

Wei You

List of Publications by Year in Descending Order

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

205
papers

16,830
citations

60
h-index

127
g-index

215
ext. papers

18,502
ext. citations

11.1
avg, IF

7.07
L-index

#	Paper	IF	Citations
205	Effect of osmotic ballast properties on the performance of a concentration gradient battery.. <i>Water Research</i> , 2022 , 212, 118076	12.5	0
204	Semi-paracrystallinity in semi-conducting polymers.. <i>Materials Horizons</i> , 2022 ,	14.4	6
203	Origin of layered perovskite device efficiencies revealed by multidimensional time-of-flight spectroscopy.. <i>Journal of Chemical Physics</i> , 2022 , 156, 084202	3.9	2
202	Non-Covalent Interactions in Organic/Inorganic Hybrid 2D Perovskites 2022 , 153-193		
201	Integrating charge mobility, stability and stretchability within conjugated polymer films for stretchable multifunctional sensors.. <i>Nature Communications</i> , 2022 , 13, 2739	17.4	1
200	Alkyl-Aryl Cation Mixing in Chiral 2D Perovskites. <i>Journal of the American Chemical Society</i> , 2021 , 143, 18114-18120	16.4	12
199	Resolving the Molecular Origin of Mechanical Relaxations in Donor-Acceptor Polymer Semiconductors. <i>Advanced Functional Materials</i> , 2021 , 2105597	15.6	3
198	Mantis shrimp-inspired organic photodetector for simultaneous hyperspectral and polarimetric imaging. <i>Science Advances</i> , 2021 , 7,	14.3	14
197	Balancing crop production and energy harvesting in organic solar-powered greenhouses. <i>Cell Reports Physical Science</i> , 2021 , 2, 100381	6.1	15
196	Probing Carrier Transport in Layered Perovskites with Nonlinear Optical and Photocurrent Spectroscopies. <i>Journal of Physical Chemistry C</i> , 2021 , 125, 8021-8030	3.8	3
195	Thermocleavage of Partial Side Chains in Polythiophenes Offers Appreciable Photovoltaic Efficiency and Significant Morphological Stability. <i>Chemistry of Materials</i> , 2021 , 33, 4745-4756	9.6	4
194	Multidimensional time-of-flight spectroscopy. <i>Journal of Chemical Physics</i> , 2021 , 154, 220901	3.9	4
193	Understanding of Face-On Crystallites Transitioning to Edge-On Crystallites in Thiophene-Based Conjugated Polymers. <i>Chemistry of Materials</i> , 2021 , 33, 4541-4550	9.6	4
192	Designing Simple Conjugated Polymers for Scalable and Efficient Organic Solar Cells. <i>ChemSusChem</i> , 2021 , 14, 3561-3568	8.3	13
191	Functionalization of Benzotriazole-Based Conjugated Polymers for Solar Cells: Heteroatom vs Substituents. <i>ACS Applied Polymer Materials</i> , 2021 , 3, 30-41	4.3	6
190	Elucidation of Quantum-Well-Specific Carrier Mobilities in Layered Perovskites. <i>Journal of Physical Chemistry Letters</i> , 2021 , 12, 1116-1123	6.4	5
189	A molecular interaction-diffusion framework for predicting organic solar cell stability. <i>Nature Materials</i> , 2021 , 20, 525-532	27	71

188	Coherent control of asymmetric spintronic terahertz emission from two-dimensional hybrid metal halides. <i>Nature Communications</i> , 2021 , 12, 5744	17.4	5
187	Reversible-Addition Fragmentation Chain Transfer Step-Growth Polymerization. <i>Journal of the American Chemical Society</i> , 2021 , 143, 15918-15923	16.4	4
186	Investigating the Stress-Strain Behavior in Ring-Opening Metathesis Polymerization-Based Brush Elastomers. <i>Macromolecules</i> , 2021 , 54, 8365-8371	5.5	5
185	The Role of Demixing and Crystallization Kinetics on the Stability of Non-Fullerene Organic Solar Cells. <i>Advanced Materials</i> , 2020 , 32, e2005348	24	30
184	Distinguishing Energy- and Charge-Transfer Processes in Layered Perovskite Quantum Wells with Two-Dimensional Action Spectroscopies. <i>Journal of Physical Chemistry Letters</i> , 2020 , 11, 4570-4577	6.4	12
183	Importance of Nucleophilicity of Chain-Transfer Agents for Controlled Cationic Degenerative Chain-Transfer Polymerization. <i>Macromolecules</i> , 2020 , 53, 4303-4311	5.5	12
182	High-Performance Tandem Organic Solar Cells Using HSolar as the Interconnecting Layer. <i>Advanced Energy Materials</i> , 2020 , 10, 2000823	21.8	18
181	A molecular tandem cell for efficient solar water splitting. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020 , 117, 13256-13260	11.5	17
180	Enhancing Charge Transport of 2D Perovskite Passivation Agent for Wide-Bandgap Perovskite Solar Cells Beyond 21%. <i>Solar Rrl</i> , 2020 , 4, 2070065	7.1	1
179	Enhancing Charge Transport of 2D Perovskite Passivation Agent for Wide-Bandgap Perovskite Solar Cells Beyond 21%. <i>Solar Rrl</i> , 2020 , 4, 2000082	7.1	46
178	Effects of linking units on fused-ring electron acceptor dimers. <i>Journal of Materials Chemistry A</i> , 2020 , 8, 13735-13741	13	7
177	Role of Secondary Thermal Relaxations in Conjugated Polymer Film Toughness. <i>Chemistry of Materials</i> , 2020 , 32, 6540-6549	9.6	10
176	Organic Solar Cells: High-Performance Tandem Organic Solar Cells Using HSolar as the Interconnecting Layer (Adv. Energy Mater. 25/2020). <i>Advanced Energy Materials</i> , 2020 , 10, 2070109	21.8	
175	Orthogonal Cationic and Radical RAFT Polymerizations to Prepare Bottlebrush Polymers. <i>Angewandte Chemie</i> , 2020 , 132, 7270-7275	3.6	7
174	Orthogonal Cationic and Radical RAFT Polymerizations to Prepare Bottlebrush Polymers. <i>Angewandte Chemie - International Edition</i> , 2020 , 59, 7203-7208	16.4	22
173	Tuning of spin-orbit coupling in metal-free conjugated polymers by structural conformation. <i>Physical Review Materials</i> , 2020 , 4,	3.2	5
172	Aggregation Controlled Charge Generation in Fullerene Based Bulk Heterojunction Polymer Solar Cells: Effect of Additive. <i>Polymers</i> , 2020 , 13,	4.5	2
171	Organic Solar Cells with Large Insensitivity to Donor Polymer Molar Mass across All Acceptor Classes. <i>ACS Applied Polymer Materials</i> , 2020 , 2, 5300-5308	4.3	5

