## Thuc-Quyen Nguyen

List of Publications by Year in descending order

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201 papers

17,413 citations

72 h-index 14758 127 g-index

212 all docs 212 docs citations

times ranked

212

12797 citing authors

#	Article	IF	CITATIONS
1	Nanoscale Phase Separation and High Photovoltaic Efficiency in Solutionâ€Processed, Smallâ€Molecule Bulk Heterojunction Solar Cells. Advanced Functional Materials, 2009, 19, 3063-3069.	14.9	871
2	Conjugated polymer aggregates in solution: Control of interchain interactions. Journal of Chemical Physics, 1999, 110, 4068-4078.	3.0	709
3	Exciton diffusion in organic semiconductors. Energy and Environmental Science, 2015, 8, 1867-1888.	30.8	670
4	Nonâ€Basic Highâ€Performance Molecules for Solutionâ€Processed Organic Solar Cells. Advanced Materials, 2012, 24, 3646-3649.	21.0	568
5	Improved Light Harvesting and Improved Efficiency by Insertion of an Optical Spacer (ZnO) in Solution-Processed Small-Molecule Solar Cells. Nano Letters, 2013, 13, 3796-3801.	9.1	554
6	Charge carrier recombination in organic solar cells. Progress in Polymer Science, 2013, 38, 1941-1960.	24.7	534
7	Polymer Homoâ€₹andem Solar Cells with Best Efficiency of 11.3%. Advanced Materials, 2015, 27, 1767-1773.	21.0	408
8	Small is Powerful: Recent Progress in Solutionâ€Processed Small Molecule Solar Cells. Advanced Energy Materials, 2017, 7, 1602242.	19.5	371
9	Recent Applications of Conjugated Polyelectrolytes in Optoelectronic Devices. Advanced Materials, 2008, 20, 3793-3810.	21.0	364
10	A Low Band Gap, Solution Processable Oligothiophene with a Diketopyrrolopyrrole Core for Use in Organic Solar Cells. Journal of Physical Chemistry C, 2008, 112, 11545-11551.	3.1	352
11	A Highâ€Performance Solutionâ€Processed Organic Photodetector for Nearâ€Infrared Sensing. Advanced Materials, 2020, 32, e1906027.	21.0	270
12	Nongeminate Recombination and Charge Transport Limitations in Diketopyrrolopyrroleâ€Based Solutionâ€Processed Small Molecule Solar Cells. Advanced Functional Materials, 2013, 23, 3584-3594.	14.9	268
13	Effect of leakage current and shunt resistance on the light intensity dependence of organic solar cells. Applied Physics Letters, 2015, 106, .	3.3	238
14	The role of charge recombination to triplet excitons in organic solar cells. Nature, 2021, 597, 666-671.	27.8	225
15	High Open Circuit Voltage in Regioregular Narrow Band Gap Polymer Solar Cells. Journal of the American Chemical Society, 2014, 136, 12576-12579.	13.7	216
16	Regioregular Pyridal[2,1,3]thiadiazole π-Conjugated Copolymers. Journal of the American Chemical Society, 2011, 133, 18538-18541.	13.7	213
17	Quantification of Geminate and Nonâ€Geminate Recombination Losses within a Solutionâ€Processed Smallâ€Molecule Bulk Heterojunction Solar Cell. Advanced Materials, 2012, 24, 2135-2141.	21.0	211
18	Understanding the High Performance of over 15% Efficiency in Singleâ€Junction Bulk Heterojunction Organic Solar Cells. Advanced Materials, 2019, 31, e1903868.	21.0	211

