

Xiao-Tao Hao

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186
papers

5,065
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36
h-index

65
g-index

199
ext. papers

6,847
ext. citations

8.1
avg, IF

6.09
L-index

#	Paper	IF	Citations
186	A general low-temperature route for large-scale fabrication of highly oriented ZnO nanorod/nanotube arrays. <i>Journal of the American Chemical Society</i> , 2005 , 127, 2378-9	16.4	452
185	Single-Junction Organic Photovoltaic Cell with 19% Efficiency. <i>Advanced Materials</i> , 2021 , 33, e2102420	24	302
184	Morphology Control Enables Efficient Ternary Organic Solar Cells. <i>Advanced Materials</i> , 2018 , 30, e1803045	17.1	197
183	Ternary Organic Solar Cells with Efficiency >16.5% Based on Two Compatible Nonfullerene Acceptors. <i>Advanced Materials</i> , 2019 , 31, e1905645	24	190
182	A Well-Mixed Phase Formed by Two Compatible Non-Fullerene Acceptors Enables Ternary Organic Solar Cells with Efficiency over 18.6. <i>Advanced Materials</i> , 2021 , 33, e2101733	24	145
181	Reduced non-radiative charge recombination enables organic photovoltaic cell approaching 19% efficiency. <i>Joule</i> , 2021 , 5, 2408-2419	27.8	144
180	Thickness dependence of structural, optical and electrical properties of ZnO:Al films prepared on flexible substrates. <i>Applied Surface Science</i> , 2001 , 183, 137-142	6.7	127
179	Intrinsic and Extrinsic Fluorescence in Carbon Nanodots: Ultrafast Time-Resolved Fluorescence and Carrier Dynamics. <i>Advanced Optical Materials</i> , 2013 , 1, 173-178	8.1	126
178	Regulating the vertical phase distribution by fullerene-derivative in high performance ternary organic solar cells. <i>Nano Energy</i> , 2018 , 46, 81-90	17.1	108
177	Solution-Processed Organic Solar Cells with High Open-Circuit Voltage of 1.3 V and Low Non-Radiative Voltage Loss of 0.16 V. <i>Advanced Materials</i> , 2020 , 32, e2002122	24	96
176	Designing a ternary photovoltaic cell for indoor light harvesting with a power conversion efficiency exceeding 20%. <i>Journal of Materials Chemistry A</i> , 2018 , 6, 8579-8585	13	95
175	Versatile Ternary Approach for Novel Organic Solar Cells: A Review. <i>Solar Rrl</i> , 2019 , 3, 1800263	7.1	94
174	Dual Förster resonance energy transfer effects in non-fullerene ternary organic solar cells with the third component embedded in the donor and acceptor. <i>Journal of Materials Chemistry A</i> , 2017 , 5, 12120-12130	13	84
173	Ternary Organic Solar Cells with Small Nonradiative Recombination Loss. <i>ACS Energy Letters</i> , 2019 , 4, 1196-1203	20.1	84
172	Flexible top-emitting electroluminescent devices on polyethylene terephthalate substrates. <i>Applied Physics Letters</i> , 2005 , 86, 153508	3.4	79
171	Integrating Ultrathin Bulk-Heterojunction Organic Semiconductor Intermediary for High-Performance Low-Bandgap Perovskite Solar Cells with Low Energy Loss. <i>Advanced Functional Materials</i> , 2018 , 28, 1804427	15.6	79
170	High-performance low-temperature transparent conducting aluminum-doped ZnO thin films and applications. <i>Journal of Crystal Growth</i> , 2006 , 287, 44-47	1.6	74

