Thomas D Anthopoulos

List of Publications by Year
in descending order

436	31,817	3874 91	7427 157
papers	citations	h-index	g-index

449	449	449	25544
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Morphology evolution via self-organization and lateral and vertical diffusion in polymer:fullerene solar cell blends. Nature Materials, 2008, 7, 158-164.	13.3	1,396
2	Managing grains and interfaces via ligand anchoring enables 22.3%-efficiency inverted perovskite solar cells. Nature Energy, 2020, 5, 131-140.	19.8	894
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.	6.6	854
4	Organic Transistors in Optical Displays and Microelectronic Applications. Advanced Materials, 2010, 22, 3778-3798.	11.1	576
5	Indacenodithiophene Semiconducting Polymers for High-Performance, Air-Stable Transistors. Journal of the American Chemical Society, 2010, 132, 11437-11439.	6.6	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.	11.1	521
7	Metal oxide semiconductor thin-film transistors for flexible electronics. Applied Physics Reviews, 2016, 3, 021303.	5.5	511
8	17% Efficient Organic Solar Cells Based on Liquid Exfoliated WS₂ as a Replacement for PEDOT:PSS. Advanced Materials, 2019, 31, e1902965.	11.1	500
9	Recent Progress in Highâ€Mobility Organic Transistors: A Reality Check. Advanced Materials, 2018, 30, e1801079.	11.1	498
10	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.	11.1	474
11	Molecular origin of high field-effect mobility in an indacenodithiopheneâ€"benzothiadiazole copolymer. Nature Communications, 2013, 4, 2238.	5.8	456
12	Self-Assembled Monolayer Enables Hole Transport Layer-Free Organic Solar Cells with 18% Efficiency and Improved Operational Stability. ACS Energy Letters, 2020, 5, 2935-2944.	8.8	425
13	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.	6.6	381
14	Damp heatâ€"stable perovskite solar cells with tailored-dimensionality 2D/3D heterojunctions. Science, 2022, 376, 73-77.	6.0	366
15	Highâ€Performance Polymerâ€Small Molecule Blend Organic Transistors. Advanced Materials, 2009, 21, 1166-1171.	11.1	351
16	Diketopyrrolopyrroleâ€"Diketopyrrolopyrrole-Based Conjugated Copolymer for High-Mobility Organic Field-Effect Transistors. Journal of the American Chemical Society, 2012, 134, 16532-16535.	6.6	339
17	Transistors based on two-dimensional materials for future integrated circuits. Nature Electronics, 2021, 4, 786-799.	13.1	335
18	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.	6.6	307

#	Article	IF	Citations
19	Ambipolar Organic Field-Effect Transistors Based on a Solution-Processed Methanofullerene. Advanced Materials, 2004, 16, 2174-2179.	11.1	276
20	Intrinsic efficiency limits in low-bandgap non-fullerene acceptor organic solar cells. Nature Materials, 2021, 20, 378-384.	13.3	257
21	A Simple n-Dopant Derived from Diquat Boosts the Efficiency of Organic Solar Cells to 18.3%. ACS Energy Letters, 2020, 5, 3663-3671.	8.8	253
22	Solution-processable metal oxide semiconductors for thin-film transistor applications. Chemical Society Reviews, 2013, 42, 6910.	18.7	250
23	High performance n-channel organic field-effect transistors and ring oscillators based on C60 fullerene films. Applied Physics Letters, 2006, 89, 213504.	1.5	239
24	Air-Stable Complementary-like Circuits Based on Organic Ambipolar Transistors. Advanced Materials, 2006, 18, 1900-1904.	11.1	224
25	Quantum Dots Supply Bulk- and Surface-Passivation Agents for Efficient and Stable Perovskite Solar Cells. Joule, 2019, 3, 1963-1976.	11.7	222
26	Solutionâ€Processed Small Moleculeâ€Polymer Blend Organic Thinâ€Film Transistors with Hole Mobility Greater than 5 cm²/Vs. Advanced Materials, 2012, 24, 2441-2446.	11.1	219
27	Highâ€Mobility Lowâ€Voltage ZnO and Liâ€Doped ZnO Transistors Based on ZrO₂ Highâ€k Dielectric Grown by Spray Pyrolysis in Ambient Air. Advanced Materials, 2011, 23, 1894-1898.	11.1	217
28	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.	7.8	208
29	Chlorine Vacancy Passivation in Mixed Halide Perovskite Quantum Dots by Organic Pseudohalides Enables Efficient Rec. 2020 Blue Light-Emitting Diodes. ACS Energy Letters, 2020, 5, 793-798.	8.8	208
30	Realâ€Time Investigation of Crystallization and Phaseâ€Segregation Dynamics in P3HT:PCBM Solar Cells During Thermal Annealing. Advanced Functional Materials, 2011, 21, 1701-1708.	7.8	207
31	Long-range exciton diffusion in molecular non-fullerene acceptors. Nature Communications, 2020, 11, 5220.	5.8	204
32	Solution-processed organic transistors based on semiconducting blends. Journal of Materials Chemistry, 2010, 20, 2562.	6.7	201
33	Highâ€Performance Zinc Oxide Transistors and Circuits Fabricated by Spray Pyrolysis in Ambient Atmosphere. Advanced Materials, 2009, 21, 2226-2231.	11.1	197
34	Holeâ€Transporting Transistors and Circuits Based on the Transparent Inorganic Semiconductor Copper(I) Thiocyanate (CuSCN) Processed from Solution at Room Temperature. Advanced Materials, 2013, 25, 1504-1509.	11.1	196
35	Air-stable ambipolar organic transistors. Applied Physics Letters, 2007, 90, 122105.	1.5	194
36	Systematic Improvement in Charge Carrier Mobility of Air Stable Triarylamine Copolymers. Journal of the American Chemical Society, 2009, 131, 10814-10815.	6.6	186

#	Article	IF	Citations
37	Organic complementary-like inverters employing methanofullerene-based ambipolar field-effect transistors. Applied Physics Letters, 2004, 85, 4205-4207.	1.5	179
38	Highâ€Efficiency, Solutionâ€Processed, Multilayer Phosphorescent Organic Lightâ€Emitting Diodes with a Copper Thiocyanate Holeâ€Injection/Holeâ€Transport Layer. Advanced Materials, 2015, 27, 93-100.	11.1	178
39	Silaindacenodithiopheneâ€Based Low Band Gap Polymers â€“ The Effect of Fluorine Substitution on Device Performances and Film Morphologies. Advanced Functional Materials, 2012, 22, 1663-1670.	7.8	177
40	Solution-Processable Red Phosphorescent Dendrimers for Light-Emitting Device Applications. Advanced Materials, 2004, 16, 557-560.	11.1	175
41	17.1% Efficient Singleâ€Junction Organic Solar Cells Enabled by nâ€Type Doping of the Bulkâ€Heterojunction. Advanced Science, 2020, 7, 1903419.	5.6	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.	15.6	170
43	Ambipolar charge transport in organic field-effect transistors. Physical Review B, 2006, 73, .	1.1	169
44	Low band gap selenopheneâ€“diketopyrrolopyrrolepolymers exhibiting high and balanced ambipolar performance in bottom-gate transistors. Chemical Science, 2012, 3, 181-185.	3.7	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.	2.2	169
46	Small Molecule/Polymer Blend Organic Transistors with Hole Mobility Exceeding 13 cm² V^{â^'1} s^{â^'1}. Advanced Materials, 2016, 28, 7791-7798.	11.1	166
47	Indacenodithiophene-co-benzothiadiazole Copolymers for High Performance Solar Cells or Transistors via Alkyl Chain Optimization. Macromolecules, 2011, 44, 6649-6652.	2.2	165
48	Generation of long-lived charges in organic semiconductor heterojunction nanoparticles for efficient photocatalytic hydrogen evolution. Nature Energy, 2022, 7, 340-351.	19.8	164
49	Printable CsPbI₃ Perovskite Solar Cells with PCE of 19% via an Additive Strategy. Advanced Materials, 2020, 32, e2001243.	11.1	157
50	Highâ€Performance ZnO Transistors Processed Via an Aqueous Carbonâ€Free Metal Oxide Precursor Route at Temperatures Between 80â€“180 Â°C. Advanced Materials, 2013, 25, 4340-4346.	11.1	156
51	Doping Approaches for Organic Semiconductors. Chemical Reviews, 2022, 122, 4420-4492.	23.0	153
52	High mobility n-channel organic field-effect transistors based on soluble C60 and C70 fullerene derivatives. Synthetic Metals, 2008, 158, 468-472.	2.1	151
53	Key Parameters Requirements for Nonâ€Fullereneâ€Based Organic Solar Cells with Power Conversion Efficiency >20%. Advanced Science, 2019, 6, 1802028.	5.6	149
54	Encapsulated Cores: Host-Free Organic Light-Emitting Diodes Based on Solution-Processible Electrophosphorescent Dendrimers. Advanced Materials, 2005, 17, 1945-1948.	11.1	148

