Zhan'ao Tan

List of Publications by Year
in descending order

228 papers	13,409 citations	23500 58 h-index	26548 107 g-index
229 all docs	229 docs citations	229 times ranked	12034 citing authors

#	Article	IF	Citations
1	A High-Mobility Electron-Transport Polymer with Broad Absorption and Its Use in Field-Effect Transistors and All-Polymer Solar Cells. Journal of the American Chemical Society, 2007, 129, 7246-7247.	6.6	1,110
2	Synthesis and Photovoltaic Properties of Two-Dimensional Conjugated Polythiophenes with Bi(thienylenevinylene) Side Chains. Journal of the American Chemical Society, 2006, 128, 4911-4916.	6.6	759
3	Engineering triangular carbon quantum dots with unprecedented narrow bandwidth emission for multicolored LEDs. Nature Communications, 2018, 9, 2249.	5.8	676
4	Design, Application, and Morphology Study of a New Photovoltaic Polymer with Strong Aggregation in Solution State. Macromolecules, 2012, 45, 9611-9617.	2.2	664
5	Bright Multicolor Bandgap Fluorescent Carbon Quantum Dots for Electroluminescent Lightâ€Emitting Diodes. Advanced Materials, 2017, 29, 1604436.	11.1	643
6	Highly Emissive and Colorâ€Tunable CuInS₂â€Based Colloidal Semiconductor Nanocrystals: Offâ€Stoichiometry Effects and Improved Electroluminescence Performance. Advanced Functional Materials, 2012, 22, 2081-2088.	7.8	449
7	Highâ€Performance Inverted Polymer Solar Cells with Solutionâ€Processed Titanium Chelate as Electronâ€Collecting Layer on ITO Electrode. Advanced Materials, 2012, 24, 1476-1481.	11.1	305
8	Solution-processable metal oxides/chelates as electrode buffer layers for efficient and stable polymer solar cells. Energy and Environmental Science, 2015, 8, 1059-1091.	15.6	265
9	Bright and Color-Saturated Emission from Blue Light-Emitting Diodes Based on Solution-Processed Colloidal Nanocrystal Quantum Dots. Nano Letters, 2007, 7, 3803-3807.	4.5	197
10	Nearâ€Bandâ€Edge Electroluminescence from Heavyâ€Metalâ€Free Colloidal Quantum Dots. Advanced Materials, 2011, 23, 3553-3558.	11.1	180
11	Electroluminescent Warm White Lightâ€Emitting Diodes Based on Passivation Enabled Bright Red Bandgap Emission Carbon Quantum Dots. Advanced Science, 2019, 6, 1900397.	5.6	174
12	Copolymers of perylene diimide with dithienothiophene and dithienopyrrole as electron-transport materials for all-polymer solar cells and field-effect transistors. Journal of Materials Chemistry, 2009, 19, 5794.	6.7	165
13	High performance polymer solar cells with as-prepared zirconium acetylacetonate film as cathode buffer layer. Scientific Reports, 2014, 4, 4691.	1.6	165
14	Passivation of the grain boundaries of CH₃NH₃PbI₃ using carbon quantum dots for highly efficient perovskite solar cells with excellent environmental stability. Nanoscale, 2019, 11, 115-124.	2.8	164
15	Solution-Processed Tungsten Oxide as an Effective Anode Buffer Layer for High-Performance Polymer Solar Cells. Journal of Physical Chemistry C, 2012, 116, 18626-18632.	1.5	157
16	Fluorescent Carbon Dots: Fantastic Electroluminescent Materials for Lightâ€Emitting Diodes. Advanced Science, 2021, 8, 2001977.	5.6	141
17	Efficient and stable polymer solar cells with solution-processed molybdenum oxide interfacial layer. Journal of Materials Chemistry A, 2013, 1, 657-664.	5.2	126
18	Branched Poly(thienylene vinylene)s with Absorption Spectra Covering the Whole Visible Region. Macromolecules, 2006, 39, 4657-4662.	2.2	125

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19	Morphology Engineering for Highâ€Performance and Multicolored Perovskite Lightâ€Emitting Diodes with Simple Device Structures. Small, 2016, 12, 4412-4420.	5.2	125