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19	Design, Synthesis, and Self-assembly of Oligothiophene Derivatives with a Diketopyrrolopyrrole Core. Journal of Physical Chemistry C, 2008, 112, 15543-15552.	3.1	207
20	Impact of interfacial molecular orientation on radiative recombination and charge generation efficiency. Nature Communications, 2017, 8, 79.	12.8	198
21	Effects of Solvent Additives on Morphology, Charge Generation, Transport, and Recombination in Solutionâ€Processed Smallâ€Molecule Solar Cells. Advanced Energy Materials, 2014, 4, 1301469.	19.5	194
22	Conductive Conjugated Polyelectrolyte as Holeâ€Transporting Layer for Organic Bulk Heterojunction Solar Cells. Advanced Materials, 2014, 26, 780-785.	21.0	193
23	Mobility Guidelines for High Fill Factor Solutionâ€Processed Small Molecule Solar Cells. Advanced Materials, 2014, 26, 5957-5961.	21.0	192
24	Harvesting the Full Potential of Photons with Organic Solar Cells. Advanced Materials, 2016, 28, 1482-1488.	21.0	190
25	Film Morphology of High Efficiency Solutionâ€Processed Smallâ€Molecule Solar Cells. Advanced Functional Materials, 2013, 23, 5019-5026.	14.9	185
26	Side-Chain Engineering of Nonfullerene Acceptors for Near-Infrared Organic Photodetectors and Photovoltaics. ACS Energy Letters, 2019, 4, 1401-1409.	17.4	182
27	Improving the performance of conjugated polymer-based devices by control of interchain interactions and polymer film morphology. Applied Physics Letters, 2000, 76, 2454-2456.	3.3	181
28	Electrolyte-gated transistors for enhanced performance bioelectronics. Nature Reviews Methods Primers, 2021, 1, .	21.2	172
29	Effects of Heteroatom Substitutions on the Crystal Structure, Film Formation, and Optoelectronic Properties of Diketopyrrolopyrroleâ€Based Materials. Advanced Functional Materials, 2013, 23, 47-56.	14.9	171
30	A Systematic Approach to Solvent Selection Based on Cohesive Energy Densities in a Molecular Bulk Heterojunction System. Advanced Energy Materials, 2011, 1, 221-229.	19.5	169
31	Solutionâ€Processed Semitransparent Organic Photovoltaics: From Molecular Design to Device Performance. Advanced Materials, 2019, 31, e1900904.	21.0	168
32	Solvent Additive Effects on Small Molecule Crystallization in Bulk Heterojunction Solar Cells Probed During Spin Casting. Advanced Materials, 2013, 25, 6380-6384.	21.0	156
33	The Path to 20% Power Conversion Efficiencies in Nonfullerene Acceptor Organic Solar Cells. Advanced Energy Materials, 2021, 11, 2003441.	19.5	154
34	Effect of Charge Recombination on the Fill Factor of Small Molecule Bulk Heterojunction Solar Cells. Advanced Energy Materials, 2011, 1, 610-617.	19.5	146
35	Systematic study of exciton diffusion length in organic semiconductors by six experimental methods. Materials Horizons, 2014, 1, 280-285.	12.2	144
36	Towards understanding the doping mechanism of organic semiconductors by Lewis acids. Nature Materials, 2019, 18, 1327-1334.	27.5	144

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37	Silaindacenodithiophene-Based Molecular Donor: Morphological Features and Use in the Fabrication of Compositionally Tolerant, High-Efficiency Bulk Heterojunction Solar Cells. Journal of the American Chemical Society, 2014, 136, 3597-3606.	13.7	136
38	Competitive Absorption and Inefficient Exciton Harvesting: Lessons Learned from Bulk Heterojunction Organic Photovoltaics Utilizing the Polymer Acceptor P(NDI2ODâ€₹2). Advanced Functional Materials, 2014, 24, 6989-6998.	14.9	134
39	Significance of Average Domain Purity and Mixed Domains on the Photovoltaic Performance of Highâ€Efficiency Solutionâ€Processed Smallâ€Molecule BHJ Solar Cells. Advanced Energy Materials, 2015, 5, 1500877.	19.5	133
40	Electron injection into organic semiconductor devices from high work function cathodes. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 12730-12735.	7.1	132
41	Facile Doping of Anionic Narrowâ€Bandâ€Gap Conjugated Polyelectrolytes During Dialysis. Angewandte Chemie - International Edition, 2013, 52, 12874-12878.	13.8	129
42	Miniature Soft Electromagnetic Actuators for Robotic Applications. Advanced Functional Materials, 2018, 28, 1800244.	14.9	129
43	Trapâ€Limited Exciton Diffusion in Organic Semiconductors. Advanced Materials, 2014, 26, 1912-1917.	21.0	127
44	The role of bulk and interfacial morphology in charge generation, recombination, and extraction in non-fullerene acceptor organic solar cells. Energy and Environmental Science, 2020, 13, 3679-3692.	30.8	126
45	Bandgap Narrowing in Nonâ€Fullerene Acceptors: Single Atom Substitution Leads to High Optoelectronic Response Beyond 1000 nm. Advanced Energy Materials, 2018, 8, 1801212.	19.5	125
46	Improved Injection in n-Type Organic Transistors with Conjugated Polyelectrolytes. Journal of the American Chemical Society, 2009, 131, 18220-18221.	13.7	123
47	Quantifying the Nongeminate Recombination Dynamics in Nonfullerene Bulk Heterojunction Organic Solar Cells. Advanced Energy Materials, 2019, 9, 1901438.	19.5	115
48	Oligothiophene Derivatives Functionalized with a Diketopyrrolopyrrolo Core for Solution-Processed Field Effect Transistors: Effect of Alkyl Substituents and Thermal Annealing. Journal of Physical Chemistry C, 2008, 112, 17402-17407.	3.1	113
49	Optimization of energy levels by molecular design: evaluation of bis-diketopyrrolopyrrole molecular donor materials for bulk heterojunction solar cells. Energy and Environmental Science, 2013, 6, 952.	30.8	113
50	Color Tuning in Polymer Lightâ€Emitting Diodes with Lewis Acids. Angewandte Chemie - International Edition, 2012, 51, 7495-7498.	13.8	112
51	Order enables efficient electron-hole separation at an organic heterojunction with a small energy loss. Nature Communications, 2018, 9, 277.	12.8	112
52	Influence of Structural Variation on the Solid-State Properties of Diketopyrrolopyrrole-Based Oligophenylenethiophenes: Single-Crystal Structures, Thermal Properties, Optical Bandgaps, Energy Levels, Film Morphology, and Hole Mobility. Chemistry of Materials, 2012, 24, 1699-1709.	6.7	109
53	Molecular solubility and hansen solubility parameters for the analysis of phase separation in bulk heterojunctions. Journal of Polymer Science, Part B: Polymer Physics, 2012, 50, 1405-1413.	2.1	107
54	Thermally stable, highly efficient, ultraflexible organic photovoltaics. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 4589-4594.	7.1	106

