Andrew Wadsworth

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164 213 27,275 75 h-index g-index citations papers 16.9 31,148 225 7.31 L-index avg, IF ext. citations ext. papers

#	Paper	IF	Citations
213	A strong regioregularity effect in self-organizing conjugated polymer films and high-efficiency polythiophene:fullerene solar cells. <i>Nature Materials</i> , 2006 , 5, 197-203	27	2097
212	Liquid-crystalline semiconducting polymers with high charge-carrier mobility. <i>Nature Materials</i> , 2006 , 5, 328-33	27	1836
211	Materials and applications for large area electronics: solution-based approaches. <i>Chemical Reviews</i> , 2010 , 110, 3-24	68.1	1510
210	Non-fullerene electron acceptors for use in organic solar cells. <i>Accounts of Chemical Research</i> , 2015 , 48, 2803-12	24.3	944
209	High-efficiency and air-stable P3HT-based polymer solar cells with a new non-fullerene acceptor. Nature Communications, 2016 , 7, 11585	17.4	903
208	Thieno[3,2-b]thiophene-diketopyrrolopyrrole-containing polymers for high-performance organic field-effect transistors and organic photovoltaic devices. <i>Journal of the American Chemical Society</i> , 2011 , 133, 3272-5	16.4	809
207	Reducing the efficiency-stability-cost gap of organic photovoltaics with highly efficient and stable small molecule acceptor ternary solar cells. <i>Nature Materials</i> , 2017 , 16, 363-369	27	807
206	Recent advances in the development of semiconducting DPP-containing polymers for transistor applications. <i>Advanced Materials</i> , 2013 , 25, 1859-80	24	711
205	Approaching disorder-free transport in high-mobility conjugated polymers. <i>Nature</i> , 2014 , 515, 384-8	50.4	692
204	Critical review of the molecular design progress in non-fullerene electron acceptors towards commercially viable organic solar cells. <i>Chemical Society Reviews</i> , 2019 , 48, 1596-1625	58.5	617
203	High-performance ambipolar diketopyrrolopyrrole-thieno[3,2-b]thiophene copolymer field-effect transistors with balanced hole and electron mobilities. <i>Advanced Materials</i> , 2012 , 24, 647-52	24	488
202	Influence of blend microstructure on bulk heterojunction organic photovoltaic performance. <i>Chemical Society Reviews</i> , 2011 , 40, 1185-99	58.5	463
201	Indacenodithiophene semiconducting polymers for high-performance, air-stable transistors. Journal of the American Chemical Society, 2010 , 132, 11437-9	16.4	463
200	Reduced voltage losses yield 10% efficient fullerene free organic solar cells with >1 V open circuit voltages. <i>Energy and Environmental Science</i> , 2016 , 9, 3783-3793	35.4	425
199	A rhodanine flanked nonfullerene acceptor for solution-processed organic photovoltaics. <i>Journal of the American Chemical Society</i> , 2015 , 137, 898-904	16.4	407
198	17% Efficient Organic Solar Cells Based on Liquid Exfoliated WS as a Replacement for PEDOT:PSS. <i>Advanced Materials</i> , 2019 , 31, e1902965	24	384
197	Molecular origin of high field-effect mobility in an indacenodithiophene-benzothiadiazole copolymer. <i>Nature Communications</i> , 2013 , 4, 2238	17.4	384

(2016-2018)

196	Recent Progress in High-Mobility Organic Transistors: A Reality Check. <i>Advanced Materials</i> , 2018 , 30, e1801079	24	358
195	Molecular packing of high-mobility diketo pyrrolo-pyrrole polymer semiconductors with branched alkyl side chains. <i>Journal of the American Chemical Society</i> , 2011 , 133, 15073-84	16.4	353
194	Advances in Charge Carrier Mobilities of Semiconducting Polymers Used in Organic Transistors. <i>Chemistry of Materials</i> , 2014 , 26, 647-663	9.6	335
193	Chalcogenophene comonomer comparison in small band gap diketopyrrolopyrrole-based conjugated polymers for high-performing field-effect transistors and organic solar cells. <i>Journal of the American Chemical Society</i> , 2015 , 137, 1314-21	16.4	317