20	Efficient all-polymer solar cells based on blend of tris(thienylenevinylene)-substituted polythiophene and poly[perylene diimide-<i>alt</i>-bis(dithienothiophene)]. Applied Physics Letters, 2008, 93, .	1.5	123
21	Dihydronaphthyl-based [60]fullerene bisadducts for efficient and stable polymer solar cells. Chemical Communications, 2012, 48, 425-427.	2.2	122
22	Manipulating the Tradeâ€off Between Quantum Yield and Electrical Conductivity for Highâ€Brightness Quasiâ€2D Perovskite Lightâ€Emitting Diodes. Advanced Functional Materials, 2018, 28, 1804187.	7.8	113
23	Highly Efficient and Thermally Stable Polymer Solar Cells with Dihydronaphthylâ€Based [70]Fullerene Bisadduct Derivative as the Acceptor. Advanced Functional Materials, 2012, 22, 2187-2193.	7.8	104
24	Effects of Fullerene Bisadduct Regioisomers on Photovoltaic Performance. Advanced Functional Materials, 2014, 24, 158-163.	7.8	104
25	The growth of a CH₃NH₃PbI₃thin film using simplified close space sublimation for efficient and large dimensional perovskite solar cells. Energy and Environmental Science, 2016, 9, 1486-1494.	15.6	104
26	Efficient perovskite/fullerene planar heterojunction solar cells with enhanced charge extraction and suppressed charge recombination. Nanoscale, 2015, 7, 9771-9778.	2.8	102
27	A Hyperbranched Conjugated Polymer as the Cathode Interlayer for Highâ€Performance Polymer Solar Cells. Advanced Materials, 2013, 25, 6889-6894.	11.1	101
28	Efficient and Stable Pure Green All-Inorganic Perovskite CsPbBr₃ Light-Emitting Diodes with a Solution-Processed NiO_{<i>x</i>} Interlayer. Journal of Physical Chemistry C, 2017, 121, 28132-28138.	1.5	100
29	Efficient Two-Dimensional Tin Halide Perovskite Light-Emitting Diodes via a Spacer Cation Substitution Strategy. Journal of Physical Chemistry Letters, 2020, 11, 1120-1127.	2.1	97
30	Synthesis of highly fluorescent InP/ZnS small-core/thick-shell tetrahedral-shaped quantum dots for blue light-emitting diodes. Journal of Materials Chemistry C, 2017, 5, 8243-8249.	2.7	93
31	Synthesis and Photovoltaic Properties of a Donorâˆ’Acceptor Double-Cable Polythiophene with High Content of C60Pendant. Macromolecules, 2007, 40, 1868-1873.	2.2	92
32	Opticalâ€“Electricalâ€“Chemical Engineering of PEDOT:PSS by Incorporation of Hydrophobic Nafion for Efficient and Stable Perovskite Solar Cells. ACS Applied Materials & Interfaces, 2018, 10, 3902-3911.	4.0	89
33	Molecular Design toward Efficient Polymer Solar Cells with High Polymer Content. Journal of the American Chemical Society, 2013, 135, 8464-8467.	6.6	86
34	Two-dimensional organic-inorganic hybrid perovskite: from material properties to device applications. Science China Materials, 2018, 61, 1257-1277.	3.5	84
35	Achieving Balanced Charge Injection of Blue Quantum Dot Light-Emitting Diodes through Transport Layer Doping Strategies. Journal of Physical Chemistry Letters, 2019, 10, 960-965.	2.1	84
36	Interfacial engineering and optical coupling for multicolored semitransparent inverted organic photovoltaics with a record efficiency of over 12%. Journal of Materials Chemistry A, 2019, 7, 15887-15894.	5.2	83

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37	Synthesis, Hole Mobility, and Photovoltaic Properties of Cross-Linked Polythiophenes with Vinyleneâˆ’Terthiopheneâˆ’Vinylene as Conjugated Bridge. Macromolecules, 2007, 40, 1831-1837.	2.2	81
