Xiao-Tao Hao

List of Publications by Year
in descending order

196 papers	8,559 citations	61857 43 h-index	53109 85 g-index
199 all docs	199 docs citations	199 times ranked	6640 citing authors

#	Article	IF	Citations
1	Singleâ€Junction Organic Photovoltaic Cell with 19% Efficiency. Advanced Materials, 2021, 33, e2102420.	11.1	1,072
2	A General Low-Temperature Route for Large-Scale Fabrication of Highly Oriented ZnO Nanorod/Nanotube Arrays. Journal of the American Chemical Society, 2005, 127, 2378-2379.	6.6	479
3	Reduced non-radiative charge recombination enables organic photovoltaic cell approaching 19% efficiency. Joule, 2021, 5, 2408-2419.	11.7	419
4	Singleâ€Junction Organic Solar Cells with 19.17% Efficiency Enabled by Introducing One Asymmetric Guest Acceptor. Advanced Materials, 2022, 34, e2110147.	11.1	377
5	A Wellâ€Mixed Phase Formed by Two Compatible Nonâ€Fullerene Acceptors Enables Ternary Organic Solar Cells with Efficiency over 18.6%. Advanced Materials, 2021, 33, e2101733.	11.1	354
6	Morphology Control Enables Efficient Ternary Organic Solar Cells. Advanced Materials, 2018, 30, e1803045.	11.1	243
7	Ternary Organic Solar Cells with Efficiency >16.5% Based on Two Compatible Nonfullerene Acceptors. Advanced Materials, 2019, 31, e1905645.	11.1	240
8	Solutionâ€Processed Organic Solar Cells with High Openâ€Circuit Voltage of 1.3 V and Low Nonâ€Radiative Voltage Loss of 0.16 V. Advanced Materials, 2020, 32, e2002122.	11.1	168
9	Intrinsic and Extrinsic Fluorescence in Carbon Nanodots: Ultrafast Timeâ€Resolved Fluorescence and Carrier Dynamics. Advanced Optical Materials, 2013, 1, 173-178.	3.6	156
10	Thickness dependence of structural, optical and electrical properties of ZnO:Al films prepared on flexible substrates. Applied Surface Science, 2001, 183, 137-142.	3.1	136
11	Regulating the vertical phase distribution by fullerene-derivative in high performance ternary organic solar cells. Nano Energy, 2018, 46, 81-90.	8.2	129
12	Designing a ternary photovoltaic cell for indoor light harvesting with a power conversion efficiency exceeding 20%. Journal of Materials Chemistry A, 2018, 6, 8579-8585.	5.2	124
13	Vertically optimized phase separation with improved exciton diffusion enables efficient organic solar cells with thick active layers. Nature Communications, 2022, 13, 2369.	5.8	122
14	Versatile Ternary Approach for Novel Organic Solar Cells: A Review. Solar Rrl, 2019, 3, 1800263.	3.1	117
15	17% efficiency all-small-molecule organic solar cells enabled by nanoscale phase separation with a hierarchical branched structure. Energy and Environmental Science, 2021, 14, 5903-5910.	15.6	116
16	Small reorganization energy acceptors enable low energy losses in non-fullerene organic solar cells. Nature Communications, 2022, 13, .	5.8	113
17	Integrating Ultrathin Bulkâ€Heterojunction Organic Semiconductor Intermediary for Highâ€Performance Lowâ€Bandgap Perovskite Solar Cells with Low Energy Loss. Advanced Functional Materials, 2018, 28, 1804427.	7.8	111
18	Dual FÃ¶rster resonance energy transfer effects in non-fullerene ternary organic solar cells with the third component embedded in the donor and acceptor. Journal of Materials Chemistry A, 2017, 5, 12120-12130.	5.2	102

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19	Ternary Organic Solar Cells with Small Nonradiative Recombination Loss. ACS Energy Letters, 2019, 4, 1196-1203.	8.8	101