192	High operational and environmental stability of high-mobility conjugated polymer field-effect transistors through the use of molecular additives. <i>Nature Materials</i> , 2017 , 16, 356-362	27	276
191	Controlling the mode of operation of organic transistors through side-chain engineering. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 12017-12022	11.5	251
190	Photocurrent enhancement from diketopyrrolopyrrole polymer solar cells through alkyl-chain branching point manipulation. <i>Journal of the American Chemical Society</i> , 2013 , 135, 11537-40	16.4	248
189	The role of the third component in ternary organic solar cells. <i>Nature Reviews Materials</i> , 2019 , 4, 229-24	2 73.3	244
188	Molecular-weight dependence of interchain polaron delocalization and exciton bandwidth in high-mobility conjugated polymers. <i>Physical Review B</i> , 2006 , 74,	3.3	244
187	Conjugated Polymers in Bioelectronics. Accounts of Chemical Research, 2018, 51, 1368-1376	24.3	235
186	The Effect of Poly(3-hexylthiophene) Molecular Weight on Charge Transport and the Performance of Polymer:Fullerene Solar Cells. <i>Advanced Functional Materials</i> , 2008 , 18, 2373-2380	15.6	233
185	Exploring the origin of high optical absorption in conjugated polymers. <i>Nature Materials</i> , 2016 , 15, 746-	5 3 7	233
184	Design of semiconducting indacenodithiophene polymers for high performance transistors and solar cells. <i>Accounts of Chemical Research</i> , 2012 , 45, 714-22	24.3	229
183	A new thiophene substituted isoindigo based copolymer for high performance ambipolar transistors. <i>Chemical Communications</i> , 2012 , 48, 3939-41	5.8	208
182	The role of chemical design in the performance of organic semiconductors. <i>Nature Reviews Chemistry</i> , 2020 , 4, 66-77	34.6	205
181	Solution-processed small molecule-polymer blend organic thin-film transistors with hole mobility greater than 5 cm2/Vs. <i>Advanced Materials</i> , 2012 , 24, 2441-6	24	202
180	Effect of Fluorination on the Properties of a DonorAcceptor Copolymer for Use in Photovoltaic Cells and Transistors. <i>Chemistry of Materials</i> , 2013 , 25, 277-285	9.6	201
179	Molecular Design of Semiconducting Polymers for High-Performance Organic Electrochemical Transistors. <i>Journal of the American Chemical Society</i> , 2016 , 138, 10252-9	16.4	189

178	ORGANIC DEVICES. Avoid the kinks when measuring mobility. <i>Science</i> , 2016 , 352, 1521-2	33.3	181
177	Enhanced photocatalytic hydrogen evolution from organic semiconductor heterojunction nanoparticles. <i>Nature Materials</i> , 2020 , 19, 559-565	27	171
176	N-type organic electrochemical transistors with stability in water. <i>Nature Communications</i> , 2016 , 7, 130	66 7.4	170
175	Silaindacenodithiophene-Based Low Band Gap Polymers T he Effect of Fluorine Substitution on Device Performances and Film Morphologies. <i>Advanced Functional Materials</i> , 2012 , 22, 1663-1670	15.6	170
174	On the energetic dependence of charge separation in low-band-gap polymer/fullerene blends. Journal of the American Chemical Society, 2012, 134, 18189-92	16.4	160
173	Enhanced n-Doping Efficiency of a Naphthalenediimide-Based Copolymer through Polar Side Chains for Organic Thermoelectrics. <i>ACS Energy Letters</i> , 2018 , 3, 278-285	20.1	159
172	Burn-in Free Nonfullerene-Based Organic Solar Cells. Advanced Energy Materials, 2017, 7, 1700770	21.8	156
171	High performance ambient-air-stable FAPbI3 perovskite solar cells with molecule-passivated Ruddlesden Popper/3D heterostructured film. <i>Energy and Environmental Science</i> , 2018 , 11, 3358-3366	35.4	154
170	Indacenodithiophene-co-benzothiadiazole Copolymers for High Performance Solar Cells or Transistors via Alkyl Chain Optimization. <i>Macromolecules</i> , 2011 , 44, 6649-6652	5.5	152
169	Robust nonfullerene solar cells approaching unity external quantum efficiency enabled by suppression of geminate recombination. <i>Nature Communications</i> , 2018 , 9, 2059	17.4	141
