

Christopher McNeill

List of Publications by Citations

Source: <https://exaly.com/author-pdf/106254/christopher-mcneill-publications-by-citations.pdf>

Version: 2024-04-29

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

244
papers

12,951
citations

61
h-index

105
g-index

271
ext. papers

14,276
ext. citations

9.6
avg, IF

6.64
L-index

#	Paper	IF	Citations
244	Absolute Measurement of Domain Composition and Nanoscale Size Distribution Explains Performance in PTB7:PC71BM Solar Cells. <i>Advanced Energy Materials</i> , 2013 , 3, 65-74	21.8	555
243	Gas-assisted preparation of lead iodide perovskite films consisting of a monolayer of single crystalline grains for high efficiency planar solar cells. <i>Nano Energy</i> , 2014 , 10, 10-18	17.1	461
242	An Alkylated Indacenodithieno[3,2-b]thiophene-Based Nonfullerene Acceptor with High Crystallinity Exhibiting Single Junction Solar Cell Efficiencies Greater than 13% with Low Voltage Losses. <i>Advanced Materials</i> , 2018 , 30, 1705209	24	399
241	Critical role of alkyl chain branching of organic semiconductors in enabling solution-processed N-channel organic thin-film transistors with mobility of up to 3.50 cm ² V ⁻¹ s ⁻¹ . <i>Journal of the American Chemical Society</i> , 2013 , 135, 2338-49	16.4	344
240	Molecular Miscibility of Polymer/Fullerene Blends. <i>Journal of Physical Chemistry Letters</i> , 2010 , 1, 3160-3166	16.4	340
239	Understanding charge transport in lead iodide perovskite thin-film field-effect transistors. <i>Science Advances</i> , 2017 , 3, e1601935	14.3	284
238	Conjugated-Polymer Blends for Optoelectronics. <i>Advanced Materials</i> , 2009 , 21, 3840-3850	24	273
237	Polarized X-ray scattering reveals non-crystalline orientational ordering in organic films. <i>Nature Materials</i> , 2012 , 11, 536-43	27	258
236	Morphology of all-polymer solar cells. <i>Energy and Environmental Science</i> , 2012 , 5, 5653	35.4	255
235	Macroscopic and high-throughput printing of aligned nanostructured polymer semiconductors for MHz large-area electronics. <i>Nature Communications</i> , 2015 , 6, 8394	17.4	240
234	Efficient Polythiophene/Polyfluorene Copolymer Bulk Heterojunction Photovoltaic Devices: Device Physics and Annealing Effects. <i>Advanced Functional Materials</i> , 2008 , 18, 2309-2321	15.6	235
233	Dual electron donor/electron acceptor character of a conjugated polymer in efficient photovoltaic diodes. <i>Applied Physics Letters</i> , 2007 , 90, 193506	3.4	208
232	Effects of Layer Thickness and Annealing of PEDOT:PSS Layers in Organic Photodetectors. <i>Macromolecules</i> , 2009 , 42, 6741-6747	5.5	207
231	Comparison of the Operation of Polymer/Fullerene, Polymer/Polymer, and Polymer/Nanocrystal Solar Cells: A Transient Photocurrent and Photovoltage Study. <i>Advanced Functional Materials</i> , 2011 , 21, 1419-1431	15.6	206
230	Influence of Nanoscale Phase Separation on the Charge Generation Dynamics and Photovoltaic Performance of Conjugated Polymer Blends: Balancing Charge Generation and Separation. <i>Journal of Physical Chemistry C</i> , 2007 , 111, 19153-19160	3.8	201
229	Oriented Quasi-2D Perovskites for High Performance Optoelectronic Devices. <i>Advanced Materials</i> , 2018 , 30, e1804771	24	195
228	Polymer Blend Solar Cells Based on a High-Mobility Naphthalenediimide-Based Polymer Acceptor: Device Physics, Photophysics and Morphology. <i>Advanced Energy Materials</i> , 2011 , 1, 230-240	21.8	190

227	Nanomorphology of bulk heterojunction photovoltaic thin films probed with resonant soft X-ray scattering. <i>Nano Letters</i> , 2010 , 10, 2863-9	11.5	175
226	Influence of Backbone Fluorination in Regioregular Poly(3-alkyl-4-fluoro)thiophenes. <i>Journal of the American Chemical Society</i> , 2015 , 137, 6866-79	16.4	166
225	Correlating the efficiency and nanomorphology of polymer blend solar cells utilizing resonant soft X-ray scattering. <i>ACS Nano</i> , 2012 , 6, 677-88	16.7	145
224	Highly Exfoliated MWNT-rGO Ink-Wrapped Polyurethane Foam for Piezoresistive Pressure Sensor Applications. <i>ACS Applied Materials & Interfaces</i> , 2018 , 10, 5185-5195	9.5	141
223	Observation of a distinct surface molecular orientation in films of a high mobility conjugated polymer. <i>Journal of the American Chemical Society</i> , 2013 , 135, 1092-101	16.4	134
222	Two-dimensional Expanded quinoidal terthiophenes terminated with dicyanomethylenes as n-type semiconductors for high-performance organic thin-film transistors. <i>Journal of the American Chemical Society</i> , 2014 , 136, 16176-84	16.4	132
221	Highly efficient single-layer polymer ambipolar light-emitting field-effect transistors. <i>Advanced Materials</i> , 2012 , 24, 2728-34	24	128
220	Drift-diffusion modeling of photocurrent transients in bulk heterojunction solar cells. <i>Journal of Applied Physics</i> , 2009 , 106, 094506	2.5	122
219	Amorphous hole-transporting layer in slot-die coated perovskite solar cells. <i>Nano Energy</i> , 2017 , 31, 210-217	21.1	121
218	The Binding Energy of Charge-Transfer Excitons Localized at Polymeric Semiconductor Heterojunctions. <i>Journal of Physical Chemistry C</i> , 2011 , 115, 7114-7119	3.8	117
217	A Highly Sensitive Diketopyrrolopyrrole-Based Ambipolar Transistor for Selective Detection and Discrimination of Xylene Isomers. <i>Advanced Materials</i> , 2016 , 28, 4012-8	24	112
216	All-Inkjet-Printed, All-Air-Processed Solar Cells. <i>Advanced Energy Materials</i> , 2014 , 4, 1400432	21.8	112
215	Photocurrent transients in all-polymer solar cells: Trapping and detrapping effects. <i>Journal of Applied Physics</i> , 2009 , 106, 024507	2.5	111
214	Self-Assembled 2D Perovskite Layers for Efficient Printable Solar Cells. <i>Advanced Energy Materials</i> , 2019 , 9, 1803258	21.8	111
213	Incorporation of 2,6-Connected Azulene Units into the Backbone of Conjugated Polymers: Towards High-Performance Organic Optoelectronic Materials. <i>Angewandte Chemie - International Edition</i> , 2018 , 57, 1322-1326	16.4	111
212	Performance, morphology and photophysics of high open-circuit voltage, low band gap all-polymer solar cells. <i>Energy and Environmental Science</i> , 2015 , 8, 332-342	35.4	110
211	Charge-Transport Anisotropy in a Uniaxially Aligned Diketopyrrolopyrrole-Based Copolymer. <i>Advanced Materials</i> , 2015 , 27, 7356-64	24	110
210	Nanoscale quantitative chemical mapping of conjugated polymer blends. <i>Nano Letters</i> , 2006 , 6, 1202-6	11.5	106

