FrÃ©dÃ©ric Laquai

List of Publications by Year
in descending order

202 papers	13,809 citations	19657 61 h-index	24982 109 g-index
208 all docs	208 docs citations	208 times ranked	14404 citing authors

#	Article	IF	Citations
1	Effect of Quencher, Geometry, and Light Outcoupling on the Determination of Exciton Diffusion Length in Nonfullerene Acceptors. Solar Rrl, 2022, 6, .	5.8	2
2	A Universal Cosolvent Evaporation Strategy Enables Direct Printing of Perovskite Single Crystals for Optoelectronic Device Applications. Advanced Materials, 2022, 34, e2109862.	21.0	18
3	Understanding the Role of Order in Yâ€Series Nonâ€Fullerene Solar Cells to Realize High Openâ€Circuit Voltages. Advanced Energy Materials, 2022, 12, .	19.5	32
4	Photo-induced enhancement of lattice fluctuations in metal-halide perovskites. Nature Communications, 2022, 13, 1019.	12.8	5
5	Quantum-size-tuned heterostructures enable efficient and stable inverted perovskite solar cells. Nature Photonics, 2022, 16, 352-358.	31.4	233
6	Self-assembly enables simple structure organic photovoltaics via green-solvent and open-air-printing: Closing the lab-to-fab gap. Materials Today, 2022, 55, 46-55.	14.2	23
7	Probing Ultrafast Interfacial Carrier Dynamics in Metal Halide Perovskite Films and Devices by Transient Reflection Spectroscopy. ACS Applied Materials & Interfaces, 2022, 14, 34281-34290.	8.0	5
8	Light-induced activation of boron doping in hydrogenated amorphous silicon for over 25% efficiency silicon solar cells. Nature Energy, 2022, 7, 427-437.	39.5	50
9	Mechanistic insights into photochemical nickel-catalyzed cross-couplings enabled by energy transfer. Nature Communications, 2022, 13, 2737.	12.8	30
10	Efficient and stable perovskite-silicon tandem solar cells through contact displacement by MgF <i> _x </i>. Science, 2022, 377, 302-306.	12.6	141
11	Doubleâ€Cable Conjugated Polymers with Pendent Nearâ€Infrared Electron Acceptors for Singleâ€Component Organic Solar Cells. Angewandte Chemie - International Edition, 2022, 61, .	13.8	28
12	An effective method of reconnoitering currentâ€“voltage (<i>IV</i>) characteristics of organic solar cells. Journal of Applied Physics, 2022, 132, .	2.5	2
13	The Energy Level Conundrum of Organic Semiconductors in Solar Cells. Advanced Materials, 2022, 34, .	21.0	72
14	Photophysics of Defect-Passivated Quasi-2D (PEA)₂PbBr₄ Perovskite Using an Organic Small Molecule. ACS Energy Letters, 2022, 7, 2450-2458.	17.4	8
15	Engineering of dendritic dopant-free hole transport molecules: enabling ultrahigh fill factor in perovskite solar cells with optimized dendron construction. Science China Chemistry, 2021, 64, 41-51.	8.2	55
16	Scaling-up perovskite solar cells on hydrophobic surfaces. Nano Energy, 2021, 81, 105633.	16.0	46
17	Charge Photogeneration in Nonâ€Fullerene Organic Solar Cells: Influence of Excess Energy and Electrostatic Interactions. Advanced Functional Materials, 2021, 31, 2007479.	14.9	31
18	Intrinsic efficiency limits in low-bandgap non-fullerene acceptor organic solar cells. Nature Materials, 2021, 20, 378-384.	27.5	257

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19	The role of spin in the degradation of organic photovoltaics. Nature Communications, 2021, 12, 471.	12.8	16