168	An Efficient, "Burn in" Free Organic Solar Cell Employing a Nonfullerene Electron Acceptor. <i>Advanced Materials</i> , 2017 , 29, 1701156	24	138
167	Correlating triplet yield, singlet oxygen generation and photochemical stability in polymer/fullerene blend films. <i>Chemical Communications</i> , 2013 , 49, 1291-3	5.8	125
166	The Role of the Side Chain on the Performance of N-type Conjugated Polymers in Aqueous Electrolytes. <i>Chemistry of Materials</i> , 2018 , 30, 2945-2953	9.6	124
165	Silaindacenodithiophene Semiconducting Polymers for Efficient Solar Cells and High-Mobility Ambipolar Transistors <i>Chemistry of Materials</i> , 2011 , 23, 768-770	9.6	120
164	Analyzing the efficiency, stability and cost potential for fullerene-free organic photovoltaics in one figure of merit. <i>Energy and Environmental Science</i> , 2018 , 11, 1355-1361	35.4	119
163	The influence of polymer purification on photovoltaic device performance of a series of indacenodithiophene donor polymers. <i>Advanced Materials</i> , 2013 , 25, 2029-34	24	119
162	Acceptor energy level control of charge photogeneration in organic donor/acceptor blends. <i>Journal of the American Chemical Society</i> , 2010 , 132, 12919-26	16.4	119
161	Direct metabolite detection with an n-type accumulation mode organic electrochemical transistor. <i>Science Advances</i> , 2018 , 4, eaat0911	14.3	114

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160	A thieno[3,2-b][1]benzothiophene isoindigo building block for additive- and annealing-free high-performance polymer solar cells. <i>Advanced Materials</i> , 2015 , 27, 4702-7	24	113
159	Morphological stability and performance of polymer-fullerene solar cells under thermal stress: the impact of photoinduced PC60BM oligomerization. <i>ACS Nano</i> , 2014 , 8, 1297-308	16.7	111
158	17.1% Efficient Single-Junction Organic Solar Cells Enabled by n-Type Doping of the Bulk-Heterojunction. <i>Advanced Science</i> , 2020 , 7, 1903419	13.6	110
157	The Influence of Film Morphology in High-Mobility Small-Molecule:Polymer Blend Organic Transistors. <i>Advanced Functional Materials</i> , 2010 , 20, 2330-2337	15.6	110
156	The role of exciton lifetime for charge generation in organic solar cells at negligible energy-level offsets. <i>Nature Energy</i> , 2020 , 5, 711-719	62.3	110
155	Intrinsic efficiency limits in low-bandgap non-fullerene acceptor organic solar cells. <i>Nature Materials</i> , 2021 , 20, 378-384	27	108
154	Organic photovoltaics: Crosslinking for optimal morphology and stability. <i>Materials Today</i> , 2015 , 18, 42	5:43\$	105
153	Biofuel powered glucose detection in bodily fluids with an n-type conjugated polymer. <i>Nature Materials</i> , 2020 , 19, 456-463	27	105
152	A Novel Alkylated Indacenodithieno[3,2-b]thiophene-Based Polymer for High-Performance Field-Effect Transistors. <i>Advanced Materials</i> , 2016 , 28, 3922-7	24	100
151	The Physics of Small Molecule Acceptors for Efficient and Stable Bulk Heterojunction Solar Cells. <i>Advanced Energy Materials</i> , 2018 , 8, 1703298	21.8	96
150	Materials in Organic Electrochemical Transistors for Bioelectronic Applications: Past, Present, and Future. <i>Advanced Functional Materials</i> , 2019 , 29, 1807033	15.6	92
149	Fused electron deficient semiconducting polymers for air stable electron transport. <i>Nature Communications</i> , 2018 , 9, 416	17.4	91
148	The Effect of Residual Palladium Catalyst Contamination on the Photocatalytic Hydrogen Evolution Activity of Conjugated Polymers. <i>Advanced Energy Materials</i> , 2018 , 8, 1802181	21.8	89
147	Side Chain Redistribution as a Strategy to Boost Organic Electrochemical Transistor Performance and Stability. <i>Advanced Materials</i> , 2020 , 32, e2002748	24	88
146	Long-range exciton diffusion in molecular non-fullerene acceptors. <i>Nature Communications</i> , 2020 , 11, 5220	17.4	87