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55	Solutionâ€Processed Ambipolar Fieldâ€Effect Transistor Based on Diketopyrrolopyrrole Functionalized with Benzothiadiazole. Advanced Functional Materials, 2012, 22, 97-105.	14.9	102
56	Nanostructure and Optoelectronic Characterization of Small Molecule Bulk Heterojunction Solar Cells by Photoconductive Atomic Force Microscopy. Advanced Functional Materials, 2010, 20, 3314-3321.	14.9	101
57	Unraveling the cooperative synergy of zero-dimensional graphene quantum dots and metal nanocrystals enabled by layer-by-layer assembly. Journal of Materials Chemistry A, 2018, 6, 1700-1713.	10.3	99
58	The Effect of Solvent Additive on the Charge Generation and Photovoltaic Performance of a Solution-Processed Small Molecule:Perylene Diimide Bulk Heterojunction Solar Cell. Chemistry of Materials, 2014, 26, 4109-4118.	6.7	98
59	Determining the Dielectric Constants of Organic Photovoltaic Materials Using Impedance Spectroscopy. Advanced Functional Materials, 2018, 28, 1801542.	14.9	98
60	Capacitance Spectroscopy for Quantifying Recombination Losses in Nonfullerene Smallâ€Molecule Bulk Heterojunction Solar Cells. Advanced Energy Materials, 2016, 6, 1502250.	19.5	95
61	Design of Nonfullerene Acceptors with Nearâ€Infrared Light Absorption Capabilities. Advanced Energy Materials, 2018, 8, 1801209.	19.5	95
62	Direct Observation of Doping Sites in Temperatureâ€Controlled, pâ€Doped P3HT Thin Films by Conducting Atomic Force Microscopy. Advanced Materials, 2014, 26, 6069-6073.	21.0	86
63	Synthesis and Properties of Two Cationic Narrow Band Gap Conjugated Polyelectrolytes. Journal of the American Chemical Society, 2013, 135, 4163-4166.	13.7	83
64	Influence of alkyl substituents and thermal annealing on the film morphology and performance of solution processed, diketopyrrolopyrrole-based bulk heterojunction solar cells. Energy and Environmental Science, 2009, 2, 1180.	30.8	80
65	Understanding Openâ€Circuit Voltage Loss through the Density of States in Organic Bulk Heterojunction Solar Cells. Advanced Energy Materials, 2016, 6, 1501721.	19.5	80
66	Structure-function relationships of conjugated polyelectrolyte electron injection layers in polymer light emitting diodes. Applied Physics Letters, 2007, 91, .	3.3	79
67	Limits for Recombination in a Low Energy Loss Organic Heterojunction. ACS Nano, 2016, 10, 10736-10744.	14.6	79
68	Electrical Instability Induced by Electron Trapping in Lowâ€Bandgap Donor–Acceptor Polymer Fieldâ€Effect Transistors. Advanced Materials, 2015, 27, 7004-7009.	21.0	78
69	Overcoming Geminate Recombination and Enhancing Extraction in Solutionâ€Processed Small Molecule Solar Cells. Advanced Energy Materials, 2014, 4, 1400230.	19.5	76
70	High Mobility Organic Field-Effect Transistors from Majority Insulator Blends. Chemistry of Materials, 2016, 28, 1256-1260.	6.7	75
71	Unifying Charge Generation, Recombination, and Extraction in Lowâ€Offset Nonâ€Fullerene Acceptor Organic Solar Cells. Advanced Energy Materials, 2020, 10, 2001203.	19.5	74
72	Solution-Processed pH-Neutral Conjugated Polyelectrolyte Improves Interfacial Contact in Organic Solar Cells. ACS Nano, 2015, 9, 371-377.	14.6	73

