

Wei You

List of Publications by Year in descending order

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206
papers

20,095
citations

15466

65
h-index

10708

138
g-index

215
all docs

215
docs citations

215
times ranked

16213
citing authors

#	ARTICLE	IF	CITATIONS
1	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, 4625-4631.	6.6	1,463
2	Rational Design of High Performance Conjugated Polymers for Organic Solar Cells. <i>Macromolecules</i> , 2012, 45, 607-632.	2.2	1,398
3	Development of Fluorinated Benzothiadiazole as a Structural Unit for a Polymer Solar Cell of 7.2% Efficiency. <i>Angewandte Chemie - International Edition</i> , 2011, 50, 2995-2998.	7.2	1,130
4	Hierarchical Porous $\text{g-C}_3\text{N}_4$ with Enhanced Photocatalytic CO_2 Reduction Activity. <i>Small</i> , 2017, 13, 1603938.	5.2	1,025
5	Fused Nonacyclic Electron Acceptors for Efficient Polymer Solar Cells. <i>Journal of the American Chemical Society</i> , 2017, 139, 1336-1343.	6.6	813
6	Single-Junction Binary Blend Nonfullerene Polymer Solar Cells with 12.1% Efficiency. <i>Advanced Materials</i> , 2017, 29, 1700144.	11.1	629
7	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, 1806-1815.	6.6	528
8	Status and prospects for ternary organic photovoltaics. <i>Nature Photonics</i> , 2015, 9, 491-500.	15.6	527
9	The influence of molecular orientation on organic bulk heterojunction solar cells. <i>Nature Photonics</i> , 2014, 8, 385-391.	15.6	439
10	Solution-Processed Flexible Polymer Solar Cells with Silver Nanowire Electrodes. <i>ACS Applied Materials & Interfaces</i> , 2011, 3, 4075-4084.	4.0	351
11	The Curious Case of Fluorination of Conjugated Polymers for Solar Cells. <i>Accounts of Chemical Research</i> , 2017, 50, 2401-2409.	7.6	309
12	Core-Shell Nitrogen-Doped Carbon Hollow Spheres/ Co_3O_4 Nanosheets as Advanced Electrode for High-Performance Supercapacitor. <i>Small</i> , 2018, 14, e1702407.	5.2	309
13	Enhanced Photovoltaic Performance of Low-Bandgap Polymers with Deep LUMO Levels. <i>Angewandte Chemie - International Edition</i> , 2010, 49, 7992-7995.	7.2	282
14	Parallel-like Bulk Heterojunction Polymer Solar Cells. <i>Journal of the American Chemical Society</i> , 2012, 134, 5432-5435.	6.6	279
15	Enhanced Charge Transport in 2D Perovskites via Fluorination of Organic Cation. <i>Journal of the American Chemical Society</i> , 2019, 141, 5972-5979.	6.6	274
16	A Weak Donor-Strong Acceptor Strategy to Design Ideal Polymers for Organic Solar Cells. <i>ACS Applied Materials & Interfaces</i> , 2010, 2, 1377-1383.	4.0	265
17	Mobility-Controlled Performance of Thick Solar Cells Based on Fluorinated Copolymers. <i>Journal of the American Chemical Society</i> , 2014, 136, 15566-15576.	6.6	249
18	Enhancing Performance of Nonfullerene Acceptors via Side-Chain Conjugation Strategy. <i>Advanced Materials</i> , 2017, 29, 1702125.	11.1	249