145	Understanding the Influence of Morphology on Poly(3-hexylselenothiophene):PCBM Solar Cells. <i>Macromolecules</i> , 2010 , 43, 1169-1174	5.5	86
144	Exploiting Ternary Blends for Improved Photostability in High-Efficiency Organic Solar Cells. <i>ACS Energy Letters</i> , 2020 , 5, 1371-1379	20.1	83
143	Influence of Water on the Performance of Organic Electrochemical Transistors. <i>Chemistry of Materials</i> , 2019 , 31, 927-937	9.6	82

142	Singlet Exciton Lifetimes in Conjugated Polymer Films for Organic Solar Cells. <i>Polymers</i> , 2016 , 8,	4.5	81
141	Enhancing fullerene-based solar cell lifetimes by addition of a fullerene dumbbell. <i>Angewandte Chemie - International Edition</i> , 2014 , 53, 12870-5	16.4	80
140	Rapid single-molecule detection of COVID-19 and MERS antigens via nanobody-functionalized organic electrochemical transistors. <i>Nature Biomedical Engineering</i> , 2021 , 5, 666-677	19	78
139	Effect of fluorination of 2,1,3-benzothiadiazole. <i>Journal of Organic Chemistry</i> , 2015 , 80, 5045-8	4.2	77
138	Highly Efficient and Reproducible Nonfullerene Solar Cells from Hydrocarbon Solvents. <i>ACS Energy Letters</i> , 2017 , 2, 1494-1500	20.1	74
137	Delineation of Thermodynamic and Kinetic Factors that Control Stability in Non-fullerene Organic Solar Cells. <i>Joule</i> , 2019 , 3, 1328-1348	27.8	74
136	Design and evaluation of conjugated polymers with polar side chains as electrode materials for electrochemical energy storage in aqueous electrolytes. <i>Energy and Environmental Science</i> , 2019 , 12, 1349-1357	35.4	74
135	A simple and robust approach to reducing contact resistance in organic transistors. <i>Nature Communications</i> , 2018 , 9, 5130	17.4	72
134	Progress in Poly (3-Hexylthiophene) Organic Solar Cells and the Influence of Its Molecular Weight on Device Performance. <i>Advanced Energy Materials</i> , 2018 , 8, 1801001	21.8	72
133	Thieno[3,2-b]thiophene-diketopyrrolopyrrole Containing Polymers for Inverted Solar Cells Devices with High Short Circuit Currents. <i>Advanced Functional Materials</i> , 2013 , 23, 5647-5654	15.6	71
132	A molecular interaction-diffusion framework for predicting organic solar cell stability. <i>Nature Materials</i> , 2021 , 20, 525-532	27	71
131	Balancing Ionic and Electronic Conduction for High-Performance Organic Electrochemical Transistors. <i>Advanced Functional Materials</i> , 2020 , 30, 1907657	15.6	70
130	The phase behavior of a polymer-fullerene bulk heterojunction system that contains bimolecular crystals. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2011 , 49, 499-503	2.6	70
129	Polymer:Nonfullerene Bulk Heterojunction Solar Cells with Exceptionally Low Recombination Rates. <i>Advanced Energy Materials</i> , 2017 , 7, 1701561	21.8	69
128	The Bulk Heterojunction in Organic Photovoltaic, Photodetector, and Photocatalytic Applications. <i>Advanced Materials</i> , 2020 , 32, e2001763	24	68
127	Role of the Anion on the Transport and Structure of Organic Mixed Conductors. <i>Advanced Functional Materials</i> , 2019 , 29, 1807034	15.6	68
126	Influence of Blend Morphology and Energetics on Charge Separation and Recombination Dynamics in Organic Solar Cells Incorporating a Nonfullerene Acceptor. <i>Advanced Functional Materials</i> , 2018 , 28, 1704389	15.6	68
125	Polaron pair mediated triplet generation in polymer/fullerene blends. <i>Nature Communications</i> , 2015 , 6, 6501	17.4	65

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124	Energetic Control of Redox-Active Polymers toward Safe Organic Bioelectronic Materials. <i>Advanced Materials</i> , 2020 , 32, e1908047	24	65
123	A Highly Crystalline Fused-Ring n-Type Small Molecule for Non-Fullerene Acceptor Based Organic Solar Cells and Field-Effect Transistors. <i>Advanced Functional Materials</i> , 2018 , 28, 1802895	15.6	63
122	Twist and Degradelmpact of Molecular Structure on the Photostability of Nonfullerene Acceptors and Their Photovoltaic Blends. <i>Advanced Energy Materials</i> , 2019 , 9, 1803755	21.8	62