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73	Linear Conjugated Polymer Backbones Improve Alignment in Nanogroove-Assisted Organic Field-Effect Transistors. Journal of the American Chemical Society, 2017, 139, 17624-17631.	13.7	72
74	lonomeric control of interchain interactions, morphology, and the electronic properties of conjugated polymer solutions and films. Journal of Chemical Physics, 2002, 116, 8198-8208.	3.0	70
75	Increased Mobility Induced by Addition of a Lewis Acid to a Lewis Basic Conjugated Polymer. Advanced Materials, 2014, 26, 724-727.	21.0	69
76	Quantifying and Understanding Voltage Losses Due to Nonradiative Recombination in Bulk Heterojunction Organic Solar Cells with Low Energetic Offsets. Advanced Energy Materials, 2019, 9, 1901077.	19.5	69
77	Self-assembly of 1-D organic semiconductor nanostructures. Physical Chemistry Chemical Physics, 2007, 9, 1515.	2.8	62
78	Triisopropylsilylethynyl-functionalized dibenzo[def,mno]chrysene: a solution-processed small molecule for bulk heterojunction solar cells. Journal of Materials Chemistry, 2012, 22, 4266-4268.	6.7	62
79	Unifying Energetic Disorder from Charge Transport and Band Bending in Organic Semiconductors. Advanced Functional Materials, 2019, 29, 1901109.	14.9	62
80	Organic solar cells from water-soluble poly(thiophene)/fullerene heterojunction. Applied Physics Letters, 2007, 90, 103514.	3.3	60
81	Charge Generation and Recombination in an Organic Solar Cell with Low Energetic Offsets. Advanced Energy Materials, 2018, 8, 1701073.	19.5	60
82	Measuring the competition between bimolecular charge recombination and charge transport in organic solar cells under operating conditions. Energy and Environmental Science, 2018, 11, 3019-3032.	30.8	59
83	The Nature of Interchain Excitations in Conjugated Polymers:  Spatially-Varying Interfacial Solvatochromism of Annealed MEH-PPV Films Studied by Near-Field Scanning Optical Microscopy (NSOM). Journal of Physical Chemistry B, 2002, 106, 9496-9506.	2.6	57
84	Monomolecular and Bimolecular Recombination of Electron–Hole Pairs at the Interface of a Bilayer Organic Solar Cell. Advanced Functional Materials, 2017, 27, 1604906.	14.9	57
85	Donor–Acceptor–Collector Ternary Crystalline Films for Efficient Solid-State Photon Upconversion. Journal of the American Chemical Society, 2018, 140, 8788-8796.	13.7	57
86	Fluorine substitution influence on benzo [2,1,3] thiadiazole based polymers for field-effect transistor applications. Chemical Communications, 2016, 52, 3207-3210.	4.1	56
87	Mechanical Properties of Solution-Processed Small-Molecule Semiconductor Films. ACS Applied Materials & Samp; Interfaces, 2016, 8, 11649-11657.	8.0	55
88	Electrical Doubleâ€Slope Nonideality in Organic Fieldâ€Effect Transistors. Advanced Functional Materials, 2018, 28, 1707221.	14.9	54
89	Doping Polymer Semiconductors by Organic Salts: Toward High-Performance Solution-Processed Organic Field-Effect Transistors. ACS Nano, 2018, 12, 3938-3946.	14.6	52
90	Understanding and Countering Illumination-Sensitive Dark Current: Toward Organic Photodetectors with Reliable High Detectivity. ACS Nano, 2021, 15, 1753-1763.	14.6	52

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91	Design of narrow bandgap non-fullerene acceptors for photovoltaic applications and investigation of non-geminate recombination dynamics. Journal of Materials Chemistry C, 2020, 8, 15175-15182.	<b>5.</b> 5	50
92	Interplay of Solvent Additive Concentration and Active Layer Thickness on the Performance of Small Molecule Solar Cells. Advanced Materials, 2014, 26, 7308-7316.	21.0	47
93	Morphology control of solution processable small molecule bulk heterojunction solar cells via solvent additives. RSC Advances, 2012, 2, 2232.	3.6	46
94	Effects of Processing Conditions on the Recombination Reduction in Small Molecule Bulk Heterojunction Solar Cells. Advanced Energy Materials, 2014, 4, 1400438.	19.5	46
95	Hole Mobility and Electron Injection Properties of Dâ€A Conjugated Copolymers with Fluorinated Phenylene Acceptor Units. Advanced Materials, 2017, 29, 1603830.	21.0	45
96	Nanoscopic interchain aggregate domain formation in conjugated polymer films studied by third harmonic generation near-field scanning optical microscopy. Journal of Chemical Physics, 2002, 117, 6688-6698.	3.0	43
97	Use of a commercially available nucleating agent to control the morphological development of solution-processed small molecule bulk heterojunction organic solar cells. Journal of Materials Chemistry A, 2014, 2, 15717-15721.	10.3	43
98	Effects of Impurities on Operational Mechanism of Organic Bulk Heterojunction Solar Cells. Advanced Materials, 2013, 25, 1706-1712.	21.0	42
99	Organic Electrochemical Transistors Based on the Conjugated Polyelectrolyte PCPDTBTâ€SO <sub>3</sub> K (CPEâ€K). Advanced Materials, 2020, 32, e1908120.	21.0	42
100	Cationic Conjugated Polyelectrolyte Electron Injection Layers: Effect of Halide Counterions. Journal of Physical Chemistry C, 2009, 113, 2950-2954.	3.1	41
101	Biofilm as a redox conductor: a systematic study of the moisture and temperature dependence of its electrical properties. Physical Chemistry Chemical Physics, 2016, 18, 17815-17821.	2.8	40
102	A Ferrocene-Based Conjugated Oligoelectrolyte Catalyzes Bacterial Electrode Respiration. CheM, 2017, 2, 240-257.	11.7	40
103	Temperature Dependence of Exciton Diffusion in a Smallâ€Molecule Organic Semiconductor Processed With and Without Additive. Advanced Materials, 2015, 27, 2528-2532.	21.0	39
104	Fullerene Additives Convert Ambipolar Transport to pâ€Type Transport while Improving the Operational Stability of Organic Thin Film Transistors. Advanced Functional Materials, 2016, 26, 4472-4480.	14.9	38
105	Complexation of a Conjugated Polyelectrolyte and Impact on Optoelectronic Properties. ACS Macro Letters, 2019, 8, 88-94.	4.8	37
106	Bandgap Tailored Nonfullerene Acceptors for Low-Energy-Loss Near-Infrared Organic Photovoltaics., 2020, 2, 395-402.		37
107	Resolving Atomicâ€6cale Interactions in Nonfullerene Acceptor Organic Solar Cells with Solidâ€6tate NMR Spectroscopy, Crystallographic Modelling, and Molecular Dynamics Simulations. Advanced Materials, 2022, 34, e2105943.	21.0	36
108	High open-circuit voltage small-molecule p-DTS(FBTTh <sub>2</sub> ) <sub>2</sub> :ICBA bulk heterojunction solar cells – morphology, excited-state dynamics, and photovoltaic performance. Journal of Materials Chemistry A, 2015, 3, 1530-1539.	10.3	35