#	Article	IF	Citations
55	Heterojunction oxide thin-film transistors with unprecedented electron mobility grown from solution. Science Advances, 2017, 3, e1602640.	4.7	148
56	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.	6.6	145
57	Near-Infrared Light-Emitting Ambipolar Organic Field-Effect Transistors. Advanced Materials, 2007, 19, 734-738.	11.1	140
58	High Electron Mobility Thinâ€Film Transistors Based on Solutionâ€Processed Semiconducting Metal Oxide Heterojunctions and Quasiâ€Superlattices. Advanced Science, 2015, 2, 1500058.	5.6	134
59	Electrolyte Engineering Enables High Stability and Capacity Alloying Anodes for Sodium and Potassium Ion Batteries. ACS Energy Letters, 2020, 5, 766-776.	8.8	134
60	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.	10.2	133
61	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.	5.6	131
62	The Influence of Polymer Purification on Photovoltaic Device Performance of a Series of Indacenodithiophene Donor Polymers. Advanced Materials, 2013, 25, 2029-2034.	11.1	129
63	Highly efficient single-layer dendrimer light-emitting diodes with balanced charge transport. Applied Physics Letters, 2003, 82, 4824-4826.	1.5	128
64	Silaindacenodithiophene Semiconducting Polymers for Efficient Solar Cells and High-Mobility Ambipolar Transistors. Chemistry of Materials, 2011, 23, 768-770.	3.2	126
65	High Mobility Fieldâ€Effect Transistors with Versatile Processing from a Smallâ€Molecule Organic Semiconductor. Advanced Materials, 2013, 25, 4352-4357.	11.1	126
66	Metal Halide Perovskites for Highâ€Energy Radiation Detection. Advanced Science, 2020, 7, 2002098.	5.6	126
67	Low-voltage ZnO thin-film transistors based on Y2O3 and Al2O3 high-k dielectrics deposited by spray pyrolysis in air. Applied Physics Letters, 2011, 98, 123503.	1.5	122
68	Interfacial Model Deciphering Highâ€Voltage Electrolytes for High Energy Density, High Safety, and Fastâ€Charging Lithiumâ€Ion Batteries. Advanced Materials, 2021, 33, e2102964.	11.1	122
69	Airâ€Stable and Highâ€Mobility nâ€Channel Organic Transistors Based on Smallâ€Molecule/Polymer Semiconducting Blends. Advanced Materials, 2012, 24, 3205-3211.	11.1	121
70	18.4â€‰% Organic Solar Cells Using a High Ionization Energy Selfâ€Assembled Monolayer as Holeâ€Extraction Interlayer. ChemSusChem, 2021, 14, 3569-3578.	3.6	121
71	The Influence of Film Morphology in Highâ€Mobility Smallâ€Molecule:Polymer Blend Organic Transistors. Advanced Functional Materials, 2010, 20, 2330-2337.	7.8	120
72	Fullerene/Cobalt Porphyrin Hybrid Nanosheets with Ambipolar Charge Transporting Characteristics. Journal of the American Chemical Society, 2012, 134, 7204-7206.	6.6	119

#	Article	IF	Citations
73	Concurrent cationic and anionic perovskite defect passivation enables 27.4% perovskite/silicon tandems with suppression of halide segregation. Joule, 2021, 5, 1566-1586.	11.7	119
74	A Novel Alkylated Indacenodithieno[3,2â€b]thiopheneâ€Based Polymer for Highâ€Performance Fieldâ€Effect Transistors. Advanced Materials, 2016, 28, 3922-3927.	11.1	117
75	Metalâ€Halide Perovskite Transistors for Printed Electronics: Challenges and Opportunities. Advanced Materials, 2017, 29, 1702838.	11.1	117
76	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.	3.2	115
77	Low-voltage organic transistors based on solution processed semiconductors and self-assembled monolayer gate dielectrics. Applied Physics Letters, 2008, 93, .	1.5	111
78	Random benzotrithiophene-based donorâ€“acceptor copolymers for efficient organic photovoltaic devices. Chemical Communications, 2012, 48, 5832.	2.2	111
79	Liquid phase exfoliation of MoS₂ and WS₂ in aqueous ammonia and their application in highly efficient organic solar cells. Journal of Materials Chemistry C, 2020, 8, 5259-5264.	2.7	109
80	Sprayâ€Deposited Liâ€Doped ZnO Transistors with Electron Mobility Exceeding 50 cm²/Vs. Advanced Materials, 2010, 22, 4764-4769.	11.1	105
81	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.	6.6	105
82	Ledge-directed epitaxy of continuously self-aligned single-crystalline nanoribbons of transition metal dichalcogenides. Nature Materials, 2020, 19, 1300-1306.	13.3	104
83	p-channel thin-film transistors based on spray-coated Cu2O films. Applied Physics Letters, 2013, 102, .	1.5	101
84	Modification of Indacenodithiophene-Based Polymers and Its Impact on Charge Carrier Mobility in Organic Thin-Film Transistors. Journal of the American Chemical Society, 2020, 142, 652-664.	6.6	101
85	Structural and Electrical Characterization of ZnO Films Grown by Spray Pyrolysis and Their Application in Thinâ€Film Transistors. Advanced Functional Materials, 2011, 21, 525-531.	7.8	100
86	Lithiumâ€Ion Desolvation Induced by Nitrate Additives Reveals New Insights into High Performance Lithium Batteries. Advanced Functional Materials, 2021, 31, 2101593.	7.8	100
87	Solution processible organic transistors and circuits based on a C70 methanofullerene. Journal of Applied Physics, 2005, 98, 054503.	1.1	99
88	Unraveling the New Role of an Ethylene Carbonate Solvation Shell in Rechargeable Metal Ion Batteries. ACS Energy Letters, 2021, 6, 69-78.	8.8	99
89	28.2%-efficient, outdoor-stable perovskite/silicon tandem solar cell. Joule, 2021, 5, 3169-3186.	11.7	99
90	Low-voltage ambipolar phototransistors based on a pentacene/PC61BM heterostructure and a self-assembled nano-dielectric. Organic Electronics, 2010, 11, 1250-1254.	1.4	98

#	Article	IF	Citations
91	Vertical Phase Separation in Small Molecule:Polymer Blend Organic Thin Film Transistors Can Be Dynamically Controlled. Advanced Functional Materials, 2016, 26, 1737-1746.	7.8	98
92	N-type organic thermoelectrics: demonstration of ZTâ€‰>â€‰0.3. Nature Communications, 2020, 11, 5694.	5.8	98
93	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.	6.6	97
94	Over 18% ternary polymer solar cells enabled by a terpolymer as the third component. Nano Energy, 2022, 92, 106681.	8.2	97
95	Modulationâ€Doped In₂O₃/ZnO Heterojunction Transistors Processed from Solution. Advanced Materials, 2017, 29, 1605837.	11.1	96
96	Reduced Graphene Oxide Electrodes for Large Area Organic Electronics. Advanced Materials, 2011, 23, 1558-1562.	11.1	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. Journal of Materials Chemistry, 2011, 21, 16257.	6.7	91
98	Amphipathic Side Chain of a Conjugated Polymer Optimizes Dopant Location toward Efficient Nâ€Type Organic Thermoelectrics. Advanced Materials, 2021, 33, e2006694.	11.1	91
99	Air-Stable n-Channel Organic Transistors Based on a Soluble C84 Fullerene Derivative. Advanced Materials, 2006, 18, 1679-1684.	11.1	89
100	Cyano substituted benzothiadiazole: a novel acceptor inducing n-type behaviour in conjugated polymers. Journal of Materials Chemistry C, 2015, 3, 265-275.	2.7	89
101	Stretchable and Transparent Conductive PEDOT:PSSâ€Based Electrodes for Organic Photovoltaics and Strain Sensors Applications. Advanced Functional Materials, 2020, 30, 2001251.	7.8	88
102	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.	3.7	84
103	Copper(I) thiocyanate (CuSCN) as a hole-transport material for large-area opto/electronics. Semiconductor Science and Technology, 2015, 30, 104002.	1.0	83
104	Water stable molecular n-doping produces organic electrochemical transistors with high transconductance and record stability. Nature Communications, 2020, 11, 3004.	5.8	82
105	Electro-optical circuits based on light-sensing ambipolar organic field-effect transistors. Applied Physics Letters, 2007, 91, 113513.	1.5	81
106	Indium Oxide Thin-Film Transistors Processed at Low Temperature via Ultrasonic Spray Pyrolysis. ACS Applied Materials & Interfaces, 2015, 7, 782-790.	4.0	79
107	Ambipolar organic transistors and near-infrared phototransistors based on a solution-processable squarilium dye. Journal of Materials Chemistry, 2010, 20, 3673.	6.7	77
108	Sub-15-nm patterning of asymmetric metal electrodes and devices by adhesion lithography. Nature Communications, 2014, 5, 3933.	5.8	77

#	Article	IF	Citations
109	Partially oxidized graphene as a precursor to graphene. Journal of Materials Chemistry, 2011, 21, 11217.	6.7	76
110	Post-fabrication, in situ laser reduction of graphene oxide devices. Applied Physics Letters, 2013, 102, .	1.5	76
111	High-performance organic integrated circuits based on solution processable polymer-small molecule blends. Applied Physics Letters, 2008, 93, .	1.5	74
112	Efficient organic solar cells using copper(I) iodide (CuI) hole transport layers. Applied Physics Letters, 2015, 106, .	1.5	73
113	The Energy Level Conundrum of Organic Semiconductors in Solar Cells. Advanced Materials, 2022, 34, .	11.1	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.	2.9	71
115	Thiophene fluorination to enhance photovoltaic performance in low band gap donorâ€“acceptor polymers. Chemical Communications, 2012, 48, 11130.	2.2	68
116	Ambient blade coating of mixed cation, mixed halide perovskites without dripping: in situ investigation and highly efficient solar cells. Journal of Materials Chemistry A, 2020, 8, 1095-1104.	5.2	68
117	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.	2.2	67
118	Optoelectronic Ferroelectric Domainâ€Wall Memories Made from a Single Van Der Waals Ferroelectric. Advanced Functional Materials, 2020, 30, 2004206.	7.8	67
119	The Effect of Alkyl Spacers on the Mixed Ionicâ€Electronic Conduction Properties of Nâ€Type Polymers. Advanced Functional Materials, 2021, 31, 2008718.	7.8	67
120	Electronic properties of ZnO field-effect transistors fabricated by spray pyrolysis in ambient air. Applied Physics Letters, 2009, 95, 133507.	1.5	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.	2.1	65
122	Effect of Acene Length on Electronic Properties in 5â€, 6â€, and 7â€Ringed Heteroacenes. Advanced Materials, 2011, 23, 3698-3703.	11.1	65
123	Self-Powered Perovskite/CdS Heterostructure Photodetectors. ACS Applied Materials & Interfaces, 2019, 11, 40204-40213.	4.0	65
124	The Mobility and Decay Kinetics of Charge Carriers in Pulse-Ionized Microcrystalline PCBM Powder. Advanced Functional Materials, 2006, 16, 2274-2280.	7.8	64
125	Electronic Properties of Copper(I) Thiocyanate (CuSCN). Advanced Electronic Materials, 2017, 3, 1600378.	2.6	64
126	Flexible diodes for radio frequency (RF) electronics: a materials perspective. Semiconductor Science and Technology, 2017, 32, 123002.	1.0	64