209	Influence of Annealing and Interfacial Roughness on the Performance of Bilayer Donor/Acceptor Polymer Photovoltaic Devices. <i>Advanced Functional Materials</i> , 2010 , 20, 4329-4337	15.6	100
208	X-ray Microscopy of Photovoltaic Polyfluorene Blends: Relating Nanomorphology to Device Performance. <i>Macromolecules</i> , 2007 , 40, 3263-3270	5.5	97
207	Surface and Bulk Structural Characterization of a High-Mobility Electron-Transporting Polymer. <i>Macromolecules</i> , 2011 , 44, 1530-1539	5.5	96
206	Structure-Function Relationships of High-Electron Mobility Naphthalene Diimide Copolymers Prepared Via Direct Arylation. <i>Chemistry of Materials</i> , 2014 , 26, 6233-6240	9.6	94
205	Unraveling the Morphology of High Efficiency Polymer Solar Cells Based on the Donor Polymer PBDTTT-EFT. <i>Advanced Energy Materials</i> , 2015 , 5, 1401259	21.8	93
204	Microstructure of polycrystalline PBTTT films: domain mapping and structure formation. <i>ACS Nano</i> , 2012 , 6, 1849-64	16.7	93
203	Photophysics and Photocurrent Generation in Polythiophene/Polyfluorene Copolymer Blends. <i>Advanced Functional Materials</i> , 2009 , 19, 3103-3111	15.6	93
202	Influence of Alkyl Side-Chain Length on the Performance of Poly(3-alkylthiophene)/Polyfluorene All-Polymer Solar Cells. <i>Chemistry of Materials</i> , 2010 , 22, 3389-3398	9.6	89
201	Quick AS NEXAFS Tool (QANT): a program for NEXAFS loading and analysis developed at the Australian Synchrotron. <i>Journal of Synchrotron Radiation</i> , 2016 , 23, 374-80	2.4	89
200	Bottom-up growth of n-type monolayer molecular crystals on polymeric substrate for optoelectronic device applications. <i>Nature Communications</i> , 2018 , 9, 2933	17.4	88
199	A unified description of current-voltage characteristics in organic and hybrid photovoltaics under low light intensity. <i>Nano Letters</i> , 2008 , 8, 1393-8	11.5	88
198	Alkyl-Chain-Length-Independent Hole Mobility via Morphological Control with Poly(3-alkylthiophene) Nanofibers. <i>Advanced Functional Materials</i> , 2010 , 20, 792-802	15.6	87
197	Enabling high-mobility, ambipolar charge-transport in a DPP-benzotriazole copolymer by side-chain engineering. <i>Chemical Science</i> , 2015 , 6, 6949-6960	9.4	81
196	Low-temperature control of nanoscale morphology for high performance polymer photovoltaics. <i>Nano Letters</i> , 2008 , 8, 3942-7	11.5	81
195	Alkylated Selenophene-Based Ladder-Type Monomers via a Facile Route for High-Performance Thin-Film Transistor Applications. <i>Journal of the American Chemical Society</i> , 2017 , 139, 8552-8561	16.4	80
194	Pursuing High-Mobility n-Type Organic Semiconductors by Combination of "Molecule-Framework" and "Side-Chain" Engineering. <i>Advanced Materials</i> , 2016 , 28, 8456-8462	24	78
193	Mapping of Domain Orientation and Molecular Order in Polycrystalline Semiconducting Polymer Films with Soft X-Ray Microscopy. <i>Advanced Functional Materials</i> , 2011 , 21, 1122-1131	15.6	77
192	Near-Field Scanning Photocurrent Measurements of Polyfluorene Blend Devices: Directly Correlating Morphology with Current Generation. <i>Nano Letters</i> , 2004 , 4, 2503-2507	11.5	76