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19	Synthetic control over orientational degeneracy of spacer cations enhances solar cell efficiency in two-dimensional perovskites. <i>Nature Communications</i> , 2019, 10, 1276.	5.8	222
20	Quantitatively Analyzing the Influence of Side Chains on Photovoltaic Properties of Polymer ⁺ Fullerene Solar Cells. <i>Journal of Physical Chemistry C</i> , 2010, 114, 16793-16800.	1.5	218
21	A molecular interaction ⁺ diffusion framework for predicting organic solar cell stability. <i>Nature Materials</i> , 2021, 20, 525-532.	13.3	212
22	Naphthodithiophene ⁺ Based Nonfullerene Acceptor for High ⁺ Performance Organic Photovoltaics: Effect of Extended Conjugation. <i>Advanced Materials</i> , 2018, 30, 1704713.	11.1	199
23	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, 14078-14088.	6.6	193
24	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, 4456-4462.	11.1	190
25	Organic Solar Cells beyond One Pair of Donor ⁺ Acceptor: Ternary Blends and More. <i>Journal of Physical Chemistry Letters</i> , 2013, 4, 1802-1810.	2.1	186
26	Donor ⁺ Acceptor Polymers Incorporating Alkylated Dithienylbenzothiadiazole for Bulk Heterojunction Solar Cells: Pronounced Effect of Positioning Alkyl Chains. <i>Macromolecules</i> , 2010, 43, 811-820.	2.2	175
27	Hierarchical porous C/MnO ₂ composite hollow microspheres with enhanced supercapacitor performance. <i>Journal of Materials Chemistry A</i> , 2017, 5, 8635-8643.	5.2	174
28	Hierarchical NiS/N-doped carbon composite hollow spheres with excellent supercapacitor performance. <i>Journal of Materials Chemistry A</i> , 2017, 5, 21257-21265.	5.2	174
29	Balanced Partnership between Donor and Acceptor Components in Nonfullerene Organic Solar Cells with η 12% Efficiency. <i>Advanced Materials</i> , 2018, 30, e1706363.	11.1	172
30	Solution-processed copper ⁺ nickel nanowire anodes for organic solar cells. <i>Nanoscale</i> , 2014, 6, 5980.	2.8	170
31	Visible Light Photoinitiated Metal-Free Living Cationic Polymerization of 4-Methoxystyrene. <i>Journal of the American Chemical Society</i> , 2015, 137, 7580-7583.	6.6	167
32	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.	5.0	167
33	Hierarchical flower-like C/NiO composite hollow microspheres and its excellent supercapacitor performance. <i>Journal of Power Sources</i> , 2017, 359, 371-378.	4.0	154
34	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.	15.6	153
35	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.	6.6	151
36	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.	11.1	150

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37	Inversion of the Rectifying Effect in Diblock Molecular Diodes by Protonation. <i>Journal of the American Chemical Society</i> , 2005, 127, 10456-10457.	6.6	144
38	Delineation of Thermodynamic and Kinetic Factors that Control Stability in Non-fullerene Organic Solar Cells. <i>Joule</i> , 2019, 3, 1328-1348.	11.7	143
39	Fabrication of a hierarchical NiO/C hollow sphere composite and its enhanced supercapacitor performance. <i>Chemical Communications</i> , 2018, 54, 3731-3734.	2.2	140
40	Molecular Engineering of Conjugated Polymers for Solar Cells: An Updated Report. <i>Advanced Materials</i> , 2017, 29, 1601391.	11.1	139
41	Two-Dimensional Organic-Inorganic Hybrid Perovskites: A New Platform for Optoelectronic Applications. <i>Advanced Materials</i> , 2018, 30, e1802041.	11.1	138
42	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.	11.1	132
43	Low Band Gap Polymers Based on Benzo[1,2-b:4,5-b ²]dithiophene: Rational Design of Polymers Leads to High Photovoltaic Performance. <i>Macromolecules</i> , 2010, 43, 4609-4612.	2.2	130
44	Synthesis of Diode Molecules and Their Sequential Assembly to Control Electron Transport. <i>Angewandte Chemie - International Edition</i> , 2004, 43, 4471-4475.	7.2	129
45	Unique Energy Alignments of a Ternary Material System toward High-Performance Organic Photovoltaics. <i>Advanced Materials</i> , 2018, 30, e1801501.	11.1	116
46	Structure-Property Optimizations in Donor Polymers via Electronics, Substituents, and Side Chains Toward High Efficiency Solar Cells. <i>Macromolecular Rapid Communications</i> , 2012, 33, 1162-1177.	2.0	110
47	A universal optical approach to enhancing efficiency of organic-based photovoltaic devices. <i>Energy and Environmental Science</i> , 2012, 5, 6900.	15.6	107
48	Tunable Semiconductors: Control over Carrier States and Excitations in Layered Hybrid Organic-Inorganic Perovskites. <i>Physical Review Letters</i> , 2018, 121, 146401.	2.9	103
49	Effect of Core Size on Performance of Fused-Ring Electron Acceptors. <i>Chemistry of Materials</i> , 2018, 30, 5390-5396.	3.2	102
50	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.	10.2	97
51	Fluorinated Polymer Yields High Organic Solar Cell Performance for a Wide Range of Morphologies. <i>Advanced Functional Materials</i> , 2013, 23, 3463-3470.	7.8	91
52	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.	3.2	88
53	Panchromatic Sequentially Cast Ternary Polymer Solar Cells. <i>Advanced Materials</i> , 2017, 29, 1604603.	11.1	87
54	Highly Efficient, Stable, and Ductile Ternary Nonfullerene Organic Solar Cells from a Two-Donor Polymer Blend. <i>Advanced Materials</i> , 2019, 31, e1808279.	11.1	79