169	Hyperbranched Blue-Light-Emitting Alternating Copolymers of Tetrabromoarylmethane/Silane and 9,9-Dihexylfluorene-2,7-diboronic Acid. <i>Macromolecules</i> , 2004 , 37, 5965-5970	5.5	74
168	Single-Junction Organic Solar Cells with 19.17% Efficiency Enabled by Introducing One Asymmetric Guest Acceptor.. <i>Advanced Materials</i> , 2022 , e2110147	24	71
167	Efficient Ternary Organic Solar Cells Enabled by the Integration of Nonfullerene and Fullerene Acceptors with a Broad Composition Tolerance. <i>Advanced Functional Materials</i> , 2019 , 29, 1807006	15.6	70
166	Charge transfer from poly(3-hexylthiophene) to graphene oxide and reduced graphene oxide. <i>RSC Advances</i> , 2015 , 5, 89515-89520	3.7	65
165	Fully doctor-bladed planar heterojunction perovskite solar cells under ambient condition. <i>Organic Electronics</i> , 2018 , 58, 153-158	3.5	63
164	Monolithic perovskite/Si tandem solar cells exceeding 22% efficiency via optimizing top cell absorber. <i>Nano Energy</i> , 2018 , 53, 798-807	17.1	56
163	Förster Resonance Energy Transfer and Energy Cascade in Broadband Photodetectors with Ternary Polymer Bulk Heterojunction. <i>Journal of Physical Chemistry C</i> , 2015 , 119, 21913-21920	3.8	53
162	Spatial Fluorescence Inhomogeneities in Light-Emitting Conjugated Polymer Films. <i>Journal of Physical Chemistry Letters</i> , 2011 , 2, 1520-1525	6.4	50
161	Controllable Growth of Lead-Free All-Inorganic Perovskite Nanowire Array with Fast and Stable Near-Infrared Photodetection. <i>Journal of Physical Chemistry C</i> , 2019 , 123, 17566-17573	3.8	49
160	Recent Advances of Plasmonic Organic Solar Cells: Photophysical Investigations. <i>Polymers</i> , 2018 , 10,	4.5	49
159	Hyperbranched Blue to Red Light-Emitting Polymers with Tetraarylsilyl Cores: Synthesis, Optical and Electroluminescence Properties, and ab Initio Modeling Studies. <i>Macromolecules</i> , 2005 , 38, 4157-4168	5.5	47
158	Ferrocene as a highly volatile solid additive in non-fullerene organic solar cells with enhanced photovoltaic performance. <i>Energy and Environmental Science</i> , 2020 , 13, 5117-5125	35.4	46
157	Preparation and structural properties for GaN films grown on Si (1 1 1) by annealing. <i>Applied Surface Science</i> , 2002 , 193, 254-260	6.7	45
156	Improving the Compatibility of Donor Polymers in Efficient Ternary Organic Solar Cells via Post-Additive Soaking Treatment. <i>ACS Applied Materials & Interfaces</i> , 2017 , 9, 618-627	9.5	44
155	Ternary organic solar cells based on two compatible PDI-based acceptors with an enhanced power conversion efficiency. <i>Journal of Materials Chemistry A</i> , 2019 , 7, 3552-3557	13	44
154	An Obvious Improvement in the Performance of Ternary Organic Solar Cells with "Guest" Donor Present at the "Host" Donor/Acceptor Interface. <i>ACS Applied Materials & Interfaces</i> , 2016 , 8, 23212-21	9.5	40
153	Comparison of the electrical and optical properties for SnO ₂ :Sb films deposited on polyimide and glass substrates. <i>Applied Surface Science</i> , 2003 , 214, 208-213	6.7	39
152	17% efficiency all-small-molecule organic solar cells enabled by nanoscale phase separation with a hierarchical branched structure. <i>Energy and Environmental Science</i> ,	35.4	39

151	Balanced Electric Field Dependent Mobilities: A Key to Access High Fill Factors in Organic Bulk Heterojunction Solar Cells. <i>Solar Rrl</i> , 2018 , 2, 1700239	7.1	38
150	Energy Loss in Organic Solar Cells: Mechanisms, Strategies, and Prospects. <i>Solar Rrl</i> , 2020 , 4, 2000130	7.1	36
149	Thickness dependence of properties of SnO ₂ :Sb films deposited on flexible substrates. <i>Applied Surface Science</i> , 2002 , 191, 313-318	6.7	36
148	Comparison of the properties for ZnO:Al films deposited on polyimide and glass substrates. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2002 , 90, 50-54	3.1	35
147	Surface modification via self-assembling large cations for improved performance and modulated hysteresis of perovskite solar cells. <i>Journal of Materials Chemistry A</i> , 2019 , 7, 6793-6800	13	35
146	Bias voltage dependence of properties for ZnO:Al films deposited on flexible substrate. <i>Surface and Coatings Technology</i> , 2002 , 161, 58-61	4.4	34
145	Three-dimensional femtosecond laser fabrication of waveguide beam splitters in LiNbO ₃ crystal. <i>Optical Materials Express</i> , 2015 , 5, 1274	2.6	33
144	Anisotropic Magnetolectric Coupling and Cotton-Mouton Effects in the Organic Magnetic Charge-Transfer Complex Pyrene-FTCNQ. <i>ACS Applied Materials & Interfaces</i> , 2018 , 10, 44654-44659	9.5	31
143	Homogeneous phase separation in polymer:fullerene bulk heterojunction organic solar cells. <i>Organic Electronics</i> , 2015 , 25, 266-274	3.5	30
142	Enhanced Electron Transport and Heat Transfer Boost Light Stability of Ternary Organic Photovoltaic Cells Incorporating Non-Fullerene Small Molecule and Polymer Acceptors. <i>Advanced Electronic Materials</i> , 2019 , 5, 1900497	6.4	30
141	Thick-Film High-Performance Bulk-Heterojunction Solar Cells Retaining 90% PCEs of the Optimized Thin Film Cells. <i>Advanced Electronic Materials</i> , 2017 , 3, 1700007	6.4	29
140	Functionalized Graphene Oxide Enables a High-Performance Bulk Heterojunction Organic Solar Cell with a Thick Active Layer. <i>Journal of Physical Chemistry Letters</i> , 2018 , 9, 6238-6248	6.4	29
139	Conformational Changes and Photophysical Behavior in Poly[2-methoxy-5-(2-ethyl-hexyloxy)-1,4-phenylene vinylene] Thin Films Cast under an Electric Field. <i>Journal of Physical Chemistry C</i> , 2009 , 113, 11657-11661	3.8	28
138	Hole Transfer Originating from Weakly Bound Exciton Dissociation in Acceptor-Donor-Acceptor Nonfullerene Organic Solar Cells. <i>Journal of Physical Chemistry Letters</i> , 2019 , 10, 7100-7106	6.4	26
137	Observing electron transport and percolation in selected bulk heterojunctions bearing fullerene derivatives, non-fullerene small molecules, and polymeric acceptors. <i>Nano Energy</i> , 2019 , 64, 103950	17.1	25
136	Recent progress of PM6:Y6-based high efficiency organic solar cells. <i>Surfaces and Interfaces</i> , 2021 , 23, 100921	4.1	25
135	Revealing the Role of Methylammonium Chloride for Improving the Performance of 2D Perovskite Solar Cells. <i>ACS Applied Materials & Interfaces</i> , 2020 , 12, 25980-25990	9.5	24
134	Vertically optimized phase separation with improved exciton diffusion enables efficient organic solar cells with thick active layers.. <i>Nature Communications</i> , 2022 , 13, 2369	17.4	23