121	High-mobility, trap-free charge transport in conjugated polymer diodes. <i>Nature Communications</i> , 2019 , 10, 2122	17.4	61
120	Dithiopheneindenofluorene (TIF) Semiconducting Polymers with Very High Mobility in Field-Effect Transistors. <i>Advanced Materials</i> , 2017 , 29, 1702523	24	61
119	Visible and Near-Infrared Imaging with Nonfullerene-Based Photodetectors. <i>Advanced Materials Technologies</i> , 2018 , 3, 1800104	6.8	60
118	Redox-Stability of Alkoxy-BDT Copolymers and their Use for Organic Bioelectronic Devices. <i>Advanced Functional Materials</i> , 2018 , 28, 1706325	15.6	58
117	Overcoming efficiency and stability limits in water-processing nanoparticular organic photovoltaics by minimizing microstructure defects. <i>Nature Communications</i> , 2018 , 9, 5335	17.4	57
116	Material Crystallinity as a Determinant of Triplet Dynamics and Oxygen Quenching in Donor Polymers for Organic Photovoltaic Devices. <i>Advanced Functional Materials</i> , 2014 , 24, 1474-1482	15.6	56
115	Tracking Charge Transfer to Residual Metal Clusters in Conjugated Polymers for Photocatalytic Hydrogen Evolution. <i>Journal of the American Chemical Society</i> , 2020 , 142, 14574-14587	16.4	56
114	Azaisoindigo conjugated polymers for high performance n-type and ambipolar thin film transistor applications. <i>Journal of Materials Chemistry C</i> , 2016 , 4, 9704-9710	7.1	56
113	Modification of Indacenodithiophene-Based Polymers and Its Impact on Charge Carrier Mobility in Organic Thin-Film Transistors. <i>Journal of the American Chemical Society</i> , 2020 , 142, 652-664	16.4	55
112	Subthreshold Operation of Organic Electrochemical Transistors for Biosignal Amplification. <i>Advanced Science</i> , 2018 , 5, 1800453	13.6	55
111	Dual Function Additives: A Small Molecule Crosslinker for Enhanced Efficiency and Stability in Organic Solar Cells. <i>Advanced Energy Materials</i> , 2015 , 5, 1401426	21.8	54
110	Efficient Charge Photogeneration by the Dissociation of PC70BM Excitons in Polymer/Fullerene Solar Cells. <i>Journal of Physical Chemistry Letters</i> , 2012 , 3, 140-144	6.4	54
109	Membrane-Free Detection of Metal Cations with an Organic Electrochemical Transistor. <i>Advanced Functional Materials</i> , 2019 , 29, 1904403	15.6	52
108	Carrier Transport and Recombination in Efficient All-Small-Molecule Solar Cells with the Nonfullerene Acceptor IDTBR. <i>Advanced Energy Materials</i> , 2018 , 8, 1800264	21.8	52
107	Performance Improvements in Conjugated Polymer Devices by Removal of Water-Induced Traps. <i>Advanced Materials</i> , 2018 , 30, e1801874	24	52

106	Water stable molecular n-doping produces organic electrochemical transistors with high transconductance and record stability. <i>Nature Communications</i> , 2020 , 11, 3004	17.4	51
105	Hybrid Alkyl E thylene Glycol Side Chains Enhance Substrate Adhesion and Operational Stability in Accumulation Mode Organic Electrochemical Transistors. <i>Chemistry of Materials</i> , 2019 , 31, 9797-9806	9.6	51
104	Toward Improved Environmental Stability of Polymer:Fullerene and Polymer:Nonfullerene Organic Solar Cells: A Common Energetic Origin of Light- and Oxygen-Induced Degradation. <i>ACS Energy Letters</i> , 2019 , 4, 846-852	20.1	49
103	Germaindacenodithiophene based low band gap polymers for organic solar cells. <i>Chemical Communications</i> , 2012 , 48, 2955-7	5.8	49
102	Pyrroloindacenodithiophene containing polymers for organic field effect transistors and organic photovoltaics. <i>Journal of Materials Chemistry</i> , 2011 , 21, 18744		48
101	A Systematic Approach to the Design Optimization of Light-Absorbing Indenofluorene Polymers for Organic Photovoltaics. <i>Advanced Energy Materials</i> , 2012 , 2, 260-265	21.8	47
