

Thomas D Anthopoulos

List of Publications by Year in descending order

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436
papers

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3334

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docs citations

449
times ranked

22113
citing authors

#	ARTICLE	IF	CITATIONS
1	Morphology evolution via self-organization and lateral and vertical diffusion in polymer:fullerene solar cell blends. <i>Nature Materials</i> , 2008, 7, 158-164.	27.5	1,396
2	Managing grains and interfaces via ligand anchoring enables 22.3%-efficiency inverted perovskite solar cells. <i>Nature Energy</i> , 2020, 5, 131-140.	39.5	894
3	Thieno[3,2- <i>b</i>]thiophene- <i>2,5</i> -Diketopyrrolopyrrole-Containing Polymers for High-Performance Organic Field-Effect Transistors and Organic Photovoltaic Devices. <i>Journal of the American Chemical Society</i> , 2011, 133, 3272-3275.	13.7	854
4	Organic Transistors in Optical Displays and Microelectronic Applications. <i>Advanced Materials</i> , 2010, 22, 3778-3798.	21.0	576
5	Indacenodithiophene Semiconducting Polymers for High-Performance, Air-Stable Transistors. <i>Journal of the American Chemical Society</i> , 2010, 132, 11437-11439.	13.7	529
6	High-Performance Ambipolar Diketopyrrolopyrrole-Thieno[3,2- <i>b</i>]thiophene Copolymer Field-Effect Transistors with Balanced Hole and Electron Mobilities. <i>Advanced Materials</i> , 2012, 24, 647-652.	21.0	521
7	Metal oxide semiconductor thin-film transistors for flexible electronics. <i>Applied Physics Reviews</i> , 2016, 3, 021303.	11.3	511
8	17% Efficient Organic Solar Cells Based on Liquid Exfoliated WS ₂ as a Replacement for PEDOT:PSS. <i>Advanced Materials</i> , 2019, 31, e1902965.	21.0	500
9	Recent Progress in High-Mobility Organic Transistors: A Reality Check. <i>Advanced Materials</i> , 2018, 30, e1801079.	21.0	498
10	An Alkylated Indacenodithieno[3,2- <i>b</i>]thiophene-Based Nonfullerene Acceptor with High Crystallinity Exhibiting Single Junction Solar Cell Efficiencies Greater than 13% with Low Voltage Losses. <i>Advanced Materials</i> , 2018, 30, 1705209.	21.0	474
11	Molecular origin of high field-effect mobility in an indacenodithiophene-benzothiadiazole copolymer. <i>Nature Communications</i> , 2013, 4, 2238.	12.8	456
12	Self-Assembled Monolayer Enables Hole Transport Layer-Free Organic Solar Cells with 18% Efficiency and Improved Operational Stability. <i>ACS Energy Letters</i> , 2020, 5, 2935-2944.	17.4	425
13	Molecular Packing of High-Mobility Diketo Pyrrolo-Pyrrole Polymer Semiconductors with Branched Alkyl Side Chains. <i>Journal of the American Chemical Society</i> , 2011, 133, 15073-15084.	13.7	381
14	Damp heat-stable perovskite solar cells with tailored-dimensionality 2D/3D heterojunctions. <i>Science</i> , 2022, 376, 73-77.	12.6	366
15	High-Performance Polymer-Small Molecule Blend Organic Transistors. <i>Advanced Materials</i> , 2009, 21, 1166-1171.	21.0	351
16	Diketopyrrolopyrrole-Diketopyrrolopyrrole-Based Conjugated Copolymer for High-Mobility Organic Field-Effect Transistors. <i>Journal of the American Chemical Society</i> , 2012, 134, 16532-16535.	13.7	339
17	Transistors based on two-dimensional materials for future integrated circuits. <i>Nature Electronics</i> , 2021, 4, 786-799.	26.0	335
18	Hybridization of Local Exciton and Charge-Transfer States Reduces Nonradiative Voltage Losses in Organic Solar Cells. <i>Journal of the American Chemical Society</i> , 2019, 141, 6362-6374.	13.7	307