170	Ultrafast Exciton Transport with a Long Diffusion Length in Layered Perovskites with Organic Cation Functionalization. <i>Advanced Materials</i> , 2020 , 32, e2004080	24	16
169	Nonlinear fluorescence spectroscopy of layered perovskite quantum wells. <i>Journal of Chemical Physics</i> , 2020 , 153, 134202	3.9	8
168	Effects of Fluorination Position on Fused-Ring Electron Acceptors. <i>Small Structures</i> , 2020 , 1, 2000006	8.7	4
167	Ternary Blending Driven Molecular Reorientation of Non-Fullerene Acceptor IDIC with Backbone Order. <i>ACS Applied Energy Materials</i> , 2020 , 3, 10814-10822	6.1	10
166	Initiation and Polymer Density of Conjugated Polymer Brushes. <i>Journal of Physical Chemistry B</i> , 2020 , 124, 9734-9744	3.4	1
165	Enhancing Photovoltaic Performance of Aromatic Ammonium-based Two-Dimensional Organic-Inorganic Hybrid Perovskites via Tuning CH ₂ ⋯Interaction. <i>Solar Rrl</i> , 2020 , 4, 1900374	7.1	8
164	Resolving Rotational Stacking Disorder and Electronic Level Alignment in a 2D Oligothiophene-Based Lead Iodide Perovskite. <i>Chemistry of Materials</i> , 2019 , 31, 8523-8532	9.6	14
163	Fine Optimization of Morphology Evolution Kinetics with Binary Additives for Efficient Non-Fullerene Organic Solar Cells. <i>Advanced Science</i> , 2019 , 6, 1801560	13.6	22
162	Pairing 1D/2D-conjugation donors/acceptors towards high-performance organic solar cells. <i>Materials Chemistry Frontiers</i> , 2019 , 3, 276-283	7.8	7
161	Perfluorocarbon-based O nanocarrier for efficient photodynamic therapy. <i>Journal of Materials Chemistry B</i> , 2019 , 7, 1116-1123	7.3	32
160	Alcohol mediated degenerate chain transfer controlled cationic polymerisation of para-alkoxystyrene. <i>Polymer Chemistry</i> , 2019 , 10, 4126-4133	4.9	10
159	Recombination between Photogenerated and Electrode-Induced Charges Dominates the Fill Factor Losses in Optimized Organic Solar Cells. <i>Journal of Physical Chemistry Letters</i> , 2019 , 10, 3473-3480	6.4	17
158	Aryl-Perfluoroaryl Interaction in Two-Dimensional Organic-Inorganic Hybrid Perovskites Boosts Stability and Photovoltaic Efficiency 2019 , 1, 171-176		47
157	The crucial role of end group planarity for fused-ring electron acceptors in organic solar cells. <i>Materials Chemistry Frontiers</i> , 2019 , 3, 1642-1652	7.8	9
156	Tunable internal quantum well alignment in rationally designed oligomer-based perovskite films deposited by resonant infrared matrix-assisted pulsed laser evaporation. <i>Materials Horizons</i> , 2019 , 6, 1707-1716	14.4	34
155	0D/2D (Fe _{0.5} Ni _{0.5})S ₂ /rGO nanocomposite with enhanced supercapacitor and lithium ion battery performance. <i>Journal of Power Sources</i> , 2019 , 426, 266-274	8.9	41
154	Direct-Bandgap 2D Silver-Bismuth Iodide Double Perovskite: The Structure-Directing Influence of an Oligothiophene Spacer Cation. <i>Journal of the American Chemical Society</i> , 2019 , 141, 7955-7964	16.4	100
153	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