133	Suppressing Thermally Induced Fullerene Aggregation in Organic Solar Cells by Employing Plastic Network. <i>Journal of Physical Chemistry C</i> , 2018 , 122, 9843-9851	3.8	21
132	Poly(3-hexylthiophene) coated graphene oxide for improved performance of bulk heterojunction polymer solar cells. <i>Organic Electronics</i> , 2017 , 44, 149-158	3.5	20
131	Surfactant-mediated formation of polymeric microlenses from interfacial microdroplets. <i>Soft Matter</i> , 2014 , 10, 957-64	3.6	20
130	Polymer Compression in Shear Flow. <i>Journal of Physical Chemistry Letters</i> , 2010 , 1, 1912-1916	6.4	20
129	Femtosecond Laser Writing of Optical-Lattice-Like Cladding Structures for Three-Dimensional Waveguide Beam Splitters in LiNbO ₃ Crystal. <i>Journal of Lightwave Technology</i> , 2016 , 34, 3587-3591	4	20
128	Chemically driven supramolecular self-assembly of porphyrin donors for high-performance organic solar cells. <i>Journal of Materials Chemistry A</i> , 2018 , 6, 14675-14680	13	20
127	Bulk-Heterojunction with Long-Range Ordering: C Single-Crystal with Incorporated Conjugated Polymer Networks. <i>Journal of the American Chemical Society</i> , 2020 , 142, 1630-1635	16.4	19
126	Suppressing Kinetic Aggregation of Non-Fullerene Acceptor via Versatile Alloy States Enables High-Efficiency and Stable Ternary Polymer Solar Cells. <i>Advanced Functional Materials</i> , 2021 , 31, 2100316	15.6	18
125	Rationalizing device performance of perylene diimide derivatives as acceptors for bulk-heterojunction organic solar cells. <i>Organic Electronics</i> , 2019 , 65, 156-161	3.5	18
124	Ternary Strategy Enabling High-Efficiency Rigid and Flexible Organic Solar Cells with Reduced Non-radiative Voltage Loss. <i>Energy and Environmental Science</i> ,	35.4	17
123	Organic Chiral Charge Transfer Magnets. <i>ACS Nano</i> , 2019 , 13, 4705-4711	16.7	16
122	Performance improvement of TiO ₂ /Ag/TiO ₂ multilayer transparent conducting electrode films for application on photodetectors. <i>Journal Physics D: Applied Physics</i> , 2016 , 49, 115108	3	16
121	Investigation of the dye-sensitized solar cell designed by a series of mixed metal oxides based on ZnAl-layered double hydroxide. <i>Applied Physics A: Materials Science and Processing</i> , 2017 , 123, 1	2.6	16
120	RF magnetron sputtering SnO ₂ : Sb films deposited on organic substrates. <i>Solid State Communications</i> , 2002 , 121, 345-349	1.6	16
119	Faster resonance energy transfer and morphology optimization for high-performance ternary organic photodetectors. <i>Organic Electronics</i> , 2019 , 67, 146-152	3.5	16
118	High-Performance Ternary Organic Solar Cells with Morphology-Modulated Hole Transfer and Improved Ultraviolet Photostability. <i>Solar Rrl</i> , 2020 , 4, 2000165	7.1	15
117	Carbon nanotubes as the effective charge transport pathways for planar perovskite photodetector. <i>Organic Electronics</i> , 2018 , 59, 156-163	3.5	15
116	Resolving the Mechanisms of Photocurrent Improvement in Ternary Organic Solar Cells. <i>Journal of Physical Chemistry C</i> , 2019 , 123, 18294-18302	3.8	15