20	Impact of Photoluminescence Reabsorption in Metalâ€Halide Perovskite Solar Cells. Solar Rrl, 2021, 5, 2100029.	5.8	9
21	Heat generation and mitigation in silicon solar cells and modules. Joule, 2021, 5, 631-645.	24.0	38
22	Tin Oxide Electronâ€Selective Layers for Efficient, Stable, and Scalable Perovskite Solar Cells. Advanced Materials, 2021, 33, e2005504.	21.0	196
23	18.4â€‰% Organic Solar Cells Using a High Ionization Energy Selfâ€Assembled Monolayer as Holeâ€Extraction Interlayer. ChemSusChem, 2021, 14, 3569-3578.	6.8	121
24	Impact of Acceptor Quadrupole Moment on Charge Generation and Recombination in Blends of IDTâ€Based Nonâ€Fullerene Acceptors with PCE10 as Donor Polymer. Advanced Energy Materials, 2021, 11, 2100839.	19.5	23
25	Concurrent cationic and anionic perovskite defect passivation enables 27.4% perovskite/silicon tandems with suppression of halide segregation. Joule, 2021, 5, 1566-1586.	24.0	119
26	Understanding the Charge Transfer State and Energy Loss Trade-offs in Non-fullerene-Based Organic Solar Cells. ACS Energy Letters, 2021, 6, 3408-3416.	17.4	40
27	Revealing the Sideâ€Chainâ€Dependent Ordering Transition of Highly Crystalline Doubleâ€Cable Conjugated Polymers. Angewandte Chemie - International Edition, 2021, 60, 25499-25507.	13.8	31
28	Revealing the Sideâ€Chainâ€Dependent Ordering Transition of Highly Crystalline Doubleâ€Cable Conjugated Polymers. Angewandte Chemie, 2021, 133, 25703-25711.	2.0	3
29	Ligand-bridged charge extraction and enhanced quantum efficiency enable efficient nâ€“iâ€“p perovskite/silicon tandem solar cells. Energy and Environmental Science, 2021, 14, 4377-4390.	30.8	79
30	Uphill and downhill charge generation from charge transfer to charge separated states in organic solar cells. Journal of Materials Chemistry C, 2021, 9, 14463-14489.	5.5	10
31	Chemical Design Rules for Nonâ€Fullerene Acceptors in Organic Solar Cells. Advanced Energy Materials, 2021, 11, 2102363.	19.5	38
32	Printed Memtransistor Utilizing a Hybrid Perovskite/Organic Heterojunction Channel. ACS Applied Materials & Interfaces, 2021, 13, 51592-51601.	8.0	9
33	Charge Carrier Recombination at Perovskite/Hole Transport Layer Interfaces Monitored by Time-Resolved Spectroscopy. ACS Energy Letters, 2021, 6, 4155-4164.	17.4	20
34	28.2%-efficient, outdoor-stable perovskite/silicon tandem solar cell. Joule, 2021, 5, 3169-3186.	24.0	99
35	Chemical Design Rules for Nonâ€Fullerene Acceptors in Organic Solar Cells (Adv. Energy Mater.) Tj ETQq1 1 0.784314 rgBT /Overlock	19.5	2
36	Room-temperature multiple ligands-tailored SnO2 quantum dots endow in situ dual-interface binding for upscaling efficient perovskite photovoltaics with high VOC. Light: Science and Applications, 2021, 10, 239.	16.6	40

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37	Impact of Residual Lead Iodide on Photophysical Properties of Lead Triiodide Perovskite Solar Cells. Energy Technology, 2020, 8, 1900627.	3.8	10
38	Design, Synthesis and Selective Functionalization of a Rigid, Truxene Derived Pure Blueâ€Emitting Chromophore. ChemistrySelect, 2020, 5, 109-116.	1.5	3
39	Novel wide-bandgap non-fullerene acceptors for efficient tandem organic solar cells. Journal of Materials Chemistry A, 2020, 8, 1164-1175.	10.3	39