152	Enhanced Charge Transport in 2D Perovskites via Fluorination of Organic Cation. <i>Journal of the American Chemical Society</i> , 2019 , 141, 5972-5979	16.4	170
151	Synthetic control over orientational degeneracy of spacer cations enhances solar cell efficiency in two-dimensional perovskites. <i>Nature Communications</i> , 2019 , 10, 1276	17.4	144
150	The impact of fluorination on both donor polymer and non-fullerene acceptor: The more fluorine, the merrier. <i>Nano Research</i> , 2019 , 12, 2400-2405	10	20
149	Sequential Deposition of Organic Films with Eco-Compatible Solvents Improves Performance and Enables Over 12%-Efficiency Nonfullerene Solar Cells. <i>Advanced Materials</i> , 2019 , 31, e1808153	24	80
148	Green-Solvent-Processed Conjugated Polymers for Organic Solar Cells: The Impact of Oligoethylene Glycol Side Chains. <i>ACS Applied Polymer Materials</i> , 2019 , 1, 804-814	4.3	25
147	Highly Efficient, Stable, and Ductile Ternary Nonfullerene Organic Solar Cells from a Two-Donor Polymer Blend. <i>Advanced Materials</i> , 2019 , 31, e1808279	24	50
146	Utilizing Difluorinated Thiophene Units To Improve the Performance of Polymer Solar Cells. <i>Macromolecules</i> , 2019 , 52, 6523-6532	5.5	11
145	The Importance of Entanglements in Optimizing the Mechanical and Electrical Performance of All-Polymer Solar Cells. <i>Chemistry of Materials</i> , 2019 , 31, 5124-5132	9.6	52
144	Effect of Cyano Substitution on Conjugated Polymers for Bulk Heterojunction Solar Cells. <i>ACS Applied Polymer Materials</i> , 2019 , 1, 3313-3322	4.3	12
143	Imaging Excited State Dynamics in Layered 2D Perovskites with Transient Absorption Microscopy. <i>Journal of Physical Chemistry A</i> , 2019 , 123, 11012-11021	2.8	17
142	Nonlinear Photocurrent Spectroscopy of Layered 2D Perovskite Quantum Wells. <i>Journal of Physical Chemistry Letters</i> , 2019 , 10, 7362-7367	6.4	6
141	Revealing the Impact of F4-TCNQ as Additive on Morphology and Performance of High-Efficiency Nonfullerene Organic Solar Cells. <i>Advanced Functional Materials</i> , 2019 , 29, 1806262	15.6	41
140	Panchromatic All-Polymer Photodetector with Tunable Polarization Sensitivity. <i>Advanced Optical Materials</i> , 2019 , 7, 1801346	8.1	20
139	Competition between Exceptionally Long-Range Alkyl Sidechain Ordering and Backbone Ordering in Semiconducting Polymers and Its Impact on Electronic and Optoelectronic Properties. <i>Advanced Functional Materials</i> , 2019 , 29, 1806977	15.6	20
138	Solar Cells: Surpassing 10% Efficiency Benchmark for Nonfullerene Organic Solar Cells by Scalable Coating in Air from Single Nonhalogenated Solvent (Adv. Mater. 8/2018). <i>Advanced Materials</i> , 2018 , 30, 1870054	24	3
137	Effect of Replacing Alkyl Side Chains with Triethylene Glycols on Photovoltaic Properties of Easily Accessible Fluorene-Based Non-Fullerene Molecular Acceptors: Improve or Deteriorate?. <i>ACS Applied Energy Materials</i> , 2018 , 1, 1276-1285	6.1	8
136	Balanced Partnership between Donor and Acceptor Components in Nonfullerene Organic Solar Cells with >12% Efficiency. <i>Advanced Materials</i> , 2018 , 30, e1706363	24	148
135	Optical studies of native defects in π -conjugated donor-acceptor copolymers. <i>Journal of Applied Physics</i> , 2018 , 123, 161571	2.5	2