115	Electrical and optical properties of SnO ₂ :Sb films prepared on polyimide substrate by r.f. bias sputtering. <i>Applied Surface Science</i> , 2002 , 189, 157-161	6.7	15
114	Green up-conversion and near-infrared luminescence of femtosecond-laser-written waveguides in Er ³⁺ , MgO co-doped nearly stoichiometric LiNbO ₃ crystal. <i>Optics Express</i> , 2016 , 24, 25482-25490	3.3	15
113	Effects of Processing Solvent on the Photophysics and Nanomorphology of Poly(3-butyl-thiophene) Nanowires:PCBM Blends. <i>Journal of Physical Chemistry Letters</i> , 2016 , 7, 1872-9	6.4	15
112	Preparation and photovoltaic properties of dye-sensitized solar cells based on zinc titanium mixed metal oxides. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2019 , 568, 59-65	5.1	14
111	Magnetic and Electric Control of Circularly Polarized Emission through Tuning Chirality-Generated Orbital Angular Momentum in Organic Helical Polymeric Nanofibers. <i>Advanced Materials</i> , 2019 , 31, e1904857	24	14
110	Spatially Resolved Photophysical Dynamics in Perovskite Microplates Fabricated Using an Antisolvent Treatment. <i>Journal of Physical Chemistry C</i> , 2017 , 121, 26250-26255	3.8	14
109	Purified dispersions of graphene in a nonpolar solvent via solvothermal reduction of graphene oxide. <i>Chemical Communications</i> , 2015 , 51, 3824-7	5.8	14
108	Log-Rolling Alignment in Friction-Transferred Light-Emitting Conjugated Polymer Thin Films. <i>Macromolecules</i> , 2010 , 43, 10475-10480	5.5	14
107	Recent Progress of Organic Solar Cells with Insulating Polymers. <i>Solar Rrl</i> , 2020 , 4, 2000539	7.1	14
106	Effective Exciton Dissociation and Reduced Charge Recombination in Thick-Film Organic Solar Cells via Incorporation of Insulating Polypropylene. <i>Solar Rrl</i> , 2019 , 3, 1900087	7.1	13
105	High-Performance Non-Fused Wide Bandgap Acceptor for Versatile Photovoltaic Applications. <i>Advanced Materials</i> , 2021 , e2108090	24	13
104	Femtosecond laser written optical waveguides in z-cut MgO:LiNbO ₃ crystal: Fabrication and optical damage investigation. <i>Optical Materials</i> , 2016 , 57, 169-173	3.3	13
103	The effect of CuS counter electrodes for the CdS/CdSe quantum dot co-sensitized solar cells based on zinc titanium mixed metal oxides. <i>Journal of Materials Science</i> , 2019 , 54, 4884-4892	4.3	13
102	Exploring the mechanisms of exciton diffusion improvement in ternary polymer solar cells: From ultrafast to ultraslow temporal scale. <i>Nano Energy</i> , 2021 , 79, 105513	17.1	13
101	Aqueous self-assembled perovskite microfibers for sensitive photodetectors. <i>Organic Electronics</i> , 2017 , 48, 106-111	3.5	12
100	3D Charge Transport Pathway in Organic Solar Cells via Incorporation of Discotic Liquid Crystal Columns. <i>Solar Rrl</i> , 2020 , 4, 2000047	7.1	12
99	Optimizing the Crystallinity and Phase Separation of PTB7:PC71BM Films by Modified Graphene Oxide. <i>Journal of Physical Chemistry C</i> , 2018 , 122, 2572-2581	3.8	12
98	Erbium (III) tris(8-hydroxyquinoline) doped zinc oxide interfacial layer for improved performance of polymer solar cells. <i>Organic Electronics</i> , 2018 , 62, 65-71	3.5	12