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55	Enhancing Charge Transport of 2D Perovskite Passivation Agent for Wide-Bandgap Perovskite Solar Cells Beyond 21%. <i>Solar Rrl</i> , 2020, 4, 2000082.	3.1	79
56	Polymer Solar Cells with 90% External Quantum Efficiency Featuring an Ideal Light- and Charge-Manipulation Layer. <i>Advanced Materials</i> , 2018, 30, e1706083.	11.1	76
57	Low-Band-Gap Polymers That Utilize Quinoid Resonance Structure Stabilization by Thienothiophene: Fine-Tuning of HOMO Level. <i>Macromolecules</i> , 2011, 44, 872-877.	2.2	75
58	Tuning Fluorinated Benzotriazole Polymers through Alkylthio Substitution and Selenophene Incorporation for Bulk Heterojunction Solar Cells. <i>Macromolecules</i> , 2014, 47, 2289-2295.	2.2	75
59	The Role of Demixing and Crystallization Kinetics on the Stability of Non-Fullerene Organic Solar Cells. <i>Advanced Materials</i> , 2020, 32, e2005348.	11.1	74
60	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.	7.8	73
61	Site-Selective Passivation of Defects in NiO Solar Photocathodes by Targeted Atomic Deposition. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 4754-4761.	4.0	71
62	Energy transfer mechanisms in layered 2D perovskites. <i>Journal of Chemical Physics</i> , 2018, 148, 134706.	1.2	70
63	Conjugated Polymers of Fused Bithiophenes with Enhanced π -Electron Delocalization for Photovoltaic Applications. <i>Macromolecules</i> , 2008, 41, 5688-5696.	2.2	69
64	Iron(ii) spin crossover films on Au(111): scanning probe microscopy and photoelectron spectroscopy. <i>Chemical Communications</i> , 2013, 49, 10446.	2.2	69
65	A General Approach toward Electron Deficient Triazole Units to Construct Conjugated Polymers for Solar Cells. <i>Chemistry of Materials</i> , 2015, 27, 6470-6476.	3.2	69
66	General Post-annealing Method Enables High-Efficiency Two-Dimensional Perovskite Solar Cells. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 33187-33197.	4.0	66
67	Supramolecular Self-Assembly of Conjugated Diblock Copolymers. <i>Chemistry - A European Journal</i> , 2004, 10, 986-993.	1.7	63
68	Aryl-Perfluoroaryl Interaction in Two-Dimensional Organic-Inorganic Hybrid Perovskites Boosts Stability and Photovoltaic Efficiency. , 2019, 1, 171-176.		63
69	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.	2.2	61
70	Fluorinated Thiophene Units Improve Photovoltaic Device Performance of Donor-Acceptor Copolymers. <i>Chemistry of Materials</i> , 2017, 29, 5990-6002.	3.2	57
71	Alkyl-Aryl Cation Mixing in Chiral 2D Perovskites. <i>Journal of the American Chemical Society</i> , 2021, 143, 18114-18120.	6.6	57
72	Lyotropic Liquid-Crystalline Solutions of High-Concentration Dispersions of Single-Walled Carbon Nanotubes with Conjugated Polymers. <i>Small</i> , 2009, 5, 1019-1024.	5.2	55

