Martin Heeney

List of Publications by Year
in descending order

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354 papers	29,695 citations	3731 89 h-index	5829 161 g-index
375 all docs	375 docs citations	375 times ranked	17562 citing authors

#	Article	IF	Citations
1	Liquid-crystalline semiconducting polymers with high charge-carrier mobility. Nature Materials, 2006, 5, 328-333.	27.5	2,001
2	nâ€Type Organic Semiconductors in Organic Electronics. Advanced Materials, 2010, 22, 3876-3892.	21.0	1,077
3	Thieno[3,2-b]thiopheneâ"Diketopyrrolopyrrole-Containing Polymers for High-Performance Organic Field-Effect Transistors and Organic Photovoltaic Devices. Journal of the American Chemical Society, 2011, 133, 3272-3275.	13.7	854
4	Charge Carrier Formation in Polythiophene/Fullerene Blend Films Studied by Transient Absorption Spectroscopy. Journal of the American Chemical Society, 2008, 130, 3030-3042.	13.7	602
5	Indacenodithiophene Semiconducting Polymers for High-Performance, Air-Stable Transistors. Journal of the American Chemical Society, 2010, 132, 11437-11439.	13.7	529
6	Highâ€Performance Ambipolar Diketopyrrolopyrroleâ€Thieno[3,2â€b]thiophene Copolymer Fieldâ€Effect Transistors with Balanced Hole and Electron Mobilities. Advanced Materials, 2012, 24, 647-652.	21.0	521
7	Influence of blend microstructure on bulk heterojunction organic photovoltaic performance. Chemical Society Reviews, 2011, 40, 1185-1199.	38.1	511
8	Recent Progress in Highâ€Mobility Organic Transistors: A Reality Check. Advanced Materials, 2018, 30, e1801079.	21.0	498
9	An Alkylated Indacenodithieno[3,2â€b]thiopheneâ€Based Nonfullerene Acceptor with High Crystallinity Exhibiting Single Junction Solar Cell Efficiencies Greater than 13% with Low Voltage Losses. Advanced Materials, 2018, 30, 1705209.	21.0	474
10	Molecular origin of high field-effect mobility in an indacenodithiopheneâ€"benzothiadiazole copolymer. Nature Communications, 2013, 4, 2238.	12.8	456
11	Fullerenecrystallisation as a key driver of charge separation in polymer/fullerene bulk heterojunction solar cells. Chemical Science, 2012, 3, 485-492.	7.4	418
12	Semiconducting Thienothiophene Copolymers: Design, Synthesis, Morphology, and Performance in Thinâ€Film Organic Transistors. Advanced Materials, 2009, 21, 1091-1109.	21.0	412
13	Bimolecular Crystals of Fullerenes in Conjugated Polymers and the Implications of Molecular Mixing for Solar Cells. Advanced Functional Materials, 2009, 19, 1173-1179.	14.9	392
14	Molecular Packing of High-Mobility Diketo Pyrrolo-Pyrrole Polymer Semiconductors with Branched Alkyl Side Chains. Journal of the American Chemical Society, 2011, 133, 15073-15084.	13.7	381
15	X-ray Scattering Study of Thin Films of Poly(2,5-bis(3-alkylthiophen-2-yl)thieno[3,2-b]thiophene). Journal of the American Chemical Society, 2007, 129, 3226-3237.	13.7	351
16	Highâ€Performance Polymerâ€Small Molecule Blend Organic Transistors. Advanced Materials, 2009, 21, 1166-1171.	21.0	351
17	2D coherent charge transport in highly orderedÂconducting polymers doped by solid stateÂdiffusion. Nature Materials, 2016, 15, 896-902.	27.5	346
18	Stable Polythiophene Semiconductors Incorporating Thieno[2,3-b]thiophene. Journal of the American Chemical Society, 2005, 127, 1078-1079.	13.7	343

#	Article	IF	Citations
19	Regioregular poly(3-hexyl)selenophene: a low band gap organic hole transporting polymer. Chemical Communications, 2007, , 5061.	4.1	322
20	Critical Role of Side-Chain Attachment Density on the Order and Device Performance of Polythiophenes. Macromolecules, 2007, 40, 7960-7965.	4.8	321
21	A Selenopheneâ€Based Lowâ€Bandgap Donorâ€“Acceptor Polymer Leading to Fast Ambipolar Logic. Advanced Materials, 2012, 24, 1558-1565.	21.0	313