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109	Atomic-Level Insight into the Postsynthesis Band Gap Engineering of a Lewis Base Polymer Using Lewis Acid Tris(pentafluorophenyl)borane. Chemistry of Materials, 2019, 31, 6715-6725.	6.7	35
110	Effect of Aggregation on the Optical and Charge Transport Properties of an Anionic Conjugated Polyelectrolyte. Journal of Physical Chemistry C, 2008, 112, 7054-7061.	3.1	32
111	Direct measurement of electric field screening in light emitting diodes with conjugated polyelectrolyte electron injecting/transport layers. Applied Physics Letters, 2009, 94, 033301.	3.3	32
112	Charge Recombination Dynamics in Organic Photovoltaic Systems with Enhanced Dielectric Constant. Advanced Functional Materials, 2019, 29, 1901269.	14.9	32
113	A Simple Approach for Unraveling Optoelectronic Processes in Organic Solar Cells under Shortâ€Circuit Conditions. Advanced Energy Materials, 2021, 11, 2002760.	19.5	32
114	Photoluminescence Quenching Probes Spin Conversion and Exciton Dynamics in Thermally Activated Delayed Fluorescence Materials. Advanced Materials, 2019, 31, e1804490.	21.0	31
115	Insights into Bulkâ€Heterojunction Organic Solar Cells Processed from Green Solvent. Solar Rrl, 2021, 5, 2100213.	5.8	30
116	Electrochromic devices and thin film transistors from a new family of ethylenedioxythiophene based conjugated polymers. New Journal of Chemistry, 2011, 35, 1327.	2.8	29
117	Understanding Charge Transport in Molecular Blend Films in Terms of Structural Order and Connectivity of Conductive Pathways. Advanced Energy Materials, 2016, 6, 1502285.	19.5	29
118	Large-gain low-voltage and wideband organic photodetectors <i>via</i> unbalanced charge transport. Materials Horizons, 2020, 7, 3234-3241.	12.2	29
119	Towards environmentally friendly processing of molecular semiconductors. Journal of Materials Chemistry A, 2013, 1, 11117.	10.3	28
120	In Situ Conjugated Polyelectrolyte Formation. Macromolecules, 2008, 41, 9146-9155.	4.8	27
121	Interfaces in organic devices studied with resonant soft x-ray reflectivity. Journal of Applied Physics, 2011, 110, .	2.5	27
122	Effect of Palladiumâ€Tetrakis(Triphenylphosphine) Catalyst Traces on Charge Recombination and Extraction in Nonâ€Fullereneâ€based Organic Solar Cells. Advanced Functional Materials, 2021, 31, 2009363.	14.9	27
123	Improving Electrical Stability and Ideality in Organic Fieldâ€Effect Transistors by the Addition of Fullerenes: Understanding the Working Mechanism. Advanced Functional Materials, 2017, 27, 1701358.	14.9	26
124	The importance of sulfonate to the self-doping mechanism of the water-soluble conjugated polyelectrolyte PCPDTBT-SO <sub>3</sub> K. Materials Chemistry Frontiers, 2020, 4, 3556-3566.	5.9	25
125	Operational Mechanism of Conjugated Polyelectrolytes. Journal of the American Chemical Society, 2014, 136, 8500-8503.	13.7	24
126	High-k Fluoropolymer Gate Dielectric in Electrically Stable Organic Field-Effect Transistors. ACS Applied Materials & Dielectrically 11, 15821-15828.	8.0	23