20	Ferrocene as a highly volatile solid additive in non-fullerene organic solar cells with enhanced photovoltaic performance. Energy and Environmental Science, 2020, 13, 5117-5125.	15.6	93
21	Flexible top-emitting electroluminescent devices on polyethylene terephthalate substrates. Applied Physics Letters, 2005, 86, 153508.	1.5	89
22	Charge transfer from poly(3-hexylthiophene) to graphene oxide and reduced graphene oxide. RSC Advances, 2015, 5, 89515-89520.	1.7	89
23	High-performance low-temperature transparent conducting aluminum-doped ZnO thin films and applications. Journal of Crystal Growth, 2006, 287, 44-47.	0.7	86
24	Monolithic perovskite/Si tandem solar cells exceeding 22% efficiency via optimizing top cell absorber. Nano Energy, 2018, 53, 798-807.	8.2	83
25	Ternary strategy enabling high-efficiency rigid and flexible organic solar cells with reduced non-radiative voltage loss. Energy and Environmental Science, 2022, 15, 1563-1572.	15.6	83
26	Efficient Ternary Organic Solar Cells Enabled by the Integration of Nonfullerene and Fullerene Acceptors with a Broad Composition Tolerance. Advanced Functional Materials, 2019, 29, 1807006.	7.8	81
27	Controllable Growth of Lead-Free All-Inorganic Perovskite Nanowire Array with Fast and Stable Near-Infrared Photodetection. Journal of Physical Chemistry C, 2019, 123, 17566-17573.	1.5	78
28	Hyperbranched Blue-Light-Emitting Alternating Copolymers of Tetrabromoarylmethane/Silane and 9,9-Dihexylfluorene-2,7-diboronic Acid. Macromolecules, 2004, 37, 5965-5970.	2.2	75
29	A Highâ€Performance Nonfused Wideâ€Bandgap Acceptor for Versatile Photovoltaic Applications. Advanced Materials, 2022, 34, e2108090.	11.1	71
30	Fully doctor-bladed planar heterojunction perovskite solar cells under ambient condition. Organic Electronics, 2018, 58, 153-158.	1.4	69
31	Recent Advances of Plasmonic Organic Solar Cells: Photophysical Investigations. Polymers, 2018, 10, 123.	2.0	67
32	FÃ¶rster Resonance Energy Transfer and Energy Cascade in Broadband Photodetectors with Ternary Polymer Bulk Heterojunction. Journal of Physical Chemistry C, 2015, 119, 21913-21920.	1.5	61
33	Energy Loss in Organic Solar Cells: Mechanisms, Strategies, and Prospects. Solar Rrl, 2020, 4, 2000130.	3.1	59
34	Ternary organic solar cells based on two compatible PDI-based acceptors with an enhanced power conversion efficiency. Journal of Materials Chemistry A, 2019, 7, 3552-3557.	5.2	58
35	Spatial Fluorescence Inhomogeneities in Light-Emitting Conjugated Polymer Films. Journal of Physical Chemistry Letters, 2011, 2, 1520-1525.	2.1	57
36	Improving the Compatibility of Donor Polymers in Efficient Ternary Organic Solar Cells via Post-Additive Soaking Treatment. ACS Applied Materials & Interfaces, 2017, 9, 618-627.	4.0	51

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37	Preparation and structural properties for GaN films grown on Si (1 1 1) by annealing. Applied Surface Science, 2002, 193, 254-260.	3.1	50
38	Recent progress of PM6:Y6-based high efficiency organic solar cells. Surfaces and Interfaces, 2021, 23, 100921.	1.5	50
39	Hyperbranched Blue to Red Light-Emitting Polymers with Tetraarylsilyl Cores:Â Synthesis, Optical and Electroluminescence Properties, and ab Initio Modeling Studies. Macromolecules, 2005, 38, 4157-4168.	2.2	49
40	Balanced Electric Field Dependent Mobilities: A Key to Access High Fill Factors in Organic Bulk Heterojunction Solar Cells. Solar Rrl, 2018, 2, 1700239.	3.1	49
41	Surface modification <i>via</i> self-assembling large cations for improved performance and modulated hysteresis of perovskite solar cells. Journal of Materials Chemistry A, 2019, 7, 6793-6800.	5.2	48