191	Selenium-Substituted Diketopyrrolopyrrole Polymer for High-Performance p-Type Organic Thermoelectric Materials. <i>Angewandte Chemie - International Edition</i> , 2019 , 58, 18994-18999	16.4	75
190	Direct Photocurrent Mapping of Organic Solar Cells Using a Near-Field Scanning Optical Microscope. <i>Nano Letters</i> , 2004 , 4, 219-223	11.5	74
189	Quantum efficiency of ambipolar light-emitting polymer field-effect transistors. <i>Journal of Applied Physics</i> , 2008 , 103, 064517	2.5	73
188	Trap-induced losses in hybrid photovoltaics. <i>ACS Nano</i> , 2014 , 8, 3213-21	16.7	69
187	Transient photocurrent measurements of PCDTBT:PC70BM and PCPDTBT:PC70BM Solar Cells: Evidence for charge trapping in efficient polymer/fullerene blends. <i>Journal of Applied Physics</i> , 2011 , 109, 074513	2.5	69
186	Understanding and Improving Solid-State Polymer/C60-Fullerene Bulk-Heterojunction Solar Cells Using Ternary Porphyrin Blends. <i>Journal of Physical Chemistry C</i> , 2007 , 111, 15415-15426	3.8	68
185	Soft X-ray characterisation of organic semiconductor films. <i>Journal of Materials Chemistry C</i> , 2013 , 1, 187-201	7.1	67
184	High-Mobility Naphthalene Diimide and Selenophene-Vinylene-Selenophene-Based Conjugated Polymer: n-Channel Organic Field-Effect Transistors and Structure-Property Relationship. <i>Advanced Functional Materials</i> , 2016 , 26, 4984-4997	15.6	66
183	Dithiopheneindeno[1,2-b]fluorene (TIF) Semiconducting Polymers with Very High Mobility in Field-Effect Transistors. <i>Advanced Materials</i> , 2017 , 29, 1702523	24	61
182	Fullerene-Dependent Miscibility in the Silole-Containing Copolymer PSBTBT-08. <i>Macromolecules</i> , 2011 , 44, 9747-9751	5.5	58
181	Efficient and Mechanically Robust Ultraflexible Organic Solar Cells Based on Mixed Acceptors. <i>Joule</i> , 2020 , 4, 128-141	27.8	58
180	High-Performance All-Polymer Solar Cells Enabled by n-Type Polymers with an Ultranarrow Bandgap Down to 1.28 eV. <i>Advanced Materials</i> , 2020 , 32, e2001476	24	56
179	X-ray spectromicroscopy of polymer/fullerene composites: quantitative chemical mapping. <i>Small</i> , 2006 , 2, 1432-5	11	56
178	Spinodal Decomposition of Blends of Semiconducting and Ferroelectric Polymers. <i>Advanced Functional Materials</i> , 2011 , 21, 1887-1894	15.6	55
177	Sub-micrometer charge modulation microscopy of a high mobility polymeric n-channel field-effect transistor. <i>Advanced Materials</i> , 2011 , 23, 5086-90	24	53
176	Tuning the Molecular Weight of the Electron Accepting Polymer in All-Polymer Solar Cells: Impact on Morphology and Charge Generation. <i>Advanced Functional Materials</i> , 2018 , 28, 1707185	15.6	51
175	Probing Molecular and Crystalline Orientation in Solution-Processed Perovskite Solar Cells. <i>Advanced Functional Materials</i> , 2015 , 25, 5529-5536	15.6	51
174	Cholesteric Aggregation at the Quinoidal-to-Diradical Border Enabled Stable n-Doped Conductor. <i>Chem</i> , 2019 , 5, 964-976	16.2	48

173	Interfacial disorder in efficient polymer solar cells: the impact of donor molecular structure and solvent additives. <i>Journal of Materials Chemistry A</i> , 2017 , 5, 24749-24757	13	48
172	Alkali Cation Doping for Improving the Structural Stability of 2D Perovskite in 3D/2D PSCs. <i>Nano Letters</i> , 2020 , 20, 1240-1251	11.5	47
171	NEXAFS spectroscopy of conjugated polymers. <i>European Polymer Journal</i> , 2016 , 81, 532-554	5.2	47
170	Structure of phase-separated ferroelectric/semiconducting polymer blends for organic non-volatile memories. <i>Small</i> , 2010 , 6, 508-12	11	47
169	Influence of nanoparticle shape on charge transport and recombination in polymer/nanocrystal solar cells. <i>Physical Chemistry Chemical Physics</i> , 2014 , 16, 25684-93	3.6	45
168	Simultaneous Surface and Bulk Imaging of Polymer Blends with X-ray Spectromicroscopy. <i>Macromolecular Rapid Communications</i> , 2010 , 31, 1706-12	4.8	45
167	Evolution of the nanomorphology of photovoltaic polyfluorene blends: sub-100nm resolution with x-ray spectromicroscopy. <i>Nanotechnology</i> , 2008 , 19, 424015	3.4	45
166	Structure Influence on Charge Transport in Naphthalenediimide- π -thiophene Copolymers. <i>Chemistry of Materials</i> , 2014 , 26, 6796-6804	9.6	44
165	All-polymer solar cells utilizing low band gap polymers as donor and acceptor. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2013 , 51, 403-409	2.6	44
164	Voltage-dependent photocurrent transients of PTB7:PC70BM solar cells: Experiment and numerical simulation. <i>Journal of Applied Physics</i> , 2013 , 114, 034502	2.5	44
163	Blade Coating Aligned, High-Performance, Semiconducting-Polymer Transistors. <i>Chemistry of Materials</i> , 2018 , 30, 1924-1936	9.6	43
162	Evolution of Laterally Phase-Separated Polyfluorene Blend Morphology Studied by X-ray Spectromicroscopy. <i>Macromolecules</i> , 2009 , 42, 3347-3352	5.5	42
161	Efficient Naphthalenediimide-Based Hole Semiconducting Polymer with Vinylene Linkers between Donor and Acceptor Units. <i>Chemistry of Materials</i> , 2016 , 28, 8580-8590	9.6	41
160	Role of Solvent Trapping Effects in Determining the Structure and Morphology of Ternary Blend Organic Devices. <i>Macromolecules</i> , 2009 , 42, 3098-3103	5.5	40
159	Charge transport dynamics of polymer solar cells under operating conditions: Influence of trap filling. <i>Applied Physics Letters</i> , 2008 , 93, 203310	3.4	40
158	Alternating 5,5-Dimethylcyclopentadiene and Diketopyrrolopyrrole Copolymer Prepared at Room Temperature for High Performance Organic Thin-Film Transistors. <i>Journal of the American Chemical Society</i> , 2017 , 139, 8094-8097	16.4	39
157	Crystallisation control of drop-cast quasi-2D/3D perovskite layers for efficient solar cells. <i>Communications Materials</i> , 2020 , 1,	6	39
156	Nature and Extent of Solution Aggregation Determines the Performance of P(NDI2OD-T2) Thin-Film Transistors. <i>Advanced Electronic Materials</i> , 2018 , 4, 1700559	6.4	39