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127	Temperature and Light Modulated Openâ€Circuit Voltage in Nonfullerene Organic Solar Cells with Different Effective Bandgaps. Advanced Energy Materials, 2021, 11, 2003091.	19.5	23
128	Understanding how Lewis acids dope organic semiconductors: a "complex―story. Chemical Science, 2021, 12, 7012-7022.	7.4	23
129	Single Crystal Microwires of <i>p</i> â€DTS(FBTTh <sub>2</sub> ) <sub>2</sub> and Their Use in the Fabrication of Fieldâ€Effect Transistors and Photodetectors. Advanced Functional Materials, 2018, 28, 1702073.	14.9	22
130	Hole Transport in Diketopyrrolopyrrole (DPP) Small Molecules: A Joint Theoretical and Experimental Study. Journal of Physical Chemistry C, 2013, 117, 6730-6740.	3.1	21
131	Hall of Fame Article: Solution-Processed Semitransparent Organic Photovoltaics: From Molecular Design to Device Performance (Adv. Mater. 30/2019). Advanced Materials, 2019, 31, 1970219.	21.0	21
132	Excited State Dynamics of a Selfâ€Doped Conjugated Polyelectrolyte. Advanced Functional Materials, 2020, 30, 1906148.	14.9	21
133	Photocurrent hysteresis by ion motion within conjugated polyelectrolyte electron transporting layers. Journal of Materials Chemistry, 2009, 19, 211-214.	6.7	20
134	Rectifying Electrical Noise with an Ionicâ€Organic Ratchet. Advanced Materials, 2015, 27, 2007-2012.	21.0	20
135	PCBM Disperse-Red Ester with Strong Visible-Light Absorption: Implication of Molecular Design and Morphological Control for Organic Solar Cells. Journal of Physical Chemistry C, 2012, 116, 1313-1321.	3.1	19
136	Effect of copper metalation of tetrabenzoporphyrin donor material on organic solar cell performance. Journal of Materials Chemistry A, 2014, 2, 7890.	10.3	19
137	Observing Ion Motion in Conjugated Polyelectrolytes with Kelvin Probe Force Microscopy. Advanced Electronic Materials, 2017, 3, 1700005.	5.1	19
138	Aggregation-free sensitizer dispersion in rigid ionic crystals for efficient solid-state photon upconversion and demonstration of defect effects. Journal of Materials Chemistry C, 2018, 6, 5609-5615.	5.5	19
139	Effect of Alkylâ€Chain Length on Charge Transport Properties of Organic Semiconductors and Organic Fieldâ€Effect Transistors. Advanced Electronic Materials, 2018, 4, 1800175.	5.1	19
140	Lowâ€Cost Nucleophilic Organic Bases as nâ€Dopants for Organic Fieldâ€Effect Transistors and Thermoelectric Devices. Advanced Functional Materials, 2021, 31, 2102768.	14.9	19
141	Data driven discovery of conjugated polyelectrolytes for optoelectronic and photocatalytic applications. Npj Computational Materials, 2021, 7, .	8.7	19
142	Current Progress of Interfacing Organic Semiconducting Materials with Bacteria. Chemical Reviews, 2022, 122, 4791-4825.	47.7	19
143	Role of crystallinity of non-fullerene acceptors in bulk heterojunctions. Journal of Materials Chemistry A, 2015, 3, 9989-9998.	10.3	18
144	Understanding Interfacial Recombination Processes in Narrow-Band-Gap Organic Solar Cells. ACS Energy Letters, 2022, 7, 1626-1634.	17.4	18

