecular conformation on electrical performance. RSC Advances, 2016, 6, 44272-44278.	3.6	8
147	Programmable dual electrochromism in azine linked conjugated polymer. Optical Materials Express, 2017, 7, 2117.	3.0	8
148	Solar Cells: pâ€Type CuI Islands on TiO₂ Electron Transport Layer for a Highly Efficient Planarâ€Perovskite Solar Cell with Negligible Hysteresis (Adv. Energy Mater. 5/2018). Advanced Energy Materials, 2018, 8, 1870020.	19.5	8
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