97	Role of Central Metal Ions in 8-Hydroxyquinoline-Doped ZnO Interfacial Layers for Improving the Performance of Polymer Solar Cells. <i>Advanced Materials Interfaces</i> , 2018 , 5, 1801172	4.6	12
96	Helical-chiroptical nanowires generated orbital angular momentum for the detection of circularly polarized light. <i>Applied Physics Letters</i> , 2020 , 116, 053301	3.4	11
95	The photovoltaic performance of CdS/CdSe quantum dots co-sensitized solar cells based on zinc titanium mixed metal oxides. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2020 , 115, 113669 ³		11
94	Suppressing trap states and energy loss by optimizing vertical phase distribution through ternary strategy in organic solar cells. <i>Science China Chemistry</i> , 2021 , 64, 599-607	7.9	11
93	Trap State Induced Recombination Effects on Indoor Organic Photovoltaic Cells. <i>ACS Energy Letters</i> , 2021 , 6, 3203-3211	20.1	11
92	Effects of various donor:acceptor blend ratios on photophysical properties in non-fullerene organic bulk heterojunctions. <i>Chinese Chemical Letters</i> , 2019 , 30, 995-999	8.1	10
91	Multiple Temporal-Scale Photocarrier Dynamics Induced by Synergistic Effects of Fluorination and Chlorination in Highly Efficient Nonfullerene Organic Solar Cells. <i>Solar Rrl</i> , 2020 , 4, 1900552	7.1	10
90	Ferroelectric Polarization in CsPbI ₃ /CsSnI ₃ Perovskite Heterostructure. <i>Journal of Physical Chemistry C</i> , 2018 , 122, 17820-17824	3.8	10
89	Low resistivity phase-pure n-type Cu ₂ O films realized via post-deposition nitrogen plasma treatment. <i>Journal of Alloys and Compounds</i> , 2018 , 769, 484-489	5.7	10
88	Effect of the Energy Offset on the Charge Dynamics in Nonfullerene Organic Solar Cells. <i>ACS Applied Materials & Interfaces</i> , 2020 , 12, 43984-43991	9.5	10
87	Modulating the morphology and molecular arrangement via the well-compatible polymer donor in multiple working mechanisms intertwined ternary organic solar cells. <i>Organic Electronics</i> , 2019 , 66, 13-23 ^{3·5}		10
86	Improved compatibility of DDAB-functionalized graphene oxide with a conjugated polymer by isocyanate treatment. <i>RSC Advances</i> , 2017 , 7, 17633-17639	3.7	9
85	Optically Controlled Magnetization and Magnetoelectric Effect in Organic Multiferroic Heterojunction. <i>Advanced Optical Materials</i> , 2017 , 5, 1700644	8.1	9
84	Recent Progress of Organic Solar Cells with Insulating Polymers. <i>Solar Rrl</i> , 2020 , 4, 2070124	7.1	9
83	A novel ZnS/SiO ₂ double passivation layers for the CdS/CdSe quantum dots co-sensitized solar cells based on zinc titanium mixed metal oxides. <i>Solar Energy Materials and Solar Cells</i> , 2020 , 208, 110380	6.4	9
82	The prospective photo anode composed of zinc tin mixed metal oxides for the dye-sensitized solar cells. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2018 , 547, 111-116	5.1	9
81	Molecular packing correlated fluorescence in TIPS-pentacene films. <i>Organic Electronics</i> , 2017 , 49, 340-346 ⁵		9
80	Structural and optical properties of conjugated polymer and carbon-based non-fullerene material blend films for photovoltaic applications. <i>Optical Materials Express</i> , 2017 , 7, 687	2.6	9