155	Increased Exciton Dipole Moment Translates into Charge-Transfer Excitons in Thiophene-Fluorinated Low-Bandgap Polymers for Organic Photovoltaic Applications. <i>Chemistry of Materials</i> , 2015 , 27, 7934-7944	9.6	39
154	An optical fibre-based sensor for the detection of gaseous ammonia with methylammonium lead halide perovskite. <i>Journal of Materials Chemistry C</i> , 2018 , 6, 6988-6995	7.1	39
153	Critical Role of Pendant Group Substitution on the Performance of Efficient All-Polymer Solar Cells. <i>Chemistry of Materials</i> , 2017 , 29, 804-816	9.6	38
152	Control of Molecular Orientation in Polydiketopyrrolopyrrole Copolymers via Diffusive Noncovalent Interactions. <i>Chemistry of Materials</i> , 2016 , 28, 7088-7097	9.6	38
151	Influence of Fluorination and Molecular Weight on the Morphology and Performance of PTB7:PC71BM Solar Cells. <i>Journal of Physical Chemistry C</i> , 2014 , 118, 9918-9929	3.8	38
150	Studying polymer/fullerene intermixing and miscibility in laterally patterned films with X-ray spectromicroscopy. <i>Small</i> , 2012 , 8, 1920-7	11	38
149	Hole mobility of 3.56 cm ² V ⁻¹ s ⁻¹ accomplished using more extended dithienothiophene with furan flanked diketopyrrolopyrrole polymer. <i>Journal of Materials Chemistry C</i> , 2015 , 3, 9299-9305	7.1	37
148	Light induced degradation in mixed-halide perovskites. <i>Journal of Materials Chemistry C</i> , 2019 , 7, 9326-9334		37
147	Influence of solution heating on the properties of PEDOT:PSS colloidal solutions and impact on the device performance of polymer solar cells. <i>Organic Electronics</i> , 2011 , 12, 1736-1745	3.5	37
146	Unconventional Molecular Weight Dependence of Charge Transport in the High Mobility n-type Semiconducting Polymer P(NDI2OD-T2). <i>Advanced Functional Materials</i> , 2017 , 27, 1604744	15.6	36
145	Naphthalene diimide-based small molecule acceptors for organic solar cells. <i>Journal of Materials Chemistry A</i> , 2017 , 5, 12266-12277	13	36
144	A facile approach to alleviate photochemical degradation in high efficiency polymer solar cells. <i>Journal of Materials Chemistry A</i> , 2015 , 3, 16313-16319	13	36
143	Effects of PNDIT2 end groups on aggregation, thin film structure, alignment and electron transport in field-effect transistors. <i>Journal of Materials Chemistry C</i> , 2016 , 4, 10371-10380	7.1	35
142	Excitons and charges at organic semiconductor heterojunctions. <i>Faraday Discussions</i> , 2012 , 155, 339-48; discussion 349-56	3.6	35
141	Influence of Fullerene Acceptor on the Performance, Microstructure, and Photophysics of Low Bandgap Polymer Solar Cells. <i>Advanced Energy Materials</i> , 2017 , 7, 1602197	21.8	34
140	The utility of resonant soft x-ray scattering and reflectivity for the nanoscale characterization of polymers. <i>European Physical Journal: Special Topics</i> , 2009 , 167, 121-126	2.3	34
139	In-Depth Understanding of the Morphology-Performance Relationship in Polymer Solar Cells. <i>ACS Applied Materials & Interfaces</i> , 2015 , 7, 14026-34	9.5	33
138	Spatially Resolved Spectroscopic Mapping of Photocurrent and Photoluminescence in Polymer Blend Photovoltaic Devices. <i>Journal of Physical Chemistry C</i> , 2011 , 115, 19364-19370	3.8	33

137	Device physics of inverted all-polymer solar cells. <i>Journal of Applied Physics</i> , 2010 , 107, 114501	2.5	32
136	Correlation between Photovoltaic Performance and Interchain Ordering Induced Delocalization of Electronics States in Conjugated Polymer Blends. <i>ACS Applied Materials & Interfaces</i> , 2016 , 8, 20243-20250	9.5	31
135	Phase-Dependent Photocurrent Generation in Polymer/Fullerene Bulk Heterojunction Solar Cells. <i>Journal of Physical Chemistry C</i> , 2011 , 115, 22075-22083	3.8	31
134	Tuning Orientational Order of Highly Aggregating P(NDI2OD-T2) by Solvent Vapor Annealing and Blade Coating. <i>Macromolecules</i> , 2019 , 52, 43-54	5.5	31
133	Imaging the domain structure of organic semiconductor films. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2011 , 49, 909-919	2.6	30
132	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
131	Nanostructure characterization by a combined x-ray absorption/scanning force microscopy system. <i>Nanotechnology</i> , 2012 , 23, 475708	3.4	28
130	Polaron spin dynamics in high-mobility polymeric semiconductors. <i>Nature Physics</i> , 2019 , 15, 814-822	16.2	27
129	Förster Resonance Energy Transfer Drives Higher Efficiency in Ternary Blend Organic Solar Cells. <i>ACS Applied Energy Materials</i> , 2018 , 1, 4874-4882	6.1	27
128	Microstructural control suppresses thermal activation of electron transport at room temperature in polymer transistors. <i>Nature Communications</i> , 2019 , 10, 3365	17.4	27
127	Isolating and quantifying the impact of domain purity on the performance of bulk heterojunction solar cells. <i>Energy and Environmental Science</i> , 2017 , 10, 1843-1853	35.4	27
126	Interfaces in organic devices studied with resonant soft x-ray reflectivity. <i>Journal of Applied Physics</i> , 2011 , 110, 102220	2.5	27
125	Drastic Improvement of Air Stability in an n-Type Doped Naphthalene-Diimide Polymer by Thionation. <i>ACS Applied Energy Materials</i> , 2018 , 1, 4626-4634	6.1	26
124	White-light bias external quantum efficiency measurements of standard and inverted P3HT : PCBM photovoltaic cells. <i>Journal Physics D: Applied Physics</i> , 2012 , 45, 415101	3	26
123	Organic field-effect transistors and solar cells using novel high electron-affinity conjugated copolymers based on alkylbenzotriazole and benzothiadiazole. <i>Journal of Materials Chemistry</i> , 2012 , 22, 4436		26
122	Incorporation of 2,6-Connected Azulene Units into the Backbone of Conjugated Polymers: Towards High-Performance Organic Optoelectronic Materials. <i>Angewandte Chemie</i> , 2018 , 130, 1336-1340	3.6	26
121	Impact of Acceptor Fluorination on the Performance of All-Polymer Solar Cells. <i>ACS Applied Materials & Interfaces</i> , 2018 , 10, 955-969	9.5	26
120	Direct influence of morphology on current generation in conjugated polymer:methanofullerene solar cells measured by near-field scanning photocurrent microscopy. <i>Synthetic Metals</i> , 2004 , 147, 101-104	3.6	25