22	Hybridization of Local Exciton and Charge-Transfer States Reduces Nonradiative Voltage Losses in Organic Solar Cells. Journal of the American Chemical Society, 2019, 141, 6362-6374.	13.7	307
23	Chargeâ€Transport Anisotropy Due to Grain Boundaries in Directionally Crystallized Thin Films of Regioregular Poly(3â€hexylthiophene). Advanced Materials, 2009, 21, 1568-1572.	21.0	305
24	High Carrier Mobility Polythiophene Thin Films: Structure Determination by Experiment and Theory. Advanced Materials, 2007, 19, 833-837.	21.0	276
25	The impact of molecular weight on microstructure and charge transport in semicrystalline polymer semiconductorsâ€“poly(3-hexylthiophene), a model study. Progress in Polymer Science, 2013, 38, 1978-1989.	24.7	274
26	Molecular-weight dependence of interchain polaron delocalization and exciton bandwidth in high-mobility conjugated polymers. Physical Review B, 2006, 74, .	3.2	262
27	The Effect of Poly(3â€hexylthiophene) Molecular Weight on Charge Transport and the Performance of Polymer:Fullerene Solar Cells. Advanced Functional Materials, 2008, 18, 2373-2380.	14.9	256
28	A Simple n-Dopant Derived from Diquat Boosts the Efficiency of Organic Solar Cells to 18.3%. ACS Energy Letters, 2020, 5, 3663-3671.	17.4	253
29	Tuning the Properties of Polymer Bulk Heterojunction Solar Cells by Adjusting Fullerene Size to Control Intercalation. Nano Letters, 2009, 9, 4153-4157.	9.1	243
30	Undoped polythiophene field-effect transistors with mobility of 1cm2Vâˆ’1sâˆ’1. Applied Physics Letters, 2007, 91, .	3.3	223
31	Solutionâ€Processed Small Moleculeâ€Polymer Blend Organic Thinâ€Film Transistors with Hole Mobility Greater than 5 cm²/Vs. Advanced Materials, 2012, 24, 2441-2446.	21.0	219
32	Influence of Backbone Fluorination in Regioregular Poly(3-alkyl-4-fluoro)thiophenes. Journal of the American Chemical Society, 2015, 137, 6866-6879.	13.7	211
33	Correlations between Mechanical and Electrical Properties of Polythiophenes. ACS Nano, 2010, 4, 7538-7544.	14.6	210
34	Copper(I) Thiocyanate (CuSCN) Holeâ€Transport Layers Processed from Aqueous Precursor Solutions and Their Application in Thinâ€Film Transistors and Highly Efficient Organic and Organometal Halide Perovskite Solar Cells. Advanced Functional Materials, 2017, 27, 1701818.	14.9	208
35	Solution-processed organic transistors based on semiconducting blends. Journal of Materials Chemistry, 2010, 20, 2562.	6.7	201
36	Polymer-Fullerene Miscibility: A Metric for Screening New Materials for High-Performance Organic Solar Cells. Journal of the American Chemical Society, 2012, 134, 15869-15879.	13.7	196

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37	Systematic Improvement in Charge Carrier Mobility of Air Stable Triarylamine Copolymers. Journal of the American Chemical Society, 2009, 131, 10814-10815.	13.7	186
38	High Mobility Ambipolar Charge Transport in Polyselenophene Conjugated Polymers. Advanced Materials, 2010, 22, 2371-2375.	21.0	178
39	Toward Stretchable Selfâ€Powered Sensors Based on the Thermoelectric Response of PEDOT:PSS/Polyurethane Blends. Advanced Functional Materials, 2018, 28, 1704285.	14.9	171
40	Transient Optoelectronic Analysis of Charge Carrier Losses in a Selenophene/Fullerene Blend Solar Cell. Journal of Physical Chemistry C, 2011, 115, 5947-5957.	3.1	170
41	Low band gap selenopheneâ€“diketopyrrolopyrrolepolymers exhibiting high and balanced ambipolar performance in bottom-gate transistors. Chemical Science, 2012, 3, 181-185.	7.4	169
42	Anisotropy of Charge Transport in a Uniaxially Aligned and Chainâ€Extended, Highâ€Mobility, Conjugated Polymer Semiconductor. Advanced Functional Materials, 2011, 21, 932-940.	14.9	166
43	Small Molecule/Polymer Blend Organic Transistors with Hole Mobility Exceeding 13 cm² V^{â^'1} s^{â^'1}. Advanced Materials, 2016, 28, 7791-7798.	21.0	166