40	Afterglow Effects as a Tool to Screen Emissive Nongeminate Charge Recombination Processes in Organic Photovoltaic Composites. ACS Applied Materials & Interfaces, 2020, 12, 2695-2707.	8.0	5
41	Deciphering the Role of Fluorination: Morphological Manipulation Prompts Charge Separation and Reduces Carrier Recombination in Allâ€Smallâ€Molecule Photovoltaics. Solar Rrl, 2020, 4, 1900528.	5.8	27
42	Long-range exciton diffusion in molecular non-fullerene acceptors. Nature Communications, 2020, 11, 5220.	12.8	204
43	How Humidity and Light Exposure Change the Photophysics of Metal Halide Perovskite Solar Cells. Solar Rrl, 2020, 4, 2000382.	5.8	23
44	Miscibilityâ€Controlled Phase Separation in Doubleâ€Cable Conjugated Polymers for Singleâ€Component Organic Solar Cells with Efficiencies over 8â€‰%. Angewandte Chemie - International Edition, 2020, 59, 21683-21692.	13.8	82
45	Miscibilityâ€Controlled Phase Separation in Doubleâ€Cable Conjugated Polymers for Singleâ€Component Organic Solar Cells with Efficiencies over 8â€‰%. Angewandte Chemie, 2020, 132, 21867-21876.	2.0	18
46	Micron Thick Colloidal Quantum Dot Solids. Nano Letters, 2020, 20, 5284-5291.	9.1	47
47	Ultrafast Charge Dynamics in Dilute-Donor versus Highly Intermixed TAPC:C₆₀ Organic Solar Cell Blends. Journal of Physical Chemistry Letters, 2020, 11, 5610-5617.	4.6	15
48	Monolayer Perovskite Bridges Enable Strong Quantum Dot Coupling for Efficient Solar Cells. Joule, 2020, 4, 1542-1556.	24.0	143
49	Buildup of Triplet-State Population in Operating TQ1:PC₇₁BM Devices Does Not Limit Their Performance. Journal of Physical Chemistry Letters, 2020, 11, 2838-2845.	4.6	30
50	17.1% Efficient Singleâ€Junction Organic Solar Cells Enabled by nâ€Type Doping of the Bulkâ€Heterojunction. Advanced Science, 2020, 7, 1903419.	11.2	173
51	Ecoâ€Friendly Spray Deposition of Perovskite Films on Macroscale Textured Surfaces. Advanced Materials Technologies, 2020, 5, 1901009.	5.8	23
52	Impact of Cesium/Rubidium Incorporation on the Photophysics of Multipleâ€Cation Lead Halide Perovskites. Solar Rrl, 2020, 4, 2000072.	5.8	13
53	Ligand-Assisted Reconstruction of Colloidal Quantum Dots Decreases Trap State Density. Nano Letters, 2020, 20, 3694-3702.	9.1	46
54	Quantification of Photophysical Processes in Allâ€Polymer Bulk Heterojunction Solar Cells. Solar Rrl, 2020, 4, 2000181.	5.8	8

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55	Thienyl Sidechain Substitution and Backbone Fluorination of Benzodithiophene-Based Donor Polymers Concertedly Minimize Carrier Losses in ITIC-Based Organic Solar Cells. Journal of Physical Chemistry C, 2020, 124, 10420-10429.	3.1	10
56	Enhanced photocatalytic hydrogen evolution from organic semiconductor heterojunction nanoparticles. Nature Materials, 2020, 19, 559-565.	27.5	366
57	Impact of Fullerene on the Photophysics of Ternary Small Molecule Organic Solar Cells. Advanced Energy Materials, 2019, 9, 1901443.	19.5	37
58	Impact of polymorphism on the optoelectronic properties of a low-bandgap semiconducting polymer. Nature Communications, 2019, 10, 2867.	12.8	89
59	17% Efficient Organic Solar Cells Based on Liquid Exfoliated WS₂ as a Replacement for PEDOT:PSS. Advanced Materials, 2019, 31, e1902965.	21.0	500