100	Ethylene Glycol-Based Side Chain Length Engineering in Polythiophenes and its Impact on Organic Electrochemical Transistor Performance. <i>Chemistry of Materials</i> , 2020 , 32, 6618-6628	9.6	47
99	A Thieno[2,3-b]pyridine-Flanked Diketopyrrolopyrrole Polymer as an n-Type Polymer Semiconductor for All-Polymer Solar Cells and Organic Field-Effect Transistors. <i>Macromolecules</i> , 2018 , 51, 71-79	5.5	44
98	Efficient truxenone-based acceptors for organic photovoltaics. <i>Journal of Materials Chemistry A</i> , 2013 , 1, 73-76	13	43
97	Suppression of Recombination Losses in Polymer:Nonfullerene Acceptor Organic Solar Cells due to Aggregation Dependence of Acceptor Electron Affinity. <i>Advanced Energy Materials</i> , 2019 , 9, 1901254	21.8	42
96	Electrolyte-gated transistors for enhanced performance bioelectronics <i>Nature Reviews Methods Primers</i> , 2021 , 1,		42
95	Polaron Delocalization in Donor-Acceptor Polymers and its Impact on Organic Electrochemical Transistor Performance. <i>Angewandte Chemie - International Edition</i> , 2021 , 60, 7777-7785	16.4	41
94	Residual Pd Enables Photocatalytic H2 Evolution from Conjugated Polymers. <i>ACS Energy Letters</i> , 2018 , 3, 2846-2850	20.1	40
93	Photocatalysts Based on Organic Semiconductors with Tunable Energy Levels for Solar Fuel Applications. <i>Advanced Energy Materials</i> , 2020 , 10, 2001935	21.8	39
92	Towards optimisation of photocurrent from fullerene excitons in organic solar cells. <i>Energy and Environmental Science</i> , 2014 , 7, 1037	35.4	36
91	Mixed Conduction in an N-Type Organic Semiconductor in the Absence of Hydrophilic Side-Chains. <i>Advanced Functional Materials</i> , 2021 , 31, 2010165	15.6	36
90	n-Type Rigid Semiconducting Polymers Bearing Oligo(Ethylene Glycol) Side Chains for High-Performance Organic Electrochemical Transistors. <i>Angewandte Chemie - International Edition</i> , 2021 , 60, 9368-9373	16.4	35
89	Influence of Side Chains on the n-Type Organic Electrochemical Transistor Performance. <i>ACS Applied Materials & District Applied & District App</i>	9.5	34

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88	End Group Tuning in Acceptor Donor Acceptor Nonfullerene Small Molecules for High Fill Factor Organic Solar Cells. <i>Advanced Functional Materials</i> , 2019 , 29, 1808429	15.6	33
87	Energetic Disorder and Activation Energy in Efficient Ternary Organic Solar Cells with Nonfullerene Acceptor Eh-IDTBR as the Third Component. <i>Solar Rrl</i> , 2020 , 4, 1900403	7.1	33
86	The Effect of Alkyl Spacers on the Mixed Ionic-Electronic Conduction Properties of N-Type Polymers. <i>Advanced Functional Materials</i> , 2021 , 31, 2008718	15.6	33
85	Why are SE and SD non-covalent interactions stabilising?. <i>Journal of Materials Chemistry C</i> , 2018 , 6, 12413-12421	7.1	32
84	On the Role of Contact Resistance and Electrode Modification in Organic Electrochemical Transistors. <i>Advanced Materials</i> , 2019 , 31, e1902291	24	31
83	Impact of Nonfullerene Acceptor Side Chain Variation on Transistor Mobility. <i>Advanced Electronic Materials</i> , 2019 , 5, 1900344	6.4	30
82	Acene Ring Size Optimization in Fused Lactam Polymers Enabling High n-Type Organic Thermoelectric Performance. <i>Journal of the American Chemical Society</i> , 2021 , 143, 260-268	16.4	30
81	Short contacts between chains enhancing luminescence quantum yields and carrier mobilities in conjugated copolymers. <i>Nature Communications</i> , 2019 , 10, 2614	17.4	29
80	Electron-deficient truxenone derivatives and their use in organic photovoltaics. <i>Journal of Materials Chemistry A</i> , 2014 , 2, 12348-12354	13	29
79	Improving the Compatibility of Diketopyrrolopyrrole Semiconducting Polymers for Biological Interfacing by Lysine Attachment. <i>Chemistry of Materials</i> , 2018 , 30, 6164-6172	9.6	28
78	n-Type organic semiconducting polymers: stability limitations, design considerations and applications. <i>Journal of Materials Chemistry C</i> , 2021 , 9, 8099-8128	7.1	28