44	Beyond the metal-insulator transition in polymer electrolyte gated polymer field-effect transistors. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 11834-11837.	7.1	165
45	Indacenodithiophene-co-benzothiadiazole Copolymers for High Performance Solar Cells or Transistors via Alkyl Chain Optimization. Macromolecules, 2011, 44, 6649-6652.	4.8	165
46	Controlling the Orientation of Terraced Nanoscale â€œRibbonsâ€•of a Poly(thiophene) Semiconductor. ACS Nano, 2009, 3, 780-787.	14.6	160
47	On the role of intermixed phases in organic photovoltaic blends. Energy and Environmental Science, 2013, 6, 2756.	30.8	157
48	Thiophene and Selenophene Copolymers Incorporating Fluorinated Phenylene Units in the Main Chain:â€‰ Synthesis, Characterization, and Application in Organic Field-Effect Transistors. Chemistry of Materials, 2005, 17, 6567-6578.	6.7	154
49	Studies of Highly Regioregular Poly(3â€hexylselenophene) for Photovoltaic Applications. Advanced Materials, 2007, 19, 4544-4547.	21.0	154
50	Influence of Molecular Weight Distribution on the Gelation of P3HT and Its Impact on the Photovoltaic Performance. Macromolecules, 2009, 42, 4661-4666.	4.8	153
51	Doping Approaches for Organic Semiconductors. Chemical Reviews, 2022, 122, 4420-4492.	47.7	153
52	Electrochemical Doping in Electrolyte-Gated Polymer Transistors. Journal of the American Chemical Society, 2007, 129, 14367-14371.	13.7	145
53	Fused Dithienogermolodithiophene Low Band Gap Polymers for High-Performance Organic Solar Cells without Processing Additives. Journal of the American Chemical Society, 2013, 135, 2040-2043.	13.7	145
54	Activated Singlet Exciton Fission in a Semiconducting Polymer. Journal of the American Chemical Society, 2013, 135, 12747-12754.	13.7	143

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55	Significant dependence of morphology and charge carrier mobility on substrate surface chemistry in high performance polythiophene semiconductor films. Applied Physics Letters, 2007, 90, 062117.	3.3	136
56	Roomâ€Temperature Fabrication of Ultrathin Oxide Gate Dielectrics for Lowâ€Voltage Operation of Organic Fieldâ€Effect Transistors. Advanced Materials, 2011, 23, 971-974.	21.0	136
57	Comparison of Methods for Determining the Mechanical Properties of Semiconducting Polymer Films for Stretchable Electronics. ACS Applied Materials & Interfaces, 2017, 9, 8855-8862.	8.0	136
58	Highâ€Efficiency Organic Photovoltaic Cells Based on the Solutionâ€Processable Hole Transporting Interlayer Copper Thiocyanate (CuSCN) as a Replacement for PEDOT:PSS. Advanced Energy Materials, 2015, 5, 1401529.	19.5	133
59	Sequential Deposition of Organic Films with Ecoâ€Compatible Solvents Improves Performance and Enables Over 12%â€Efficiency Nonfullerene Solar Cells. Advanced Materials, 2019, 31, e1808153.	21.0	132
60	Remarkable Enhancement of the Hole Mobility in Several Organic Smallâ€Molecules, Polymers, and Smallâ€Molecule:Polymer Blend Transistors by Simple Admixing of the Lewis Acid pâ€Dopant B(C₆F₅)₃. Advanced Science, 2018, 5, 1700290.	11.2	131
61	Acceptor Energy Level Control of Charge Photogeneration in Organic Donor/Acceptor Blends. Journal of the American Chemical Society, 2010, 132, 12919-12926.	13.7	128
62	Silaindacenodithiophene Semiconducting Polymers for Efficient Solar Cells and High-Mobility Ambipolar Transistors. Chemistry of Materials, 2011, 23, 768-770.	6.7	126
63	Use of Xâ€Ray Diffraction, Molecular Simulations, and Spectroscopy to Determine the Molecular Packing in a Polymerâ€Fullerene Bimolecular Crystal. Advanced Materials, 2012, 24, 6071-6079.	21.0	126
64	High Mobility Fieldâ€Effect Transistors with Versatile Processing from a Smallâ€Molecule Organic Semiconductor. Advanced Materials, 2013, 25, 4352-4357.	21.0	126
65	Airâ€Stable and Highâ€Mobility nâ€Channel Organic Transistors Based on Smallâ€Molecule/Polymer Semiconducting Blends. Advanced Materials, 2012, 24, 3205-3211.	21.0	121