42	Trap State Induced Recombination Effects on Indoor Organic Photovoltaic Cells. ACS Energy Letters, 2021, 6, 3203-3211.	8.8	48
43	Three-dimensional femtosecond laser fabrication of waveguide beam splitters in LiNbO_3 crystal. Optical Materials Express, 2015, 5, 1274.	1.6	47
44	Revealing the Role of Methylammonium Chloride for Improving the Performance of 2D Perovskite Solar Cells. ACS Applied Materials & Interfaces, 2020, 12, 25980-25990.	4.0	47
45	An Obvious Improvement in the Performance of Ternary Organic Solar Cells with â€œGuestâ€•Donor Present at the â€œHostâ€•Donor/Acceptor Interface. ACS Applied Materials & Interfaces, 2016, 8, 23212-23221.	4.0	44
46	Ternaryâ€Assisted Sequential Solution Deposition Enables Efficient Allâ€Polymer Solar Cells with Tailored Verticalâ€Phase Distribution. Advanced Functional Materials, 2022, 32, .	7.8	44
47	Comparison of the electrical and optical properties for SnO2:Sb films deposited on polyimide and glass substrates. Applied Surface Science, 2003, 214, 208-213.	3.1	43
48	Hole Transfer Originating from Weakly Bound Exciton Dissociation in Acceptorâ€“Donorâ€“Acceptor Nonfullerene Organic Solar Cells. Journal of Physical Chemistry Letters, 2019, 10, 7100-7106.	2.1	40
49	Comparison of the properties for ZnO:Al films deposited on polyimide and glass substrates. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2002, 90, 50-54.	1.7	39
50	Anisotropic Magnetoelectric Coupling and Cottonâ€“Mouton Effects in the Organic Magnetic Charge-Transfer Complex Pyreneâ€“F₄TCNQ. ACS Applied Materials & Interfaces, 2018, 10, 44654-44659.	4.0	39
51	Suppressing Kinetic Aggregation of Nonâ€Fullerene Acceptor via Versatile Alloy States Enables Highâ€Efficiency and Stable Ternary Polymer Solar Cells. Advanced Functional Materials, 2021, 31, 2100316.	7.8	38
52	Thickness dependence of properties of SnO2:Sb films deposited on flexible substrates. Applied Surface Science, 2002, 191, 313-318.	3.1	37
53	Enhanced Electron Transport and Heat Transfer Boost Light Stability of Ternary Organic Photovoltaic Cells Incorporating Nonâ€Fullerene Small Molecule and Polymer Acceptors. Advanced Electronic Materials, 2019, 5, 1900497.	2.6	37
54	Benzo[1,2â€b:4,5â€bâ€²]difuran Based Polymer Donor for Highâ€Efficiency (>16%) and Stable Organic Solar Cells. Advanced Energy Materials, 2022, 12, .	10.2	37

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55	Bias voltage dependence of properties for ZnO:Al films deposited on flexible substrate. Surface and Coatings Technology, 2002, 161, 58-61.	2.2	35
56	Functionalized Graphene Oxide Enables a High-Performance Bulk Heterojunction Organic Solar Cell with a Thick Active Layer. Journal of Physical Chemistry Letters, 2018, 9, 6238-6248.	2.1	34
57	Homogeneous phase separation in polymer:fullerene bulk heterojunction organic solar cells. Organic Electronics, 2015, 25, 266-274.	1.4	33
58	Thickâ€Film Highâ€Performance Bulkâ€Heterojunction Solar Cells Retaining 90% PCEs of the Optimized Thin Film Cells. Advanced Electronic Materials, 2017, 3, 1700007.	2.6	33
59	Stiffening the Pb-X Framework through a Ï€-Conjugated Small-Molecule Cross-Linker for High-Performance Inorganic CsPbI₂Br Perovskite Solar Cells. ACS Applied Materials & Interfaces, 2021, 13, 40489-40501.	4.0	33
60	Baseplate Temperatureâ€Dependent Vertical Composition Gradient in Pseudoâ€Bilayer Films for Printing Nonâ€Fullerene Organic Solar Cells. Advanced Energy Materials, 2021, 11, 2102135.	10.2	33