60	Enhancing the Charge Extraction and Stability of Perovskite Solar Cells Using Strontium Titanate (SrTiO₃) Electron Transport Layer. ACS Applied Energy Materials, 2019, 2, 8090-8097.	5.1	51
61	Highly Crystalline Near-Infrared Acceptor Enabling Simultaneous Efficiency and Photostability Boosting in High-Performance Ternary Organic Solar Cells. ACS Applied Materials & Interfaces, 2019, 11, 48095-48102.	8.0	30
62	Carrier Extraction from Perovskite to Polymeric Charge Transport Layers Probed by Ultrafast Transient Absorption Spectroscopy. Journal of Physical Chemistry Letters, 2019, 10, 6921-6928.	4.6	19
63	Terminal group engineering for small-molecule donors boosts the performance of nonfullerene organic solar cells. Journal of Materials Chemistry A, 2019, 7, 2541-2546.	10.3	45
64	Direct and Energy-Transfer-Mediated Charge-Transfer State Formation and Recombination in Triangulene-Spacer-Perylenediimide Multichromophores: Lessons for Photovoltaic Applications. Journal of Physical Chemistry C, 2019, 123, 16602-16613.	3.1	11
65	Triarylphosphine Oxide as Cathode Interfacial Material for Inverted Perovskite Solar Cells. Advanced Materials Interfaces, 2019, 6, 1900434.	3.7	16
66	P3HT Molecular Weight Determines the Performance of P3HT:Oâ€IDTBR Solar Cells. Solar Rrl, 2019, 3, 1900023.	5.8	27
67	Key Parameters Requirements for Nonâ€Fullereneâ€Based Organic Solar Cells with Power Conversion Efficiency >20%. Advanced Science, 2019, 6, 1802028.	11.2	149
68	Negligible Energy Loss During Charge Generation in Small-Molecule/Fullerene Bulk-Heterojunction Solar Cells Leads to Open-Circuit Voltage over 1.10 V. ACS Applied Energy Materials, 2019, 2, 2717-2722.	5.1	27
69	Higher Mobility and Carrier Lifetimes in Solutionâ€Processable Smallâ€Molecule Ternary Solar Cells with 11% Efficiency. Advanced Energy Materials, 2019, 9, 1802836.	19.5	65
70	Charge and Triplet Exciton Generation in Neat PC₇₀BM Films and Hybrid CuSCN:PC₇₀BM Solar Cells. Advanced Energy Materials, 2019, 9, 1802476.	19.5	20
71	Impact of Nonfullerene Acceptor Core Structure on the Photophysics and Efficiency of Polymer Solar Cells. ACS Energy Letters, 2018, 3, 802-811.	17.4	46
72	Triphenylamine-Based Pushâ€“Pull Ïƒâ€“C₆₀ Dyad As Photoactive Molecular Material for Single-Component Organic Solar Cells: Synthesis, Characterizations, and Photophysical Properties. Chemistry of Materials, 2018, 30, 3474-3485.	6.7	58

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73	Mixed Domains Enhance Charge Generation and Extraction in Bulkâ€Heterojunction Solar Cells with Smallâ€Molecule Donors. Advanced Energy Materials, 2018, 8, 1702941.	19.5	43
74	Organic solar cells based on anthracene-containing PPEâ€“PPVs and non-fullerene acceptors. Chemical Papers, 2018, 72, 1769-1778.	2.2	6
75	Efficiency-limiting processes in cyclopentadithiophene-bridged donor-acceptor-type dyes for solid-state dye-sensitized solar cells. Journal of Chemical Physics, 2018, 148, 044703.	3.0	12
76	Highâ€Efficiency Fullerene Solar Cells Enabled by a Spontaneously Formed Mesostructured CuSCNâ€Nanowire Heterointerface. Advanced Science, 2018, 5, 1700980.	11.2	19
77	Control of triplet state generation in heavy atom-free BODIPYâ€“anthracene dyads by media polarity and structural factors. Physical Chemistry Chemical Physics, 2018, 20, 8016-8031.	2.8	96