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73	Tailoring Porphyrin-Based Electron Accepting Materials for Organic Photovoltaics. <i>Journal of the American Chemical Society</i> , 2014, 136, 17561-17569.	6.6	55
74	Revealing the Impact of F4TCNQ as Additive on Morphology and Performance of High-Efficiency Nonfullerene Organic Solar Cells. <i>Advanced Functional Materials</i> , 2019, 29, 1806262.	7.8	55
75	OD/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.	4.0	54
76	Perfluorocarbon-based O ₂ nanocarrier for efficient photodynamic therapy. <i>Journal of Materials Chemistry B</i> , 2019, 7, 1116-1123.	2.9	53
77	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, 5069-5073.	4.0	51
78	Investigation of Dopamine Analogues: Synthesis, Mechanistic Understanding, and Structure-Property Relationship. <i>Langmuir</i> , 2016, 32, 9873-9882.	1.6	51
79	Mantis shrimp-inspired organic photodetector for simultaneous hyperspectral and polarimetric imaging. <i>Science Advances</i> , 2021, 7, .	4.7	51
80	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.	6.4	48
81	Balancing crop production and energy harvesting in organic solar-powered greenhouses. <i>Cell Reports Physical Science</i> , 2021, 2, 100381.	2.8	48
82	Comprehensive Investigation of Self-Assembled Monolayer Formation on Ferromagnetic Thin Film Surfaces. <i>Journal of the American Chemical Society</i> , 2008, 130, 9763-9772.	6.6	47
83	Enhancing the performance of the electron acceptor ITIC-Th via tailoring its end groups. <i>Materials Chemistry Frontiers</i> , 2018, 2, 537-543.	3.2	46
84	Tuning optical and electronic properties of star-shaped conjugated molecules with enlarged π -delocalization for organic solar cell application. <i>Journal of Materials Chemistry A</i> , 2013, 1, 8270.	5.2	45
85	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.	5.2	44
86	The Structural Origin of Chiroptical Properties in Perovskite Nanocrystals with Chiral Organic Ligands. <i>Advanced Functional Materials</i> , 2022, 32, .	7.8	43
87	Fully Functionalized Photorefractive Polymer with Infrared Sensitivity Based on Novel Chromophores. <i>Macromolecules</i> , 2003, 36, 7014-7019.	2.2	42
88	A carbon-oxygen-bridged hexacyclic ladder-type building block for low-bandgap nonfullerene acceptors. <i>Materials Chemistry Frontiers</i> , 2018, 2, 700-703.	3.2	41
89	Selective Crystallization of Organic Semiconductors on Patterned Templates of Carbon Nanotubes. <i>Advanced Functional Materials</i> , 2007, 17, 2891-2896.	7.8	40
90	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, 1613-1621.	4.0	40

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91	Orthogonal Cationic and Radical RAFT Polymerizations to Prepare Bottlebrush Polymers. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 7203-7208.	7.2	40
92	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.	2.2	39
93	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.	2.0	39
94	Enhancing the performance of a fused-ring electron acceptor <i>via</i> extending benzene to naphthalene. <i>Journal of Materials Chemistry C</i> , 2018, 6, 66-71.	2.7	38
95	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.	3.2	38
96	Synthesis and Structure/Property Correlation of Fully Functionalized Photorefractive Polymers. <i>Macromolecules</i> , 2002, 35, 4636-4645.	2.2	37
97	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, 11658-11666.	4.0	37
98	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.	2.8	37
99	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.	7.3	36
100	Designing Simple Conjugated Polymers for Scalable and Efficient Organic Solar Cells. <i>ChemSusChem</i> , 2021, 14, 3561-3568.	3.6	36
101	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, 2078-2081.	6.6	34
102	Shear-Enhanced Transfer Printing of Conducting Polymer Thin Films. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 31560-31567.	4.0	34
103	Ultrafast Exciton Transport with a Long Diffusion Length in Layered Perovskites with Organic Cation Functionalization. <i>Advanced Materials</i> , 2020, 32, e2004080.	11.1	34
104	Sequence Effects in Donor-Acceptor Oligomeric Semiconductors Comprising Benzothiadiazole and Phenylenevinylene Monomers. <i>Macromolecules</i> , 2017, 50, 151-161.	2.2	33
105	Understanding of Face-On Crystallites Transitioning to Edge-On Crystallites in Thiophene-Based Conjugated Polymers. <i>Chemistry of Materials</i> , 2021, 33, 4541-4550.	3.2	33
106	Morphology linked to miscibility in highly amorphous semi-conducting polymer/fullerene blends. <i>Polymer</i> , 2014, 55, 4884-4889.	1.8	32
107	Anion-Dipole Interactions Make the Homopolymers Self-Assemble into Multiple Nanostructures. <i>Advanced Materials</i> , 2015, 27, 3202-3207.	11.1	31
108	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.	2.2	31