66	The Effect of Interfacial Roughness on the Thin Film Morphology and Charge Transport of Highâ€Performance Polythiophenes. Advanced Functional Materials, 2008, 18, 742-750.	14.9	120
67	The Influence of Film Morphology in Highâ€Mobility Smallâ€Molecule:Polymer Blend Organic Transistors. Advanced Functional Materials, 2010, 20, 2330-2337.	14.9	120
68	A Novel Alkylated Indacenodithieno[3,2â€b]thiopheneâ€Based Polymer for Highâ€Performance Fieldâ€Effect Transistors. Advanced Materials, 2016, 28, 3922-3927.	21.0	117
69	Influence of Molecular Design on the Field-Effect Transistor Characteristics of Terthiophene Polymers. Chemistry of Materials, 2005, 17, 1381-1385.	6.7	116
70	Effect of Systematically Tuning Conjugated Donor Polymer Lowest Unoccupied Molecular Orbital Levels via Cyano Substitution on Organic Photovoltaic Device Performance. Chemistry of Materials, 2016, 28, 5110-5120.	6.7	115
71	Molecular Basis of Mesophase Ordering in a Thiophene-Based Copolymer. Macromolecules, 2008, 41, 5709-5715.	4.8	114
72	Microwave-assisted synthesis of polythiophenes via the Stille coupling. Synthetic Metals, 2005, 148, 195-198.	3.9	113

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73	Singlet Exciton Lifetimes in Conjugated Polymer Films for Organic Solar Cells. Polymers, 2016, 8, 14.	4.5	111
74	Organic bulk heterojunction solar cells using poly(2,5-bis(3-tetradecyllthiophen-2-yl)thieno[3,2,-b]thiophene). Applied Physics Letters, 2008, 92, .	3.3	110
75	Doping of Conjugated Polythiophenes with Alkyl Silanes. Advanced Functional Materials, 2009, 19, 1906-1911.	14.9	107
76	Polaron Localization at Interfaces in Highâ€Mobility Microcrystalline Conjugated Polymers. Advanced Materials, 2009, 21, 3759-3763.	21.0	105
77	Thermal and Structural Characteristics of Oligo(3-hexylthiophene)s (3HT)_n, n = 4â€“36. Journal of the American Chemical Society, 2013, 135, 13699-13709.	13.7	105
78	Alkylated Selenophene-Based Ladder-Type Monomers via a Facile Route for High-Performance Thin-Film Transistor Applications. Journal of the American Chemical Society, 2017, 139, 8552-8561.	13.7	105
79	Role of Molecular Weight Distribution on Charge Transport in Semiconducting Polymers. Macromolecules, 2014, 47, 7151-7157.	4.8	102
80	Highly Efficient Patterning of Organic Singleâ€Crystal Transistors from the Solution Phase. Advanced Materials, 2008, 20, 4044-4048.	21.0	100
81	Polymerisable liquid crystalline organic semiconductors and their fabrication in organic field effect transistors. Journal of Materials Chemistry, 2003, 13, 2436.	6.7	99
82	Factors Governing Intercalation of Fullerenes and Other Small Molecules Between the Side Chains of Semiconducting Polymers Used in Solar Cells. Advanced Energy Materials, 2012, 2, 1208-1217.	19.5	97
83	Influence of Side-Chain Regiochemistry on the Transistor Performance of High-Mobility, All-Donor Polymers. Journal of the American Chemical Society, 2014, 136, 15154-15157.	13.7	97
84	Lamination Method for the Study of Interfaces in Polymeric Thin Film Transistors. Journal of the American Chemical Society, 2004, 126, 13928-13929.	13.7	96
85	Effect of the End Group of Regioregular Poly(3-hexylthiophene) Polymers on the Performance of Polymer/Fullerene Solar Cells. Journal of Physical Chemistry C, 2007, 111, 8137-8141.	3.1	96
86	Ambipolar Field-Effect Transistors Based on Solution-Processable Blends of Thieno[2,3-b]thiophene Terthiophene Polymer and Methanofullerenes. Advanced Materials, 2005, 17, 2608-2612.	21.0	93
87	Understanding the Influence of Morphology on Poly(3-hexylselenothiophene):PCBM Solar Cells. Macromolecules, 2010, 43, 1169-1174.	4.8	92
88	Photovoltaic and field effect transistor performance of selenophene and thiophene diketopyrrolopyrrole co-polymers with dithienothiophene. Journal of Materials Chemistry, 2012, 22, 12817.	6.7	92