78	Solvent Vapor Annealing-Mediated Crystallization Directs Charge Generation, Recombination and Extraction in BHJ Solar Cells. Chemistry of Materials, 2018, 30, 789-798.	6.7	48
79	Charge Photogeneration and Recombination in Mesostructured CuSCNâ€Nanowire/PC₇₀BM Solar Cells. Solar Rrl, 2018, 2, 1800095.	5.8	9
80	BODIPYâ€Pyrene and Perylene Dyads as Heavyâ€Atomâ€Free Singlet Oxygen Sensitizers. ChemPhotoChem, 2018, 2, 606-615.	3.0	66
81	Thermal annealing reduces geminate recombination in TQ1:N2200 all-polymer solar cells. Journal of Materials Chemistry A, 2018, 6, 7428-7438.	10.3	45
82	From Recombination Dynamics to Device Performance: Quantifying the Efficiency of Exciton Dissociation, Charge Separation, and Extraction in Bulk Heterojunction Solar Cells with Fluorineâ€Substituted Polymer Donors. Advanced Energy Materials, 2018, 8, 1701678.	19.5	33
83	Impact of Structural Polymorphs on Charge Collection and Nongeminate Recombination in Organic Photovoltaic Devices. Journal of Physical Chemistry C, 2018, 122, 29141-29149.	3.1	5
84	Room-Temperature-Sputtered Nanocrystalline Nickel Oxide as Hole Transport Layer for pâ€“iâ€“n Perovskite Solar Cells. ACS Applied Energy Materials, 2018, 1, 6227-6233.	5.1	88
85	A Universal Doubleâ€Side Passivation for High Openâ€Circuit Voltage in Perovskite Solar Cells: Role of Carbonyl Groups in Poly(methyl methacrylate). Advanced Energy Materials, 2018, 8, 1801208.	19.5	387
86	Efficient long-range electron transfer processes in polyfluoreneâ€“perylene diimide blends. Nanoscale, 2018, 10, 10934-10944.	5.6	8
87	Progress in Poly (3â€Hexylthiophene) Organic Solar Cells and the Influence of Its Molecular Weight on Device Performance. Advanced Energy Materials, 2018, 8, 1801001.	19.5	95
88	Wideâ€Bandgap Small Molecular Acceptors Based on a Weak Electronâ€Withdrawing Moiety for Efficient Polymer Solar Cells. Solar Rrl, 2018, 2, 1800120.	5.8	30
89	Programmable and coherent crystallization of semiconductors. Science Advances, 2017, 3, e1602462.	10.3	35
90	Generation of Triplet Excited States via Photoinduced Electron Transfer in <i>meso</i>-anthra-BODIPY: Fluorogenic Response toward Singlet Oxygen in Solution and in Vitro. Journal of the American Chemical Society, 2017, 139, 6282-6285.	13.7	248

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91	Thieno[3,4â€‹<i>c</i>]Pyrroleâ€4,6â€Dioneâ€Based Polymer Acceptors for High Openâ€Circuit Voltage Allâ€Polymer Solar Cells. Advanced Energy Materials, 2017, 7, 1602574.	19.5	77
92	Trap-Free Hot Carrier Relaxation in Leadâ€“Halide Perovskite Films. Journal of Physical Chemistry C, 2017, 121, 11201-11206.	3.1	43
93	Charge Carrier Generation, Recombination, and Extraction in Polymerâ€“Fullerene Bulk Heterojunction Organic Solar Cells. Advances in Polymer Science, 2017, , 267-291.	0.8	20
94	Polymer Mainâ€Chain Substitution Effects on the Efficiency of Nonfullerene BHJ Solar Cells. Advanced Energy Materials, 2017, 7, 1700834.	19.5	80
95	Molecular Doping of the Hole-Transporting Layer for Efficient, Single-Step-Deposited Colloidal Quantum Dot Photovoltaics. ACS Energy Letters, 2017, 2, 1952-1959.	17.4	45
96	Improved Morphology and Efficiency of nâ€“iâ€“p Planar Perovskite Solar Cells by Processing with Glycol Ether Additives. ACS Energy Letters, 2017, 2, 1960-1968.	17.4	47