79	The structure and optical properties of regio-regular poly(3-hexylthiophene) and carboxylic multi-walled carbon nanotubes composite films. <i>Journal Physics D: Applied Physics</i> , 2014 , 47, 505502	3	9
78	Molar Mass Determination of Water-Soluble Light-Emitting Conjugated Polymers by Fluorescence-Based Analytical Ultracentrifugation. <i>Macromolecules</i> , 2009 , 42, 2737-2740	5.5	9
77	Baseplate Temperature-Dependent Vertical Composition Gradient in Pseudo-Bilayer Films for Printing Non-Fullerene Organic Solar Cells. <i>Advanced Energy Materials</i> , 2021 , 11, 2102135	21.8	9
76	Organic Multiferroic Magnetoelastic Complexes. <i>Advanced Materials</i> , 2020 , 32, e2003293	24	9
75	Enhanced light-harvesting of benzodithiophene conjugated porphyrin electron donors in organic solar cells. <i>Journal of Materials Chemistry C</i> , 2019 , 7, 380-386	7.1	9
74	Laser-induced crystallization and conformation control of poly(3-hexylthiophene) for improving the performance of organic solar cells. <i>Organic Electronics</i> , 2017 , 49, 157-164	3.5	8
73	Quantitatively Characterized Crystallization Effect on Recombination Energy Loss in Non-Fullerene Organic Solar Cells. <i>Journal of Physical Chemistry C</i> , 2019 ,	3.8	8
72	Waveguides and proportional beam splitters in bulk poly(methyl methacrylate) produced by direct femtosecond-laser inscription. <i>Optical Materials</i> , 2015 , 49, 110-115	3.3	8
71	Modification of Hole Transport Layers for Fabricating High Performance Non-fullerene Polymer Solar Cells. <i>Chinese Journal of Chemistry</i> , 2020 , 38, 817-822	4.9	8
70	Charge transfer dynamics in poly(3-hexylthiophene): nanodiamond blend films. <i>Diamond and Related Materials</i> , 2016 , 64, 8-12	3.5	8
69	Femtosecond laser processing induced low loss waveguides in multicomponent glasses. <i>Optical Materials Express</i> , 2017 , 7, 3580	2.6	8
68	Characterization of GaN films grown on silicon (1 1 1) substrates. <i>Physica B: Condensed Matter</i> , 2003 , 325, 230-234	2.8	8
67	Preparation and properties of GaN nanostructures by post-nitridation technique. <i>Physica B: Condensed Matter</i> , 2003 , 334, 287-291	2.8	8
66	Ternary-Assisted Sequential Solution Deposition Enables Efficient All-Polymer Solar Cells with Tailored Vertical-Phase Distribution. <i>Advanced Functional Materials</i> , 2020 , 30, 200478	15.6	8
65	Reducing Limitations of Aggregation-Induced Photocarrier Trapping for Photovoltaic Stability via Tailoring Intermolecular Electron-Phonon Coupling in Highly Efficient Quaternary Polymer Solar Cells. <i>Advanced Energy Materials</i> , 2022 , 12, 2103371	21.8	8
64	Room-temperature subnanosecond waveguide lasers in Nd:YVO Q-switched by phase-change VO ₂ : A comparison with 2D materials. <i>Scientific Reports</i> , 2017 , 7, 46162	4.9	7
63	Spin-Photon Coupling in Organic Chiral Crystals. <i>Nano Letters</i> , 2019 , 19, 9008-9012	11.5	7
62	Benzo[1,2-b:4,5-b']difuran Based Polymer Donor for High-Efficiency (>16%) and Stable Organic Solar Cells. <i>Advanced Energy Materials</i> , 2021 , 11, 2103684	21.8	7

61	Synergistic effect of incorporating intra- and inter-molecular charge transfer in nonfullerene acceptor molecules for highly-efficient organic solar cells. <i>Journal of Materials Chemistry A</i> , 2021 , 9, 16834-16840	12	7
60	Enhancing light harvesting and charge transport in organic solar cells via integrating lanthanide-doped upconversion materials. <i>Journal Physics D: Applied Physics</i> , 2018 , 51, 265105	3	7
59	Unveiling the important role of non-fullerene acceptors crystallinity on optimizing nanomorphology and charge transfer in ternary organic solar cells. <i>Organic Electronics</i> , 2018 , 62, 643-652	3.5	7
58	Competition between singlet fission and singlet exciton dissociation at the interface in TIPS-pentacene:IT-4F blend. <i>Organic Electronics</i> , 2019 , 71, 296-302	3.5	6
57	Quasiparticle electronic structure and optical absorption of diamond nanoparticles from ab initio many-body perturbation theory. <i>Journal of Chemical Physics</i> , 2014 , 140, 214315	3.9	6
56	DEEP-UV CONFOCAL FLUORESCENCE IMAGING AND SUPER-RESOLUTION OPTICAL MICROSCOPY OF BIOLOGICAL SAMPLES. <i>Journal of Innovative Optical Health Sciences</i> , 2012 , 05, 1250025	1.2	6
55	Hydrophilic Fullerene Derivative Doping in Active Layer and Electron Transport Layer for Enhancing Oxygen Stability of Perovskite Solar Cells. <i>Solar Rrl</i> , 2020 , 4, 1900249	7.1	6
54	Stiffening the Pb-X Framework through a EConjugated Small-Molecule Cross-Linker for High-Performance Inorganic CsPbIBr Perovskite Solar Cells. <i>ACS Applied Materials & Interfaces</i> , 2021 , 13, 40489-40501	9.5	6
53	Unraveling the unstable amorphous phase evolution effect on burn-in loss in polymer-fullerene solar cells. <i>Organic Electronics</i> , 2019 , 71, 156-163	3.5	5
52	Optimization of waveguide structures for beam splitters fabricated in fused silica by direct femtosecond-laser inscription. <i>Optics and Laser Technology</i> , 2015 , 74, 60-64	4.2	5
51	Steric Poly(diarylfluorene-co-benzothiadiazole) for Efficient Amplified Spontaneous Emission and Polymer Light-Emitting Diodes: Benefit from Preventing Interchain Aggregation and Polaron Formation. <i>Advanced Optical Materials</i> , 2020 , 8, 1901616	8.1	5
50	Faster resonance energy transfer and charge transfer dynamics in ternary organic nanoparticles. <i>Organic Electronics</i> , 2018 , 57, 140-145	3.5	5
49	Effect of alkyl side-chain length on the photophysical, morphology and photoresponse properties of poly(3-alkylthiophene). <i>Journal Physics D: Applied Physics</i> , 2015 , 48, 485501	3	5
48	Quantifying phase separation and interfacial area in organic photovoltaic bulk heterojunction processed with solvent additives. <i>Chemical Physics</i> , 2015 , 457, 7-12	2.3	5
47	Aggregation of water-soluble conjugated polymers in Couette shear flow. <i>Journal of Physical Chemistry B</i> , 2009 , 113, 13138-41	3.4	5
46	Toward Novel Flexible Display - Top-Emitting OLEDs on Al-Laminated PET Substrates. <i>Proceedings of the IEEE</i> , 2005 , 93, 1440-1446	14.3	5
45	One-micron-thick organic indoor light harvesters with low photocurrent loss and fill factors over 67%. <i>Journal of Materials Chemistry A</i> , 2021 , 9, 13515-13521	13	5
44	Chromaticity manipulation of indoor photovoltaic cells. <i>Applied Physics Letters</i> , 2021 , 118, 043301	3.4	5