134	Morphology, Structure, and Enhanced Intramolecular Conduction in Ultralong Conjugated Polymer Brushes. <i>Journal of Physical Chemistry C</i> , 2018 , 122, 7586-7596	3.8	9
133	Dramatic Improvement of the Mechanical Strength of Silane-Modified Hydroxyapatite-Gelatin Composites via Processing with Cosolvent. <i>ACS Omega</i> , 2018 , 3, 3592-3598	3.9	4
132	Energy transfer mechanisms in layered 2D perovskites. <i>Journal of Chemical Physics</i> , 2018 , 148, 134706	3.9	47
131	Fabrication of hierarchical bristle-grass-like $\text{NH}_4\text{Al}(\text{OH})_2\text{CO}_3@(\text{Ni}(\text{OH})_2)$ core-shell structure and its enhanced Congo red adsorption performance. <i>Journal of Alloys and Compounds</i> , 2018 , 750, 644-654	5.7	27
130	A carbon-oxygen-bridged hexacyclic ladder-type building block for low-bandgap nonfullerene acceptors. <i>Materials Chemistry Frontiers</i> , 2018 , 2, 700-703	7.8	37
129	Core-Shell Nitrogen-Doped Carbon Hollow Spheres/Co O Nanosheets as Advanced Electrode for High-Performance Supercapacitor. <i>Small</i> , 2018 , 14, e1702407	11	245
128	Polymer Solar Cells with 90% External Quantum Efficiency Featuring an Ideal Light- and Charge-Manipulation Layer. <i>Advanced Materials</i> , 2018 , 30, e1706083	24	66
127	Enhancing the performance of the electron acceptor ITIC-Th via tailoring its end groups. <i>Materials Chemistry Frontiers</i> , 2018 , 2, 537-543	7.8	36
126	Surpassing 10% Efficiency Benchmark for Nonfullerene Organic Solar Cells by Scalable Coating in Air from Single Nonhalogenated Solvent. <i>Advanced Materials</i> , 2018 , 30, 1705485	24	127
125	Imaging Carrier Diffusion in Perovskites with a Diffractive Optic-Based Transient Absorption Microscope. <i>Journal of Physical Chemistry C</i> , 2018 , 122, 10650-10656	3.8	27
124	Fabrication of a hierarchical NiO/C hollow sphere composite and its enhanced supercapacitor performance. <i>Chemical Communications</i> , 2018 , 54, 3731-3734	5.8	113
123	Sensitivity of Molecular Packing and Photovoltaic Performance to Subtle Fluctuation of Steric Distortions within D π A Copolymer Backbones. <i>ACS Applied Energy Materials</i> , 2018 , 1, 4332-4340	6.1	9
122	Post-polymerization modification of phosphorus containing conjugated copolymers. <i>European Polymer Journal</i> , 2018 , 104, 157-163	5.2	4
121	Shear-Enhanced Transfer Printing of Conducting Polymer Thin Films. <i>ACS Applied Materials & Interfaces</i> , 2018 , 10, 31560-31567	9.5	22
120	Understanding the side-chain effects on D π A acceptors: in-plane and out-of-plane. <i>Materials Chemistry Frontiers</i> , 2018 , 2, 1563-1567	7.8	12
119	Design and Synthesis of Conjugated Polymers for Solar Cells. <i>Materials and Energy</i> , 2018 , 1-30		
118	Naphthodithiophene-Based Nonfullerene Acceptor for High-Performance Organic Photovoltaics: Effect of Extended Conjugation. <i>Advanced Materials</i> , 2018 , 30, 1704713	24	183
117	Distinction between PTB7-Th samples prepared from $\text{Pd}(\text{PPh}_3)_4$ and $\text{Pd}_2(\text{dba})_3/\text{P}(\text{o-tol})_3$ catalysed stille coupling polymerization and the resultant photovoltaic performance. <i>Journal of Materials Chemistry A</i> , 2018 , 6, 179-188	13	16

116	Enhancing the performance of a fused-ring electron acceptor via extending benzene to naphthalene. <i>Journal of Materials Chemistry C</i> , 2018 , 6, 66-71	7.1	34
115	End-cap Group Engineering of a Small Molecule Non-Fullerene Acceptor: The Influence of Benzothiophene Dioxide. <i>ACS Applied Energy Materials</i> , 2018 , 1, 7146-7152	6.1	9
114	The finale of a trilogy: comparing terpolymers and ternary blends with structurally similar backbones for use in organic bulk heterojunction solar cells. <i>Journal of Materials Chemistry A</i> , 2018 , 6, 19190-19200	13	10
113	Sifting β -(thiophen-2-yl)alkanes as solvent additives to boost the photovoltaic performance of the PTB7-Th:PC71BM blend. <i>Journal of Materials Chemistry A</i> , 2018 , 6, 20788-20794	13	5
112	Tunable Semiconductors: Control over Carrier States and Excitations in Layered Hybrid Organic-Inorganic Perovskites. <i>Physical Review Letters</i> , 2018 , 121, 146401	7.4	65
111	General Post-annealing Method Enables High-Efficiency Two-Dimensional Perovskite Solar Cells. <i>ACS Applied Materials & Interfaces</i> , 2018 , 10, 33187-33197	9.5	52
110	A Fused Ring Electron Acceptor with Decacyclic Core Enables over 13.5% Efficiency for Organic Solar Cells. <i>Advanced Energy Materials</i> , 2018 , 8, 1802050	21.8	83
109	Two-Dimensional Organic-Inorganic Hybrid Perovskites: A New Platform for Optoelectronic Applications. <i>Advanced Materials</i> , 2018 , 30, e1802041	24	94
108	Transforming the molecular orientation of crystalline lamellae by the degree of multi-fluorination within D _A copolymers and its effect on photovoltaic performance. <i>Journal of Materials Chemistry C</i> , 2018 , 6, 10513-10523	7.1	1
107	Measuring Temperature-Dependent Miscibility for Polymer Solar Cell Blends: An Easily Accessible Optical Method Reveals Complex Behavior. <i>Chemistry of Materials</i> , 2018 , 30, 3943-3951	9.6	26
106	Unique Energy Alignments of a Ternary Material System toward High-Performance Organic Photovoltaics. <i>Advanced Materials</i> , 2018 , 30, e1801501	24	110
105	Effect of Core Size on Performance of Fused-Ring Electron Acceptors. <i>Chemistry of Materials</i> , 2018 , 30, 5390-5396	9.6	77
104	Fused Nonacyclic Electron Acceptors for Efficient Polymer Solar Cells. <i>Journal of the American Chemical Society</i> , 2017 , 139, 1336-1343	16.4	729
103	Comparing non-fullerene acceptors with fullerene in polymer solar cells: a case study with FTAZ and PycNTAZ. <i>Journal of Materials Chemistry A</i> , 2017 , 5, 4886-4893	13	41
102	Hierarchical Porous O-Doped g-C N with Enhanced Photocatalytic CO Reduction Activity. <i>Small</i> , 2017 , 13, 1603938	11	732
101	Single-Junction Binary-Blend Nonfullerene Polymer Solar Cells with 12.1% Efficiency. <i>Advanced Materials</i> , 2017 , 29, 1700144	24	566
100	Charge Generation and Mobility-Limited Performance of Bulk Heterojunction Solar Cells with a Higher Adduct Fullerene. <i>Journal of Physical Chemistry C</i> , 2017 , 121, 10305-10316	3.8	9
99	Panchromatic Sequentially Cast Ternary Polymer Solar Cells. <i>Advanced Materials</i> , 2017 , 29, 1604603	24	63