38	Synthesis of New Conjugated Polyfluorene Derivatives Bearing Triphenylamine Moiety through a Vinylene Bridge and Their Stable Blue Electroluminescence. Chemistry of Materials, 2006, 18, 1053-1061.	3.2	77
39	[6,6]â€Phenylâ€C₆₁â€Butyric Acid Dimethylamino Ester as a Cathode Buffer Layer for Highâ€Performance Polymer Solar Cells. Advanced Energy Materials, 2013, 3, 1569-1574.	10.2	77
40	High-Performance Polymer Solar Cells with Solution-Processed and Environmentally Friendly CuO_{<i>x</i>} Anode Buffer Layer. ACS Applied Materials & Interfaces, 2013, 5, 10658-10664.	4.0	77
41	Effect of Energy Alignment, Electron Mobility, and Film Morphology of Perylene Diimide Based Polymers as Electron Transport Layer on the Performance of Perovskite Solar Cells. ACS Applied Materials & Interfaces, 2017, 9, 10983-10991.	4.0	76
42	Green-solvent-processable strategies for achieving large-scale manufacture of organic photovoltaics. Journal of Materials Chemistry A, 2019, 7, 22826-22847.	5.2	76
43	Multifarious Chiral Nanoarchitectures Serving as Handed-Selective Fluorescence Filters for Generating Full-Color Circularly Polarized Luminescence. ACS Nano, 2020, 14, 3208-3218.	7.3	76
44	Solution-processed vanadium oxide as a hole collection layer on an ITO electrode for high-performance polymer solar cells. Physical Chemistry Chemical Physics, 2012, 14, 14589.	1.3	75
45	Solution-processed nickel acetate as hole collection layer for polymer solar cells. Physical Chemistry Chemical Physics, 2012, 14, 14217.	1.3	75
46	Enhancing the crystallinity of HC(NH2)2PbI3 film by incorporating methylammonium halide intermediate for efficient and stable perovskite solar cells. Nano Energy, 2017, 40, 248-257.	8.2	72
47	Solutionâ€Processed Rhenium Oxide: A Versatile Anode Buffer Layer for High Performance Polymer Solar Cells with Enhanced Light Harvest. Advanced Energy Materials, 2014, 4, 1300884.	10.2	71
48	Effect of side-chain end groups on the optical, electrochemical, and photovoltaic properties of side-chain conjugated polythiophenes. Journal of Polymer Science Part A, 2006, 44, 4916-4922.	2.5	70
49	Diverse applications of MoO₃for high performance organic photovoltaics: fundamentals, processes and optimization strategies. Journal of Materials Chemistry A, 2020, 8, 978-1009.	5.2	70
50	Effect of Branched Conjugation Structure on the Optical, Electrochemical, Hole Mobility, and Photovoltaic Properties of Polythiophenes. Journal of Physical Chemistry B, 2006, 110, 26062-26067.	1.2	69
51	Novel twoâ€dimensional donorâ€“acceptor conjugated polymers containing quinoxaline units: Synthesis, characterization, and photovoltaic properties. Journal of Polymer Science Part A, 2008, 46, 4038-4049.	2.5	69
52	Significant improvement of photovoltaic performance by embedding thiophene in solution-processed star-shaped TPA-DPP backbone. Journal of Materials Chemistry A, 2013, 1, 5747.	5.2	69
53	Influence of Ï€-linker on triphenylamine-based hole transporting materials in perovskite solar cells. Dyes and Pigments, 2017, 139, 129-135.	2.0	69
54	White light from polymer light-emitting diodes: Utilization of fluorenone defects and exciplex. Applied Physics Letters, 2006, 88, 163510.	1.5	68

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55	High Performance Quasiâ€2D Perovskite Skyâ€Blue Lightâ€Emitting Diodes Using a Dualâ€Ligand Strategy. Small, 2020, 16, e2002940.	5.2	65
56	Performance improvement of polymer solar cells by using a solution processible titanium chelate as cathode buffer layer. Applied Physics Letters, 2007, 91, 023509.	1.5	64