61	Low-cost and high-performance poly(thienylene vinylene) derivative donor for efficient versatile organic photovoltaic cells. Nano Energy, 2022, 100, 107463.	8.2	33
62	Conformational Changes and Photophysical Behavior in Poly[2-methoxy-5-(2â€²-ethyl-hexyloxy)-1,4-phenylene vinylene] Thin Films Cast under an Electric Field. Journal of Physical Chemistry C, 2009, 113, 11657-11661.	1.5	31
63	Observing electron transport and percolation in selected bulk heterojunctions bearing fullerene derivatives, non-fullerene small molecules, and polymeric acceptors. Nano Energy, 2019, 64, 103950.	8.2	31
64	Exploring the mechanisms of exciton diffusion improvement in ternary polymer solar cells: From ultrafast to ultraslow temporal scale. Nano Energy, 2021, 79, 105513.	8.2	31
65	Bulk-Heterojunction with Long-Range Ordering: C₆₀ Single-Crystal with Incorporated Conjugated Polymer Networks. Journal of the American Chemical Society, 2020, 142, 1630-1635.	6.6	30
66	Highâ€Performance Ternary Organic Solar Cells with Morphologyâ€Modulated Hole Transfer and Improved Ultraviolet Photostability. Solar Rrl, 2020, 4, 2000165.	3.1	30
67	Reducing Limitations of Aggregationâ€Induced Photocarrier Trapping for Photovoltaic Stability via Tailoring Intermolecular Electronâ€“Phonon Coupling in Highly Efficient Quaternary Polymer Solar Cells. Advanced Energy Materials, 2022, 12, .	10.2	29
68	Femtosecond Laser Writing of Optical-Lattice-Like Cladding Structures for Three-Dimensional Waveguide Beam Splitters in LiNbO₃Crystal. Journal of Lightwave Technology, 2016, 34, 3587-3591.	2.7	28
69	Suppressing Thermally Induced Fullerene Aggregation in Organic Solar Cells by Employing Plastic Network. Journal of Physical Chemistry C, 2018, 122, 9843-9851.	1.5	27
70	Chemically driven supramolecular self-assembly of porphyrin donors for high-performance organic solar cells. Journal of Materials Chemistry A, 2018, 6, 14675-14680.	5.2	27
71	Polymer Compression in Shear Flow. Journal of Physical Chemistry Letters, 2010, 1, 1912-1916.	2.1	25
72	Organic Chiral Charge Transfer Magnets. ACS Nano, 2019, 13, 4705-4711.	7.3	24

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73	Recent Progress of Organic Solar Cells with Insulating Polymers. Solar Rrl, 2020, 4, 2000539.	3.1	24
74	Poly(3-hexylthiophene) coated graphene oxide for improved performance of bulk heterojunction polymer solar cells. Organic Electronics, 2017, 44, 149-158.	1.4	23
75	Preparation and photovoltaic properties of dye-sensitized solar cells based on zinc titanium mixed metal oxides. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2019, 568, 59-65.	2.3	23
76	Rationalizing device performance of perylenediimide derivatives as acceptors for bulk-heterojunction organic solar cells. Organic Electronics, 2019, 65, 156-161.	1.4	23
77	Surfactant-mediated formation of polymeric microlenses from interfacial microdroplets. Soft Matter, 2014, 10, 957-964.	1.2	22
78	Magnetic and Electric Control of Circularly Polarized Emission through Tuning Chiralityâ€Generated Orbital Angular Momentum in Organic Helical Polymeric Nanofibers. Advanced Materials, 2019, 31, e1904857.	11.1	22
79	A novel ZnS/SiO2 double passivation layers for the CdS/CdSe quantum dots co-sensitized solar cells based on zinc titanium mixed metal oxides. Solar Energy Materials and Solar Cells, 2020, 208, 110380.	3.0	22