119	Near-edge X-ray absorption fine-structure spectroscopy of naphthalene diimide-thiophene co-polymers. <i>Journal of Chemical Physics</i> , 2014 , 140, 164710	3.9	24
118	Indole-substituted nickel dithiolene complexes in electronic and optoelectronic devices. <i>Journal of Materials Chemistry</i> , 2011 , 21, 15422		23
117	Impact of Fullerene Mixing Behavior on the Microstructure, Photophysics, and Device Performance of Polymer/Fullerene Solar Cells. <i>ACS Applied Materials & Interfaces</i> , 2016 , 8, 29608-29618	9.5	23
116	Influence of fluorination in extended backbone polydiketopyrrolopyrroles on charge carrier mobility and depth-dependent molecular alignment. <i>Journal of Materials Chemistry C</i> , 2015 , 3, 8916-8923	7.1	22
115	Pronounced Cosolvent Effects in Polymer:Polymer Bulk Heterojunction Solar Cells with Sulfur-Rich Electron-Donating and Imide-Containing Electron-Accepting Polymers. <i>ACS Applied Materials & Interfaces</i> , 2015 , 7, 15995-6002	9.5	22
114	High Mobility Indium Oxide Electron Transport Layer for an Efficient Charge Extraction and Optimized Nanomorphology in Organic Photovoltaics. <i>Nano Letters</i> , 2018 , 18, 5805-5811	11.5	22
113	High-Mobility Ambipolar Organic Thin-Film Transistor Processed From a Nonchlorinated Solvent. <i>ACS Applied Materials & Interfaces</i> , 2016 , 8, 24325-30	9.5	22
112	Critical Role of Molecular Symmetry for Charge Transport Properties: A Paradigm Learned from Quinoidal Bithieno[3,4-b]thiophenes. <i>Chemistry of Materials</i> , 2017 , 29, 4999-5008	9.6	21
111	Diffraction X-ray Waveguiding Reveals Orthogonal Crystalline Stratification in Conjugated Polymer Thin Films. <i>Macromolecules</i> , 2018 , 51, 2979-2987	5.5	21
110	Interfacial Characteristics of Efficient Bulk Heterojunction Solar Cells Fabricated on MoO _x Anode Interlayers. <i>Advanced Materials</i> , 2016 , 28, 3944-51	24	20
109	Insight into thin-film stacking modes of expanded quinoidal molecules on charge transport property via side-chain engineering. <i>Journal of Materials Chemistry C</i> , 2017 , 5, 1935-1943	7.1	20
108	Oriented Attachment as the Mechanism for Microstructure Evolution in Chloride-Derived Hybrid Perovskite Thin Films. <i>ACS Applied Materials & Interfaces</i> , 2019 , 11, 39930-39939	9.5	20
107	Crucial Role of Fluorine in Fully Alkylated Ladder-Type Carbazole-Based Nonfullerene Organic Solar Cells. <i>ACS Applied Materials & Interfaces</i> , 2020 , 12, 9555-9562	9.5	20
106	Coulomb Enhanced Charge Transport in Semicrystalline Polymer Semiconductors. <i>Advanced Functional Materials</i> , 2016 , 26, 8011-8022	15.6	20
105	N-Alkyl substituted 1H-benzimidazoles as improved n-type dopants for a naphthalene-diimide based copolymer. <i>Journal of Materials Chemistry A</i> , 2018 , 6, 15294-15302	13	20
104	Structure engineering of hierarchical layered perovskite interface for efficient and stable wide bandgap photovoltaics. <i>Nano Energy</i> , 2020 , 75, 104917	17.1	19
103	Influence of alkyl side-chain type and length on the thin film microstructure and OFET performance of naphthalene diimide-based organic semiconductors. <i>Organic Electronics</i> , 2019 , 75, 105378	3.5	19
102	Charge transport properties and microstructure of polythiophene/polyfluorene blends. <i>Organic Electronics</i> , 2009 , 10, 1549-1555	3.5	19

101	Raman Spectroscopy of Formamidinium-Based Lead Halide Perovskite Single Crystals. <i>Journal of Physical Chemistry C</i> , 2020 , 124, 2265-2272	3.8	19
100	Diketopyrrolopyrrole based organic semiconductors with different numbers of thiophene units: symmetry tuning effect on electronic devices. <i>New Journal of Chemistry</i> , 2018 , 42, 4017-4028	3.6	18
99	On the manifestation of electron-electron interactions in the thermoelectric response of semicrystalline conjugated polymers with low energetic disorder. <i>Communications Physics</i> , 2018 , 1,	5.4	18
98	Conjugated Polyelectrolyte Blend with Polyethyleneimine Ethoxylated for Thickness-Insensitive Electron Injection Layers in Organic Light-Emitting Devices. <i>ACS Applied Materials & Interfaces</i> , 2018 , 10, 17318-17326	9.5	18
97	Fused Cyclopentadithienothiophene Acceptor Enables Ultrahigh Short-Circuit Current and High Efficiency >11% in As-Cast Organic Solar Cells. <i>Advanced Functional Materials</i> , 2019 , 29, 1904956	15.6	18
96	Morphological and Device Evaluation of an Amphiphilic Block Copolymer for Organic Photovoltaic Applications. <i>Macromolecules</i> , 2017 , 50, 4942-4951	5.5	18
95	9-Fluorenone and 9,10-anthraquinone potential fused aromatic building blocks to synthesize electron acceptors for organic solar cells. <i>New Journal of Chemistry</i> , 2017 , 41, 2899-2909	3.6	17
94	Simultaneous enhancement of charge generation quantum yield and carrier transport in organic solar cells. <i>Journal of Materials Chemistry C</i> , 2015 , 3, 10799-10812	7.1	17
93	Design of New Isoindigo-Based Copolymer for Ambipolar Organic Field-Effect Transistors. <i>ACS Applied Materials & Interfaces</i> , 2018 , 10, 13774-13782	9.5	17
92	Influence of dielectric-dependent interfacial widths on device performance in top-gate P(NDI2OD-T2) field-effect transistors. <i>Applied Physics Letters</i> , 2012 , 101, 093308	3.4	17
91	Azido-Functionalized Thiophene as a Versatile Building Block To Cross-Link Low-Bandgap Polymers. <i>Macromolecules</i> , 2016 , 49, 3749-3760	5.5	17
90	EDOT-diketopyrrolopyrrole copolymers for polymer solar cells. <i>Journal of Materials Chemistry A</i> , 2016 , 4, 3477-3486	13	16
89	The impact of tetrahedral capping groups and device processing conditions on the crystal packing, thin film features and OFET hole mobility of 7,14-bis(ethynyl)dibenzo[b,def]chrysenes. <i>Journal of Materials Chemistry C</i> , 2013 , 1, 6299	7.1	16
88	On the Relation between Morphology and FET Mobility of Poly(3-alkylthiophene)s at the Polymer/SiO ₂ and Polymer/Air Interface. <i>Advanced Functional Materials</i> , 2014 , 24, 1994-2004	15.6	16
87	Synthesis and Aggregation Behavior of a Glycolated Naphthalene Diimide Bithiophene Copolymer for Application in Low-Level n-Doped Organic Thermoelectrics. <i>Macromolecules</i> , 2020 , 53, 5158-5168	5.5	15
86	Quinoid-Resonant Conducting Polymers Achieve High Electrical Conductivity over 4000 S cm for Thermoelectrics. <i>Advanced Science</i> , 2018 , 5, 1800947	13.6	14
85	On the packing and the orientation of P(NDI2OD-T2) at low molecular weight. <i>European Polymer Journal</i> , 2014 , 61, 172-185	5.2	14
84	Fluorination in thieno[3,4-c]pyrrole-4,6-dione copolymers leading to electron transport, high crystallinity and end-on alignment. <i>Journal of Materials Chemistry C</i> , 2017 , 5, 7527-7534	7.1	14