57	Efficient polymer solar cells with a solution-processed and thermal annealing-free RuO₂anode buffer layer. Journal of Materials Chemistry A, 2014, 2, 1318-1324.	5.2	64
58	Linking Polythiophene Chains Through Conjugated Bridges: A Way to Improve Charge Transport in Polymer Solar Cells. Macromolecular Rapid Communications, 2006, 27, 793-798.	2.0	59
59	Morphology and properties of soy protein plastics modified with chitin. Journal of Applied Polymer Science, 2003, 90, 3676-3682.	1.3	57
60	Material and device engineering for high-performance blue quantum dot light-emitting diodes. Nanoscale, 2020, 12, 13186-13224.	2.8	57
61	Semitransparent solar cells with over 12% efficiency based on a new low bandgap fluorinated small molecule acceptor. Materials Chemistry Frontiers, 2019, 3, 2483-2490.	3.2	55
62	Quadrupole Moment Induced Morphology Control Via a Highly Volatile Small Molecule in Efficient Organic Solar Cells. Advanced Functional Materials, 2021, 31, 2010535.	7.8	55
63	Realization of high performance for PM6:Y6 based organic photovoltaic cells. Journal of Energy Chemistry, 2021, 61, 29-46.	7.1	54
64	Red Phosphorescent Carbon Quantum Dot Organic Framework-Based Electroluminescent Light-Emitting Diodes Exceeding 5% External Quantum Efficiency. Journal of the American Chemical Society, 2021, 143, 18941-18951.	6.6	54
65	Fine-tuning device performances of small molecule solar cells via the more polarized DPP-attached donor units. Physical Chemistry Chemical Physics, 2012, 14, 14238.	1.3	53
66	Multifunctional pâ€Type Carbon Quantum Dots: a Novel Hole Injection Layer for Highâ€Performance Perovskite Lightâ€Emitting Diodes with Significantly Enhanced Stability. Advanced Optical Materials, 2019, 7, 1901299.	3.6	52
67	High-Efficiency Fluorescence through Bioinspired Supramolecular Self-Assembly. ACS Nano, 2020, 14, 2798-2807.	7.3	49
68	Multiâ€Functional Solid Additive Induced Favorable Vertical Phase Separation and Ordered Molecular Packing for Highly Efficient Layerâ€byâ€Layer Organic Solar Cells. Small, 2021, 17, e2103497.	5.2	49
69	Efficient interface modification <i>via</i> multi-site coordination for improved efficiency and stability in organic solar cells. Energy and Environmental Science, 2022, 15, 822-829.	15.6	49
70	Narrowâ€bandwidth emissive carbon dots: A rising star in the fluorescent material family. , 2022, 4, 88-114.		49
71	Efficient lead acetate sourced planar heterojunction perovskite solar cells with enhanced substrate coverage via one-step spin-coating. Organic Electronics, 2016, 33, 194-200.	1.4	48
72	Improvement of the power conversion efficiency and long term stability of polymer solar cells by incorporation of amphiphilic Nafion doped PEDOT-PSS as a hole extraction layer. Journal of Materials Chemistry A, 2015, 3, 18727-18734.	5.2	46

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73	A co-crystallization induced surface modification strategy with cyanuric acid modulates the bandgap emission of carbon dots. Nanoscale, 2020, 12, 10987-10993.	2.8	46
74	Tetraphenylmethaneâ€Arylamine Holeâ€Transporting Materials for Perovskite Solar Cells. ChemSusChem, 2017, 10, 968-975.	3.6	45
75	Anthraceneâ€“arylamine hole transporting materials for perovskite solar cells. Chemical Communications, 2017, 53, 9558-9561.	2.2	45
76	Thiopheneâ€“Arylamine Holeâ€Transporting Materials in Perovskite Solar Cells: Substitution Position Effect. Energy Technology, 2017, 5, 1788-1794.	1.8	44
77	Colloidal nanocrystal-based light-emitting diodes fabricated on plastic toward flexible quantum dot optoelectronics. Journal of Applied Physics, 2009, 105, .	1.1	43