#	Article	IF	Citations
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.	7.8	64
128	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.	11.1	64
129	Synthesis of novel thieno[3,2-b]thienobis(silolothiophene) based low bandgap polymers for organic photovoltaics. Chemical Communications, 2012, 48, 7699.	2.2	63
130	BPTs: thiophene-flanked benzodipyrrolidone conjugated polymers for ambipolar organic transistors. Chemical Communications, 2013, 49, 4465.	2.2	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.	5.6	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.	2.6	63
133	Advantageous 3D Ordering of Ïâ€Conjugated Systems: A New Approach Towards Efficient Charge Transport in any Direction. Advanced Materials, 2007, 19, 4438-4442.	11.1	61
134	Quasi Two-Dimensional Dye-Sensitized In₂O₃ Phototransistors for Ultrahigh Responsivity and Photosensitivity Photodetector Applications. ACS Applied Materials & Interfaces, 2016, 8, 4894-4902.	4.0	61
135	Microstructural Control of Charge Transport in Organic Blend Thinâ€Film Transistors. Advanced Functional Materials, 2014, 24, 5969-5976.	7.8	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.	2.4	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.	7.8	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.	1.9	59
139	Using Molecular Design to Increase Hole Transport: Backbone Fluorination in the Benchmark Material		

#	Article	IF	Citations
145	High electron mobility thin-film transistors based on Ga2O3 grown by atmospheric ultrasonic spray pyrolysis at low temperatures. Applied Physics Letters, 2014, 105, .	1.5	56
146	Study of the Hole Transport Processes in Solutionâ€Processed Layers of the Wide Bandgap Semiconductor Copper(I) Thiocyanate (CuSCN). Advanced Functional Materials, 2015, 25, 6802-6813.	7.8	56
147	An Airâ€Stable Semiconducting Polymer Containing Dithieno[3,2â€b:2â€²,3â€²â€d]arsole. Angewandte Chemie - International Edition, 2016, 55, 7148-7151.	7.2	56
148	Isostructural, Deeper Highest Occupied Molecular Orbital Analogues of Poly(3-hexylthiophene) for High-Open Circuit Voltage Organic Solar Cells. Chemistry of Materials, 2013, 25, 4239-4249.	3.2	55
149	Comparative Study of the Nâ€Type Doping Efficiency in Solutionâ€processed Fullerenes and Fullerene Derivatives. Advanced Functional Materials, 2014, 24, 7116-7124.	7.8	55
150	Enabling thin-film transistor technologies and the device metrics that matter. Nature Communications, 2018, 9, 5264.	5.8	55
151	Use of side-chain for rational design of n-type diketopyrrolopyrrole-based conjugated polymers: what did we find out?. Physical Chemistry Chemical Physics, 2014, 16, 17253-17265.	1.3	54
152	Germaindacenodithiophene based low band gap polymers for organic solar cells. Chemical Communications, 2012, 48, 2955.	2.2	53
153	Observation of Unusual, Highly Conductive Grain Boundaries in Highâ€Mobility Phase Separated Organic Semiconducting Blend Films Probed by Lateralâ€Transport Conductiveâ€AFM. Advanced Materials, 2013, 25, 4320-4326.	11.1	53
154	Copper thiocyanate: An attractive hole transport/extraction layer for use in organic photovoltaic cells. Applied Physics Letters, 2015, 107, .	1.5	53
155	Doping of Large Ionization Potential Indenopyrazine Polymers via Lewis Acid Complexation with Tris(pentafluorophenyl)borane: A Simple Method for Improving the Performance of Organic Thin-Film Transistors. Chemistry of Materials, 2016, 28, 8016-8024.	3.2	53
156	Indolo-naphthyridine-6,13-dione Thiophene Building Block for Conjugated Polymer Electronics: Molecular Origin of Ultrahigh n-Type Mobility. Chemistry of Materials, 2016, 28, 8366-8378.	3.2	52
157	On the Role of Contact Resistance and Electrode Modification in Organic Electrochemical Transistors. Advanced Materials, 2019, 31, e1902291.	11.1	52
158	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.	2.5	51
159	Pushing the Limits of Flexibility and Stretchability of Solar Cells: A Review. Advanced Materials, 2021, 33, e2101469.	11.1	51
160	TiO 2 thin-film transistors fabricated by spray pyrolysis. Applied Physics Letters, 2010, 96, .	1.5	50
161	Pyrroloindacenodithiophene containing polymers for organic field effect transistors and organic photovoltaics. Journal of Materials Chemistry, 2011, 21, 18744.	6.7	50
162	pâ€Doping of Copper(I) Thiocyanate (CuSCN) Holeâ€Transport Layers for Highâ€Performance Transistors and Organic Solar Cells. Advanced Functional Materials, 2018, 28, 1802055.	7.8	50

#	Article	IF	Citations
163	Synthesis, Characterization, and Field Effect Transistor Properties of Regioregular Poly(3-alkyl-2,5-selenylenevinylene). Macromolecules, 2011, 44, 5194-5199.	2.2	49
164	Highâ€Entropy Mixtures of Pristine Fullerenes for Solutionâ€Processed Transistors and Solar Cells. Advanced Materials, 2015, 27, 7325-7331.	11.1	49
165	Distinguishing the influence of structural and energetic disorder on electron transport in fullerene multi-adducts. Materials Horizons, 2015, 2, 113-119.	6.4	49
166	Conjugated Copolymers of Vinylene Flanked Naphthalene Diimide. Macromolecules, 2016, 49, 6384-6393.	2.2	49
167	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.	6.6	49
168	Deciphering photocarrier dynamics for tuneable high-performance perovskite-organic semiconductor heterojunction phototransistors. Nature Communications, 2019, 10, 4475.	5.8	49
169	Hybrid organicâ€“metal oxide multilayer channel transistors with high operational stability. Nature Electronics, 2019, 2, 587-595.	13.1	49
170	Influence of molecular structure on the properties of dendrimer light-emitting diodes. Organic Electronics, 2003, 4, 71-76.	1.4	48
171	Oxygen induced p-doping of Î±-nickel phthalocyanine vacuum sublimed films: Implication for its use in organic photovoltaics. Applied Physics Letters, 2003, 82, 1628-1630.	1.5	48
172	A Nature-Inspired Conjugated Polymer for High Performance Transistors and Solar Cells. Macromolecules, 2015, 48, 5148-5154.	2.2	48
173	Radio Frequency Coplanar ZnO Schottky Nanodiodes Processed from Solution on Plastic Substrates. Small, 2016, 12, 1993-2000.	5.2	48
174	Post-polymerisation functionalisation of conjugated polymer backbones and its application in multi-functional emissive nanoparticles. Nature Communications, 2018, 9, 3237.	5.8	48
175	Analysis of Recombination Losses in a Pentacene/C₆₀ Organic Bilayer Solar Cell. Journal of Physical Chemistry Letters, 2011, 2, 2759-2763.	2.1	47
176	The synthesis and properties of iridium cored dendrimers with carbazole dendrons. Organic Electronics, 2006, 7, 85-98.	1.4	46
177	Solidâ€State Processing of Organic Semiconductors. Advanced Materials, 2010, 22, 3942-3947.	11.1	46
178	Percolation behaviour in high mobility p-channel polymer/small-molecule blend organic field-effect transistors. Organic Electronics, 2011, 12, 143-147.	1.4	46
179	Low-temperature spray-deposited indium oxide for flexible thin-film transistors and integrated circuits. Applied Physics Letters, 2015, 106, .	1.5	46
180	Ambipolar Organic Phototransistors with pâ€Type/nâ€Type Conjugated Polymer Bulk Heterojunction Lightâ€Sensing Layers. Advanced Electronic Materials, 2016, 2, 1600264.	2.6	46