83	Photocurrent pattern formation in polymer/methanofullerene blends imaged by near-field scanning photocurrent microscopy. <i>Journal of Applied Physics</i> , 2006 , 99, 033502	2.5	14
82	Negative Correlation between Intermolecular vs Intramolecular Disorder in Bulk-Heterojunction Organic Solar Cells. <i>ACS Applied Materials & Interfaces</i> , 2018 , 10, 44576-44582	9.5	14
81	Solubilizing core modifications on high-performing benzodithiophene-based molecular semiconductors and their influences on film nanostructure and photovoltaic performance. <i>Journal of Materials Chemistry A</i> , 2019 , 7, 6312-6326	13	13
80	Vinylene-Linked Oligothiophene-Difluorobenzothiadiazole Copolymer for Transistor Applications. <i>ACS Applied Materials & Interfaces</i> , 2016 , 8, 31154-31165	9.5	13
79	Evolution of phase separation upon annealing and the influence on photocurrent generation in ternary blend organic solar cells. <i>Synthetic Metals</i> , 2014 , 189, 63-68	3.6	13
78	Imaging nanostructures in organic semiconductor films with scanning transmission X-ray spectro-microscopy. <i>Synthetic Metals</i> , 2012 , 161, 2516-2520	3.6	13
77	Controlling intermolecular redox-doping of naphthalene diimides. <i>Journal of Materials Chemistry C</i> , 2019 , 7, 4466-4474	7.1	12
76	Metal Evaporation-Induced Degradation of Fullerene Acceptors in Polymer/Fullerene Solar Cells. <i>ACS Applied Materials & Interfaces</i> , 2016 , 8, 2247-54	9.5	12
75	Graphene-MWNTs composite coatings with enhanced electrical conductivity. <i>FlatChem</i> , 2017 , 4, 33-41	5.1	12
74	Thionation of naphthalene diimide molecules: Thin-film microstructure and transistor performance. <i>Organic Electronics</i> , 2018 , 53, 287-295	3.5	12
73	Kinetics of thermally activated triplet fusion as a function of polymer chain packing in boosting the efficiency of organic light emitting diodes. <i>Npj Flexible Electronics</i> , 2018 , 2,	10.7	12
72	Application of an A-A'-A-Containing Acceptor Polymer in Sequentially Deposited All-Polymer Solar Cells. <i>ACS Applied Materials & Interfaces</i> , 2018 , 10, 24046-24054	9.5	12
71	Effect of Backbone Sequence of a Naphthalene Diimide-Based Copolymer on Performance in n-Type Organic Thin-Film Transistors. <i>ACS Applied Materials & Interfaces</i> , 2019 , 11, 35185-35192	9.5	11
70	Enantiopure versus racemic naphthalene diimide-based n-type organic semiconductors: effect on charge transport. <i>Journal of Materials Chemistry C</i> , 2019 , 7, 2659-2665	7.1	11
69	Selenium-Substituted Diketopyrrolopyrrole Polymer for High-Performance p-Type Organic Thermoelectric Materials. <i>Angewandte Chemie</i> , 2019 , 131, 19170-19175	3.6	11
68	Phase Transitions and Anisotropic Thermal Expansion in High Mobility Core-expanded Naphthalene Diimide Thin Film Transistors. <i>Advanced Functional Materials</i> , 2014 , 24, n/a-n/a	15.6	11
67	Synthesis and properties of pyrrolo[3,2-b]pyrrole-1,4-diones (isoDPP) derivatives. <i>Journal of Materials Chemistry C</i> , 2014 , 2, 4276	7.1	11
66	Regioregular Polymer Analogous Thionation of Naphthalene DiimideBithiophene Copolymers. <i>Macromolecules</i> , 2018 , 51, 984-991	5.5	10