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145	Balance Between Light Absorption and Recombination Losses in Solutionâ€Processed Small Molecule Solar Cells with Normal or Inverted Structures. Advanced Energy Materials, 2018, 8, 1801807.	19.5	17
146	Fabricating Lowâ€Cost Ionicâ€Organic Electronic Ratchets with Graphite Pencil and Adhesive Tape. Advanced Electronic Materials, 2016, 2, 1500344.	5.1	16
147	Structural insights into Lewis acid- and F4TCNQ-doped conjugated polymers by solid-state magnetic resonance spectroscopy. Materials Horizons, 2022, 9, 981-990.	12.2	16
148	Effect of structural variation on photovoltaic characteristics of phenyl substituted diketopyrrolopyrroles. RSC Advances, 2014, 4, 14101-14108.	3.6	15
149	Electron Transport and Nanomorphology in Solutionâ€Processed Polymeric Semiconductor nâ€Doped with an Airâ€5table Organometallic Dimer. Advanced Electronic Materials, 2017, 3, 1600546.	5.1	15
150	Morphology Inversion of a Nonâ€Fullerene Acceptor Via Adhesion Controlled Decalâ€Coating for Efficient Conversion and Detection in Organic Electronics. Advanced Functional Materials, 2021, 31, 2103705.	14.9	15
151	Solutionâ€Processed CsPbBr <sub>3</sub> Quantum Dots/Organic Semiconductor Planar Heterojunctions for Highâ€Performance Photodetectors. Advanced Science, 2022, 9, e2105856.	11.2	15
152	Dualâ€Mode Organic Electrochemical Transistors Based on Selfâ€Doped Conjugated Polyelectrolytes for Reconfigurable Electronics. Advanced Materials, 2022, 34, e2200274.	21.0	15
153	The effect of intermolecular interaction on excited states in p â^' DTS(FBTTH2)2. Journal of Chemical Physics, 2016, 144, 074904.	3.0	14
154	Tuning Optical Properties of Conjugated Molecules by Lewis Acids: Insights from Electronic Structure Modeling. Journal of Physical Chemistry Letters, 2019, 10, 4632-4638.	4.6	14
155	Tuning Geobacter sulfurreducens biofilm with conjugated polyelectrolyte for increased performance in bioelectrochemical system. Biosensors and Bioelectronics, 2019, 144, 111630.	10.1	14
156	On Optoelectronic Processes in Organic Solar Cells: From Opaque to Transparent. Advanced Optical Materials, 2021, 9, 2001484.	7.3	14
157	Biomaterialâ€Based Solidâ€Electrolyte Organic Electrochemical Transistors for Electronic and Neuromorphic Applications. Advanced Electronic Materials, 2021, 7, 2100519.	5.1	14
158	Carrierâ€Selective Traps: A New Approach for Fabricating Circuit Elements with Ambipolar Organic Semiconductors. Advanced Electronic Materials, 2017, 3, 1600537.	5.1	13
159	Efficiency of Thermally Activated Delayed Fluorescence Sensitized Triplet Upconversion Doubled in Threeâ€Component System. Advanced Materials, 2022, 34, e2103976.	21.0	13
160	Understanding the Device Physics in Polymerâ∈Based Ionic–Organic Ratchets. Advanced Materials, 2017, 29, 1606464.	21.0	12
161	Structural variations to a donor polymer with low energy losses. Journal of Materials Chemistry A, 2017, 5, 18618-18626.	10.3	12
162	Conductive Polymer Work Function Changes due to Residual Water: Impact of Temperatureâ€Dependent Dielectric Constant. Advanced Electronic Materials, 2020, 6, 2000408.	5.1	12

#	Article	IF	Citations
163	Charge carrier mobility in a two-phase disordered organic system in the low-carrier concentration regime. Physical Review B, 2013, 88, .	3.2	11
164	What is the role of planarity and torsional freedom for aggregation in a π-conjugated donor–acceptor model oligomer?. Journal of Materials Chemistry C, 2020, 8, 4944-4955.	5.5	11
165	Optical Expediency of Back Electrode Materials for Organic Near-Infrared Photodiodes. ACS Applied Materials & Samp; Interfaces, 2021, 13, 27217-27226.	8.0	11
166	Ionic Tunability of Conjugated Polyelectrolyte Solutions. Macromolecules, 2022, 55, 3437-3448.	4.8	11
167	High light intensity effects on nanoscale open-circuit voltage for three common donor materials in bulk heterojunction solar cells. Energy and Environmental Science, 2013, 6, 1766.	30.8	10
168	Fullerene derivative induced morphology of bulk heterojunction blends: PIPCP:PC <sub>61</sub> BM. RSC Advances, 2019, 9, 4106-4112.	3.6	10
169	Orbital-Energy Modulation of Tetrabenzoporphyrin-Derived Non-Fullerene Acceptors for Improved Open-Circuit Voltage in Organic Solar Cells. Journal of Organic Chemistry, 2020, 85, 168-178.	3.2	10
170	Selective doping of a single ambipolar organic semiconductor to obtain P- and N-type semiconductors. Matter, 2022, 5, 2882-2897.	10.0	10
171	Tuning the Potential of Electron Extraction from Microbes with Ferroceneâ€Containing Conjugated Oligoelectrolytes. Advanced Biology, 2019, 3, 1800303.	3.0	9
172	Visualization of Charge Transfer from Bacteria to a Self-Doped Conjugated Polymer Electrode Surface Using Conductive Atomic Force Microscopy. ACS Applied Materials & Enterfaces, 2020, 12, 40778-40785.	8.0	9
173	Understanding the p-doping of spiroOMeTAD by tris(pentafluorophenyl)borane. Electrochimica Acta, 2022, 424, 140602.	5.2	9
174	First-Principles Study of Electron Mobility in Cationic and Anionic Conjugated Polyelectrolytes. Journal of Physical Chemistry C, 2012, 116, 1205-1210.	3.1	8
175	Elucidating Aggregation Pathways in the Donor–Acceptor Type Molecules p-DTS(FBTTh <sub>2</sub> ) <sub>2</sub> ). Journal of Physical Chemistry B, 2018, 122, 9191-9201.	2.6	8
176	Acceptor Percolation Determines How Electron-Accepting Additives Modify Transport of Ambipolar Polymer Organic Field-Effect Transistors. ACS Nano, 2018, 12, 7134-7140.	14.6	8
177	Efficient Fabrication of Organic Electrochemical Transistors via Wet Chemical Processing. ACS Applied Materials & District Science (1988) Applied Material	8.0	8
178	Twisted olefinic building blocks for low bandgap polymers in solar cells and ambipolar fieldâ€effect transistors. Journal of Polymer Science Part A, 2016, 54, 889-899.	2.3	7
179	Organic Photovoltaics. Advanced Energy Materials, 2018, 8, 1802706.	19.5	7
180	Theoretical study on the structure and property relationship of the cationic conjugated polyelectrolytes. Structural Chemistry, 2007, 18, 827-832.	2.0	6