89	A low band gap co-polymer of dithienogermole and 2,1,3-benzothiadiazole by Suzuki polycondensation and its application in transistor and photovoltaic cells. Journal of Materials Chemistry, 2011, 21, 16257.	6.7	91
90	Influence of Phase Segregation on Recombination Dynamics in Organic Bulkâ€Heterojunction Solar Cells. Advanced Functional Materials, 2011, 21, 1687-1692.	14.9	90

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91	Natures of optical absorption transitions and excitation energy dependent photostability of diketopyrrolopyrrole (DPP)-based photovoltaic copolymers. Energy and Environmental Science, 2015, 8, 3222-3232.	30.8	90
92	Polyterthiophenes as Donors for Polymer Solar Cells. Advanced Functional Materials, 2007, 17, 1371-1376.	14.9	89
93	Enabling high-mobility, ambipolar charge-transport in a DPP-benzotriazole copolymer by side-chain engineering. Chemical Science, 2015, 6, 6949-6960.	7.4	89
94	Cyano substituted benzothiadiazole: a novel acceptor inducing n-type behaviour in conjugated polymers. Journal of Materials Chemistry C, 2015, 3, 265-275.	5.5	89
95	â€œFibonacciâ€™s Routeâ€•to Regioregular Oligo(3-hexylthiophene)s. Journal of the American Chemical Society, 2013, 135, 13695-13698.	13.7	86
96	Relative importance of polaron activation and disorder on charge transport in high-mobility conjugated polymer field-effect transistors. Physical Review B, 2007, 76, .	3.2	84
97	Influence of the heteroatom on the optoelectronic properties and transistor performance of soluble thiophene-, selenophene- and telluropheneâ€“vinylene copolymers. Chemical Science, 2016, 7, 1093-1099.	7.4	84
98	Tetradiketone macrocycle for divalent aluminium ion batteries. Nature Communications, 2021, 12, 2386.	12.8	84
99	Continuous Synthesis of Deviceâ€Grade Semiconducting Polymers in Dropletâ€Based Microreactors. Advanced Functional Materials, 2013, 23, 2123-2129.	14.9	83
100	Alkylidene Fluorene Liquid Crystalline Semiconducting Polymers for Organic Field Effect Transistor Devices. Macromolecules, 2004, 37, 5250-5256.	4.8	80
101	Structural characterisation of a red phthalocyanine. Chemical Communications, 2003, , 2064.	4.1	78
102	Effects of Confinement on Microstructure and Charge Transport in High Performance Semicrystalline Polymer Semiconductors. Advanced Functional Materials, 2013, 23, 2091-2098.	14.9	77
103	Domain Compositions and Fullerene Aggregation Govern Charge Photogeneration in Polymer/Fullerene Solar Cells. Advanced Energy Materials, 2014, 4, 1400116.	19.5	77
104	Carboraneâ€Induced Excimer Emission of Severely Twisted Bisâ€oâ€Carboranyl Chrysene. Angewandte Chemie - International Edition, 2018, 57, 10640-10645.	13.8	77
105	Solidâ€State Supramolecular Organization of Polythiophene Chains Containing Thienothiophene Units. Advanced Materials, 2009, 21, 1193-1198.	21.0	76
106	Microstructural Origin of High Mobility in Highâ€Performance Poly(thienoâ€thiophene) Thinâ€Film Transistors. Advanced Materials, 2010, 22, 697-701.	21.0	75
107	A Close Look at Charge Generation in Polymer:Fullerene Blends with Microstructure Control. Journal of the American Chemical Society, 2015, 137, 2908-2918.	13.7	75
108	Entanglements in marginal solutions: a means of tuning pre-aggregation of conjugated polymers with positive implications for charge transport. Journal of Materials Chemistry C, 2015, 3, 7394-7404.	5.5	75

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109	High-performance organic integrated circuits based on solution processable polymer-small molecule blends. Applied Physics Letters, 2008, 93, .	3.3	74
110	The phase behavior of a polymerâ€fullerene bulk heterojunction system that contains bimolecular crystals. Journal of Polymer Science, Part B: Polymer Physics, 2011, 49, 499-503.	2.1	71