78	Molecular Engineering of Simple Benzeneâ€“Arylamine Hole-Transporting Materials for Perovskite Solar Cells. ACS Applied Materials & Interfaces, 2017, 9, 27657-27663.	4.0	42
79	All-solution-processed perovskite light-emitting diodes with all metal oxide transport layers. Chemical Communications, 2018, 54, 13283-13286.	2.2	42
80	Low-temperature solution-processed vanadium oxide as hole transport layer for efficient and stable perovskite solar cells. Physical Chemistry Chemical Physics, 2018, 20, 21746-21754.	1.3	40
81	Pure Blue and Highly Luminescent Quantumâ€Dot Lightâ€Emitting Diodes with Enhanced Electron Injection and Exciton Confinement via Partially Oxidized Aluminum Cathode. Advanced Optical Materials, 2017, 5, 1700035.	3.6	39
82	Printable SnO2 cathode interlayer with up to 500 nm thickness-tolerance for high-performance and large-area organic solar cells. Science China Chemistry, 2020, 63, 957-965.	4.2	38
83	Engineering the vertical concentration distribution within the polymer:fullerene blends for high performance inverted polymer solar cells. Journal of Materials Chemistry A, 2017, 5, 2319-2327.	5.2	37
84	New Insights into the Formation and Colorâ€Tunable Optical Properties of Multinary Cuâ€Inâ€Znâ€Based Chalcogenide Semiconductor Nanocrystals. Advanced Optical Materials, 2018, 6, 1701389.	3.6	37
85	Double-Layer Structured WPLEDs Based on Three Primary RGB Luminescent Polymers:â€‰ Toward High Luminous Efficiency, Color Purity, and Stability. Journal of Physical Chemistry C, 2007, 111, 6862-6867.	1.5	36
86	Integration of planar and bulk heterojunctions in polymer/nanocrystal hybrid photovoltaic cells. Applied Physics Letters, 2009, 95, 063510.	1.5	35
87	A comparison of n-type copolymers based on cyclopentadithiophene and naphthalene diimide/perylene diimides for all-polymer solar cell applications. Polymer Chemistry, 2015, 6, 7594-7602.	1.9	35
88	High Performance Tandem Solar Cells with Inorganic Perovskite and Organic Conjugated Molecules to Realize Complementary Absorption. Journal of Physical Chemistry Letters, 2020, 11, 9596-9604.	2.1	35
89	Finding the Lost Open-Circuit Voltage in Polymer Solar Cells by UV-Ozone Treatment of the Nickel Acetate Anode Buffer Layer. ACS Applied Materials & Interfaces, 2014, 6, 9458-9465.	4.0	34
90	Highâ€Performance Blue Quantum Dot Lightâ€Emitting Diodes with Balanced Charge Injection. Advanced Electronic Materials, 2019, 5, 1800794.	2.6	34

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91	Microwave-assisted <i>in situ</i> large scale synthesis of a carbon dots@g-C₃N₄ composite phosphor for white light-emitting devices. Materials Chemistry Frontiers, 2020, 4, 517-523.	3.2	34
92	pâ€Type Carbon Dots for Effective Surface Optimization for Nearâ€Recordâ€Efficiency CsPbI₂Br Solar Cells. Small, 2021, 17, e2102272.	5.2	34
93	Synthesis, hole mobility, and photovoltaic properties of two alternating poly[3-(hex-1-enyl)thiophene-co-thiophene]s. Journal of Polymer Science Part A, 2007, 45, 629-638.	2.5	33
94	Trapping Light with a Nanostructured CeO_x/Al Back Electrode for Highâ€Performance Polymer Solar Cells. Advanced Materials Interfaces, 2014, 1, 1400197.	1.9	33
95	Efficient perovskite/organic integrated solar cells with extended photoresponse to 930 nm and enhanced near-infrared external quantum efficiency of over 50%. Nanoscale, 2018, 10, 3245-3253.	2.8	33
96	Recent advances and comprehensive insights on nickel oxide in emerging optoelectronic devices. Sustainable Energy and Fuels, 2020, 4, 4415-4458.	2.5	33