98	Hierarchical porous C/MnO ₂ composite hollow microspheres with enhanced supercapacitor performance. <i>Journal of Materials Chemistry A</i> , 2017 , 5, 8635-8643	13	139
97	Sequence Effects in Donor-Acceptor Oligomeric Semiconductors Comprising Benzothiadiazole and Phenylenevinylene Monomers. <i>Macromolecules</i> , 2017 , 50, 151-161	5.5	24
96	Molecular Engineering of Conjugated Polymers for Solar Cells: An Updated Report. <i>Advanced Materials</i> , 2017 , 29, 1601391	24	123
95	Incorporating Fluorine Substitution into Conjugated Polymers for Solar Cells: Three Different Means, Same Results. <i>Journal of Physical Chemistry C</i> , 2017 , 121, 2059-2068	3.8	20
94	Fluorination of Donor-Acceptor Copolymer Active Layers Enhances Charge Mobilities in Thin-Film Transistors. <i>ACS Macro Letters</i> , 2017 , 6, 1162-1167	6.6	14
93	Donor polymer fluorination doubles the efficiency in non-fullerene organic photovoltaics. <i>Journal of Materials Chemistry A</i> , 2017 , 5, 22536-22541	13	23
92	A Ladder-type Heteroheptacene 12H-Dithieno[2,3-b:4,5-d']thieno[3,2-b:2',3'-b']fluorene Based D-A Copolymer with Strong Intermolecular Interactions toward Efficient Polymer Solar Cells. <i>ACS Applied Materials & Interfaces</i> , 2017 , 9, 35159-35168	9.5	9
91	Hierarchical NiS/N-doped carbon composite hollow spheres with excellent supercapacitor performance. <i>Journal of Materials Chemistry A</i> , 2017 , 5, 21257-21265	13	138
90	The Curious Case of Fluorination of Conjugated Polymers for Solar Cells. <i>Accounts of Chemical Research</i> , 2017 , 50, 2401-2409	24.3	237
89	Enhancing Performance of Nonfullerene Acceptors via Side-Chain Conjugation Strategy. <i>Advanced Materials</i> , 2017 , 29, 1702125	24	227
88	Enhancing Efficiency and Stability of Organic Solar Cells by UV Absorbent. <i>Solar Rrl</i> , 2017 , 1, 1700148	7.1	13
87	Hierarchical flower-like nickel(II) oxide microspheres with high adsorption capacity of Congo red in water. <i>Journal of Colloid and Interface Science</i> , 2017 , 504, 688-696	9.3	125
86	Hierarchical flower-like C/NiO composite hollow microspheres and its excellent supercapacitor performance. <i>Journal of Power Sources</i> , 2017 , 359, 371-378	8.9	127
85	Fluorinated Thiophene Units Improve Photovoltaic Device Performance of Donor-Acceptor Copolymers. <i>Chemistry of Materials</i> , 2017 , 29, 5990-6002	9.6	48
84	Ultrafast Spectroscopic Signatures of Coherent Electron-Transfer Mechanisms in a Transition Metal Complex. <i>Journal of Physical Chemistry A</i> , 2016 , 120, 5773-90	2.8	6
83	Site-Selective Passivation of Defects in NiO Solar Photocathodes by Targeted Atomic Deposition. <i>ACS Applied Materials & Interfaces</i> , 2016 , 8, 4754-61	9.5	60
82	Comparative Photovoltaic Study of Physical Blending of Two Donor-Acceptor Polymers with the Chemical Blending of the Respective Moieties. <i>Macromolecules</i> , 2016 , 49, 2533-2540	5.5	27
81	Valence Band Dependent Charge Transport in Bulk Molecular Electronic Devices Incorporating Highly Conjugated Multi-[(Porphinato)Metal] Oligomers. <i>Journal of the American Chemical Society</i> , 2016 , 138, 2078-81	16.4	29