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19	Ambipolar Organic Field-Effect Transistors Based on a Solution-Processed Methanofullerene. <i>Advanced Materials</i> , 2004, 16, 2174-2179.	21.0	276
20	Intrinsic efficiency limits in low-bandgap non-fullerene acceptor organic solar cells. <i>Nature Materials</i> , 2021, 20, 378-384.	27.5	257
21	A Simple n-Dopant Derived from Diquat Boosts the Efficiency of Organic Solar Cells to 18.3%. <i>ACS Energy Letters</i> , 2020, 5, 3663-3671.	17.4	253
22	Solution-processable metal oxide semiconductors for thin-film transistor applications. <i>Chemical Society Reviews</i> , 2013, 42, 6910.	38.1	250
23	High performance n-channel organic field-effect transistors and ring oscillators based on C60 fullerene films. <i>Applied Physics Letters</i> , 2006, 89, 213504.	3.3	239
24	Air-Stable Complementary-like Circuits Based on Organic Ambipolar Transistors. <i>Advanced Materials</i> , 2006, 18, 1900-1904.	21.0	224
25	Quantum Dots Supply Bulk- and Surface-Passivation Agents for Efficient and Stable Perovskite Solar Cells. <i>Joule</i> , 2019, 3, 1963-1976.	24.0	222
26	Solution-Processed Small Molecule-Polymer Blend Organic Thin-Film Transistors with Hole Mobility Greater than $5 \text{ cm}^2/\text{Vs}$. <i>Advanced Materials</i> , 2012, 24, 2441-2446.	21.0	219
27	High-Mobility Low-Voltage ZnO and Li-Doped ZnO Transistors Based on ZrO_2 High-Dielectric Grown by Spray Pyrolysis in Ambient Air. <i>Advanced Materials</i> , 2011, 23, 1894-1898.	21.0	217
28	Copper(I) Thiocyanate (CuSCN) Hole-Transport Layers Processed from Aqueous Precursor Solutions and Their Application in Thin-Film Transistors and Highly Efficient Organic and Organometal Halide Perovskite Solar Cells. <i>Advanced Functional Materials</i> , 2017, 27, 1701818.	14.9	208
29	Chlorine Vacancy Passivation in Mixed Halide Perovskite Quantum Dots by Organic Pseudohalides Enables Efficient Rec. 2020 Blue Light-Emitting Diodes. <i>ACS Energy Letters</i> , 2020, 5, 793-798.	17.4	208
30	Real-Time Investigation of Crystallization and Phase Segregation Dynamics in P3HT:PCBM Solar Cells During Thermal Annealing. <i>Advanced Functional Materials</i> , 2011, 21, 1701-1708.	14.9	207
31	Long-range exciton diffusion in molecular non-fullerene acceptors. <i>Nature Communications</i> , 2020, 11, 5220.	12.8	204
32	Solution-processed organic transistors based on semiconducting blends. <i>Journal of Materials Chemistry</i> , 2010, 20, 2562.	6.7	201
33	High-Performance Zinc Oxide Transistors and Circuits Fabricated by Spray Pyrolysis in Ambient Atmosphere. <i>Advanced Materials</i> , 2009, 21, 2226-2231.	21.0	197
34	Hole-Transporting Transistors and Circuits Based on the Transparent Inorganic Semiconductor Copper(I) Thiocyanate (CuSCN) Processed from Solution at Room Temperature. <i>Advanced Materials</i> , 2013, 25, 1504-1509.	21.0	196
35	Air-stable ambipolar organic transistors. <i>Applied Physics Letters</i> , 2007, 90, 122105.	3.3	194
36	Systematic Improvement in Charge Carrier Mobility of Air Stable Triarylamine Copolymers. <i>Journal of the American Chemical Society</i> , 2009, 131, 10814-10815.	13.7	186