43	High-Efficiency Thickness-Insensitive Organic Solar Cells with an Insulating Polymer. <i>ACS Applied Materials & Interfaces</i> , 2021 , 13, 11134-11143	9.5	5
42	Exploring charge transfer processes and crystallization dynamics in donor-acceptor crystals. <i>Organic Electronics</i> , 2018 , 58, 105-110	3.5	4
41	Effect of the third component on charge transfer character in ternary organic solar cells with a cascade-type electronic structure. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 2019 , 383, 126001	2.3	4
40	Systematic control of optical features in aluminosilicate glass waveguides using direct femtosecond laser writing. <i>Optical Materials</i> , 2017 , 72, 501-507	3.3	4
39	Investigation of preparation and characterization of GaN films on sapphire (0001) substrates. <i>Applied Surface Science</i> , 2002 , 202, 295-300	6.7	4
38	Chemical vapor deposition growth of phase-selective inorganic lead halide perovskite films for sensitive photodetectors. <i>Chinese Chemical Letters</i> , 2021 , 32, 489-492	8.1	4
37	Giant Nonlinear Optical Response of Lead-Free All-inorganic CsSnBr ₃ Nanoplates. <i>Journal of Physical Chemistry C</i> , 2021 , 125, 803-811	3.8	4
36	A sandwich-like structural model revealed for quasi-2D perovskite films. <i>Journal of Materials Chemistry C</i> , 2021 , 9, 5362-5372	7.1	4
35	Performance Enhancement in Polymer-Based Organic Optoelectronic Devices Enabled By Discontinuous Metal Interlayer. <i>IEEE Journal of Photovoltaics</i> , 2016 , 6, 1522-1529	3.7	3
34	Structure and luminescence of GaN films by sputtering post-annealing-reaction technique. <i>Diamond and Related Materials</i> , 2003 , 12, 1402-1405	3.5	3
33	Organic indoor light harvesters achieving recorded output power over 500% enhancement under thermal radiated illuminances. <i>Science Bulletin</i> , 2021 , 66, 1641-1641	10.6	3
32	Efficient photoinduced charge transfer in chemically-linked organic-metal Ag-P3HT nanocomposites. <i>Optical Materials Express</i> , 2016 , 6, 3063	2.6	3
31	Impact of solvent additive on exciton dissociation in P3HT : EP-PDI blend film via controlling morphology. <i>Journal Physics D: Applied Physics</i> , 2016 , 49, 255502	3	3
30	Influence of donor:acceptor ratio on charge transfer dynamics in non-fullerene organic bulk heterojunctions. <i>Chinese Chemical Letters</i> , 2021 , 32, 529-534	8.1	3
29	Preparation of Biomorphic TiO ₂ Ceramics from Rattan Templates. <i>BioResources</i> , 2015 , 10,	1.3	2
28	Conformational and photophysical changes in conjugated polymers exposed to Couette shear. <i>Journal of Physical Chemistry B</i> , 2011 , 115, 6838-42	3.4	2
27	Semitransparent passive matrix organic light-emitting displays. <i>Journal of Materials Science: Materials in Electronics</i> , 2007 , 18, 913-918	2.1	2
26	Emission properties of laser ablation of SnO ₂ : Sb transparent conducting film and KTiOPO ₄ crystal. <i>Optics and Laser Technology</i> , 2003 , 35, 475-480	4.2	2