80	Chemical vapor deposition growth of phase-selective inorganic lead halide perovskite films for sensitive photodetectors. Chinese Chemical Letters, 2021, 32, 489-492.	4.8	22
81	Suppressing trap states and energy loss by optimizing vertical phase distribution through ternary strategy in organic solar cells. Science China Chemistry, 2021, 64, 599-607.	4.2	22
82	RF magnetron sputtering SnO2: Sb films deposited on organic substrates. Solid State Communications, 2002, 121, 345-349.	0.9	21
83	Femtosecond laser written optical waveguides in z-cut MgO:LiNbO3 crystal: Fabrication and optical damage investigation. Optical Materials, 2016, 57, 169-173.	1.7	21
84	Investigation of the dye-sensitized solar cell designed by a series of mixed metal oxides based on ZnAl-layered double hydroxide. Applied Physics A: Materials Science and Processing, 2017, 123, 1.	1.1	21
85	Resolving the Mechanisms of Photocurrent Improvement in Ternary Organic Solar Cells. Journal of Physical Chemistry C, 2019, 123, 18294-18302.	1.5	21
86	Helical-chiroptical nanowires generated orbital angular momentum for the detection of circularly polarized light. Applied Physics Letters, 2020, 116, .	1.5	20
87	Carbon nanotubes as the effective charge transport pathways for planar perovskite photodetector. Organic Electronics, 2018, 59, 156-163.	1.4	19
88	Effective Exciton Dissociation and Reduced Charge Recombination in Thickâ€Film Organic Solar Cells via Incorporation of Insulating Polypropylene. Solar Rrl, 2019, 3, 1900087.	3.1	19
89	FÃ¶rster resonance energy transfer and morphology optimization for high-performance ternary organic photodetectors. Organic Electronics, 2019, 67, 146-152.	1.4	19
90	The photovoltaic performance of CdS/CdSe quantum dots co-sensitized solar cells based on zinc titanium mixed metal oxides. Physica E: Low-Dimensional Systems and Nanostructures, 2020, 115, 113669.	1.3	19

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91	Effect of the Energy Offset on the Charge Dynamics in Nonfullerene Organic Solar Cells. ACS Applied Materials & Interfaces, 2020, 12, 43984-43991.	4.0	19
92	Multiple Temporalâ€Scale Photocarrier Dynamics Induced by Synergistic Effects of Fluorination and Chlorination in Highly Efficient Nonfullerene Organic Solar Cells. Solar Rrl, 2020, 4, 1900552.	3.1	19
93	Purified dispersions of graphene in a nonpolar solvent via solvothermal reduction of graphene oxide. Chemical Communications, 2015, 51, 3824-3827.	2.2	18
94	Performance improvement of TiO₂/Ag/TiO₂ multilayer transparent conducting electrode films for application on photodetectors. Journal Physics D: Applied Physics, 2016, 49, 115108.	1.3	18
95	Spatially Resolved Photophysical Dynamics in Perovskite Microplates Fabricated Using an Antisolvent Treatment. Journal of Physical Chemistry C, 2017, 121, 26250-26255.	1.5	18
96	Organic Multiferroic Magnetoelastic Complexes. Advanced Materials, 2020, 32, e2003293.	11.1	18
97	Effects of Processing Solvent on the Photophysics and Nanomorphology of Poly(3-butyl-thiophene) Nanowires:PCBM Blends. Journal of Physical Chemistry Letters, 2016, 7, 1872-1879.	2.1	17
98	Giant Nonlinear Optical Response of Lead-Free All-inorganic CsSnBr₃ Nanoplates. Journal of Physical Chemistry C, 2021, 125, 803-811.	1.5	17
99	An Aggregationâ€Suppressed Polymer Blending Strategy Enables Highâ€Performance Organic and Quantum Dot Hybrid Solar Cells. Small, 2022, 18, e2201387.	5.2	17
100	Electrical and optical properties of SnO2:Sb films prepared on polyimide substrate by r.f. bias sputtering. Applied Surface Science, 2002, 189, 157-161.	3.1	16