80	Communication: Uncovering correlated vibrational cooling and electron transfer dynamics with multidimensional spectroscopy. <i>Journal of Chemical Physics</i> , 2016 , 145, 101101	3.9	4
79	Charge Photogeneration in Organic Photovoltaics: Role of Hot versus Cold Charge-Transfer Excitons. <i>Advanced Energy Materials</i> , 2016 , 6, 1301032	21.8	12
78	Organic Photovoltaics: Charge Photogeneration in Organic Photovoltaics: Role of Hot versus Cold Charge-Transfer Excitons (Adv. Energy Mater. 1/2016). <i>Advanced Energy Materials</i> , 2016 , 6,	21.8	1
77	Enhancement of Photovoltaic Performance by Utilizing Readily Accessible Hole Transporting Layer of Vanadium(V) Oxide Hydrate in a Polymer-Fullerene Blend Solar Cell. <i>ACS Applied Materials & Interfaces</i> , 2016 , 8, 11658-66	9.5	31
76	Investigation of Dopamine Analogues: Synthesis, Mechanistic Understanding, and Structure-Property Relationship. <i>Langmuir</i> , 2016 , 32, 9873-82	4	36
75	Status and prospects for ternary organic photovoltaics. <i>Nature Photonics</i> , 2015 , 9, 491-500	33.9	457
74	Direct Optical Observation of Stimulated Emission from Hot Charge Transfer Excitons in Bulk Heterojunction Polymer Solar Cells. <i>Journal of Physical Chemistry C</i> , 2015 , 119, 19697-19702	3.8	2
73	A General Approach toward Electron Deficient Triazole Units to Construct Conjugated Polymers for Solar Cells. <i>Chemistry of Materials</i> , 2015 , 27, 6470-6476	9.6	62
72	Orientation effect on GaAs/ultrathin polymer/PEDOT:PSS hybrid solar cell. <i>Organic Electronics</i> , 2015 , 16, 71-76	3.5	8
71	Anion-dipole interactions make the homopolymers self-assemble into multiple nanostructures. <i>Advanced Materials</i> , 2015 , 27, 3202-7	24	27
70	Visible Light Photoinitiated Metal-Free Living Cationic Polymerization of 4-Methoxystyrene. <i>Journal of the American Chemical Society</i> , 2015 , 137, 7580-3	16.4	130
69	Molecular Design of Conjugated Polymers for High-Efficiency Solar Cells 2014 , 61-94		2
68	Tuning Fluorinated Benzotriazole Polymers through Alkylthio Substitution and Selenophene Incorporation for Bulk Heterojunction Solar Cells. <i>Macromolecules</i> , 2014 , 47, 2289-2295	5.5	70
67	Roles of interfacial modifiers in hybrid solar cells: inorganic/polymer bilayer vs inorganic/polymer:fullerene bulk heterojunction. <i>ACS Applied Materials & Interfaces</i> , 2014 , 6, 803-10 ^{9.5}	9.5	21
66	The role of temperature in forming sol-gel biocomposites containing polydopamine. <i>Journal of Materials Chemistry B</i> , 2014 , 2, 7704-7711	7.3	7
65	Shifting Electronic Structure by Inherent Tension in Molecular Bottlebrushes with Polythiophene Backbones.. <i>ACS Macro Letters</i> , 2014 , 3, 738-742	6.6	14
64	Characterization of the polymer energy landscape in polymer:fullerene bulk heterojunctions with pure and mixed phases. <i>Journal of the American Chemical Society</i> , 2014 , 136, 14078-88	16.4	169
63	Mobility-controlled performance of thick solar cells based on fluorinated copolymers. <i>Journal of the American Chemical Society</i> , 2014 , 136, 15566-76	16.4	232

62	Solution-processed copper-nickel nanowire anodes for organic solar cells. <i>Nanoscale</i> , 2014 , 6, 5980-8	7.7	143
61	Morphology linked to miscibility in highly amorphous semi-conducting polymer/fullerene blends. <i>Polymer</i> , 2014 , 55, 4884-4889	3.9	24
60	Morphological effects on the small-molecule-based solution-processed organic solar cells. <i>ACS Applied Materials & Interfaces</i> , 2014 , 6, 15767-73	9.5	15
59	Tailoring porphyrin-based electron accepting materials for organic photovoltaics. <i>Journal of the American Chemical Society</i> , 2014 , 136, 17561-9	16.4	50
58	Controlling molecular weight of a high efficiency donor-acceptor conjugated polymer and understanding its significant impact on photovoltaic properties. <i>Advanced Materials</i> , 2014 , 26, 4456-62	24	177
57	The influence of molecular orientation on organic bulk heterojunction solar cells. <i>Nature Photonics</i> , 2014 , 8, 385-391	33.9	396
56	Real function of semiconducting polymer in GaAs/polymer planar heterojunction solar cells. <i>ACS Nano</i> , 2013 , 7, 6619-26	16.7	21
55	Soluble reduced graphene oxide sheets grafted with polypyridylruthenium-derivatized polystyrene brushes as light harvesting antenna for photovoltaic applications. <i>ACS Nano</i> , 2013 , 7, 7992-8002	16.7	35
54	Growth of nickel nanoparticles on an organic self-assembled monolayer template by means of electroless plating. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2013 , 434, 194-199	5.1	13
53	Iron(II) spin crossover films on Au(111): scanning probe microscopy and photoelectron spectroscopy. <i>Chemical Communications</i> , 2013 , 49, 10446-52	5.8	54
52	Fluorinated Polymer Yields High Organic Solar Cell Performance for a Wide Range of Morphologies. <i>Advanced Functional Materials</i> , 2013 , 23, 3463-3470	15.6	88
51	Fluorine substituents reduce charge recombination and drive structure and morphology development in polymer solar cells. <i>Journal of the American Chemical Society</i> , 2013 , 135, 1806-15	16.4	489
50	Organic Solar Cells beyond One Pair of Donor-Acceptor: Ternary Blends and More. <i>Journal of Physical Chemistry Letters</i> , 2013 , 4, 1802-10	6.4	168
49	Disentangling the impact of side chains and fluorine substituents of conjugated donor polymers on the performance of photovoltaic blends. <i>Energy and Environmental Science</i> , 2013 , 6, 316-326	35.4	145
48	Tuning optical and electronic properties of star-shaped conjugated molecules with enlarged delocalization for organic solar cell application. <i>Journal of Materials Chemistry A</i> , 2013 , 1, 8270	13	43
47	The effect of passivation on different GaAs surfaces. <i>Applied Physics Letters</i> , 2013 , 103, 173902	3.4	10
46	Surface-initiated poly(3-methylthiophene) as a hole-transport layer for polymer solar cells with high performance. <i>ACS Applied Materials & Interfaces</i> , 2012 , 4, 5069-73	9.5	47
45	Self-Assembled Monolayer of Mixed Gold and Nickel Nanoparticles. <i>Nano-Micro Letters</i> , 2012 , 4, 166-171	9.5	1