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37	Organic complementary-like inverters employing methanofullerene-based ambipolar field-effect transistors. Applied Physics Letters, 2004, 85, 4205-4207.	3.3	179
38	High-Efficiency, Solution-Processed, Multilayer Phosphorescent Organic Light-Emitting Diodes with a Copper Thiocyanate Hole-Injection/Hole-Transport Layer. Advanced Materials, 2015, 27, 93-100.	21.0	178
39	Silaindacenodithiophene-Based Low Band Gap Polymers – The Effect of Fluorine Substitution on Device Performances and Film Morphologies. Advanced Functional Materials, 2012, 22, 1663-1670.	14.9	177
40	Solution-Processable Red Phosphorescent Dendrimers for Light-Emitting Device Applications. Advanced Materials, 2004, 16, 557-560.	21.0	175
41	17.1% Efficient Single-Junction Organic Solar Cells Enabled by n-Type Doping of the Bulk-Heterojunction. Advanced Science, 2020, 7, 1903419.	11.2	173
42	Over 14% efficiency all-polymer solar cells enabled by a low bandgap polymer acceptor with low energy loss and efficient charge separation. Energy and Environmental Science, 2020, 13, 5017-5027.	30.8	170
43	Ambipolar charge transport in organic field-effect transistors. Physical Review B, 2006, 73, .	3.2	169
44	Low band gap selenophene-diketopyrrolopyrrole polymers exhibiting high and balanced ambipolar performance in bottom-gate transistors. Chemical Science, 2012, 3, 181-185.	7.4	169
45	Electric field-induced hole transport in copper(i) thiocyanate (CuSCN) thin-films processed from solution at room temperature. Chemical Communications, 2013, 49, 4154-4156.	4.1	169
46	Small Molecule/Polymer Blend Organic Transistors with Hole Mobility Exceeding $13 \text{ cm}^2/\text{Vs}$. Advanced Materials, 2016, 28, 7791-7798.	21.0	166
47	Indacenodithiophene-co-benzothiadiazole Copolymers for High Performance Solar Cells or Transistors via Alkyl Chain Optimization. Macromolecules, 2011, 44, 6649-6652.	4.8	165
48	Generation of long-lived charges in organic semiconductor heterojunction nanoparticles for efficient photocatalytic hydrogen evolution. Nature Energy, 2022, 7, 340-351.	39.5	164
49	Printable CsPbI ₃ Perovskite Solar Cells with PCE of 19% via an Additive Strategy. Advanced Materials, 2020, 32, e2001243.	21.0	157
50	High-Performance ZnO Transistors Processed Via an Aqueous Carbon-Free Metal Oxide Precursor Route at Temperatures Between 80–180 °C. Advanced Materials, 2013, 25, 4340-4346.	21.0	156
51	Doping Approaches for Organic Semiconductors. Chemical Reviews, 2022, 122, 4420-4492.	47.7	153
52	High mobility n-channel organic field-effect transistors based on soluble C60 and C70 fullerene derivatives. Synthetic Metals, 2008, 158, 468-472.	3.9	151
53	Key Parameters Requirements for Non-Fullerene-Based Organic Solar Cells with Power Conversion Efficiency >20%. Advanced Science, 2019, 6, 1802028.	11.2	149
54	Encapsulated Cores: Host-Free Organic Light-Emitting Diodes Based on Solution-Processible Electrophosphorescent Dendrimers. Advanced Materials, 2005, 17, 1945-1948.	21.0	148