101	Green up-conversion and near-infrared luminescence of femtosecond-laser-written waveguides in Er^3+, MgO co-doped nearly stoichiometric LiNbO_3 crystal. Optics Express, 2016, 24, 25482.	1.7	16
102	Femtosecond laser processing induced low loss waveguides in multicomponent glasses. Optical Materials Express, 2017, 7, 3580.	1.6	16
103	Low resistivity phase-pure n-type Cu2O films realized via post-deposition nitrogen plasma treatment. Journal of Alloys and Compounds, 2018, 769, 484-489.	2.8	16
104	One-micron-thick organic indoor light harvesters with low photocurrent loss and fill factors over 67%. Journal of Materials Chemistry A, 2021, 9, 13515-13521.	5.2	16
105	High-Efficiency Thickness-Insensitive Organic Solar Cells with an Insulating Polymer. ACS Applied Materials & Interfaces, 2021, 13, 11134-11143.	4.0	16
106	â€œLog-Rollingâ€• Alignment in Friction-Transferred Light-Emitting Conjugated Polymer Thin Films. Macromolecules, 2010, 43, 10475-10480.	2.2	15
107	Molecular packing correlated fluorescence in TIPS-pentacene films. Organic Electronics, 2017, 49, 340-346.	1.4	15
108	Role of Central Metal Ions in 8â€Hydroxyquinolineâ€Doped ZnO Interfacial Layers for Improving the Performance of Polymer Solar Cells. Advanced Materials Interfaces, 2018, 5, 1801172.	1.9	15

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109	Quantitatively Characterized Crystallization Effect on Recombination Energy Loss in Non-Fullerene Organic Solar Cells. Journal of Physical Chemistry C, 2019, 123, 12676-12683.	1.5	15
110	The effect of CuS counter electrodes for the CdS/CdSe quantum dot co-sensitized solar cells based on zinc titanium mixed metal oxides. Journal of Materials Science, 2019, 54, 4884-4892.	1.7	15
111	Recent Progress of Organic Solar Cells with Insulating Polymers. Solar Rrl, 2020, 4, 2070124.	3.1	15
112	Synergistic effect of incorporating intra- and inter-molecular charge transfer in nonfullerene acceptor molecules for highly-efficient organic solar cells. Journal of Materials Chemistry A, 2021, 9, 16834-16840.	5.2	15
113	Erbium (III) tris(8-hydroxyquinoline) doped zinc oxide interfacial layer for improved performance of polymer solar cells. Organic Electronics, 2018, 62, 65-71.	1.4	14
114	3D Charge Transport Pathway in Organic Solar Cells via Incorporation of Discotic Liquid Crystal Columns. Solar Rrl, 2020, 4, 2000047.	3.1	14
115	A sandwich-like structural model revealed for quasi-2D perovskite films. Journal of Materials Chemistry C, 2021, 9, 5362-5372.	2.7	14
116	Aqueous self-assembled perovskite microfibers for sensitive photodetectors. Organic Electronics, 2017, 48, 106-111.	1.4	13
117	The prospective photo anode composed of zinc tin mixed metal oxides for the dye-sensitized solar cells. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2018, 547, 111-116.	2.3	13
118	The structure and optical properties of regio-regular poly(3-hexylthiophene) and carboxylic multi-walled carbon nanotubes composite films. Journal Physics D: Applied Physics, 2014, 47, 505502.	1.3	12
119	Improved compatibility of DDAB-functionalized graphene oxide with a conjugated polymer by isocyanate treatment. RSC Advances, 2017, 7, 17633-17639.	1.7	12
120	Optimizing the Crystallinity and Phase Separation of PTB7:PC₇₁BM Films by Modified Graphene Oxide. Journal of Physical Chemistry C, 2018, 122, 2572-2581.	1.5	12
121	Modulating the morphology and molecular arrangement via the well-compatible polymer donor in multiple working mechanisms interwined ternary organic solar cells. Organic Electronics, 2019, 66, 13-23.	1.4	12