44	Rational Design of High Performance Conjugated Polymers for Organic Solar Cells. <i>Macromolecules</i> , 2012 , 45, 607-632	5.5	1330
43	An Investigation of Siloxane Cross-linked Hydroxyapatite-Gelatin/Copolymer Composites for Potential Orthopedic Applications(). <i>Journal of Materials Chemistry</i> , 2012 , 22, 22888-22898		18
42	A universal optical approach to enhancing efficiency of organic-based photovoltaic devices. <i>Energy and Environmental Science</i> , 2012 , 5, 6900	35.4	98
41	Laterally patterned magnetic nanoparticles. <i>Journal of Materials Chemistry</i> , 2012 , 22, 1962-1968		14
40	Tunneling characteristics of Au-alkanedithiol-Au junctions formed via nanotransfer printing (nTP). <i>Journal of the American Chemical Society</i> , 2012 , 134, 12072-82	16.4	27
39	Structure-property optimizations in donor polymers via electronics, substituents, and side chains toward high efficiency solar cells. <i>Macromolecular Rapid Communications</i> , 2012 , 33, 1162-77	4.8	109
38	Parallel-like bulk heterojunction polymer solar cells. <i>Journal of the American Chemical Society</i> , 2012 , 134, 5432-5	16.4	256
37	Excited-State Photophysics in a Low Band Gap Polymer with High Photovoltaic Efficiency. <i>Journal of Physical Chemistry C</i> , 2011 , 115, 2371-2380	3.8	7
36	Conjugated Polymers Based on Benzo[<i>l</i> ,2- <i>b</i> :4,5- <i>b'</i>] dithiophene for Organic Electronics 2011 , 49-79		
35	Improved Synthesis of Thienothiazole and Its Utility in Developing Polymers for Photovoltaics. <i>Macromolecules</i> , 2011 , 44, 9146-9154	5.5	14
34	Fluorine substituted conjugated polymer of medium band gap yields 7% efficiency in polymer-fullerene solar cells. <i>Journal of the American Chemical Society</i> , 2011 , 133, 4625-31	16.4	1387
33	Development of Fluorinated Benzothiadiazole as a Structural Unit for a Polymer Solar Cell of 7 % Efficiency. <i>Angewandte Chemie</i> , 2011 , 123, 3051-3054	3.6	196
32	Development of fluorinated benzothiadiazole as a structural unit for a polymer solar cell of 7 % efficiency. <i>Angewandte Chemie - International Edition</i> , 2011 , 50, 2995-8	16.4	1076
31	Low-Band-Gap Polymers That Utilize Quinoid Resonance Structure Stabilization by Thienothiophene: Fine-Tuning of HOMO Level. <i>Macromolecules</i> , 2011 , 44, 872-877	5.5	69
30	Solution-processed flexible polymer solar cells with silver nanowire electrodes. <i>ACS Applied Materials & Interfaces</i> , 2011 , 3, 4075-84	9.5	318
29	A Tale of Current and Voltage: Interplay of Band Gap and Energy Levels of Conjugated Polymers in Bulk Heterojunction Solar Cells. <i>Macromolecules</i> , 2010 , 43, 10390-10396	5.5	58
28	Low Band Gap Polymers Based on Benzo[1,2- <i>b</i> :4,5- <i>b'</i>]dithiophene: Rational Design of Polymers Leads to High Photovoltaic Performance. <i>Macromolecules</i> , 2010 , 43, 4609-4612	5.5	127
27	Quantitatively Analyzing the Influence of Side Chains on Photovoltaic Properties of Polymer-Bullerene Solar Cells. <i>Journal of Physical Chemistry C</i> , 2010 , 114, 16793-16800	3.8	211