97	Stable Binary Complementary White Light-Emitting Diodes Based on Quantum-Dot/Polymer-Bilayer Structures. IEEE Photonics Technology Letters, 2008, 20, 1998-2000.	1.3	32
98	Highly Efficient and Super Stable Fullâ€Color Quantum Dots Lightâ€Emitting Diodes with Solutionâ€Processed Allâ€Inorganic Charge Transport Layers. Small, 2021, 17, e2007363.	5.2	32
99	Alcohol soluble titanium(IV) oxide bis(2,4-pentanedionate) as electron collection layer for efficient inverted polymer solar cells. Organic Electronics, 2012, 13, 2429-2435.	1.4	31
100	Extending absorption of near-infrared wavelength range for high efficiency CIGS solar cell via adjusting energy band. Current Applied Physics, 2018, 18, 484-490.	1.1	31
101	Enhancing the electron blocking ability of n-type MoO3 by doping with p-type NiO for efficient nonfullerene polymer solar cells. Organic Electronics, 2019, 68, 168-175.	1.4	31
102	Lead acetate produced from lead-acid battery for efficient perovskite solar cells. Nano Energy, 2020, 69, 104380.	8.2	30
103	Analysis of Electrode Configuration Effects on Mass Transfer and Organic Redox Flow Battery Performance. Industrial & Engineering Chemistry Research, 2022, 61, 2915-2925.	1.8	30
104	Synthesis, electroluminescence, and photovoltaic properties of dendronized poly(p-phenylene) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 22	1.8	29
105	Solution-Processed and Low-Temperature Annealed CrO_{<i>x</i>} as Anode Buffer Layer for Efficient Polymer Solar Cells. Journal of Physical Chemistry C, 2014, 118, 9309-9317.	1.5	29
106	Tandem structure: a breakthrough in power conversion efficiency for highly efficient polymer solar cells. Sustainable Energy and Fuels, 2019, 3, 910-934.	2.5	28
107	Effects of Alkoxy Chain Length in Alkoxy-Substituted Dihydronaphthyl-Based [60]Fullerene Bisadduct Acceptors on Their Photovoltaic Properties. ACS Applied Materials & Interfaces, 2012, 4, 5966-5973.	4.0	27
108	Efficient planar perovskite solar cells prepared via a low-pressure vapor-assisted solution process with fullerene/TiO₂ as an electron collection bilayer. RSC Advances, 2016, 6, 78585-78594.	1.7	27

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109	High performance polymer solar cells with electron extraction and light-trapping dual functional cathode interfacial layer. Nano Energy, 2017, 31, 201-209.	8.2	27
110	Vertically Oriented BiI₃ Template Featured BiI₃/Polymer Heterojunction for High Photocurrent and Long-Term Stable Solar Cells. ACS Applied Materials & Interfaces, 2019, 11, 32509-32516.	4.0	27
111	Multifunctional bipyramid-Au@ZnO coreâ€"shell nanoparticles as a cathode buffer layer for efficient non-fullerene inverted polymer solar cells with improved near-infrared photoresponse. Journal of Materials Chemistry A, 2019, 7, 2667-2676.	5.2	27
112	Efficient quantum dot light-emitting diodes with solution-processable molybdenum oxide as the anode buffer layer. Nanotechnology, 2013, 24, 175201.	1.3	26
113	Diketopyrrolopyrrole or benzodithiophene-arylamine small-molecule hole transporting materials for stable perovskite solar cells. RSC Advances, 2016, 6, 87454-87460.	1.7	26
114	Formulation engineering for optimizing ternary electron acceptors exemplified by isomeric PC₇₁BM in planar perovskite solar cells. Journal of Materials Chemistry A, 2016, 4, 18776-18782.	5.2	26
115	Engineering the interconnecting layer for efficient inverted tandem polymer solar cells with absorption complementary fullerene and nonfullerene acceptors. Solar Energy Materials and Solar Cells, 2018, 180, 1-9.	3.0	26