97	Performance limitations in thieno[3,4-c]pyrrole-4,6-dione-based polymer:ITIC solar cells. Physical Chemistry Chemical Physics, 2017, 19, 23990-23998.	2.8	29
98	Hybrid organicâ€“inorganic inks flatten the energy landscape in colloidal quantum dotÂsolids. Nature Materials, 2017, 16, 258-263.	27.5	563
99	Synthesis of Functional Block Copolymers Carrying One Poly(<i>p</i>-phenylenevinylene) and One Nonconjugated Block in a Facile One-Pot Procedure. Macromolecules, 2016, 49, 2085-2095.	4.8	15
100	Hollow nanoporous covalent triazine frameworks via acid vapor-assisted solid phase synthesis for enhanced visible light photoactivity. Journal of Materials Chemistry A, 2016, 4, 7555-7559.	10.3	114
101	Loss mechanisms in organic solar cells based on perylene diimide acceptors studied by time-resolved photoluminescence. Proceedings of SPIE, 2016, , .	0.8	1
102	Highly Efficient Electrocatalysts for Oxygen Reduction Reaction Based on 1D Ternary Doped Porous Carbons Derived from Carbon Nanotube Directed Conjugated Microporous Polymers. Advanced Functional Materials, 2016, 26, 8255-8265.	14.9	65
103	High-efficiency and air-stable P3HT-based polymer solar cells with a new non-fullerene acceptor. Nature Communications, 2016, 7, 11585.	12.8	1,053
104	Mesostructured Fullerene Electrodes for Highly Efficient nâ€“iâ€“p Perovskite Solar Cells. ACS Energy Letters, 2016, 1, 1049-1056.	17.4	37
105	Ferroelastic Fingerprints in Methylammonium Lead Iodide Perovskite. Journal of Physical Chemistry C, 2016, 120, 5724-5731.	3.1	154
106	Cooperative supramolecular polymerization of an amine-substituted naphthalene-diimide and its impact on excited state photophysical properties. Chemical Science, 2016, 7, 1115-1120.	7.4	44
107	Ï€-Bridge-Independent 2-(Benzo[<i>c</i>][1,2,5]thiadiazol-4-ylmethylene)malononitrile-Substituted Nonfullerene Acceptors for Efficient Bulk Heterojunction Solar Cells. Chemistry of Materials, 2016, 28, 2200-2208.	6.7	98
108	Conjugated Microporous Polymers with Dimensionalityâ€Controlled Heterostructures for Green Energy Devices. Advanced Materials, 2015, 27, 3789-3796.	21.0	210

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109	Effect of Charge Transfer in Magnetic-Plasmonic Au@MO_{<i>x</i>} (M = Mn, Fe) Heterodimers on the Kinetics of Nanocrystal Formation. Chemistry of Materials, 2015, 27, 4877-4884.	6.7	45
110	Charge Carrier Generation Followed by Triplet State Formation, Annihilation, and Carrier Recreation in PBDTTT-C/PC₆₀BM Photovoltaic Blends. Journal of Physical Chemistry C, 2015, 119, 13509-13515.	3.1	56
111	A Heteroleptic Pushâ€"Pull Substituted Iron(II) Bis(tridentate) Complex with Lowâ€Energy Chargeâ€Transfer States. Chemistry - A European Journal, 2015, 21, 704-714.	3.3	84
112	Interplay Between Side Chain Pattern, Polymer Aggregation, and Charge Carrier Dynamics in PBDTTPD:PCBM Bulkâ€Heterojunction Solar Cells. Advanced Energy Materials, 2015, 5, 1401778.	19.5	64
113	Sub-ns triplet state formation by non-geminate recombination in PSBTBT:PC₇₀BM and PCPDTBT:PC₆₀BM organic solar cells. Energy and Environmental Science, 2015, 8, 1511-1522.	30.8	67
114	J-aggregation, its impact on excited state dynamics and unique solvent effects on macroscopic assembly of a core-substituted naphthalenediimide. Nanoscale, 2015, 7, 6729-6736.	5.6	54