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109	Imaging Carrier Diffusion in Perovskites with a Diffractive Optic-Based Transient Absorption Microscope. <i>Journal of Physical Chemistry C</i> , 2018, 122, 10650-10656.	1.5	31
110	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.	7.8	31
111	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, 803-810.	4.0	29
112	Reversible-Addition Fragmentation Chain Transfer Step-Growth Polymerization. <i>Journal of the American Chemical Society</i> , 2021, 143, 15918-15923.	6.6	29
113	Tunneling Characteristics of Au-Alkanedithiol-Au Junctions formed via Nanotransfer Printing (nTP). <i>Journal of the American Chemical Society</i> , 2012, 134, 12072-12082.	6.6	28
114	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.	5.8	28
115	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.	3.3	28
116	Donor polymer fluorination doubles the efficiency in non-fullerene organic photovoltaics. <i>Journal of Materials Chemistry A</i> , 2017, 5, 22536-22541.	5.2	27
117	Role of Secondary Thermal Relaxations in Conjugated Polymer Film Toughness. <i>Chemistry of Materials</i> , 2020, 32, 6540-6549.	3.2	27
118	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.	3.2	26
119	Fine Optimization of Morphology Evolution Kinetics with Binary Additives for Efficient Non-Fullerene Organic Solar Cells. <i>Advanced Science</i> , 2019, 6, 1801560.	5.6	26
120	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.	2.1	26
121	Panchromatic All-Polymer Photodetector with Tunable Polarization Sensitivity. <i>Advanced Optical Materials</i> , 2019, 7, 1801346.	3.6	26
122	Real Function of Semiconducting Polymer in GaAs/Polymer Planar Heterojunction Solar Cells. <i>ACS Nano</i> , 2013, 7, 6619-6626.	7.3	24
123	Distinction between PTB7-Th samples prepared from Pd(PPh ₃) ₄ and Pd ₂ (dba) ₃ /P(<i>i</i> -tol) ₃ catalysed stille coupling polymerization and the resultant photovoltaic performance. <i>Journal of Materials Chemistry A</i> , 2018, 6, 179-188.	5.2	24
124	Coherent control of asymmetric spintronic terahertz emission from two-dimensional hybrid metal halides. <i>Nature Communications</i> , 2021, 12, 5744.	5.8	24
125	High-Performance Tandem Organic Solar Cells Using HSolar as the Interconnecting Layer. <i>Advanced Energy Materials</i> , 2020, 10, 2000823.	10.2	23
126	Dramatic Enhancement of Photorefractive Properties by Controlling Electron Trap Density in a Monolithic Material. <i>Advanced Materials</i> , 2004, 16, 356-360.	11.1	22