122	Modification of Hole Transport Layers for Fabricating High Performance Nonâ€fullerene Polymer Solar Cells. Chinese Journal of Chemistry, 2020, 38, 817-822.	2.6	12
123	Optically Controlled Magnetization and Magnetoelectric Effect in Organic Multiferroic Heterojunction. Advanced Optical Materials, 2017, 5, 1700644.	3.6	11
124	Ferroelectric Polarization in CsPbI₃/CsSnI₃ Perovskite Heterostructure. Journal of Physical Chemistry C, 2018, 122, 17820-17824.	1.5	11
125	Spinâ€“Photon Coupling in Organic Chiral Crystals. Nano Letters, 2019, 19, 9008-9012.	4.5	11
126	Effects of various donor:acceptor blend ratios on photophysical properties in non-fullerene organic bulk heterojunctions. Chinese Chemical Letters, 2019, 30, 995-999.	4.8	11

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127	Enhanced light-harvesting of benzodithiophene conjugated porphyrin electron donors in organic solar cells. Journal of Materials Chemistry C, 2019, 7, 380-386.	2.7	11
128	Hydrophilic Fullerene Derivative Doping in Active Layer and Electron Transport Layer for Enhancing Oxygen Stability of Perovskite Solar Cells. Solar Rrl, 2020, 4, 1900249.	3.1	11
129	Tunable Grain Boundary of Leadâ€Free Allâ€Inorganic Perovskite Films for Smart Photodetectors. Advanced Materials Interfaces, 2021, 8, 2101339.	1.9	11
130	Characterization of GaN films grown on silicon (111) substrates. Physica B: Condensed Matter, 2003, 325, 230-234.	1.3	10
131	Room-temperature subnanosecond waveguide lasers in Nd:YVO4 Q-switched by phase-change VO2: A comparison with 2D materials. Scientific Reports, 2017, 7, 46162.	1.6	10
132	Structural and optical properties of conjugated polymer and carbon-based non-fullerene material blend films for photovoltaic applications. Optical Materials Express, 2017, 7, 687.	1.6	10
133	Unveiling the important role of non-fullerene acceptors crystallinity on optimizing nanomorphology and charge transfer in ternary organic solar cells. Organic Electronics, 2018, 62, 643-652.	1.4	10
134	Efficient photoluminescence enhancement and tunable photocarrier transfer in vertical 2D organicâ€“inorganic heterostructure by energy funneling. 2D Materials, 2021, 8, 025026.	2.0	10
135	High performance indoor light harvesters with a wide-gap donor polymer PBDB-T. Organic Electronics, 2021, 98, 106289.	1.4	10
136	CdSe quantum dot organic solar cells with improved photovoltaic performance. Journal Physics D: Applied Physics, 2021, 54, 115504.	1.3	10
137	Molar Mass Determination of Water-Soluble Light-Emitting Conjugated Polymers by Fluorescence-Based Analytical Ultracentrifugation. Macromolecules, 2009, 42, 2737-2740.	2.2	9
138	Waveguides and proportional beam splitters in bulk poly(methyl methacrylate) produced by direct femtosecond-laser inscription. Optical Materials, 2015, 49, 110-115.	1.7	9
139	Charge transfer dynamics in poly(3-hexylthiophene): nanodiamond blend films. Diamond and Related Materials, 2016, 64, 8-12.	1.8	9
140	Competition between singlet fission and singlet exciton dissociation at the interface in TIPS-pentacene:IT-4F blend. Organic Electronics, 2019, 71, 296-302.	1.4	9
141	Organic indoor light harvesters achieving recorded output power over 500% enhancement under thermal radiated illuminances. Science Bulletin, 2021, 66, 1641-1641.	4.3	9
142	Preparation and properties of GaN nanostructures by post-nitridation technique. Physica B: Condensed Matter, 2003, 334, 287-291.	1.3	8