115	A spiro-bifluorene based 3D electron acceptor with dicyanovinylene substitution for solution-processed non-fullerene organic solar cells. Journal of Materials Chemistry A, 2015, 3, 11086-11092.	10.3	34
116	Triplet State Formation in Photovoltaic Blends of DPPâ€Type Copolymers and PC₇₁BM. Macromolecular Rapid Communications, 2015, 36, 1122-1128.	3.9	24
117	Charge Carrier Transport and Photogeneration in P3HT:PCBM Photovoltaic Blends. Macromolecular Rapid Communications, 2015, 36, 1001-1025.	3.9	80
118	The Impact of Donorâ€"Acceptor Phase Separation on the Charge Carrier Dynamics in pBTTT:PCBM Photovoltaic Blends. Macromolecular Rapid Communications, 2015, 36, 1054-1060.	3.9	29
119	Photovoltaic Polymer-Fullerene Blends: Terahertz Carrier Dynamics and Device Performance. , 2015, , .		0
120	Interplay between singlet and triplet excited states in a conformationally locked donorâ€"acceptor dyad. Dalton Transactions, 2015, 44, 19207-19217.	3.3	9
121	Application of hybrid blocking layers in solid-state dye-sensitized solar cells. SpringerPlus, 2015, 4, 502.	1.2	1
122	Photo-generated carriers lose energy during extraction from polymer-fullerene solar cells. Nature Communications, 2015, 6, 8778.	12.8	100
123	Bimolecular Crystals with an Intercalated Structure Improve Poly(<i>p</i>â€phenylenevinylene)â€Based Organic Photovoltaic Cells. ChemSusChem, 2015, 8, 337-344.	6.8	10
124	High open-circuit voltage small-molecule p-DTS(FBTTh₂)₂:ICBA bulk heterojunction solar cells â€" morphology, excited-state dynamics, and photovoltaic performance. Journal of Materials Chemistry A, 2015, 3, 1530-1539.	10.3	35
125	Inorganic Janus particles for biomedical applications. Beilstein Journal of Nanotechnology, 2014, 5, 2346-2362.	2.8	61
126	Two Channels of Charge Generation in Perylene Monoimide Solidâ€State Dyeâ€Sensitized Solar Cells. Advanced Energy Materials, 2014, 4, 1300640.	19.5	18

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127	Nonequilibrium Charge Dynamics in Organic Solar Cells. Advanced Energy Materials, 2014, 4, 1301743.	19.5	50
128	All-round perovskites. Nature Materials, 2014, 13, 429-430.	27.5	18
129	Correlated Donor/Acceptor Crystal Orientation Controls Photocurrent Generation in Allâ€Polymer Solar Cells. Advanced Functional Materials, 2014, 24, 4068-4081.	14.9	144
130	Tuning Reductive and Oxidative Photoinduced Electron Transfer in Amide-Linked Anthraquinone-Porphyrin-Ferrocene Architectures. European Journal of Inorganic Chemistry, 2014, 2014, 1984-2001.	2.0	30
131	Influence of triplet excitons on the lifetime of polymer-based organic light emitting diodes. Physica Status Solidi (A) Applications and Materials Science, 2014, 211, 2035-2039.	1.8	5
132	Ultrafast Terahertz Photoconductivity of Photovoltaic Polymerâ€"Fullerene Blends: A Comparative Study Correlated with Photovoltaic Device Performance. Journal of Physical Chemistry Letters, 2014, 5, 3662-3668.	4.6	52
133	Control of charge generation and recombination in ternary polymer/polymer:fullerene photovoltaic blends using amorphous and semi-crystalline copolymers as donors. Physical Chemistry Chemical Physics, 2014, 16, 20329-20337.	2.8	30