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127	Metal-Molecule-Metal Junctions via PFPE Assisted Nanotransfer Printing (nTP) onto Self-Assembled Monolayers. <i>Journal of the American Chemical Society</i> , 2009, 131, 13202-13203.	6.6	22
128	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.	1.5	22
129	Enhancing Efficiency and Stability of Organic Solar Cells by UV Absorbent. <i>Solar Rrl</i> , 2017, 1, 1700148.	3.1	21
130	Imaging Excited State Dynamics in Layered 2D Perovskites with Transient Absorption Microscopy. <i>Journal of Physical Chemistry A</i> , 2019, 123, 11012-11021.	1.1	21
131	Integrating charge mobility, stability and stretchability within conjugated polymer films for stretchable multifunctional sensors. <i>Nature Communications</i> , 2022, 13, 2739.	5.8	20
132	An investigation of siloxane cross-linked hydroxyapatite-gelatin/copolymer composites for potential orthopedic applications. <i>Journal of Materials Chemistry</i> , 2012, 22, 22888.	6.7	19
133	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.	2.1	19
134	Importance of Nucleophilicity of Chain-Transfer Agents for Controlled Cationic Degenerative Chain-Transfer Polymerization. <i>Macromolecules</i> , 2020, 53, 4303-4311.	2.2	19
135	Fluorination of Donor-Acceptor Copolymer Active Layers Enhances Charge Mobilities in Thin-Film Transistors. <i>ACS Macro Letters</i> , 2017, 6, 1162-1167.	2.3	18
136	Semi-paracrystallinity in semi-conducting polymers. <i>Materials Horizons</i> , 2022, 9, 1196-1206.	6.4	18
137	Effect of Cyano Substitution on Conjugated Polymers for Bulk Heterojunction Solar Cells. <i>ACS Applied Polymer Materials</i> , 2019, 1, 3313-3322.	2.0	17
138	Shifting Electronic Structure by Inherent Tension in Molecular Bottlebrushes with Polythiophene Backbones. <i>ACS Macro Letters</i> , 2014, 3, 738-742.	2.3	16
139	Charge Photogeneration in Organic Photovoltaics: Role of Hot versus Cold Charge-Transfer Excitons. <i>Advanced Energy Materials</i> , 2016, 6, 1301032.	10.2	16
140	Understanding the side-chain effects on A-D-A acceptors: in-plane and out-of-plane. <i>Materials Chemistry Frontiers</i> , 2018, 2, 1563-1567.	3.2	16
141	Tuning of spin-orbit coupling in metal-free conjugated polymers by structural conformation. <i>Physical Review Materials</i> , 2020, 4, .	0.9	16
142	Improved Synthesis of Thienothiazole and Its Utility in Developing Polymers for Photovoltaics. <i>Macromolecules</i> , 2011, 44, 9146-9154.	2.2	15
143	Laterally patterned magnetic nanoparticles. <i>Journal of Materials Chemistry</i> , 2012, 22, 1962-1968.	6.7	15
144	Morphological Effects on the Small-Molecule-Based Solution-Processed Organic Solar Cells. <i>ACS Applied Materials & Interfaces</i> , 2014, 6, 15767-15773.	4.0	15

#	ARTICLE	IF	CITATIONS
145	Alcohol mediated degenerate chain transfer controlled cationic polymerisation of para-alkoxystyrene. <i>Polymer Chemistry</i> , 2019, 10, 4126-4133.	1.9	15
146	Enhancing Photovoltaic Performance of Aromatic Ammonium-based Two-Dimensional Organic-Inorganic Hybrid Perovskites via Tuning CH ₃ -N Interaction. <i>Solar Rrl</i> , 2020, 4, 1900374.	3.1	15
147	Ternary Blending Driven Molecular Reorientation of Non-Fullerene Acceptor IDIC with Backbone Order. <i>ACS Applied Energy Materials</i> , 2020, 3, 10814-10822.	2.5	15
148	Resolving the Molecular Origin of Mechanical Relaxations in Donor-Acceptor Polymer Semiconductors. <i>Advanced Functional Materials</i> , 2022, 32, 2105597.	7.8	15
149	Fine-tuning photorefractive properties of monolithic molecular materials. <i>Applied Physics Letters</i> , 2003, 82, 3385-3387.	1.5	14
150	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.	2.3	14
151	Utilizing Difluorinated Thiophene Units To Improve the Performance of Polymer Solar Cells. <i>Macromolecules</i> , 2019, 52, 6523-6532.	2.2	14
152	Functionalization of Benzotriazole-Based Conjugated Polymers for Solar Cells: Heteroatom vs Substituents. <i>ACS Applied Polymer Materials</i> , 2021, 3, 30-41.	2.0	14
153	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.	5.2	13
154	Reversible addition-fragmentation chain transfer step-growth polymerization with commercially available inexpensive bis-maleimides. <i>Polymer Chemistry</i> , 2022, 13, 2589-2594.	1.9	13
155	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.	2.5	12
156	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.	3.2	12
157	Investigating the Stress-Strain Behavior in Ring-Opening Metathesis Polymerization-Based Brush Elastomers. <i>Macromolecules</i> , 2021, 54, 8365-8371.	2.2	12
158	Recent Progress on Highly Efficient Bulk Heterojunction Polymer Solar Cells. <i>ACS Symposium Series</i> , 2010, , 71-80.	0.5	11
159	Orientation effect on GaAs/ultrathin polymer/PEDOT:PSS hybrid solar cell. <i>Organic Electronics</i> , 2015, 16, 71-76.	1.4	11
160	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.	1.5	11
161	A Ladder-type Heteroheptacene Dithieno[2,3-d:4,5]thieno[3,2-b:2',3'-h]fluorene Based D-A Copolymer with Strong Intermolecular Interactions toward Efficient Polymer Solar Cells. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 35159-35168.	4.0	11
162	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.	2.5	11