116	Recent advances in perovskite/organic integrated solar cells. Rare Metals, 2021, 40, 2763-2777.	3.6	26
117	Layerâ€byâ€layered organic solar cells: Morphology optimizing strategies and processing techniques. Aggregate, 2022, 3, e107.	5.2	26
118	Electroluminescence and photovoltaic properties of poly(<i>p</i>â€phenylene vinylene) derivatives with dendritic pendants. Journal of Applied Polymer Science, 2008, 107, 514-521.	1.3	25
119	Construction of Planar and Bulk Integrated Heterojunction Polymer Solar Cells Using Cross-Linkable D-A Copolymer. ACS Applied Materials & Interfaces, 2013, 5, 6591-6597.	4.0	25
120	Enhancing the Performance of Blue Quantum Dots Lightâ€Emitting Diodes through Interface Engineering with Deoxyribonucleic Acid. Advanced Optical Materials, 2018, 6, 1800578.	3.6	25
121	Expanding the Light Harvesting of CsPbI₂Br to Near Infrared by Integrating with Organic Bulk Heterojunction for Efficient and Stable Solar Cells. ACS Applied Materials & Interfaces, 2019, 11, 37991-37998.	4.0	25
122	Stabilization of the film morphology in polymer: Fullerene heterojunction solar cells with photocrosslinkable bromineâ€functionalized lowâ€bandgap copolymers. Journal of Polymer Science Part A, 2013, 51, 3123-3131.	2.5	24
123	Large Optical Nonlinearity Induced by Singlet Fission in Pentacene Films. Angewandte Chemie - International Edition, 2015, 54, 6222-6226.	7.2	24
124	Optimization of the Energy Level Alignment between the Photoactive Layer and the Cathode Contact Utilizing Solution-Processed Hafnium Acetylacetonate as Buffer Layer for Efficient Polymer Solar Cells. ACS Applied Materials & Interfaces, 2016, 8, 432-441.	4.0	24
125	Decahedral-shaped Au nanoparticles as plasmonic centers for high performance polymer solar cells. Organic Electronics, 2017, 43, 33-40.	1.4	24
126	Biuret Induced Tinâ€Anchoring and Crystallizationâ€Regulating for Efficient Leadâ€Free Tin Halide Perovskite Lightâ€Emitting Diodes. Small, 2022, 18, e2200036.	5.2	24

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127	Achieving mixed halide perovskite via halogen exchange during vapor-assisted solution process for efficient and stable perovskite solar cells. Organic Electronics, 2017, 50, 33-42.	1.4	23
128	Incorporating an Electrode Modification Layer with a Vertical Phase Separated Photoactive Layer for Efficient and Stable Inverted Nonfullerene Polymer Solar Cells. ACS Applied Materials & Interfaces, 2017, 9, 43871-43879.	4.0	23
129	Efficient Planar Structured Perovskite Solar Cells with Enhanced Open-Circuit Voltage and Suppressed Charge Recombination Based on a Slow Grown Perovskite Layer from Lead Acetate Precursor. ACS Applied Materials & Interfaces, 2017, 9, 41937-41944.	4.0	23
130	Ternary blend strategy in benzotriazole-based organic photovoltaics for indoor application. Green Energy and Environment, 2021, 6, 920-928.	4.7	23
131	Perovskite Passivation Strategies for Efficient and Stable Solar Cells. Solar Rrl, 2021, 5, .	3.1	23
132	Recent advances of organometallic complexes in emerging photovoltaics. Journal of Polymer Science, 2022, 60, 865-916.	2.0	23
133	Enhancing charge transport in an organic photoactive layer <i>via</i> vertical component engineering for efficient perovskite/organic integrated solar cells. Nanoscale, 2019, 11, 4035-4043.	2.8	22
134	Novel cathode buffer layer of Al(acac)₃ enables efficient, large area and stable semi-transparent organic solar cells. Materials Chemistry Frontiers, 2020, 4, 2072-2080.	3.2	22