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55	Heterojunction oxide thin-film transistors with unprecedented electron mobility grown from solution. <i>Science Advances</i> , 2017, 3, e1602640.	10.3	148
56	Fused Dithienogermolodithiophene Low Band Gap Polymers for High-Performance Organic Solar Cells without Processing Additives. <i>Journal of the American Chemical Society</i> , 2013, 135, 2040-2043.	13.7	145
57	Near-Infrared Light-Emitting Ambipolar Organic Field-Effect Transistors. <i>Advanced Materials</i> , 2007, 19, 734-738.	21.0	140
58	High Electron Mobility Thin-Film Transistors Based on Solution-Processed Semiconducting Metal Oxide Heterojunctions and Quasi-Superlattices. <i>Advanced Science</i> , 2015, 2, 1500058.	11.2	134
59	Electrolyte Engineering Enables High Stability and Capacity Alloying Anodes for Sodium and Potassium Ion Batteries. <i>ACS Energy Letters</i> , 2020, 5, 766-776.	17.4	134
60	High-Efficiency Organic Photovoltaic Cells Based on the Solution-Processable Hole Transporting Interlayer Copper Thiocyanate (CuSCN) as a Replacement for PEDOT:PSS. <i>Advanced Energy Materials</i> , 2015, 5, 1401529.	19.5	133
61	Remarkable Enhancement of the Hole Mobility in Several Organic Small-Molecule, Polymers, and Small-Molecule:Polymer Blend Transistors by Simple Admixing of the Lewis Acid p-Dopant B(C ₆ F ₅) ₃ . <i>Advanced Science</i> , 2018, 5, 1700290.	11.2	131
62	The Influence of Polymer Purification on Photovoltaic Device Performance of a Series of Indacenodithiophene Donor Polymers. <i>Advanced Materials</i> , 2013, 25, 2029-2034.	21.0	129
63	Highly efficient single-layer dendrimer light-emitting diodes with balanced charge transport. <i>Applied Physics Letters</i> , 2003, 82, 4824-4826.	3.3	128
64	Silaindacenodithiophene Semiconducting Polymers for Efficient Solar Cells and High-Mobility Ambipolar Transistors. <i>Chemistry of Materials</i> , 2011, 23, 768-770.	6.7	126
65	High Mobility Field-Effect Transistors with Versatile Processing from a Small-Molecule Organic Semiconductor. <i>Advanced Materials</i> , 2013, 25, 4352-4357.	21.0	126
66	Metal Halide Perovskites for High-Energy Radiation Detection. <i>Advanced Science</i> , 2020, 7, 2002098.	11.2	126
67	Low-voltage ZnO thin-film transistors based on Y ₂ O ₃ and Al ₂ O ₃ high-k dielectrics deposited by spray pyrolysis in air. <i>Applied Physics Letters</i> , 2011, 98, 123503.	3.3	122
68	Interfacial Model Deciphering High-Voltage Electrolytes for High Energy Density, High Safety, and Fast-Charging Lithium-Ion Batteries. <i>Advanced Materials</i> , 2021, 33, e2102964.	21.0	122
69	Air-Stable and High-Mobility n-Channel Organic Transistors Based on Small-Molecule/Polymer Semiconducting Blends. <i>Advanced Materials</i> , 2012, 24, 3205-3211.	21.0	121
70	18.4% Organic Solar Cells Using a High Ionization Energy Self-Assembled Monolayer as Hole-Extraction Interlayer. <i>ChemSusChem</i> , 2021, 14, 3569-3578.	6.8	121
71	The Influence of Film Morphology in High-Mobility Small-Molecule:Polymer Blend Organic Transistors. <i>Advanced Functional Materials</i> , 2010, 20, 2330-2337.	14.9	120
72	Fullerene/Cobalt Porphyrin Hybrid Nanosheets with Ambipolar Charge Transporting Characteristics. <i>Journal of the American Chemical Society</i> , 2012, 134, 7204-7206.	13.7	119