#	ARTICLE	IF	CITATIONS
163	Sensitivity of Molecular Packing and Photovoltaic Performance to Subtle Fluctuation of Steric Distortions within D ⁺ A Copolymer Backbones. <i>ACS Applied Energy Materials</i> , 2018, 1, 4332-4340.	2.5	11
164	Thermocleavage of Partial Side Chains in Polythiophenes Offers Appreciable Photovoltaic Efficiency and Significant Morphological Stability. <i>Chemistry of Materials</i> , 2021, 33, 4745-4756.	3.2	11
165	The effect of passivation on different GaAs surfaces. <i>Applied Physics Letters</i> , 2013, 103, 173902.	1.5	10
166	Morphology, Structure, and Enhanced Intramolecular Conduction in Ultralong Conjugated Polymer Brushes. <i>Journal of Physical Chemistry C</i> , 2018, 122, 7586-7596.	1.5	10
167	Nonlinear fluorescence spectroscopy of layered perovskite quantum wells. <i>Journal of Chemical Physics</i> , 2020, 153, 134202.	1.2	10
168	Ultrafast Spectroscopic Signatures of Coherent Electron-Transfer Mechanisms in a Transition Metal Complex. <i>Journal of Physical Chemistry A</i> , 2016, 120, 5773-5790.	1.1	9
169	Pairing 1D/2D-conjugation donors/acceptors towards high-performance organic solar cells. <i>Materials Chemistry Frontiers</i> , 2019, 3, 276-283.	3.2	9
170	Nonlinear Photocurrent Spectroscopy of Layered 2D Perovskite Quantum Wells. <i>Journal of Physical Chemistry Letters</i> , 2019, 10, 7362-7367.	2.1	9
171	Orthogonal Cationic and Radical RAFT Polymerizations to Prepare Bottlebrush Polymers. <i>Angewandte Chemie</i> , 2020, 132, 7270-7275.	1.6	9
172	Elucidation of Quantum-Well-Specific Carrier Mobilities in Layered Perovskites. <i>Journal of Physical Chemistry Letters</i> , 2021, 12, 1116-1123.	2.1	9
173	Excited-State Photophysics in a Low Band Gap Polymer with High Photovoltaic Efficiency. <i>Journal of Physical Chemistry C</i> , 2011, 115, 2371-2380.	1.5	8
174	The role of temperature in forming sol-gel biocomposites containing polydopamine. <i>Journal of Materials Chemistry B</i> , 2014, 2, 7704-7711.	2.9	8
175	Effects of Fluorination Position on Fused-Ring Electron Acceptors. <i>Small Structures</i> , 2020, 1, 2000006.	6.9	8
176	Effects of linking units on fused-ring electron acceptor dimers. <i>Journal of Materials Chemistry A</i> , 2020, 8, 13735-13741.	5.2	8
177	Sifting 1,1'-di(thiophen-2-yl)alkanes as solvent additives to boost the photovoltaic performance of the PTB7-Th:PC ₇₁ BM blend. <i>Journal of Materials Chemistry A</i> , 2018, 6, 20788-20794.	5.2	7
178	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.	2.0	7
179	Multidimensional time-of-flight spectroscopy. <i>Journal of Chemical Physics</i> , 2021, 154, 220901.	1.2	7
180	Ultra-High Alignment of Polymer Semiconductor Blends Enabling Photodetectors with Exceptional Polarization Sensitivity. <i>Advanced Functional Materials</i> , 2022, 32, 2105820.	7.8	7