#	Article	IF	Citations
181	Impact of Layer Configuration and Doping on Electron Transport and Bias Stability in Heterojunction and Superlattice Metal Oxide Transistors. Advanced Functional Materials, 2019, 29, 1902591.	7.8	46
182	A Highly Conductive Titanium Oxynitride Electronâ€Selective Contact for Efficient Photovoltaic Devices. Advanced Materials, 2020, 32, e2002608.	11.1	46
183	Scaling-up perovskite solar cells on hydrophobic surfaces. Nano Energy, 2021, 81, 105633.	8.2	46
184	The Negative Effect of High-Temperature Annealing on Charge-Carrier Lifetimes in Microcrystalline PCBM. Advanced Materials, 2006, 18, 2294-2298.	11.1	45
185	Exploring Two-Dimensional Transport Phenomena in Metal Oxide Heterointerfaces for Next-Generation, High-Performance, Thin-Film Transistor Technologies. Small, 2015, 11, 5472-5482.	5.2	45
186	Impact of Nonfullerene Acceptor Side Chain Variation on Transistor Mobility. Advanced Electronic Materials, 2019, 5, 1900344.	2.6	45
187	The Effect of Ring Expansion in Thienobenzo[b]indacenodithiophene Polymers for Organic Field-Effect Transistors. Journal of the American Chemical Society, 2019, 141, 18806-18813.	6.6	45
188	Impact of the Solvation State of Lead Iodide on Its Twoâ€Step Conversion to MAPbI₃: An In Situ Investigation. Advanced Functional Materials, 2019, 29, 1807544.	7.8	45
189	100â€‰GHz zinc oxide Schottky diodes processed from solution on a wafer scale. Nature Electronics, 2020, 3, 718-725.	13.1	45
190	New Fused Bis-Thienobenzothienothiophene Copolymers and Their Use in Organic Solar Cells and Transistors. Macromolecules, 2013, 46, 727-735.	2.2	43
191	Graphene oxide gate dielectric for graphene-based monolithic field effect transistors. Applied Physics Letters, 2013, 102, .	1.5	43
192	Analysis of Schottky Contact Formation in Coplanar Au/ZnO/Al Nanogap Radio Frequency Diodes Processed from Solution at Low Temperature. ACS Applied Materials & Interfaces, 2016, 8, 23167-23174.	4.0	43
193	Exploring the Leidenfrost Effect for the Deposition of Highâ€Quality In₂O₃ Layers via Spray Pyrolysis at Low Temperatures and Their Application in High Electron Mobility Transistors. Advanced Functional Materials, 2017, 27, 1606407.	7.8	43
194	Sputtered transparent electrodes for optoelectronic devices: Induced damage and mitigation strategies. Matter, 2021, 4, 3549-3584.	5.0	43
195	Influence of oxygen doping on the electrical and photovoltaic properties of Schottky type solar cells based on Î±-nickel phthalocyanine. Thin Solid Films, 2003, 441, 207-213.	0.8	42
196	Comparative Optoelectronic Study between Copolymers of Peripherally Alkylated Dithienosilole and Dithienogermole. Macromolecules, 2012, 45, 735-742.	2.2	42
197	Alâ€Doped ZnO Transistors Processed from Solution at 120 Â°C. Advanced Electronic Materials, 2016, 2, 1600070.	2.6	42
198	Ink-jet printed p-type polymer electronics based on liquid-crystalline polymer semiconductors. Journal of Materials Chemistry, 2010, 20, 1927.	6.7	41

#	Article	IF	Citations
199	Synthesis of a Novel Fused Thiopheneâ€thieno[3,2â€b]thiopheneâ€thiophene Donor Monomer and Coâ€polymer for Use in OPV and OFETs. Macromolecular Rapid Communications, 2011, 32, 1664-1668.	2.0	41
200	Use of the Phenâ€NaDPO:Sn(SCN)₂ Blend as Electron Transport Layer Results to Consistent Efficiency Improvements in Organic and Hybrid Perovskite Solar Cells. Advanced Functional Materials, 2019, 29, 1905810.	7.8	41
201	Bismuthâ€Based Perovskiteâ€Inspired Solar Cells: In Situ Diagnostics Reveal Similarities and Differences in the Film Formation of Bismuthâ€and Leadâ€Based Films. Solar Rrl, 2019, 3, 1800305.	3.1	41
202	Roomâ€Temperature Partial Conversion of Î±â€FAPbI₃Perovskite Phase via PbI₂Solvation Enables Highâ€Performance Solar Cells. Advanced Functional Materials, 2020, 30, 1907442.	7.8	41
203	Synthesis and Characterization of Fused Pyrrolo[3,2-d:4,5-dâ€²]bisthiazole-Containing Polymers. Organic Letters, 2010, 12, 5478-5481.	2.4	40
204	Accurate Extraction of Charge Carrier Mobility in 4â€Probe Fieldâ€Effect Transistors. Advanced Functional Materials, 2018, 28, 1707105.	7.8	40
205	Highly-efficient semi-transparent organic solar cells utilising non-fullerene acceptors with optimised multilayer MoO₃/Ag/MoO₃ electrodes. Materials Chemistry Frontiers, 2019, 3, 450-455.	3.2	40
206	Impact of the Gate Dielectric on Contact Resistance in Highâ€Mobility Organic Transistors. Advanced Electronic Materials, 2019, 5, 1800723.	2.6	40
207	A universal solution processed interfacial bilayer enabling ohmic contact in organic and hybrid optoelectronic devices. Energy and Environmental Science, 2020, 13, 268-276.	15.6	40
208	Nonfullerene-Based Organic Photodetectors for Ultrahigh Sensitivity Visible Light Detection. ACS Applied Materials & Interfaces, 2020, 12, 48836-48844.	4.0	40
209	Adduct-based p-doping of organic semiconductors. Nature Materials, 2021, 20, 1248-1254.	13.3	40
210	The tuning of the energy levels of dibenzosilole copolymers and applications in organic electronics. Journal of Materials Chemistry, 2011, 21, 11800.	6.7	39
211	High Responsivity and Response Speed Singleâ€Layer Mixedâ€Cation Lead Mixedâ€Halide Perovskite Photodetectors Based on Nanogap Electrodes Manufactured on Largeâ€Area Rigid and Flexible Substrates. Advanced Functional Materials, 2019, 29, 1901371.	7.8	39
212	Novel wide-bandgap non-fullerene acceptors for efficient tandem organic solar cells. Journal of Materials Chemistry A, 2020, 8, 1164-1175.	5.2	39
213	Infrared Organic Photodetectors Employing Ultralow Bandgap Polymer and Nonâ€Fullerene Acceptors for Biometric Monitoring. Small, 2022, 18, e2200580.	5.2	39
214	Chemical Design Rules for Nonâ€Fullerene Acceptors in Organic Solar Cells. Advanced Energy Materials, 2021, 11, 2102363.	10.2	38
215	In-Situ Monitoring of the Solid-State Microstructure Evolution of Polymer:Fullerene Blend Films Using Field-Effect Transistors. Advanced Functional Materials, 2011, 21, 356-363.	7.8	37
216	Sub-second photonic processing of solution-deposited single layer and heterojunction metal oxide thin-film transistors using a high-power xenon flash lamp. Journal of Materials Chemistry C, 2017, 5, 11724-11732.	2.7	37

#	Article	IF	Citations
217	Impact of Fullerene on the Photophysics of Ternary Small Molecule Organic Solar Cells. Advanced Energy Materials, 2019, 9, 1901443.	10.2	37
218	Hall Effect in Polycrystalline Organic Semiconductors: The Effect of Grain Boundaries. Advanced Functional Materials, 2020, 30, 1903617.	7.8	37
219	Signatures of Quantized Energy States in Solutionâ€Processed Ultrathin Layers of Metalâ€Oxide Semiconductors and Their Devices. Advanced Functional Materials, 2015, 25, 1727-1736.	7.8	36
220	Air-Stable n-channel Diketopyrrolopyrroleâ^'Diketopyrrolopyrrole Oligomers for High Performance Ambipolar Organic Transistors. ACS Applied Materials & Interfaces, 2016, 8, 25415-25427.	4.0	36
221	Nondispersive hole transport in a spin-coated dendrimer film measured by the charge-generation-layer time-of-flight method. Applied Physics Letters, 2002, 81, 3266-3268.	1.5	35
222	Designing organic and inorganic ambipolar thin-film transistors and inverters: Theory and experiment. Organic Electronics, 2012, 13, 2816-2824.	1.4	35
223	Near Infrared Absorbing Soluble Poly(cyclopenta[2,1-b:3,4-bâ€²]dithiophen-4-one)vinylene Polymers Exhibiting High Hole and Electron Mobilities in Ambient Air. Chemistry of Materials, 2013, 25, 59-68.	3.2	35
224	Solution-processed ZnO nanoparticle-based transistors via a room-temperature photochemical conversion process. Applied Physics Letters, 2013, 102, .	1.5	35
225	>10% Efficiency Polymer:Fullerene Solar Cells with Polyacetyleneâ€Based Polyelectrolyte Interlayers. Advanced Materials Interfaces, 2016, 3, 1600415.	1.9	35
226	Exploring and controlling intrinsic defect formation in SnO₂ thin films. Journal of Materials Chemistry C, 2016, 4, 758-765.	2.7	35
227	Introducing a Nonvolatile Nâ€Type Dopant Drastically Improves Electron Transport in Polymer and Smallâ€Molecule Organic Transistors. Advanced Functional Materials, 2019, 29, 1902784.	7.8	35
228	Using Two Compatible Donor Polymers Boosts the Efficiency of Ternary Organic Solar Cells to 17.7%. Chemistry of Materials, 2021, 33, 7254-7262.	3.2	35
229	Solution-processed dye-sensitized ZnO phototransistors with extremely high photoresponsivity. Journal of Applied Physics, 2012, 112, .	1.1	34
230	The impact of post-deposition annealing on the performance of solution-processed single layer In₂O₃ and isotype In₂O₃/ZnO heterojunction transistors. Journal of Materials Chemistry C, 2017, 5, 59-64.	2.7	34
231	Solutionâ€Processed In₂O₃/ZnO Heterojunction Electron Transport Layers for Efficient Organic Bulk Heterojunction and Inorganic Colloidal Quantumâ€Dot Solar Cells. Solar Rrl, 2018, 2, 1800076.	3.1	34
232	Plasmonicâ€Enhanced Light Harvesting and Perovskite Solar Cell Performance Using Au Biometric Dimers with Broadband Structural Darkness. Solar Rrl, 2019, 3, 1900138.	3.1	34
233	Oneâ€Step Sixfold Cyanation of Benzothiadiazole Acceptor Units for Airâ€Stable Highâ€Performance nâ€Type Organic Fieldâ€Effect Transistors. Angewandte Chemie - International Edition, 2021, 60, 5970-5977.	7.2	34
234	Micron-scale patterning of high conductivity poly(3,4-ethylendioxythiophene):poly(styrenesulfonate) for organic field-effect transistors. Organic Electronics, 2010, 11, 1307-1312.	1.4	33