134	Aminoferrocene and Ferrocene Amino Acid as Electron Donors in Modular Porphyrinâ€"Ferrocene and Porphyrinâ€"Ferroceneâ€"Porphyrin Conjugates. European Journal of Inorganic Chemistry, 2014, 2014, 2902-2915.	2.0	23
135	Efficiency-Limiting Processes in Low-Bandgap Polymer:Perylene Diimide Photovoltaic Blends. Journal of Physical Chemistry C, 2014, 118, 20077-20085.	3.1	30
136	Modification of the Active Layer/PEDOT:PSS Interface by Solvent Additives Resulting in Improvement of the Performance of Organic Solar Cells. ACS Applied Materials & Interfaces, 2014, 6, 11068-11081.	8.0	16
137	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
138	Multifunctional Two-Photon Active Silica-Coated Au@MnO Janus Particles for Selective Dual Functionalization and Imaging. Journal of the American Chemical Society, 2014, 136, 2473-2483.	13.7	146
139	Selfâ€Assembly of Carboxylic Acid Appended Naphthalene Diimide Derivatives with Tunable Luminescent Color and Electrical Conductivity. Chemistry - A European Journal, 2014, 20, 760-771.	3.3	98
140	Observing Charge Dynamics in Surface Reactions by Time-Resolved Stark Effects. Journal of Physical Chemistry C, 2013, 117, 9171-9177.	3.1	14
141	Twoâ€Dimensional Sandwichâ€Type, Grapheneâ€Based Conjugated Microporous Polymers. Angewandte Chemie - International Edition, 2013, 52, 9668-9672.	13.8	220
142	Excited State Tuning of Bis(tridentate) Ruthenium(II) Polypyridine Chromophores by Pushâ€"Pull Effects and Bite Angle Optimization: A Comprehensive Experimental and Theoretical Study. Chemistry - A European Journal, 2013, 19, 13745-13760.	3.3	74
143	Plasmon-enhanced photocurrent in quasi-solid-state dye-sensitized solar cells by the inclusion of gold/silica coreâ€"shell nanoparticles in a TiO2 photoanode. Journal of Materials Chemistry A, 2013, 1, 12627.	10.3	24
144	Porphyrin amino acidsâ€"amide coupling, redox and photophysical properties of bis(porphyrin) amides. Dalton Transactions, 2013, 42, 9727.	3.3	12

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145	Boron-Ï€-nitrogen-based conjugated porous polymers with multi-functions. Journal of Materials Chemistry A, 2013, 1, 13878.	10.3	67
146	Controlled energy shuttling in terpolymers enabling independent optimization of absorption and transport properties in organic solar cell materials. Applied Physics Letters, 2012, 101, 231104.	3.3	1
147	Comparative study of conventional and hybrid blocking layers for solid-state dye-sensitized solar cells. Physical Chemistry Chemical Physics, 2012, 14, 1607-1613.	2.8	30
148	Arrays of Aligned Supramolecular Wires by Macroscopic Orientation of Columnar Discotic Mesophases. ACS Nano, 2012, 6, 9359-9365.	14.6	50
149	Correlation of micellar structures with surface-plasmon-coupled fluorescence in a strategy for fluorescence enhancement. Journal of Materials Chemistry, 2012, 22, 24727.	6.7	12
150	Aggregation in a High-Mobility n-Type Low-Bandgap Copolymer with Implications on Semicrystalline Morphology. Journal of the American Chemical Society, 2012, 134, 18303-18317.	13.7	395
151	Parallel Pool Analysis of Transient Spectroscopy Reveals Origins of and Perspectives for ZnO Hybrid Solar Cell Performance Enhancement Using Semiconducting Surfactants. Journal of Physical Chemistry Letters, 2012, 3, 2665-2670.	4.6	7
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