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73	Concurrent cationic and anionic perovskite defect passivation enables 27.4% perovskite/silicon tandems with suppression of halide segregation. <i>Joule</i> , 2021, 5, 1566-1586.	24.0	119
74	A Novel Alkylated Indacenodithieno[3,2-b]thiophene-Based Polymer for High-Performance Field-Effect Transistors. <i>Advanced Materials</i> , 2016, 28, 3922-3927.	21.0	117
75	Metal-Halide Perovskite Transistors for Printed Electronics: Challenges and Opportunities. <i>Advanced Materials</i> , 2017, 29, 1702838.	21.0	117
76	Effect of Systematically Tuning Conjugated Donor Polymer Lowest Unoccupied Molecular Orbital Levels via Cyano Substitution on Organic Photovoltaic Device Performance. <i>Chemistry of Materials</i> , 2016, 28, 5110-5120.	6.7	115
77	Low-voltage organic transistors based on solution processed semiconductors and self-assembled monolayer gate dielectrics. <i>Applied Physics Letters</i> , 2008, 93, .	3.3	111
78	Random benzotrithiophene-based donor-acceptor copolymers for efficient organic photovoltaic devices. <i>Chemical Communications</i> , 2012, 48, 5832.	4.1	111
79	Liquid phase exfoliation of MoS ₂ and WS ₂ in aqueous ammonia and their application in highly efficient organic solar cells. <i>Journal of Materials Chemistry C</i> , 2020, 8, 5259-5264.	5.5	109
80	Spray-Deposited Li-Doped ZnO Transistors with Electron Mobility Exceeding 50 cm ² /Vs. <i>Advanced Materials</i> , 2010, 22, 4764-4769.	21.0	105
81	Alkylated Selenophene-Based Ladder-Type Monomers via a Facile Route for High-Performance Thin-Film Transistor Applications. <i>Journal of the American Chemical Society</i> , 2017, 139, 8552-8561.	13.7	105
82	Ledge-directed epitaxy of continuously self-aligned single-crystalline nanoribbons of transition metal dichalcogenides. <i>Nature Materials</i> , 2020, 19, 1300-1306.	27.5	104
83	<i>i</i> -channel thin-film transistors based on spray-coated Cu ₂ O films. <i>Applied Physics Letters</i> , 2013, 102, .	3.3	101
84	Modification of Indacenodithiophene-Based Polymers and Its Impact on Charge Carrier Mobility in Organic Thin-Film Transistors. <i>Journal of the American Chemical Society</i> , 2020, 142, 652-664.	13.7	101
85	Structural and Electrical Characterization of ZnO Films Grown by Spray Pyrolysis and Their Application in Thin-Film Transistors. <i>Advanced Functional Materials</i> , 2011, 21, 525-531.	14.9	100
86	Lithium-Ion Desolvation Induced by Nitrate Additives Reveals New Insights into High Performance Lithium Batteries. <i>Advanced Functional Materials</i> , 2021, 31, 2101593.	14.9	100
87	Solution processible organic transistors and circuits based on a C70 methanofullerene. <i>Journal of Applied Physics</i> , 2005, 98, 054503.	2.5	99
88	Unraveling the New Role of an Ethylene Carbonate Solvation Shell in Rechargeable Metal Ion Batteries. <i>ACS Energy Letters</i> , 2021, 6, 69-78.	17.4	99
89	28.2%-efficient, outdoor-stable perovskite/silicon tandem solar cell. <i>Joule</i> , 2021, 5, 3169-3186.	24.0	99
90	Low-voltage ambipolar phototransistors based on a pentacene/PC61BM heterostructure and a self-assembled nano-dielectric. <i>Organic Electronics</i> , 2010, 11, 1250-1254.	2.6	98

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91	Vertical Phase Separation in Small Molecule:Polymer Blend Organic Thin Film Transistors Can Be Dynamically Controlled. <i>Advanced Functional Materials</i> , 2016, 26, 1737-1746.	14.9	98
92	N-type organic thermoelectrics: demonstration of $ZT \approx 0.3$. <i>Nature Communications</i> , 2020, 11, 5694.	12.8	98
93	Influence of Side-Chain Regiochemistry on the Transistor Performance of High-Mobility, All-Donor Polymers. <i>Journal of the American Chemical Society</i> , 2014, 136, 15154-15157.	13.7	97
94	Over 18% ternary polymer solar cells enabled by a terpolymer as the third component. <i>Nano Energy</i> , 2022, 92, 106681.	16.0	97
95	Modulation of Doped $\text{In}_2\text{O}_3/\text{ZnO}$ Heterojunction Transistors Processed from Solution. <i>Advanced Materials</i> , 2017, 29, 1605837.	21.0	96
96	Reduced Graphene Oxide Electrodes for Large Area Organic Electronics. <i>Advanced Materials</i> , 2011, 23, 1558-1562.	21.0	92
97	A low band gap co-polymer of dithienogermole and 2,1,3-benzothiadiazole by Suzuki polycondensation and its application in transistor and photovoltaic cells. <i>Journal of Materials Chemistry</i> , 2011, 21, 16257.	6.7	91
98	Amphipathic Side Chain of a Conjugated Polymer Optimizes Dopant Location toward Efficient n-Type Organic Thermoelectrics. <i>Advanced Materials</i> , 2021, 33, e2006694.	21.0	91
99	Air-Stable n-Channel Organic Transistors Based on a Soluble C84 Fullerene Derivative. <i>Advanced Materials</i> , 2006, 18, 1679-1684.	21.0	89
100	Cyano substituted benzothiadiazole: a novel acceptor inducing n-type behaviour in conjugated polymers. <i>Journal of Materials Chemistry C</i> , 2015, 3, 265-275.	5.5	89
101	Stretchable and Transparent Conductive PEDOT:PSS Based Electrodes for Organic Photovoltaics and Strain Sensors Applications. <i>Advanced Functional Materials</i> , 2020, 30, 2001251.	14.9	88
102	Influence of the heteroatom on the optoelectronic properties and transistor performance of soluble thiophene-, selenophene- and tellurophene-vinylene copolymers. <i>Chemical Science</i> , 2016, 7, 1093-1099.	7.4	84
103	Copper(I) thiocyanate (CuSCN) as a hole-transport material for large-area optoelectronics. <i>Semiconductor Science and Technology</i> , 2015, 30, 104002.	2.0	83
104	Water stable molecular n-doping produces organic electrochemical transistors with high transconductance and record stability. <i>Nature Communications</i> , 2020, 11, 3004.	12.8	82
105	Electro-optical circuits based on light-sensing ambipolar organic field-effect transistors. <i>Applied Physics Letters</i> , 2007, 91, 113513.	3.3	81
106	Indium Oxide Thin-Film Transistors Processed at Low Temperature via Ultrasonic Spray Pyrolysis. <i>ACS Applied Materials & Interfaces</i> , 2015, 7, 782-790.	8.0	79
107	Ambipolar organic transistors and near-infrared phototransistors based on a solution-processable squarilium dye. <i>Journal of Materials Chemistry</i> , 2010, 20, 3673.	6.7	77
108	Sub-15-nm patterning of asymmetric metal electrodes and devices by adhesion lithography. <i>Nature Communications</i> , 2014, 5, 3933.	12.8	77