111	Material Crystallinity as a Determinant of Triplet Dynamics and Oxygen Quenching in Donor Polymers for Organic Photovoltaic Devices. Advanced Functional Materials, 2014, 24, 1474-1482.	14.9	71
112	Effects of a Heavy Atom on Molecular Order and Morphology in Conjugated Polymer:Fullerene Photovoltaic Blend Thin Films and Devices. ACS Nano, 2012, 6, 9646-9656.	14.6	70
113	Facile infiltration of semiconducting polymer into mesoporous electrodes for hybrid solar cells. Energy and Environmental Science, 2011, 4, 3051.	30.8	68
114	Influence of Ion Induced Local Coulomb Field and Polarity on Charge Generation and Efficiency in Poly(3â€Hexylthiophene)â€Based Solidâ€State Dyeâ€Sensitized Solar Cells. Advanced Functional Materials, 2011, 21, 2571-2579.	14.9	68
115	Thiophene fluorination to enhance photovoltaic performance in low band gap donorâ€“acceptor polymers. Chemical Communications, 2012, 48, 11130.	4.1	68
116	Inâ€Plane Liquid Crystalline Texture of Highâ€Performance Thienothiophene Copolymer Thin Films. Advanced Functional Materials, 2010, 20, 4098-4106.	14.9	67
117	Photoinduced Carrier Generation and Decay Dynamics in Intercalated and Non-intercalated Polymer:Fullerene Bulk Heterojunctions. ACS Nano, 2011, 5, 5635-5646.	14.6	67
118	Alkyl Chain Extension as a Route to Novel Thieno[3,2-b]thiophene Flanked Diketopyrrolopyrrole Polymers for Use in Organic Solar Cells and Field Effect Transistors. Macromolecules, 2013, 46, 5961-5967.	4.8	67
119	Effects of the surface roughness of plastic-compatible inorganic dielectrics on polymeric thin film transistors. Applied Physics Letters, 2007, 90, 233508.	3.3	66
120	Thioalkyl-Substituted Benzothiadiazole Acceptors: Copolymerization with Carbazole Affords Polymers with Large Stokes Shifts and High Solar Cell Voltages. Macromolecules, 2014, 47, 2279-2288.	4.8	66
121	High mobility p-channel organic field effect transistors on flexible substrates using a polymer-small molecule blend. Synthetic Metals, 2009, 159, 2365-2367.	3.9	65
122	Tail state limited photocurrent collection of thick photoactive layers in organic solar cells. Nature Communications, 2019, 10, 5159.	12.8	65
123	Charge photogeneration in polythiopheneâ€“perylene diimide blend films. Chemical Communications, 2009, , 5445.	4.1	64
124	Addition of the Lewis Acid Zn(C₆F₅)₂ Enables Organic Transistors with a Maximum Hole Mobility in Excess of 20 cm² V^{â^'1} s^{â^'1}. Advanced Materials, 2019, 31, e1900871.	21.0	64
125	Electronic Structure and Charge-Transport Properties of Polythiophene Chains Containing Thienothiophene Units: A Joint Experimental and Theoretical Study. Chemistry of Materials, 2007, 19, 4949-4956.	6.7	63
126	The Impact of Molecular pâ€Doping on Charge Transport in Highâ€Mobility Smallâ€Molecule/Polymer Blend Organic Transistors. Advanced Electronic Materials, 2018, 4, 1700464.	5.1	63

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127	Importance of Spin-Orbit Interaction for the Electron Spin Relaxation in Organic Semiconductors. Physical Review Letters, 2013, 110, 216602.	7.8	62
128	Hexyl-substituted oligothiophenes with a central tetrafluorophenylene unit: crystal engineering of planar structures for p-type organic semiconductors. Chemical Communications, 2005, , 1465.	4.1	61
129	Local Charge Trapping in Conjugated Polymers Resolved by Scanning Kelvin Probe Microscopy. Physical Review Letters, 2009, 103, 256803.	7.8	61
130	Phthalocyaninodehydroannulenes. Chemistry - A European Journal, 2000, 6, 3958-3967.	3.3	59
131	Influence of the Electron Deficient Coâ€Monomer on the Optoelectronic Properties and Photovoltaic Performance of Dithienogermoleâ€based Coâ€Polymers. Advanced Functional Materials, 2014, 24, 678-687.	14.9	59
132	Using Molecular Design to Increase Hole Transport: Backbone Fluorination in the Benchmark Material		