26	A weak donor-strong acceptor strategy to design ideal polymers for organic solar cells. <i>ACS Applied Materials & Interfaces</i> , 2010 , 2, 1377-83	9.5	252
25	Donor-Acceptor Polymers Incorporating Alkylated Dithienylbenzothiadiazole for Bulk Heterojunction Solar Cells: Pronounced Effect of Positioning Alkyl Chains. <i>Macromolecules</i> , 2010 , 43, 811-820	5.5	165
24	Recent Progress on Highly Efficient Bulk Heterojunction Polymer Solar Cells. <i>ACS Symposium Series</i> , 2010 , 71-80	0.4	11
23	Polycyclic Aromatics with Flanking Thiophenes: Tuning Energy Level and Band Gap of Conjugated Polymers for Bulk Heterojunction Photovoltaics. <i>Macromolecules</i> , 2010 , 43, 797-804	5.5	36
22	Conjugated Polymer Based on Polycyclic Aromatics for Bulk Heterojunction Organic Solar Cells: A Case Study of Quadrathienonaphthalene Polymers with 2% Efficiency. <i>Advanced Functional Materials</i> , 2010 , 20, 635-643	15.6	70
21	Enhanced Photovoltaic Performance of Low-Bandgap Polymers with Deep LUMO Levels. <i>Angewandte Chemie</i> , 2010 , 122, 8164-8167	3.6	43
20	Enhanced photovoltaic performance of low-bandgap polymers with deep LUMO levels. <i>Angewandte Chemie - International Edition</i> , 2010 , 49, 7992-5	16.4	268
19	Lyotropic liquid-crystalline solutions of high-concentration dispersions of single-walled carbon nanotubes with conjugated polymers. <i>Small</i> , 2009 , 5, 1019-24	11	50
18	Metal-molecule-metal junctions via PFPE assisted nanotransfer printing (nTP) onto self-assembled monolayers. <i>Journal of the American Chemical Society</i> , 2009 , 131, 13202-3	16.4	20
17	Conjugated polymers based on benzo[2,1-b:3,4-b']dithiophene with low-lying highest occupied molecular orbital energy levels for organic photovoltaics. <i>ACS Applied Materials & Interfaces</i> , 2009 , 1, 1613-21	9.5	38
16	Comprehensive investigation of self-assembled monolayer formation on ferromagnetic thin film surfaces. <i>Journal of the American Chemical Society</i> , 2008 , 130, 9763-72	16.4	42
15	Conjugated Polymers of Fused Bithiophenes with Enhanced π -Electron Delocalization for Photovoltaic Applications. <i>Macromolecules</i> , 2008 , 41, 5688-5696	5.5	67
14	Selective Crystallization of Organic Semiconductors on Patterned Templates of Carbon Nanotubes. <i>Advanced Functional Materials</i> , 2007 , 17, 2891-2896	15.6	37
13	Inversion of the rectifying effect in diblock molecular diodes by protonation. <i>Journal of the American Chemical Society</i> , 2005 , 127, 10456-7	16.4	130
12	Pronounced photorefractive effect at wavelength over 1000 nm in monolithic organic materials. <i>Applied Physics Letters</i> , 2005 , 86, 151906	3.4	4
11	Effect of a trapping molecule on the monolithic organic photorefractive materials. <i>Applied Physics Letters</i> , 2004 , 85, 5221-5223	3.4	3
10	Synthesis of diode molecules and their sequential assembly to control electron transport. <i>Angewandte Chemie - International Edition</i> , 2004 , 43, 4471-5	16.4	122
9	Dramatic Enhancement of Photorefractive Properties by Controlling Electron Trap Density in a Monolithic Material. <i>Advanced Materials</i> , 2004 , 16, 356-360	24	22

8	Synthesis of Diode Molecules and Their Sequential Assembly to Control Electron Transport. <i>Angewandte Chemie</i> , 2004 , 116, 4571-4575	3.6	22
7	Supramolecular self-assembly of conjugated diblock copolymers. <i>Chemistry - A European Journal</i> , 2004 , 10, 986-93	4.8	61
6	Fully Functionalized Photorefractive Polymer with Infrared Sensitivity Based on Novel Chromophores. <i>Macromolecules</i> , 2003 , 36, 7014-7019	5.5	42
5	Fine-tuning photorefractive properties of monolithic molecular materials. <i>Applied Physics Letters</i> , 2003 , 82, 3385-3387	3.4	13
4	Synthesis and Structure/Property Correlation of Fully Functionalized Photorefractive Polymers. <i>Macromolecules</i> , 2002 , 35, 4636-4645	5.5	35
3	Ultra-High Alignment of Polymer Semiconductor Blends Enabling Photodetectors with Exceptional Polarization Sensitivity. <i>Advanced Functional Materials</i> , 2105820	15.6	2
2	The Structural Origin of Chiroptical Properties in Perovskite Nanocrystals with Chiral Organic Ligands. <i>Advanced Functional Materials</i> , 2200454	15.6	8
1	Reversible Addition-Fragmentation Chain Transfer Step-Growth Polymerization with Commercially Available Inexpensive Bis-Maleimides. <i>Polymer Chemistry</i> ,	4.9	1