#	ARTICLE	IF	CITATIONS
181	Aggregation Controlled Charge Generation in Fullerene Based Bulk Heterojunction Polymer Solar Cells: Effect of Additive. <i>Polymers</i> , 2021, 13, 115.	2.0	6
182	Tunable Anion Exchange Membrane Conductivity and Permselectivity via Non-Covalent, Hydrogen Bond Cross-Linking. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 52647-52658.	4.0	6
183	Dramatic Improvement of the Mechanical Strength of Silane-Modified Hydroxyapatite/Gelatin Composites via Processing with Cosolvent. <i>ACS Omega</i> , 2018, 3, 3592-3598.	1.6	5
184	Post-polymerization modification of phosphorus containing conjugated copolymers. <i>European Polymer Journal</i> , 2018, 104, 157-163.	2.6	5
185	Pronounced photorefractive effect at wavelength over 1000 nm in monolithic organic materials. <i>Applied Physics Letters</i> , 2005, 86, 151906.	1.5	4
186	Communication: Uncovering correlated vibrational cooling and electron transfer dynamics with multidimensional spectroscopy. <i>Journal of Chemical Physics</i> , 2016, 145, 101101.	1.2	4
187	Probing Carrier Transport in Layered Perovskites with Nonlinear Optical and Photocurrent Spectroscopies. <i>Journal of Physical Chemistry C</i> , 2021, 125, 8021-8030.	1.5	4
188	Effect of a trapping molecule on the monolithic organic photorefractive materials. <i>Applied Physics Letters</i> , 2004, 85, 5221-5223.	1.5	3
189	Solar Cells: Surpassing 10% Efficiency Benchmark for Nonfullerene Organic Solar Cells by Scalable Coating in Air from Single Nonhalogenated Solvent (<i>Adv. Mater.</i> 8/2018). <i>Advanced Materials</i> , 2018, 30, 1870054.	11.1	3
190	Optical studies of native defects in π -conjugated donor-acceptor copolymers. <i>Journal of Applied Physics</i> , 2018, 123, .	1.1	3
191	Effect of osmotic ballast properties on the performance of a concentration gradient battery. <i>Water Research</i> , 2022, 212, 118076.	5.3	3
192	Origin of layered perovskite device efficiencies revealed by multidimensional time-of-flight spectroscopy. <i>Journal of Chemical Physics</i> , 2022, 156, 084202.	1.2	3
193	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.	1.5	2
194	Transforming the molecular orientation of crystalline lamellae by the degree of multi-fluorination within D_{6h} copolymers and its effect on photovoltaic performance. <i>Journal of Materials Chemistry C</i> , 2018, 6, 10513-10523.	2.7	2
195	Initiation and Polymer Density of Conjugated Polymer Brushes. <i>Journal of Physical Chemistry B</i> , 2020, 124, 9734-9744.	1.2	2
196	Enhancing Charge Transport of 2D Perovskite Passivation Agent for Wide-Bandgap Perovskite Solar Cells Beyond 21%. <i>Solar Rrl</i> , 2020, 4, 2070065.	3.1	2
197	Bio-inspired spectropolarimetric sensor based on tandem organic photodetectors and multi-twist liquid crystals. <i>Optics Express</i> , 2021, 29, 43953.	1.7	2
198	Self-Assembled Monolayer of Mixed Gold and Nickel Nanoparticles. <i>Nano-Micro Letters</i> , 2012, 4, 166-171.	14.4	1

#	ARTICLE	IF	CITATIONS
199	Organic Photovoltaics: Charge Photogeneration in Organic Photovoltaics: Role of Hot versus Cold Charge Transfer Excitons (Adv. Energy Mater. 1/2016). Advanced Energy Materials, 2016, 6, .	10.2	1
200	CHAPTER 15. Donor-Acceptor Alternating Copolymers. RSC Polymer Chemistry Series, 2013, , 319-342.	0.1	1
201	Organic Solar Cells: High-Performance Tandem Organic Solar Cells Using HSolar as the Interconnecting Layer (Adv. Energy Mater. 25/2020). Advanced Energy Materials, 2020, 10, 2070109.	10.2	0
202	(Invited) Conjugated Polymer Brushes: A New Platform to Investigate Intramolecular Charge Transport?. ECS Meeting Abstracts, 2018, , .	0.0	0
203	Design and Synthesis of Conjugated Polymers for Solar Cells. Materials and Energy, 2018, , 1-30.	2.5	0
204	The crucial role of end group planarity for fused-ring electron acceptors in organic solar cells (Conference Presentation). , 2019, , .		0
205	Competition between exceptionally long-range alkyl sidechain ordering and backbone ordering in semiconducting polymers and its impact on electronic and optoelectronic properties. Advanced Functional Materials, 2018, 29, .	7.8	0
206	Non-Covalent Interactions in Organic/Inorganic Hybrid 2D Perovskites. , 2022, , 153-193.		0