#	Article	IF	Citations
235	Solution-processable organic dielectrics for graphene electronics. Nanotechnology, 2012, 23, 344017.	1.3	33
236	Low-voltage polymer/small-molecule blend organic thin-film transistors and circuits fabricated via spray deposition. Applied Physics Letters, 2015, 106, .	1.5	33
237	Design, synthesis, chemical stability, packing, cyclic voltammetry, ionisation potential, and charge transport of [1]benzothieno[3,2-b][1]benzothiophene derivatives. Journal of Materials Chemistry C, 2016, 4, 4863-4879.	2.7	33
238	Rapid laser-induced photochemical conversion of solâ€“gel precursors to In₂O₃ layers and their application in thin-film transistors. Journal of Materials Chemistry C, 2017, 5, 3673-3677.	2.7	33
239	Solution-processed p-type copper(I) thiocyanate (CuSCN) for low-voltage flexible thin-film transistors and integrated inverter circuits. Applied Physics Letters, 2017, 110, 113504.	1.5	33
240	Polymorphism in Nonâ€Fullerene Acceptors Based on Indacenodithienothiophene. Advanced Functional Materials, 2021, 31, 2103784.	7.8	33
241	Oligoethylene Glycol Side Chains Increase Charge Generation in Organic Semiconductor Nanoparticles for Enhanced Photocatalytic Hydrogen Evolution. Advanced Materials, 2022, 34, e2105007.	11.1	33
242	Electrical properties of Î±-nickel phthalocyanine/aluminium interfaces: effects of oxygen doping and thermal annealing. Journal of Physics and Chemistry of Solids, 2003, 64, 1217-1223.	1.9	32
243	Anion-induced N-doping of naphthalenediimide polymer semiconductor in organic thin-film transistors. Npj Flexible Electronics, 2018, 2, .	5.1	32
244	Highly transparent and conductive electrodes enabled by scalable printing-and-sintering of silver nanowires. Nanotechnology, 2020, 31, 395201.	1.3	32
245	Wide and Tunable Bandgap MAPbBr_{3â^'x}Cl_x Hybrid Perovskites with Enhanced Phase Stability: In Situ Investigation and Photovoltaic Devices. Solar Rrl, 2021, 5, 2000718.	3.1	32
246	Ruddlesdenâ€“Popperâ€Phase Hybrid Halide Perovskite/Smallâ€Molecule Organic Blend Memory Transistors. Advanced Materials, 2021, 33, e2003137.	11.1	32
247	Low band gap dithienogermolodithiophene copolymers with tunable acceptors and side-chains for organic solar cells. Journal of Materials Chemistry A, 2013, 1, 14973.	5.2	31
248	Deep Ultraviolet Copper(I) Thiocyanate (CuSCN) Photodetectors Based on Coplanar Nanogap Electrodes Fabricated via Adhesion Lithography. ACS Applied Materials & Interfaces, 2017, 9, 41965-41972.	4.0	31
249	Crucial Role of Fluorine in Fully Alkylated Ladder-Type Carbazole-Based Nonfullerene Organic Solar Cells. ACS Applied Materials & Interfaces, 2020, 12, 9555-9562.	4.0	31
250	Solution processed low-voltage organic transistors and complementary inverters. Applied Physics Letters, 2009, 95, .	1.5	30
251	High mobility transistors based on electrospray-printed small-molecule/polymer semiconducting blends. Journal of Materials Chemistry C, 2016, 4, 3499-3507.	2.7	30
252	Ambipolar Deep-Subthreshold Printed-Carbon-Nanotube Transistors for Ultralow-Voltage and Ultralow-Power Electronics. ACS Nano, 2020, 14, 14036-14046.	7.3	30

#	Article	IF	Citations
253	Solution-Processed Mixed-Dimensional Hybrid Perovskite/Carbon Nanotube Electronics. ACS Nano, 2020, 14, 3969-3979.	7.3	30
254	All-Solution-Processed Quantum Dot Electrical Double-Layer Transistors Enhanced by Surface Charges of Ti₃C₂T_x MXene Contacts. ACS Nano, 2021, 15, 5221-5229.	7.3	30
255	Indole-substituted nickel dithiolene complexes in electronic and optoelectronic devices. Journal of Materials Chemistry, 2011, 21, 15422.	6.7	29
256	Organic and Hybrid Materials for Flexible Electronics. Advanced Materials, 2013, 25, 4208-4209.	11.1	29
257	4H-1,2,6-Thiadiazin-4-one-containing small molecule donors and additive effects on their performance in solution-processed organic solar cells. Journal of Materials Chemistry C, 2015, 3, 2358-2365.	2.7	29
258	Large-area plastic nanogap electronics enabled by adhesion lithography. Npj Flexible Electronics, 2018, 2, .	5.1	29
259	Simple color tuning of phosphorescent dendrimer light emitting diodes. Applied Physics Letters, 2005, 86, 161104.	1.5	28
260	On the role of hydrogen in organic magnetoresistance: A study of C60 devices. Synthetic Metals, 2007, 157, 930-934.	2.1	28
261	Self-assembly and charge transport properties of a benzobisthiazole end-capped with dihexyl thienothiophene units. Journal of Materials Chemistry, 2011, 21, 2091-2097.	6.7	28
262	Controlling Conformations of Diketopyrrolopyrrole-Based Conjugated Polymers: Role of Torsional Angle. Journal of Physical Chemistry C, 2014, 118, 11536-11544.	1.5	28
263	Scaled Deposition of Ti₃C₂T_x MXene on Complex Surfaces: Application Assessment as Rear Electrodes for Silicon Heterojunction Solar Cells. ACS Nano, 2022, 16, 2419-2428.	7.3	28
264	P3HT Molecular Weight Determines the Performance of P3HT:Oâ€IDTBR Solar Cells. Solar Rrl, 2019, 3, 1900023.	3.1	27
265	Core Fluorination Enhances Solubility and Ambient Stability of an IDTâ€Based nâ€Type Semiconductor in Transistor Devices. Advanced Functional Materials, 2020, 30, 2000325.	7.8	27
266	Fluorine containing C60 derivatives for high-performance electron transporting field-effect transistors and integrated circuits. Applied Physics Letters, 2008, 92, 143310.	1.5	26
267	Benzotrithiophene Copolymers: Influence of Molecular Packing and Energy Levels on Charge Carrier Mobility. Macromolecules, 2014, 47, 2883-2890.	2.2	26
268	In situ photo-induced chemical doping of solution-processed graphene oxide for electronic applications. Journal of Materials Chemistry C, 2014, 2, 5931-5937.	2.7	26
269	Cyano substituted benzotriazole based polymers for use in organic solar cells. Journal of Materials Chemistry A, 2017, 5, 6465-6470.	5.2	26
270	High Speed Ultraviolet Phototransistors Based on an Ambipolar Fullerene Derivative. ACS Applied Materials & Interfaces, 2018, 10, 10202-10210.	4.0	26

#	Article	IF	Citations
271	Fused Cyclopentadithienothiophene Acceptor Enables Ultrahigh Shortâ€Circuit Current and High Efficiency >11% in Asâ€Cast Organic Solar Cells. Advanced Functional Materials, 2019, 29, 1904956.	7.8	26
272	Effect of Chalcogens on Electronic and Photophysical Properties of Vinylene-Based Diketopyrrolopyrrole Copolymers. Journal of Physical Chemistry B, 2015, 119, 11307-11316.	1.2	25
273	Polymer-sorted (6,5) single-walled carbon nanotubes for solution-processed low-voltage flexible microelectronics. Applied Physics Letters, 2015, 106, .	1.5	25
274	Lowâ€Voltage Heterojunction Metal Oxide Transistors via Rapid Photonic Processing. Advanced Electronic Materials, 2020, 6, 2000028.	2.6	25
275	Reduced roughness for improved mobility in benzodipyrrolidone-based, n-type OFETS. Journal of Materials Chemistry C, 2014, 2, 8822-8828.	2.7	24
276	The impact of thienothiophene isomeric structures on the optoelectronic properties and photovoltaic performance in quinoxaline based donorâ€“acceptor copolymers. Polymer Chemistry, 2015, 6, 3098-3109.	1.9	24
277	Hybrid Lightâ€Emitting Transistors Based on Lowâ€Temperature Solutionâ€Processed Metal Oxides and a Chargeâ€Injecting Interlayer. Advanced Optical Materials, 2016, 4, 231-237.	3.6	24
278	Hybrid complementary circuits based on p-channel organic and n-channel metal oxide transistors with balanced carrier mobilities of up to 10â€‰cm2/Vs. Applied Physics Letters, 2016, 109, .	1.5	24
279	Influence of molecular architecture and processing on properties of semiconducting arylacetylene: Insulating poly(vinylidene fluoride) blends. Organic Electronics, 2011, 12, 1886-1892.	1.4	23
280	Pyrroloindacenodithiophene polymers: the effect of molecular structure on OFET performance. Polymer Chemistry, 2013, 4, 3537.	1.9	23
281	Improved Field-Effect Transistor Performance of a Benzotrithiophene Polymer through Ketal Cleavage in the Solid State. ACS Applied Materials & Interfaces, 2013, 5, 1806-1810.	4.0	23
282	Polythiophenes with vinylene linked ortho, meta and para-carborane sidechains. Polymer Chemistry, 2014, 5, 6190-6199.	1.9	23
283	Strong molecular weight effects of gate-insulating memory polymers in low-voltage organic nonvolatile memory transistors with outstanding retention characteristics. NPG Asia Materials, 2016, 8, e235-e235.	3.8	23
284	Highâ€Performance Tandem Organic Solar Cells Using HSolar as the Interconnecting Layer. Advanced Energy Materials, 2020, 10, 2000823.	10.2	23
285	Unraveling the compositional heterogeneity and carrier dynamics of alkali cation doped 3D/2D perovskites with improved stability. Materials Advances, 2021, 2, 1253-1262.	2.6	23
286	Bias-stress effects in organic field-effect transistors based on self-assembled monolayer nanodielectrics. Physical Chemistry Chemical Physics, 2011, 13, 14387.	1.3	22
287	Î±,Î²-Unsubstituted meso-positioning thienyl BODIPY: a promising electron deficient building block for the development of near infrared (NIR) p-type donorâ€“acceptor (Dâ€“A) conjugated polymers. Journal of Materials Chemistry C, 2018, 6, 4030-4040.	2.7	22
288	Low-Voltage Solution-Processed Hybrid Light-Emitting Transistors. ACS Applied Materials & Interfaces, 2018, 10, 18445-18449.	4.0	22