65	Effect of regioregularity on recombination dynamics in inverted bulk heterojunction organic solar cells. <i>Journal Physics D: Applied Physics</i> , 2018 , 51, 015501	3	10
64	High-mobility and low-operating voltage organic thin film transistor with epoxy based siloxane binder as the gate dielectric. <i>Applied Physics Letters</i> , 2015 , 107, 103302	3.4	9
63	Control of Geminate Recombination by the Material Composition and Processing Conditions in Novel Polymer: Nonfullerene Acceptor Photovoltaic Devices. <i>Journal of Physical Chemistry A</i> , 2018 , 122, 1253-1260	2.8	9
62	Highly Efficient and Balanced Charge Transport in Thieno[3,4-c]pyrrole-4,6-dione Copolymers: Dramatic Influence of Thieno[3,2-b]thiophene Comonomer on Alignment and Charge Transport. <i>Journal of Physical Chemistry C</i> , 2018 , 122, 7565-7574	3.8	9
61	Chain-Assisted Charge Transport in Semicrystalline Conjugated Polymers. <i>Journal of Physical Chemistry C</i> , 2016 , 120, 14539-14548	3.8	9
60	The Structural Origin of Electron Injection Enhancements with Fulleropyrrolidine Interlayers. <i>Advanced Materials Interfaces</i> , 2016 , 3, 1500852	4.6	9
59	Facile Deposition of Mesoporous PbI ₂ through DMF:DMSO Solvent Engineering for Sequentially Deposited Metal Halide Perovskites. <i>ACS Applied Energy Materials</i> , 2020 , 3, 3358-3368	6.1	8
58	Detection of Halomethanes Using Cesium Lead Halide Perovskite Nanocrystals. <i>ACS Nano</i> , 2021 , 15, 14546-14648	4.6	8
57	Resonant Tender X-ray Diffraction for Disclosing the Molecular Packing of Paracrystalline Conjugated Polymer Films. <i>Journal of the American Chemical Society</i> , 2021 , 143, 1409-1415	16.4	8
56	Detecting the Onset of Molecular Reorganization in Conjugated Polymer Thin Films Using an Easily Accessible Optical Method. <i>Macromolecules</i> , 2019 , 52, 4646-4654	5.5	7
55	Lyotropic Liquid Crystalline Mesophase Governs Interfacial Molecular Orientation of Conjugated Polymer Thin Films. <i>Chemistry of Materials</i> , 2020 , 32, 6043-6054	9.6	7
54	Influence of fluorination on the microstructure and performance of diketopyrrolopyrrole-based polymer solar cells. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2017 , 55, 49-59	2.6	7
53	Screening for artifacts in near-field scanning photocurrent microscopy images of polymer solar cells. <i>Synthetic Metals</i> , 2005 , 153, 85-88	3.6	7
52	Charge transport physics of a unique class of rigid-rod conjugated polymers with fused-ring conjugated units linked by double carbon-carbon bonds. <i>Science Advances</i> , 2021 , 7,	14.3	7
51	Hydrogen Bonds Control Single-Chain Conformation, Crystallinity, and Electron Transport in Isoelectronic Diketopyrrolopyrrole Copolymers. <i>Chemistry of Materials</i> , 2021 , 33, 2635-2645	9.6	7
50	Direct assessment of structural order and evidence for stacking faults in layered hybrid perovskite films from X-ray scattering measurements. <i>Journal of Materials Chemistry A</i> , 2020 , 8, 12790-12798	13	6
49	Decoupling order and conductivity in doped conducting polymers. <i>Physical Chemistry Chemical Physics</i> , 2016 , 18, 19397-404	3.6	6
48	Enhancement of polymer electronics via surface states on highly doped polymeric anodes. <i>Journal Physics D: Applied Physics</i> , 2004 , 37, 165-170	3	6

47	Influence of side-chain length and geometry on the thermal expansion behavior and polymorphism of naphthalene diimide-based thin films. <i>Physical Review Materials</i> , 2019 , 3,	3.2	6
46	Role of Molecular and Interchain Ordering in the Formation of a Hole-Transporting Layer in Organic Solar Cells. <i>ACS Applied Materials & Interfaces</i> , 2020 , 12, 3806-3814	9.5	6
45	Radical Anion Yield, Stability, and Electrical Conductivity of Naphthalene Diimide Copolymers n-Doped with Tertiary Amines. <i>ACS Applied Polymer Materials</i> , 2020 , 2, 1954-1963	4.3	6
44	Enhanced N-Type Doping of a Naphthalene Diimide Based Copolymer by Modification of the Donor Unit. <i>Advanced Electronic Materials</i> , 2020 , 9, 2100407	6.4	6
43	Revealing the Side-Chain-Dependent Ordering Transition of Highly Crystalline Double-Cable Conjugated Polymers. <i>Angewandte Chemie - International Edition</i> , 2021 , 60, 25499-25507	16.4	6
42	Incorporation of γ -butyrolactone (GBL) dramatically lowers the phase transition temperature of formamidinium-based metal halide perovskites. <i>Chemical Communications</i> , 2019 , 55, 11743-11746	5.8	5
41	The photovoltaic properties of phenyl-capped thiophene oligomers. <i>Current Applied Physics</i> , 2004 , 4, 335-338	2.6	5
40	Boosted photovoltaic performance of indenothiophene-based molecular acceptor via fusing a thiophene. <i>Journal of Materials Chemistry C</i> , 2020 , 8, 630-636	7.1	5
39	Resolving Different Physical Origins toward Crystallite Imperfection in Semiconducting Polymers: Crystallite Size vs Paracrystallinity. <i>Journal of Physical Chemistry B</i> , 2020 , 124, 10529-10538	3.4	5
38	The effect of the dielectric end groups on the positive bias stress stability of N2200 organic field effect transistors. <i>APL Materials</i> , 2021 , 9, 041113	5.7	5
37	High performance as-cast P3HT:PCBM devices: understanding the role of molecular weight in high regioregularity P3HT. <i>Materials Advances</i> , 2021 , 2, 2045-2054	3.3	5
36	Benzoyl side-chains push the open-circuit voltage of PCDTBT/PCBM solar cells beyond 1V. <i>Organic Electronics</i> , 2017 , 49, 142-151	3.5	4
35	From Homochiral Assembly to Heterochiral Assembly: A Leap in Charge Transport Properties of Binaphthol-Based Axially Chiral Materials. <i>Langmuir</i> , 2019 , 35, 6188-6195	4	4
34	A Family of Heterocyclic Naphthalene Diimide (NDI) Analogues: Comparing Parent Isoquinoline Diimides and Phthalazine Diimides with NDI. <i>ChemPlusChem</i> , 2019 , 84, 1638-1642	2.8	4
33	Photoenhanced injection currents in organic solar cells. <i>Applied Physics Letters</i> , 2004 , 85, 1042-1044	3.4	4
32	Incorporation of Electron-Rich Indacenodithiophene Units into the Backbone of 2,6-Azulene-Based Conjugated Polymers for Proton-Responsive Materials and p-Type Polymeric Semiconductors 2022 , 4, 392-400		4
31	A Structurally Simple but High-Performing Donor-Acceptor Polymer for Field-Effect Transistor Applications. <i>Advanced Electronic Materials</i> , 2020 , 6, 2000490	6.4	4
30	Origin of Open-Circuit Voltage Turnover in Organic Solar Cells at Low Temperature. <i>Solar Rrl</i> , 2020 , 4, 2000375	7.1	4