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109	Partially oxidized graphene as a precursor to graphene. Journal of Materials Chemistry, 2011, 21, 11217.	6.7	76
110	Post-fabrication, <i>in situ</i> laser reduction of graphene oxide devices. Applied Physics Letters, 2013, 102, .	3.3	76
111	High-performance organic integrated circuits based on solution processable polymer-small molecule blends. Applied Physics Letters, 2008, 93, .	3.3	74
112	Efficient organic solar cells using copper(I) iodide (CuI) hole transport layers. Applied Physics Letters, 2015, 106, .	3.3	73
113	The Energy Level Conundrum of Organic Semiconductors in Solar Cells. Advanced Materials, 2022, 34, .	21.0	72
114	Photoinduced Transient Stark Spectroscopy in Organic Semiconductors: A Method for Charge Mobility Determination in the Picosecond Regime. Physical Review Letters, 2006, 96, 106601.	7.8	71
115	Thiophene fluorination to enhance photovoltaic performance in low band gap donor-acceptor polymers. Chemical Communications, 2012, 48, 11130.	4.1	68
116	Ambient blade coating of mixed cation, mixed halide perovskites without dripping: <i>in situ</i> investigation and highly efficient solar cells. Journal of Materials Chemistry A, 2020, 8, 1095-1104.	10.3	68
117	Alkyl Chain Extension as a Route to Novel Thieno[3,2- <i>b</i>]thiophene Flanked Diketopyrrolopyrrole Polymers for Use in Organic Solar Cells and Field Effect Transistors. Macromolecules, 2013, 46, 5961-5967.	4.8	67
118	Optoelectronic Ferroelectric Domain-Wall Memories Made from a Single Van Der Waals Ferroelectric. Advanced Functional Materials, 2020, 30, 2004206.	14.9	67
119	The Effect of Alkyl Spacers on the Mixed Ionic-Electronic Conduction Properties of N-Type Polymers. Advanced Functional Materials, 2021, 31, 2008718.	14.9	67
120	Electronic properties of ZnO field-effect transistors fabricated by spray pyrolysis in ambient air. Applied Physics Letters, 2009, 95, 133507.	3.3	65
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	Effect of Acene Length on Electronic Properties in 5-, 6-, and 7-Ringed Heteroacenes. Advanced Materials, 2011, 23, 3698-3703.	21.0	65
123	Self-Powered Perovskite/CdS Heterostructure Photodetectors. ACS Applied Materials & Interfaces, 2019, 11, 40204-40213.	8.0	65
124	The Mobility and Decay Kinetics of Charge Carriers in Pulse-Ionized Microcrystalline PCBM Powder. Advanced Functional Materials, 2006, 16, 2274-2280.	14.9	64
125	Electronic Properties of Copper(I) Thiocyanate (CuSCN). Advanced Electronic Materials, 2017, 3, 1600378.	5.1	64
126	Flexible diodes for radio frequency (RF) electronics: a materials perspective. Semiconductor Science and Technology, 2017, 32, 123002.	2.0	64