#	Article	IF	Citations
289	Lightâ€“Matter Interaction within Extreme Dimensions: From Nanomanufacturing to Applications. Advanced Optical Materials, 2018, 6, 1800444.	3.6	22
290	Incorporation of benzocarborane into conjugated polymer systems: synthesis, characterisation and optoelectronic properties. Journal of Materials Chemistry C, 2014, 2, 232-239.	2.7	21
291	Energy Quantization in Solutionâ€Processed Layers of Indium Oxide and Their Application in Resonant Tunneling Diodes. Advanced Functional Materials, 2016, 26, 1656-1663.	7.8	21
292	Temperature and composition-dependent density of states in organic small-molecule/polymer blend transistors. Journal of Applied Physics, 2016, 120, .	1.1	21
293	Alternating current conduction properties of thermally evaporated Î±-nickel phthalocyanine thin films: Effects of oxygen doping and thermal annealing. Journal of Applied Physics, 2003, 94, 2426-2433.	1.1	20
294	Semiconductor-Free Nonvolatile Resistive Switching Memory Devices Based on Metal Nanogaps Fabricated on Flexible Substrates via Adhesion Lithography. IEEE Transactions on Electron Devices, 2017, 64, 1973-1980.	1.6	20
295	Pronounced Side Chain Effects in Triple Bond-Conjugated Polymers Containing Naphthalene Diimides for n-Channel Organic Field-Effect Transistors. ACS Applied Materials & Interfaces, 2018, 10, 12921-12929.	4.0	20
296	Growth of 2H stacked WSe₂ bilayers on sapphire. Nanoscale Horizons, 2019, 4, 1434-1442.	4.1	20
297	Charge and Triplet Exciton Generation in Neat PC₇₀BM Films and Hybrid CuSCN:PC₇₀BM Solar Cells. Advanced Energy Materials, 2019, 9, 1802476.	10.2	20
298	Charge Carrier Recombination at Perovskite/Hole Transport Layer Interfaces Monitored by Time-Resolved Spectroscopy. ACS Energy Letters, 2021, 6, 4155-4164.	8.8	20
299	Soluble fullerene derivatives: The effect of electronic structure on transistor performance and air stability. Journal of Applied Physics, 2011, 110, .	1.1	19
300	Solution-processed small molecule transistors with low operating voltages and high grain-boundary anisotropy. Journal of Materials Chemistry, 2012, 22, 9458.	6.7	19
301	Dihydropyrroloindoledione-based copolymers for organic electronics. Journal of Materials Chemistry C, 2013, 1, 2711.	2.7	19
302	Benzocarborano[2,1-b:3,4-bâ€²]dithiophene Containing Conjugated Polymers: Synthesis, Characterization, and Optoelectronic Properties. Macromolecules, 2014, 47, 89-96.	2.2	19
303	Electrospray-Processed Soluble Acenes toward the Realization of High-Performance Field-Effect Transistors. ACS Applied Materials & Interfaces, 2015, 7, 6496-6504.	4.0	19
304	Diselenogermole as a novel donor monomer for low band gap polymers. Journal of Materials Chemistry A, 2015, 3, 1986-1994.	5.2	19
305	Copper (I) Selenocyanate (CuSeCN) as a Novel Holeâ€Transport Layer for Transistors, Organic Solar Cells, and Lightâ€Emitting Diodes. Advanced Functional Materials, 2018, 28, 1707319.	7.8	19
306	Highâ€Efficiency Fullerene Solar Cells Enabled by a Spontaneously Formed Mesostructured CuSCNâ€Nanowire Heterointerface. Advanced Science, 2018, 5, 1700980.	5.6	19

#	Article	IF	Citations
307	Oneâ€Step Bladeâ€Coated Highly Efficient Nonfullerene Organic Solar Cells with a Selfâ€Assembled Interfacial Layer Enabled by Solvent Vapor Annealing. Solar Rrl, 2019, 3, 1900179.	3.1	19
308	Rapid photonic curing of solution-processed In2O3 layers on flexible substrates. Applied Surface Science, 2019, 479, 974-979.	3.1	19
309	Impact of p-type doping on charge transport in blade-coated small-molecule:polymer blend transistors. Journal of Materials Chemistry C, 2020, 8, 15368-15376.	2.7	19
310	Efficient Hybrid Mixedâ€Ion Perovskite Photovoltaics: In Situ Diagnostics of the Roles of Cesium and Potassium Alkali Cation Addition. Solar Rrl, 2020, 4, 2000272.	3.1	19
311	A Triâ€Channel Oxide Transistor Concept for the Rapid Detection of Biomolecules Including the SARSâ€CoVâ€2 Spike Protein. Advanced Materials, 2022, 34, e2104608.	11.1	19
312	Measurement of the diffusivity of fullerenes in polymers using bilayer organic field effect transistors. Physical Review B, 2011, 84, .	1.1	18
313	An Air-Stable DPP-thieno-TTF Copolymer for Single-Material Solar Cell Devices and Field Effect Transistors. ACS Applied Materials & Interfaces, 2015, 7, 27999-28005.	4.0	18
314	Effect of Alkyl Chain Branching Point on 3D Crystallinity in High Nâ€Type Mobility Indolonaphthyridine Polymers. Advanced Functional Materials, 2017, 27, 1704069.	7.8	18
315	Alkylated indacenodithieno[3,2-b]thiophene-based all donor ladder-type conjugated polymers for organic thin film transistors. Journal of Materials Chemistry C, 2018, 6, 2004-2009.	2.7	18
316	Lightâ€Emitting Transistors Based on Solutionâ€Processed Heterostructures of Selfâ€Organized Multipleâ€Quantumâ€Well Perovskite and Metalâ€Oxide Semiconductors. Advanced Electronic Materials, 2019, 5, 1800985.	2.6	18
317	A Universal Cosolvent Evaporation Strategy Enables Direct Printing of Perovskite Single Crystals for Optoelectronic Device Applications. Advanced Materials, 2022, 34, e2109862.	11.1	18
318	Trace Solvent Additives Enhance Charge Generation in Layerâ€byâ€Layer Coated Organic Solar Cells. Small Structures, 0, , .	6.9	18
319	Room temperature dielectric bistability in solution-processed spin crossover polymer thin films. Journal of Materials Chemistry C, 2016, 4, 6240-6248.	2.7	17
320	Low-Temperature Cross-Linking Benzocyclobutene Based Polymer Dielectric for Organic Thin Film Transistors on Plastic Substrates. Journal of Organic Chemistry, 2020, 85, 277-283.	1.7	17
321	A Multilayered Electron Extracting System for Efficient Perovskite Solar Cells. Advanced Functional Materials, 2020, 30, 2004273.	7.8	17
322	N-Doping improves charge transport and morphology in the organic non-fullerene acceptor O-IDTBR. Journal of Materials Chemistry C, 2021, 9, 4486-4495.	2.7	17
323	The Influence of Backbone Fluorination on the Dielectric Constant of Conjugated Polythiophenes. Advanced Electronic Materials, 2018, 4, 1700375.	2.6	17
324	Complementary circuits based on solution processed low-voltage organic field-effect transistors. Synthetic Metals, 2009, 159, 2368-2370.	2.1	16