#	Article	IF	CITATIONS
181	Nanostructure and Optoelectronic Characterization of Small Molecule Bulk Heterojunction Solar Cells by Photoconductive Atomic Force Microscopy. Advanced Functional Materials, 2010, 20, n/a-n/a.	14.9	5
182	Towards a Unified Macroscopic Description of Exciton Diffusion in Organic Semiconductors. Communications in Computational Physics, 2016, 20, 754-772.	1.7	5
183	Structural and optoelectronic properties of hybrid bulk-heterojunction materials based on conjugated small molecules and mesostructured TiO <sub>2</sub> . Applied Physics Letters, 2014, 104, 233305.	3.3	4
184	n-Type Ionic–Organic Electronic Ratchets for Energy Harvesting. ACS Applied Materials & amp; Interfaces, 2019, 11, 1081-1087.	8.0	3
185	Low Voltageâ€Loss Organic Solar Cells Light the Way for Efficient Semitransparent Photovoltaics. Solar Rrl, 2022, 6, .	5.8	3
186	Robust Unipolar Electron Conduction Using an Ambipolar Polymer Semiconductor with Solution-Processable Blends. Chemistry of Materials, 2020, 32, 6831-6837.	6.7	2
187	Multiwavelength Photodetectors Based on an Azobenzene Polymeric Ionic Liquid. ACS Applied Polymer Materials, 2021, 3, 5125-5133.	4.4	2
188	Transient grating spectroscopy of photocarrier dynamics in semiconducting polymer thin films. Applied Physics Letters, 2020, 117, .	3.3	2
189	ORGANIC SOLAR CELL MATERIALS AND DEVICES CHARACTERIZED BY CONDUCTIVE AND PHOTOCONDUCTIVE ATOMIC FORCE MICROSCOPY. World Scientific Series in Nanoscience and Nanotechnology, 2013, , 73-113.	0.1	1
190	Structure–Property Relationships: Effects of Heteroatom Substitutions on the Crystal Structure, Film Formation, and Optoelectronic Properties of Diketopyrrolopyrroleâ€Based Materials (Adv. Funct.) Tj ETQq0 (	O 01.44g/BT /	Overlock 10 1
191	Chargeâ€Carrier Recombination: Effects of Processing Conditions on the Recombination Reduction in Small Molecule Bulk Heterojunction Solar Cells (Adv. Energy Mater. 14/2014). Advanced Energy Materials, 2014, 4, .	19.5	1
192	Mesomorphic Behavior in Silver(I) N-(4-Pyridyl) Benzamide with Aromatic π–π Stacking Counterions. Materials, 2018, 11, 1666.	2.9	1
193	Crystallization: Effects of Stereoisomerism on the Crystallization Behavior and Optoelectrical Properties of Conjugated Molecules (Adv. Mater. 27/2013). Advanced Materials, 2013, 25, 3618-3618.	21.0	0
194	Organic Semiconductors: Rectifying Electrical Noise with an Ionicâ€Organic Ratchet (Adv. Mater.) Tj ETQq0 0 0 r	gBT / Over	lock 10 Tf 50
195	Solar Cells: Understanding Open-Circuit Voltage Loss through the Density of States in Organic Bulk Heterojunction Solar Cells (Adv. Energy Mater. 4/2016). Advanced Energy Materials, 2016, 6, n/a-n/a.	19.5	0
196	Semiconductor Blends: Fullerene Additives Convert Ambipolar Transport to p‶ype Transport while Improving the Operational Stability of Organic Thin Film Transistors (Adv. Funct. Mater. 25/2016). Advanced Functional Materials, 2016, 26, 4616-4616.	14.9	0
197	Organic Semiconductors: Carrierâ€6elective Traps: A New Approach for Fabricating Circuit Elements with Ambipolar Organic Semiconductors (Adv. Electron. Mater. 3/2017). Advanced Electronic Materials, 2017, 3, .	5.1	0
198	Energy Spotlight. ACS Energy Letters, 2020, 5, 3051-3052.	17.4	0

#	Article	IF	CITATIONS
199	Understanding Unconventional Doping Mechanisms in Organic Semiconductors., 0,,.		0
200	Editorial for the special issue of <i>Materials Horizons</i> in honor of Seth Marder. Materials Horizons, 2022, 9, 15-16.	12.2	0
201	Understanding Unconventional Doping Mechanisms in Organic Semiconductors. , 0, , .		0