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127	Phase Inversion Strategy to Flexible Freestanding Electrode: Critical Coupling of Binders and Electrolytes for High Performance Liâ€S Battery. Advanced Functional Materials, 2018, 28, 1802244.	14.9	64
128	Addition of the Lewis Acid Zn(C ₆ F ₅) ₂ Enables Organic Transistors with a Maximum Hole Mobility in Excess of 20 cm ² /V s. Advanced Materials, 2019, 31, e1900871.	21.0	64
129	Synthesis of novel thieno[3,2-b]thienobis(silolothiophene) based low bandgap polymers for organic photovoltaics. Chemical Communications, 2012, 48, 7699.	4.1	63
130	BPTs: thiophene-flanked benzodipyrrolidone conjugated polymers for ambipolar organic transistors. Chemical Communications, 2013, 49, 4465.	4.1	63
131	Significant Stability Enhancement in Highâ€Efficiency Polymer:Fullerene Bulk Heterojunction Solar Cells by Blocking Ultraviolet Photons from Solar Light. Advanced Science, 2016, 3, 1500269.	11.2	63
132	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
133	Advantageous 3D Ordering of â€Conjugated Systems: A New Approach Towards Efficient Charge Transport in any Direction. Advanced Materials, 2007, 19, 4438-4442.	21.0	61
134	Quasi Two-Dimensional Dye-Sensitized In ₂ O ₃ Phototransistors for Ultrahigh Responsivity and Photosensitivity Photodetector Applications. ACS Applied Materials & Interfaces, 2016, 8, 4894-4902.	8.0	61
135	Microstructural Control of Charge Transport in Organic Blend Thinâ€Film Transistors. Advanced Functional Materials, 2014, 24, 5969-5976.	14.9	60
136	Effect of multiple adduct fullerenes on charge generation and transport in photovoltaic blends with poly(3â€hexylthiopheneâ€2,5â€diyl). Journal of Polymer Science, Part B: Polymer Physics, 2011, 49, 45-51.	2.1	59
137	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
138	Laser-Assisted Reduction of Graphene Oxide for Flexible, Large-Area Optoelectronics. IEEE Journal of Selected Topics in Quantum Electronics, 2014, 20, 106-115.	2.9	59
139	Using Molecular Design to Increase Hole Transport: Backbone Fluorination in the Benchmark Material		

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145	High electron mobility thin-film transistors based on Ga ₂ O ₃ grown by atmospheric ultrasonic spray pyrolysis at low temperatures. <i>Applied Physics Letters</i> , 2014, 105, .	3.3	56
146	Study of the Hole Transport Processes in Solution-Processed Layers of the Wide Bandgap Semiconductor Copper(I) Thiocyanate (CuSCN). <i>Advanced Functional Materials</i> , 2015, 25, 6802-6813.	14.9	56
147	An Air-Stable Semiconducting Polymer Containing Dithieno[3,2-b:3',2'-d]arsole. <i>Angewandte Chemie - International Edition</i> , 2016, 55, 7148-7151.	13.8	56
148	Isostructural, Deeper Highest Occupied Molecular Orbital Analogues of Poly(3-hexylthiophene) for High-Open Circuit Voltage Organic Solar Cells. <i>Chemistry of Materials</i> , 2013, 25, 4239-4249.	6.7	55
149	Comparative Study of the n-Type Doping Efficiency in Solution-Processed Fullerenes and Fullerene Derivatives. <i>Advanced Functional Materials</i> , 2014, 24, 7116-7124.	14.9	55
150	Enabling thin-film transistor technologies and the device metrics that matter. <i>Nature Communications</i> , 2018, 9, 5264.	12.8	55
151	Use of side-chain for rational design of n-type diketopyrrolopyrrole-based conjugated polymers: what did we find out?. <i>Physical Chemistry Chemical Physics</i> , 2014, 16, 17253-17265.	2.8	54
152	Germaindacenodithiophene based low band gap polymers for organic solar cells. <i>Chemical Communications</i> , 2012, 48, 2955.	4.1	53
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