25	Polycrystalline LaFe ₃ CoSb ₁₂ material manufactured by melt-freeze-annealing method. <i>Progress in Crystal Growth and Characterization of Materials</i> , 2000 , 40, 285-291	3.5	2
24	Stress-induced optical waveguides written by an ultrafast laser in Nd, Y co-doped SrF crystals. <i>Applied Optics</i> , 2019 , 58, 984-990	1.7	2
23	Study of femtosecond laser writing in the bulk of Nd ³⁺ , Y ³⁺ co-doped CaF ₂ crystals. <i>OSA Continuum</i> , 2019 , 2, 151	1.4	2
22	Tunable Grain Boundary of Lead-Free All-Inorganic Perovskite Films for Smart Photodetectors. <i>Advanced Materials Interfaces</i> , 2021 , 8, 2101339	4.6	2
21	Efficient photoluminescence enhancement and tunable photocarrier transfer in vertical 2D organic/inorganic heterostructure by energy funneling. <i>2D Materials</i> , 2021 , 8, 025026	5.9	2
20	Utilizing magnetic field to study the impact of intramolecular charge transfers on the open-circuit voltage of organic solar cells. <i>Applied Physics Letters</i> , 2018 , 113, 093301	3.4	2
19	High performance indoor light harvesters with a wide-gap donor polymer PBDB-T. <i>Organic Electronics</i> , 2021 , 98, 106289	3.5	2
18	Boosting charge and thermal transport ¶role of insulators in stable and efficient n-type polymer transistors. <i>Journal of Materials Chemistry C</i> , 2021 , 9, 12281-12290	7.1	2
17	Reproducibility in Time and Space-The Molecular Weight Effects of Polymeric Materials in Organic Photovoltaic Devices.. <i>Small Methods</i> , 2022 , e2101548	12.8	2
16	Reduced graphene oxide assisted charge separation and serving as transport pathways in planar perovskite photodetector. <i>Organic Electronics</i> , 2020 , 81, 105663	3.5	1
15	Photophysical Behaviors at Interfaces between Poly(3-Hexylthiophene) and Zinc Oxide Nanostructures. <i>Materials Transactions</i> , 2017 , 58, 1106-1110	1.3	1
14	Saturated antisolvent pressure induced perylene diimide nanowires with high degree of electron delocalization. <i>Organic Electronics</i> , 2019 , 75, 105382	3.5	1
13	Super-resolution optical imaging of binary colloidal assemblies. <i>International Journal of Nanotechnology</i> , 2014 , 11, 610	1.5	1
12	Rationalizing charge carrier transport in ternary organic solar cells. <i>Applied Physics Letters</i> , 2022 , 120, 023302	3.4	1
11	Observing halogen-bond-assisted electron transport in high-performance polymer solar cells. <i>Applied Physics Letters</i> , 2021 , 119, 183302	3.4	1
10	Organic chiral ferromagnets with strong spin-chiroptical interactions. <i>Cell Reports Physical Science</i> , 2021 , 2, 100442	6.1	1
9	Non-Fullerene Acceptors: Suppressing Kinetic Aggregation of Non-Fullerene Acceptor via Versatile Alloy States Enables High-Efficiency and Stable Ternary Polymer Solar Cells (Adv. Funct. Mater. 20/2021). <i>Advanced Functional Materials</i> , 2021 , 31, 2170141	15.6	1
8	Multiple Temporal-Scale Photocarrier Dynamics Induced by Synergistic Effects of Fluorination and Chlorination in Highly Efficient Nonfullerene Organic Solar Cells. <i>Solar Rrl</i> , 2020 , 4, 2070046	7.1	1

7	Optical Helicity-Manipulated Photocurrents and Photovoltages in Organic Solar Cells. <i>Journal of Physical Chemistry C</i> , 2018 , 122, 12566-12571	3.8	1
6	CdSe quantum dot organic solar cells with improved photovoltaic performance. <i>Journal Physics D: Applied Physics</i> , 2021 , 54, 115504	3	1
5	An Aggregation-Suppressed Polymer Blending Strategy Enables High-Performance Organic and Quantum Dot Hybrid Solar Cells.. <i>Small</i> , 2022 , e2201387	11	1
4	3D Charge Transport Pathway in Organic Solar Cells via Incorporation of Discotic Liquid Crystal Columns. <i>Solar Rrl</i> , 2020 , 4, 2070056	7.1	0
3	Reducing Limitations of Aggregation-Induced Photocarrier Trapping for Photovoltaic Stability via Tailoring Intermolecular Electron-Phonon Coupling in Highly Efficient Quaternary Polymer Solar Cells (Adv. Energy Mater. 6/2022). <i>Advanced Energy Materials</i> , 2022 , 12, 2270023	21.8	
2	V OC variation with different molecular weight fractions in highly efficient organic photovoltaic bulk heterojunctions. <i>Journal Physics D: Applied Physics</i> , 2021 , 54, 035106	3	
1	Bandgap matching strategy for organic photovoltaic cells in oceanic applications. <i>Cell Reports Physical Science</i> , 2022 , 100861	6.1	