135	Constructing Desired Vertical Component Distribution Within a PBDB-T:ITIC-M Photoactive Layer via Fine-Tuning the Surface Free Energy of a Titanium Chelate Cathode Buffer Layer. Frontiers in Chemistry, 2018, 6, 292.	1.8	21
136	Intramolecular hydrogen bonds induced high solubility for efficient and stable anthraquinone based neutral aqueous organic redox flow batteries. Journal of Power Sources, 2021, 498, 229896.	4.0	21
137	Improved performance of polymer solar cells based on P3HT and ICBA using alcohol soluble titanium chelate as electron collection layer. Organic Electronics, 2013, 14, 845-851.	1.4	20
138	Synergy of a titanium chelate electron collection layer and a vertical phase separated photoactive layer for efficient inverted polymer solar cells. Journal of Materials Chemistry A, 2018, 6, 7257-7264.	5.2	20
139	A pentacyclic <i>S</i>,<i>N</i>-heteroacene based electron acceptor with strong near-infrared absorption for efficient organic solar cells. Chemical Communications, 2019, 55, 7057-7060.	2.2	20
140	Deep-blue carbon dots offer high colour purity. Nature Photonics, 2020, 14, 130-131.	15.6	20
141	Composition-limited spectral response of hybrid photovoltaic cells containing infrared PbSe nanocrystals. Journal of Applied Physics, 2008, 104, 044306.	1.1	19
142	ITO electrode/photoactive layer interface engineering for efficient inverted polymer solar cells based on P3HT and PCBM using a solution-processed titanium chelate. Journal Physics D: Applied Physics, 2012, 45, 285102.	1.3	19
143	Nonlinear Density Dependence of Singlet Fission Rate in Tetracene Films. Journal of Physical Chemistry Letters, 2014, 5, 3462-3467.	2.1	19
144	Solutionâ€Processed Titanium Chelate Used as Both Electrode Modification Layer and Intermediate Layer for Efficient Inverted Tandem Polymer Solar Cells. Chinese Journal of Chemistry, 2018, 36, 194-198.	2.6	19

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145	Revival of Insulating Polyethylenimine by Creatively Carbonizing with Perylene into Highly Crystallized Carbon Dots as the Cathode Interlayer for High-Performance Organic Solar Cells. ACS Applied Materials & Interfaces, 2022, 14, 1280-1289.	4.0	19
146	Synthesis, characterization and photovoltaic properties of thiophene copolymers containing conjugated side-chain. European Polymer Journal, 2007, 43, 855-861.	2.6	18
147	The Effect of Donor and Nonfullerene Acceptor Inhomogeneous Distribution within the Photoactive Layer on the Performance of Polymer Solar Cells with Different Device Structures. Polymers, 2017, 9, 571.	2.0	18
148	Low-temperature in-situ preparation of ZnO electron extraction layer for efficient inverted polymer solar cells. Organic Electronics, 2019, 74, 82-88.	1.4	18
149	Triphenylamine modified bis-diketopyrrolopyrrole molecular donor materials with extended conjugation for bulk heterojunction solar cells. Organic Electronics, 2014, 15, 2575-2586.	1.4	17
150	Highly reproducible and uniform SERS substrates based on Ag nanoparticles with optimized size and gap. Photonics and Nanostructures - Fundamentals and Applications, 2017, 23, 58-63.	1.0	17
151	Tailoring film agglomeration for preparation of silver nanoparticles with controlled morphology. Materials and Design, 2016, 103, 315-320.	3.3	16
152	High-efficiency red perovskite light-emitting diodes based on collaborative optimization of emission layer and transport layers. Journal of Materials Chemistry C, 2021, 9, 12367-12373.	2.7	16
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