29	Origin of vertical slab orientation in blade-coated layered hybrid perovskite films revealed with in-situ synchrotron X-ray scattering. <i>Nano Energy</i> , 2021 , 83, 105818	17.1	4
28	Rational Design of Donor-Acceptor Based Semiconducting Copolymers with High Dielectric Constants. <i>Journal of Physical Chemistry C</i> , 2021 , 125, 6886-6896	3.8	4
27	Rapid dip-dry MWNT-rGO ink wrapped polyester elastic band (PEB) for piezoresistive strain sensor applications. <i>Applied Physics Letters</i> , 2018 , 113, 084101	3.4	4
26	X-ray diffraction of photovoltaic perovskites: Principles and applications. <i>Applied Physics Reviews</i> , 2022 , 9, 021310	17.3	4
25	Understanding the effect of thionation on naphthalene diimide using first-principles predictions of near-edge x-ray absorption fine structure spectra. <i>Journal of Chemical Physics</i> , 2019 , 150, 104302	3.9	3
24	A structural study of p-type AD _n oligothiophenes: effects of regioregular alkyl sidechains on annealing processes and photovoltaic performances. <i>Journal of Materials Chemistry C</i> , 2020 , 8, 567-580	7.1	3
23	Correlation of Nanomorphology with Structural and Spectroscopic Studies in Organic Solar Cells. <i>ACS Applied Nano Materials</i> , 2020 , 3, 11080-11089	5.6	3
22	Design of experiment optimization of aligned polymer thermoelectrics doped by ion-exchange. <i>Applied Physics Letters</i> , 2021 , 119, 111903	3.4	3
21	Remarkable wettability of highly dispersive rGO ink on multiple substrates independent of deposition techniques. <i>FlatChem</i> , 2019 , 16, 100110	5.1	2
20	Effect of Thionation on the Performance of PNDIT2-Based Polymer Solar Cells. <i>Journal of Physical Chemistry C</i> , 2019 , 123, 12062-12072	3.8	2
19	Conjugated Polymer Blends: Toward All-Polymer Solar Cells 2013 , 399-425		2
18	A NIST facility for Resonant Soft X-ray Scattering measuring nano-scale soft matter structure at NSLS-II. <i>Journal of Physics Condensed Matter</i> , 2021 ,	1.8	2
17	Anisotropic Resonant X-ray Diffraction of a Conjugated Polymer at the Sulfur K-Edge. <i>Journal of Physical Chemistry Letters</i> , 2021 , 12, 3762-3766	6.4	2
16	Investigation of the effect of microstructural changes on thermal transport in semicrystalline polymer semiconductors. <i>APL Materials</i> , 2019 , 7, 081118	5.7	1
15	Residual solvent additive enables the nanostructuring of PTB7-Th:PC71BM solar cells via soft lithography. <i>AIP Advances</i> , 2019 , 9, 065024	1.5	1
14	Atropisomeric Conjugated Diimides: A Class of Thermally Responsive Organic Semiconductors 2022 , 4, 363-369		1
13	Polymer Solar Cells: High-Performance All-Polymer Solar Cells Enabled by n-Type Polymers with an Ultranarrow Bandgap Down to 1.28 eV (Adv. Mater. 30/2020). <i>Advanced Materials</i> , 2020 , 32, 2070226	24	1
12	Influence of synthetic pathway, molecular weight and side chains on properties of indacenodithiophene-benzothiadiazole copolymers made by direct arylation polycondensation. <i>Journal of Materials Chemistry C</i> , 2021 , 9, 4597-4606	7.1	1

11	Dielectric Constant Engineering of Organic Semiconductors: Effect of Planarity and Conjugation Length. <i>Advanced Functional Materials</i> , 2104259	15.6	1
10	All-Inkjet-Printed, All-Air-Processed Solar Cells 2014 , 4, 1400432		1
9	Impact of Polymer Molecular Weight on Polymeric Photodiodes. <i>Advanced Optical Materials</i> , 2101890	8.1	0
8	Drastic Enhancement of X-ray Scattering Contrast between Amorphous and Crystalline Phases of Poly(3-hexylthiophene) at the Sulfur K-Edge 764-769		0
7	Vinylene Flanked Naphtho[1,2-c:5,6-c']bis[1,2,5]thiadiazole Polymer for Low-Crystallinity Ambipolar Transistors. <i>Macromolecules</i> , 2022 , 55, 331-337	5.5	0
6	9,9'-Bifluorenylidene-diketopyrrolopyrrole donors for non-polymeric solution processed solar cells. <i>Synthetic Metals</i> , 2019 , 250, 79-87	3.6	
5	Introduction to the Issue on Organic Nanophotonics. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , 2016 , 22, 3-5	3.8	
4	Sensors: A Highly Sensitive Diketopyrrolopyrrole-Based Ambipolar Transistor for Selective Detection and Discrimination of Xylene Isomers (Adv. Mater. 21/2016). <i>Advanced Materials</i> , 2016 , 28, 4163	24	
3	Organic Electronics: Pursuing High-Mobility n-Type Organic Semiconductors by Combination of Molecule-Framework and Side-Chain Engineering (Adv. Mater. 38/2016). <i>Advanced Materials</i> , 2016 , 28, 8455-8455	24	
2	Titelbild: Selenium-Substituted Diketopyrrolopyrrole Polymer for High-Performance p-Type Organic Thermoelectric Materials (Angew. Chem. 52/2019). <i>Angewandte Chemie</i> , 2019 , 131, 18893-18893 ^{3,6}		
1	Impact of pendent naphthalenedimide content in random double-cable conjugated polymers on their microstructures and photovoltaic performance. <i>Polymer</i> , 2022 , 253, 125020	3.9	