#	Article	IF	Citations
325	Synthesis and characterization of pyrene-centered oligothiophenes. Synthetic Metals, 2010, 160, 1987-1993.	2.1	16
326	Acenaphtho[1,2-b]quinoxaline based low band gap copolymers for organic thin film transistor applications. Journal of Materials Chemistry, 2012, 22, 4450-4458.	6.7	16
327	Hybrid Modulationâ€Doping of Solutionâ€Processed Ultrathin Layers of ZnO Using Molecular Dopants. Advanced Materials, 2016, 28, 3952-3959.	11.1	16
328	Nanoscale Charge Percolation Analysis in Polymerâ€Sorted (7,5) Singleâ€Walled Carbon Nanotube Networks. Small, 2016, 12, 4211-4221.	5.2	16
329	Triarylphosphine Oxide as Cathode Interfacial Material for Inverted Perovskite Solar Cells. Advanced Materials Interfaces, 2019, 6, 1900434.	1.9	16
330	A versatile star-shaped organic semiconductor based on benzodithiophene and diketopyrrolopyrrole. Journal of Materials Chemistry C, 2019, 7, 6622-6629.	2.7	16
331	Quantum Confinement and Thicknessâ€Dependent Electron Transport in Solutionâ€Processed In₂O₃ Transistors. Advanced Electronic Materials, 2020, 6, 2000682.	2.6	16
332	Rapid Photonic Processing of High-Electron-Mobility PbS Colloidal Quantum Dot Transistors. ACS Applied Materials & Interfaces, 2020, 12, 31591-31600.	4.0	16
333	Y6 Organic Thinâ€Film Transistors with Electron Mobilities of 2.4 cm² V^{â^'1} s^{â^'1} via Microstructural Tuning. Advanced Science, 2022, 9, e2104977.	5.6	16
334	An Airâ€Stable Semiconducting Polymer Containing Dithieno[3,2â€b:2â€²,3â€²â€d]arsole. Angewandte Chemie, 2016, 128, 7264-7267.	1.6	15
335	Highly sensitive and room temperature detection of ultra-low concentrations of O₃ using self-powered sensing elements of Cu₂O nanocubes. Nanoscale Advances, 2019, 1, 2009-2017.	2.2	15
336	Efficient Double- and Triple-Junction Nonfullerene Organic Photovoltaics and Design Guidelines for Optimal Cell Performance. ACS Energy Letters, 2020, 5, 3692-3701.	8.8	15
337	Understanding Charge Transport in Highâ€Mobility pâ€Doped Multicomponent Blend Organic Transistors. Advanced Electronic Materials, 2020, 6, 2000539.	2.6	15
338	Role of Alkali-Metal Cations in Electronic Structure and Halide Segregation of Hybrid Perovskites. ACS Applied Materials & Interfaces, 2020, 12, 34402-34412.	4.0	15
339	Sequential Formation of Tunableâ€Bandgap Mixedâ€Halide Leadâ€Based Perovskites: In Situ Investigation and Photovoltaic Devices. Solar Rrl, 2021, 5, .	3.1	15
340	Low frequency capacitance characterization of Î±-phase nickel phthalocyanine/lead interfaces: effects of temperature and oxygen doping. Journal of Physics and Chemistry of Solids, 2004, 65, 1345-1348.	1.9	14
341	Subpicosecond photoinduced Stark spectroscopy in fullerene-based devices. Physical Review B, 2007, 75, .	1.1	14
342	Synthesis and characterisation of new diindenodithienothiophene (DITT) based materials. Journal of Materials Chemistry, 2010, 20, 1112-1116.	6.7	14

#	Article	IF	Citations
343	Impact of Fullerene Molecular Weight on P3HT:PCBM Microstructure Studied Using Organic Thinâ€Film Transistors. Advanced Energy Materials, 2011, 1, 1176-1183.	10.2	14
344	Post-Polymerization Ketalization for Improved Organic Photovoltaic Materials. Macromolecules, 2013, 46, 7727-7732.	2.2	14
345	Triple bulk heterojunctions as means for recovering the microstructure of photoactive layers in organic solar cell devices. Solar Energy Materials and Solar Cells, 2014, 120, 37-47.	3.0	14
346	Nanoscale current spreading analysis in solution-processed graphene oxide/silver nanowire transparent electrodes via conductive atomic force microscopy. Journal of Applied Physics, 2016, 119, .	1.1	14
347	Vinylene-Linked Oligothiopheneâ€“Difluorobenzothiadiazole Copolymer for Transistor Applications. ACS Applied Materials & Interfaces, 2016, 8, 31154-31165.	4.0	14
348	Flexible IGZO TFTs and Their Suitability for Space Applications. IEEE Journal of the Electron Devices Society, 2019, 7, 1182-1190.	1.2	14
349	Colossal Tunneling Electroresistance in Coâ€Planar Polymer Ferroelectric Tunnel Junctions. Advanced Electronic Materials, 2020, 6, 1901091.	2.6	14
350	Onâ€Demand Patterning of Nanostructured Pentacene Transistors by Scanning Thermal Lithography. Advanced Materials, 2013, 25, 552-558.	11.1	13
351	Charge Transport in 2D DNA Tunnel Junction Diodes. Small, 2017, 13, 1703006.	5.2	13
352	Colloidal Quantum Dot Photovoltaics Using Ultrathin, Solution-Processed Bilayer In₂O₃/ZnO Electron Transport Layers with Improved Stability. ACS Applied Energy Materials, 2020, 3, 5135-5141.	2.5	13
353	Emissive Chargeâ€Transfer States at Hybrid Inorganic/Organic Heterojunctions Enable Low Nonâ€Radiative Recombination and Highâ€Performance Photodetectors. Advanced Materials, 2022, 34, e2104654.	11.1	13
354	Fused Ring Cyclopentadithienothiophenes as Novel Building Blocks for High Field Effect Mobility Conjugated Polymers. Macromolecules, 2015, 48, 5605-5613.	2.2	12
355	One-step growth of reduced graphene oxide on arbitrary substrates. Carbon, 2019, 144, 457-463.	5.4	12
356	Bismuth-based mixed-anion compounds for anode materials in rechargeable batteries. Chemical Communications, 2022, 58, 3354-3357.	2.2	12
357	Near-IR Absorbing Molecular Semiconductors Incorporating Cyanated Benzothiadiazole Acceptors for High-Performance Semitransparent n-Type Organic Field-Effect Transistors. , 2022, 4, 165-174.		12
358	Observation of wrinkle induced potential drops in biased chemically derived graphene thin film networks. Carbon, 2013, 64, 35-44.	5.4	11
359	Efficient and Stable Solution-Processed Organic Light-Emitting Transistors Using a High-k Dielectric. ACS Photonics, 2019, 6, 3159-3165.	3.2	11
360	Rapid and up-scalable manufacturing of gigahertz nanogap diodes. Nature Communications, 2022, 13, .	5.8	11

#	Article	IF	Citations
361	Effects of temperature on electronic properties of nickel phthalocyanine thin sandwich film structures. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2002, 20, 295-298.	0.9	10
362	Conjugated Polymerâ€“Porphyrin Complexes for Organic Electronics. ChemPhysChem, 2015, 16, 1223-1230.	1.0	10
363	Nondestructive Method for Mapping Metal Contact Diffusion in In₂O₃ Thin-Film Transistors. ACS Applied Materials & Interfaces, 2016, 8, 25631-25636.	4.0	10
364	Electron mobility enhancement in solution-processed low-voltage In2O3 transistors via channel interface planarization. AIP Advances, 2018, 8, .	0.6	10
365	A Structurally Simple but Highâ€Performing Donorâ€“Acceptor Polymer for Fieldâ€Effect Transistor Applications. Advanced Electronic Materials, 2020, 6, 2000490.	2.6	10
366	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.	1.5	10
367	Wide-Band-Gap Mixed-Halide 3D Perovskites: Electronic Structure and Halide Segregation Investigation. ACS Applied Electronic Materials, 2021, 3, 2277-2285.	2.0	10
368	Versatile methods for improving the mechanical properties of fullerene and non-fullerene bulk heterojunction layers to enable stretchable organic solar cells. Journal of Materials Chemistry C, 2022, 10, 3375-3386.	2.7	10
369	Synthesis of tetraselenophenoporphyrazine and its application in transistor devices. Journal of Materials Chemistry C, 2013, 1, 6198.	2.7	9
370	Correlating Non-Geminate Recombination with Film Structure: A Comparison of Polythiophene: Fullerene Bilayer and Blend Films. Journal of Physical Chemistry Letters, 2014, 5, 3669-3676.	2.1	9
371	Charge Photogeneration and Recombination in Mesostructured CuSCNâ€Nanowire/PC₇₀BM Solar Cells. Solar Rrl, 2018, 2, 1800095.	3.1	9
372	Significant Performance Improvement in nâ€Channel Organic Fieldâ€Effect Transistors with C₆₀:C₇₀ Coâ€Crystals Induced by Poly(2â€ethylâ€2â€oxazoline) Nanodots. Advanced Materials, 2021, 33, e2100421.	11.1	9
373	Ternary organic photodetectors based on pseudo-binaries nonfullerene-based acceptors. JPhys Materials, 2021, 4, 045001.	1.8	9
374	Printed Memtransistor Utilizing a Hybrid Perovskite/Organic Heterojunction Channel. ACS Applied Materials & Interfaces, 2021, 13, 51592-51601.	4.0	9
375	14ÂGHz Schottky Diodes Using a pâ€Doped Organic Polymer. Advanced Materials, 2022, 34, e2108524.	11.1	9
376	Flexible nanogap polymer light-emitting diodes fabricated via adhesion lithography (a-Lith). JPhys Materials, 2018, 1, 01LT01.	1.8	8
377	Adding a new layer to â€˜more than Mooreâ€™. Nature Electronics, 2019, 2, 497-498.	13.1	8
378	Lyotropic â€˜hairyâ€™ TiO₂ nanorods. Nanoscale Advances, 2019, 1, 254-264.	2.2	8