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145	Radical ion pair mediated triplet formation in polymerâ€“fullerene blend films. Chemical Communications, 2006, , 3939-3941.	4.1	51
146	Structural and Electronic Effects of 1,3,4-Thiadiazole Units Incorporated into Polythiophene Chains. Macromolecules, 2007, 40, 6585-6593.	4.8	50
147	Elucidating the role of hyperfine interactions on organic magnetoresistance using deuterated aluminium tris(8-hydroxyquinoline). Physical Review B, 2009, 80, .	3.2	50
148	An alignable fluorene thienothiophene copolymer with deep-blue electroluminescent emission at 410Ânm. Chemical Communications, 2008, , 1079.	4.1	49
149	Synthesis, Characterization, and Field Effect Transistor Properties of Regioregular Poly(3-alkyl-2,5-selenylenevinylene). Macromolecules, 2011, 44, 5194-5199.	4.8	49
150	Conjugated Copolymers of Vinylene Flanked Naphthalene Diimide. Macromolecules, 2016, 49, 6384-6393.	4.8	49
151	Alternating 5,5-Dimethylcyclopentadiene and Diketopyrrolopyrrole Copolymer Prepared at Room Temperature for High Performance Organic Thin-Film Transistors. Journal of the American Chemical Society, 2017, 139, 8094-8097.	13.7	49
152	Deciphering photocarrier dynamics for tuneable high-performance perovskite-organic semiconductor heterojunction phototransistors. Nature Communications, 2019, 10, 4475.	12.8	49
153	A Systematic Approach to the Design Optimization of Lightâ€Absorbing Indenofluorene Polymers for Organic Photovoltaics. Advanced Energy Materials, 2012, 2, 260-265.	19.5	48
154	The influence of microstructure on charge separation dynamics in organic bulk heterojunction materials for solar cell applications. Journal of Materials Chemistry A, 2014, 2, 6218-6230.	10.3	48
155	Post-polymerisation functionalisation of conjugated polymer backbones and its application in multi-functional emissive nanoparticles. Nature Communications, 2018, 9, 3237.	12.8	48
156	Influence of source-drain electric field on mobility and charge transport in organic field-effect transistors. Journal of Applied Physics, 2007, 102, .	2.5	47
157	Solidâ€State Processing of Organic Semiconductors. Advanced Materials, 2010, 22, 3942-3947.	21.0	46
158	Percolation behaviour in high mobility p-channel polymer/small-molecule blend organic field-effect transistors. Organic Electronics, 2011, 12, 143-147.	2.6	46
159	Germaniumâ€and Siliconâ€Substituted Donorâ€“Acceptor Type Copolymers: Effect of the Bridging Heteroatom on Molecular Packing and Photovoltaic Device Performance. Advanced Energy Materials, 2014, 4, 1400527.	19.5	46
160	Increased Exciton Dipole Moment Translates into Charge-Transfer Excitons in Thiophene-Fluorinated Low-Bandgap Polymers for Organic Photovoltaic Applications. Chemistry of Materials, 2015, 27, 7934-7944.	6.7	46
161	Impact of backbone fluorination on nanoscale morphology and excitonic coupling in polythiophenes. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 5113-5118.	7.1	46
162	Direct Correlation of Charge Transfer Absorption with Molecular Donor:Acceptor Interfacial Area via Photothermal Deflection Spectroscopy. Journal of the American Chemical Society, 2015, 137, 5256-5259.	13.7	45

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163	Bulk Heterojunction Materials Composed of Poly(2,5-bis(3-tetradecylthiophen-2-yl)thieno[3,2-b]thiophene): Ultrafast Electron Transfer and Carrier Recombination. Journal of Physical Chemistry C, 2008, 112, 7853-7857.	3.1	44
164	The influence of polymer purification on the efficiency of poly(3-hexylthiophene):fullerene organic solar cells. Scientific Reports, 2016, 6, 23651.	3.3	44
165	Comparative Optoelectronic Study between Copolymers of Peripherally Alkylated Dithienosilole and Dithienogermole. Macromolecules, 2012, 45, 735-742.	4.8	42
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