143	DEEP-UV CONFOCAL FLUORESCENCE IMAGING AND SUPER-RESOLUTION OPTICAL MICROSCOPY OF BIOLOGICAL SAMPLES. Journal of Innovative Optical Health Sciences, 2012, 05, 1250025.	0.5	8
144	Optimization of waveguide structures for beam splitters fabricated in fused silica by direct femtosecond-laser inscription. Optics and Laser Technology, 2015, 74, 60-64.	2.2	8

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145	Laser-induced crystallization and conformation control of poly(3-hexylthiophene) for improving the performance of organic solar cells. Organic Electronics, 2017, 49, 157-164.	1.4	8
146	Enhancing light harvesting and charge transport in organic solar cells via integrating lanthanide-doped upconversation materials. Journal Physics D: Applied Physics, 2018, 51, 265105.	1.3	8
147	Influence of donor:acceptor ratio on charge transfer dynamics in non-fullerene organic bulk heterojunctions. Chinese Chemical Letters, 2021, 32, 529-534.	4.8	8
148	Rationalizing charge carrier transport in ternary organic solar cells. Applied Physics Letters, 2022, 120, .	1.5	8
149	Reproducibility in Time and Spaceâ€"The Molecular Weight Effects of Polymeric Materials in Organic Photovoltaic Devices. Small Methods, 2022, 6, e2101548.	4.6	8
150	Toward Novel Flexible Display - Top-Emitting OLEDs on Al-Laminated PET Substrates. Proceedings of the IEEE, 2005, 93, 1440-1446.	16.4	7
151	Effect of the third component on charge transfer character in ternary organic solar cells with a cascade-type electronic structure. Physics Letters, Section A: General, Atomic and Solid State Physics, 2019, 383, 126001.	0.9	7
152	Steric Poly(diarylfluoreneâ€‹<i>co</i>â€‹benzothiadiazole) for Efficient Amplified Spontaneous Emission and Polymer Lightâ€Emitting Diodes: Benefit from Preventing Interchain Aggregation and Polaron Formation. Advanced Optical Materials, 2020, 8, 1901616.	3.6	7
153	Chromaticity manipulation of indoor photovoltaic cells. Applied Physics Letters, 2021, 118, .	1.5	7
154	Quasiparticle electronic structure and optical absorption of diamond nanoparticles from ab initio many-body perturbation theory. Journal of Chemical Physics, 2014, 140, 214315.	1.2	6
155	Effect of alkyl side-chain length on the photophysical, morphology and photoresponse properties of poly(3-alkylthiophene). Journal Physics D: Applied Physics, 2015, 48, 485501.	1.3	6
156	Systematic control of optical features in aluminosilicate glass waveguides using direct femtosecond laser writing. Optical Materials, 2017, 72, 501-507.	1.7	6
157	FÃ¶rster resonance energy transfer and charge transfer dynamics in ternary organic nanoparticles. Organic Electronics, 2018, 57, 140-145.	1.4	6
158	Extracting energetic disorder in organic solar cells using percolation models. ChemPhysMater, 2023, 2, 52-57.	1.4	6
159	Aggregation of Water-Soluble Conjugated Polymers in Couette Shear Flow. Journal of Physical Chemistry B, 2009, 113, 13138-13141.	1.2	5
160	Quantifying phase separation and interfacial area in organic photovoltaic bulk heterojunction processed with solvent additives. Chemical Physics, 2015, 457, 7-12.	0.9	5
161	Exploring charge transfer processes and crystallization dynamics in donor-acceptor crystals. Organic Electronics, 2018, 58, 105-110.	1.4	5
162	Utilizing magnetic field to study the impact of intramolecular charge transfers on the open-circuit voltage of organic solar cells. Applied Physics Letters, 2018, 113, .	1.5	5

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