#	Article	IF	Citations
379	Polymer Lightâ€Emitting Transistors With Chargeâ€Carrier Mobilities Exceeding 1 cm² V^{â^'1} s^{â^'1}. Advanced Electronic Materials, 2020, 6, 1901132.	2.6	8
380	Emerging Thinâ€Film Transistor Technologies and Applications. Advanced Functional Materials, 2020, 30, 2001678.	7.8	8
381	A Lowâ€Power CuSCN Hydrogen Sensor Operating Reversibly at Room Temperature. Advanced Functional Materials, 2022, 32, 2102635.	7.8	8
382	Chlorine-Infused Wide-Band Gap p-CuSCN/n-GaN Heterojunction Ultraviolet-Light Photodetectors. ACS Applied Materials & Interfaces, 2022, 14, 17889-17898.	4.0	8
383	Photophysics of Defect-Passivated Quasi-2D (PEA)₂PbBr₄ Perovskite Using an Organic Small Molecule. ACS Energy Letters, 2022, 7, 2450-2458.	8.8	8
384	Be-Doped ZnO Thin-Film Transistors and Circuits Fabricated by Spray Pyrolysis in Air. Journal of Display Technology, 2013, 9, 688-693.	1.3	7
385	Integration of solution-processed (7,5) SWCNTs with sputtered and spray-coated metal oxides for flexible complementary inverters. , 2014, , .		7
386	The influence of alkyl group regiochemistry and backbone fluorination on the packing and transistor performance of N-cyanoimine functionalised indacenodithiophenes. Materials Advances, 2021, 2, 1706-1714.	2.6	7
387	Integrated Complementary-Like Circuits Based on Organic Ambipolar Transistors. Materials Research Society Symposia Proceedings, 2005, 871, 1.	0.1	6
388	Selenium in Diketopyrrolopyrroleâ€based Polymers: Influence on Electronic Properties and Charge Carrier Mobilities. Israel Journal of Chemistry, 2014, 54, 817-827.	1.0	6
389	Solution-processable and photopolymerisable TiO₂ nanorods as dielectric layers for thin film transistors. RSC Advances, 2020, 10, 25540-25546.	1.7	6
390	Molecular doping of near-infrared organic photodetectors for photoplethysmogram sensors. Journal of Materials Chemistry C, 2021, 9, 3129-3135.	2.7	6
391	N-type polymer semiconductors incorporating para, meta, and ortho-carborane in the conjugated backbone. Polymer, 2022, 240, 124481.	1.8	6
392	Efficient Piezoelectric Energy Harvesting from a Discrete Hybrid Bismuth Bromide Ferroelectric Templated by Phosphonium Cation. Chemistry - A European Journal, 2022, , .	1.7	6
393	Addition of Diquat Enhances the Electron Mobility in Various Nonâ€Fullerene Acceptor Molecules. Advanced Functional Materials, 0, , 2202954.	7.8	6
394	High-speed scanning thermal lithography for nanostructuring of electronic devices. Nanoscale, 2014, 6, 5813-5819.	2.8	5
395	Electrochemical Stability and Ambipolar Charge Transport in Diketopyrrolopyrrole-Based Organic Materials. ACS Applied Electronic Materials, 2019, 1, 2037-2046.	2.0	5
396	Ultrathin channels make transistors go faster. Nature Materials, 2019, 18, 1033-1034.	13.3	5

#	Article	IF	Citations
397	Efficient Hybrid Amorphous Silicon/Organic Tandem Solar Cells Enabled by Nearâ€Infrared Absorbing Nonfullerene Acceptors. Advanced Energy Materials, 2021, 11, 2100166.	10.2	5
398	Bias stability of solution-processed In2O3 thin film transistors. JPhys Materials, 2020, 4, 015003.	1.8	5
399	Rapid photodegradation of organic micro-pollutants in water using high-intensity pulsed light. Journal of Water Process Engineering, 2021, 44, 102414.	2.6	5
400	Determining Out-of-Plane Hole Mobility in CuSCN via the Time-of-Flight Technique To Elucidate Its Function in Perovskite Solar Cells. ACS Applied Materials & Interfaces, 2021, 13, 38499-38507.	4.0	4
401	Planar refractive index patterning through microcontact photo-thermal annealing of a printable organic/inorganic hybrid material. Materials Horizons, 2022, 9, 411-416.	6.4	4
402	The role of the ethynylene bond on the optical and electronic properties of diketopyrrolopyrrole copolymers. RSC Advances, 2014, 4, 58404-58411.	1.7	3
403	Novel soluble thieno[3,2-b]thiophene fused porphyrazine. RSC Advances, 2015, 5, 90645-90650.	1.7	3
404	Low Temperature Scalable Deposition of Copper(I) Thiocyanate Films via Aerosol-Assisted Chemical Vapor Deposition. Crystal Growth and Design, 2020, 20, 5380-5386.	1.4	3
405	Development of Polymer Semiconductors for Field-Effect Transistor Devices in Displays. , 2009, , 393-429.		3
406	Heterojunction oxide thin-film transistors. , 0, , 5-1-5-27.		3
407	Radiofrequency Schottky Diodes Based on p-Doped Copper(I) Thiocyanate (CuSCN). ACS Applied Materials & Interfaces, 2022, 14, 29993-29999.	4.0	3
408	Two-dimensional ferroelectricity and antiferroelectricity for next-generation computing paradigms. Matter, 2022, 5, 1999-2014.	5.0	3
409	Effects of alkyl chain positioning on conjugated polymer microstructure and field-effect mobilities. MRS Communications, 2015, 5, 435-440.	0.8	2
410	Oneâ€Step Sixfold Cyanation of Benzothiadiazole Acceptor Units for Airâ€Stable Highâ€Performance nâ€Type Organic Fieldâ€Effect Transistors. Angewandte Chemie, 2021, 133, 6035-6042.	1.6	2
411	Tyrian purple: an ancient natural dye for cross-conjugated n-type charge transport. Journal of Materials Chemistry C, 2021, 9, 4200-4205.	2.7	2
412	Adhesion lithography for fabrication of printed radio-frequency diodes. SPIE Newsroom, 0, , .	0.1	2
413	Chemical Design Rules for Nonâ€Fullerene Acceptors in Organic Solar Cells (Adv. Energy Mater.) Tj ETQq1 1 0.784314 rgBT /Overlock 10.2		2
414	Highly efficient solution-processible phosphorescent dendrimers for organic light-emitting diodes. Journal of the Society for Information Display, 2003, 11, 161.	0.8	1

#	Article	IF	Citations
415	Light-sensing ambipolar organic transistors for optoelectronic applications. Proceedings of SPIE, 2008, , .	0.8	1
416	Selected Peer-Reviewed Articles from EMRS 2012 Symposium on â€œOrganic and Hybrid Materials for Flexible Electronics: Properties and Applicationsâ€• Journal of Nanoscience and Nanotechnology, 2013, 13, 5134-5135.	0.9	1
417	Preface: Printed electronics. Semiconductor Science and Technology, 2015, 30, 100301.	1.0	1
418	Low Temperature and Radiation Stability of Flexible IGZO TFTs and their Suitability for Space Applications. , 2018, , .		1
419	Device Physics in Organic Solar Cells and Drift-Diffusion Simulations. , 2020, , 1-36.		1
420	In Situ Investigation and Photovoltaic Devices: Sequential Formation of Tunable-Bandgap Mixed-Halide Lead-based Perovskites. , 0, , .		1
421	Low-energy consumption CuSCN-based ultra-low-ppb level ozone sensor, operating at room temperature. Sensors and Actuators A: Physical, 2022, 338, 113462.	2.0	1
422	Charge transport and recombination in wide-bandgap Y6 derivatives-based organic solar cells. Advances in Natural Sciences: Nanoscience and Nanotechnology, 2022, 13, 025001.	0.7	1
423	Conjugated dendrimers: a modular approach to materials for full-color displays. , 2004, 5214, 50.		0
424	67.1: Invited Paper: Dendrimers â€” Efficient Solution-Processed Phosphorescent OLED Materials. Digest of Technical Papers SID International Symposium, 2005, 36, 1862.	0.1	0
425	Solution Processed Self-Assembled Monolayer Gate Dielectrics for Low-Voltage Organic Transistors. Materials Research Society Symposia Proceedings, 2008, 1114, 90201.	0.1	0
426	Solution processed low-voltage organic transistors based on self-assembled monolayer gate dielectrics. Proceedings of SPIE, 2009, , .	0.8	0
427	Semiconducting Arylacetylene:Insulating Polymer Blends for Organic-Based Electronic Devices. Materials Research Society Symposia Proceedings, 2012, 1402, 94.	0.1	0
428	Low-voltage graphene transistors based on self-assembled monolayer nanodielectrics. Materials Research Society Symposia Proceedings, 2012, 1451, 179-184.	0.1	0
429	Electronic structure tuning of new fused thieno[3,2-b]thieno bisthiophene based polymers via alkyl chain and Group IV heteroatom modulation. Proceedings of SPIE, 2012, , .	0.8	0
430	Correction to â€œImproved Field-Effect Transistor Performance of a Benzotrithiophene Polymer through Ketal Cleavage in the Solid Stateâ€• ACS Applied Materials & Interfaces, 2013, 5, 2783-2783.	4.0	0
431	Enhanced Lightâ€“Matter Interaction: Lightâ€“Matter Interaction within Extreme Dimensions: From Nanomanufacturing to Applications (Advanced Optical Materials 18/2018). Advanced Optical Materials, 2018, 6, 1870072.	3.6	0
432	Organic Solar Cells: Highâ€Performance Tandem Organic Solar Cells Using HSolar as the Interconnecting Layer (Adv. Energy Mater. 25/2020). Advanced Energy Materials, 2020, 10, 2070109.	10.2	0

#	Article	IF	Citations
433	Ultrafast Energy Transfer Triggers Ionization Energy Offset Dependence of Quantum Efficiency in Low-bandgap Non-fullerene Acceptor Solar Cells. , 0, , .		0
434	Ultra-high performance organic transistors enabled by molecular doping. , 0, , .		0
435	Multi-Input Parameter Modulable Memtransistors from Hybrid Perovskite/Conjugated Polymer Heterostructures. , 0, , .		0
436	Aqueous ammonia-based exfoliation of two dimensional MoS2 and WS2 and their application in non-fullerene organic solar cells. , 0, , .		0