77	Reversible Electronic Solid-Gel Switching of a Conjugated Polymer. <i>Advanced Science</i> , 2020 , 7, 1901144	13.6	27
76	The binding energy and dynamics of charge-transfer states in organic photovoltaics with low driving force for charge separation. <i>Journal of Chemical Physics</i> , 2019 , 150, 104704	3.9	26
75	Universal Spray-Deposition Process for Scalable, High-Performance, and Stable Organic Electrochemical Transistors. <i>ACS Applied Materials & Amp; Interfaces</i> , 2020 , 12, 20757-20764	9.5	26
74	Enhancing the Charge Extraction and Stability of Perovskite Solar Cells Using Strontium Titanate (SrTiO3) Electron Transport Layer. <i>ACS Applied Energy Materials</i> , 2019 , 2, 8090-8097	6.1	26
73	A universal solution processed interfacial bilayer enabling ohmic contact in organic and hybrid optoelectronic devices. <i>Energy and Environmental Science</i> , 2020 , 13, 268-276	35.4	26
72	Challenges to the Success of Commercial Organic Photovoltaic Products. <i>Advanced Energy Materials</i> , 2021 , 11, 2100056	21.8	26
71	Exciton and Charge Carrier Dynamics in Highly Crystalline PTQ10:IDIC Organic Solar Cells. <i>Advanced Energy Materials</i> , 2020 , 10, 2001149	21.8	24

70	The Chemistry and Applications of Heteroisoindigo Units as Enabling Links for Semiconducting Materials. <i>Accounts of Chemical Research</i> , 2020 , 53, 2855-2868	24.3	24
69	Barbiturate end-capped non-fullerene acceptors for organic solar cells: tuning acceptor energetics to suppress geminate recombination losses. <i>Chemical Communications</i> , 2018 , 54, 2966-2969	5.8	23
68	The Effect of Ring Expansion in Thienobenzo[]indacenodithiophene Polymers for Organic Field-Effect Transistors. <i>Journal of the American Chemical Society</i> , 2019 , 141, 18806-18813	16.4	23
67	Regiochemistry-Driven Organic Electrochemical Transistor Performance Enhancement in Ethylene Glycol-Functionalized Polythiophenes. <i>Journal of the American Chemical Society</i> , 2021 , 143, 11007-1101	8 ^{16.4}	22
66	Generation of long-lived charges in organic semiconductor heterojunction nanoparticles for efficient photocatalytic hydrogen evolution. <i>Nature Energy</i> ,	62.3	22
65	P3HT Molecular Weight Determines the Performance of P3HT:O-IDTBR Solar Cells. <i>Solar Rrl</i> , 2019 , 3, 1900023	7.1	21
64	Role of Polymer Fractionation in Energetic Losses and Charge Carrier Lifetimes of Polymer: Fullerene Solar Cells. <i>Journal of Physical Chemistry C</i> , 2015 , 119, 19668-19673	3.8	21
63	Monitoring supported lipid bilayers with n-type organic electrochemical transistors. <i>Materials Horizons</i> , 2020 , 7, 2348-2358	14.4	21
62	High-Gain Chemically Gated Organic Electrochemical Transistor. <i>Advanced Functional Materials</i> , 2021 , 31, 2010868	15.6	21
61	Charge Separation in Intermixed Polymer:PC70BM Photovoltaic Blends: Correlating Structural and Photophysical Length Scales as a Function of Blend Composition. <i>Journal of Physical Chemistry C</i> , 2017 , 121, 9790-9801	3.8	20
60	Charge carrier transport and nanomorphology control for efficient non-fullerene organic solar cells. <i>Materials Today Energy</i> , 2019 , 12, 398-407	7	20
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58	An Analysis of the Factors Determining the Efficiency of Photocurrent Generation in Polymer:Nonfullerene Acceptor Solar Cells. <i>Advanced Energy Materials</i> , 2018 , 8, 1801537	21.8	20
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11	Infrared Organic Photodetectors Employing Ultralow Bandgap Polymer and Non-Fullerene Acceptors for Biometric Monitoring <i>Small</i> , 2022 , e2200580	11	3
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2	Donor Functionalization Tuning the N-Type Performance of Donor Acceptor Copolymers for Aqueous-Based Electrochemical Devices. <i>Advanced Functional Materials</i> , 2201821	15.6	1
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