John Anthony

List of Publications by Year in descending order

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9775 8852 22,777 274 73 145 citations h-index g-index papers 285 285 285 14120 docs citations times ranked citing authors all docs

#	Article	IF	CITATIONS
1	Functionalized Acenes and Heteroacenes for Organic Electronics. Chemical Reviews, 2006, 106, 5028-5048.	23.0	2,597
2	The Larger Acenes: Versatile Organic Semiconductors. Angewandte Chemie - International Edition, 2008, 47, 452-483.	7.2	1,864
3	Functionalized Pentacene:Â Improved Electronic Properties from Control of Solid-State Order. Journal of the American Chemical Society, 2001, 123, 9482-9483.	6.6	1,221
4	nâ€Type Organic Semiconductors in Organic Electronics. Advanced Materials, 2010, 22, 3876-3892.	11.1	1,077
5	Organic Field-Effect Transistors from Solution-Deposited Functionalized Acenes with Mobilities as High as 1 cm2/V·s. Journal of the American Chemical Society, 2005, 127, 4986-4987.	6.6	735
6	A Road Map to Stable, Soluble, Easily Crystallized Pentacene Derivatives. Organic Letters, 2002, 4, 15-18.	2.4	572
7	High mobility solution processed 6,13-bis(triisopropyl-silylethynyl) pentacene organic thin film transistors. Applied Physics Letters, 2007, 91, .	1.5	542
8	Contact-induced crystallinity for high-performance soluble acene-based transistors and circuits. Nature Materials, 2008, 7, 216-221.	13.3	455
9	Improving Organic Thin-Film Transistor Performance through Solvent-Vapor Annealing of Solution-Processable Triethylsilylethynyl Anthradithiophene. Advanced Materials, 2006, 18, 1721-1726.	11.1	388
10	Highâ€Performance Polymerâ€Small Molecule Blend Organic Transistors. Advanced Materials, 2009, 21, 1166-1171.	11.1	351
11	Chromophore Fluorination Enhances Crystallization and Stability of Soluble Anthradithiophene Semiconductors. Journal of the American Chemical Society, 2008, 130, 2706-2707.	6.6	324
12	Synthesis and Characterization of Electron-Deficient Pentacenes. Organic Letters, 2005, 7, 3163-3166.	2.4	263
13	Competition between Singlet Fission and Charge Separation in Solution-Processed Blend Films of 6,13-Bis(triisopropylsilylethynyl)pentacene with Sterically-Encumbered Perylene-3,4:9,10-bis(dicarboximide)s. Journal of the American Chemical Society, 2012, 134, 386-397.	6.6	232
14	Solution-printed organic semiconductor blends exhibiting transport properties on par with single crystals. Nature Communications, 2015, 6, 8598.	5.8	219
15	Efficient Solution-Processed Photovoltaic Cells Based on an Anthradithiophene/Fullerene Blend. Journal of the American Chemical Society, 2007, 129, 9144-9149.	6.6	205
16	Allâ€Printed Flexible Organic Transistors Enabled by Surface Tensionâ€Guided Blade Coating. Advanced Materials, 2014, 26, 5722-5727.	11.1	204
17	Stable, Crystalline Acenedithiophenes with up to Seven Linearly Fused Rings. Organic Letters, 2004, 6, 3325-3328.	2.4	199
18	Exciton Delocalization Drives Rapid Singlet Fission in Nanoparticles of Acene Derivatives. Journal of the American Chemical Society, 2015, 137, 6790-6803.	6.6	195

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19	Observation of Two Triplet-Pair Intermediates in Singlet Exciton Fission. Journal of Physical Chemistry Letters, 2016, 7, 2370-2375.	2.1	186
20	Vibronically coherent ultrafast triplet-pair formation and subsequent thermally activated dissociation control efficient endothermic singlet fission. Nature Chemistry, 2017, 9, 1205-1212.	6.6	184
21	Tetracene Derivatives as Potential Red Emitters for Organic LEDs. Organic Letters, 2003, 5, 4245-4248.	2.4	182
22	Strongly exchange-coupled triplet pairs in an organic semiconductor. Nature Physics, 2017, 13, 176-181.	6.5	182
23	Organic Single-Crystal Field-Effect Transistors of a Soluble Anthradithiophene. Chemistry of Materials, 2008, 20, 6733-6737.	3.2	178
24	Identification of a triplet pair intermediate in singlet exciton fission in solution. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 7656-7661.	3.3	178
25	The entangled triplet pair state in acene and heteroacene materials. Nature Communications, 2017, 8, 15953.	5.8	171
26	Highly Crystalline Soluble Acene Crystal Arrays for Organic Transistors: Mechanism of Crystal Growth During Dipâ€Coating. Advanced Functional Materials, 2012, 22, 1005-1014.	7.8	160
27	Bistetracene: An Air-Stable, High-Mobility Organic Semiconductor with Extended Conjugation. Journal of the American Chemical Society, 2014, 136, 9248-9251.	6.6	150
28	Reducing dynamic disorder in small-molecule organic semiconductors by suppressing large-amplitude thermal motions. Nature Communications, 2016, 7, 10736.	5.8	147
29	Bandlike transport in pentacene and functionalized pentacene thin films revealed by subpicosecond transient photoconductivity measurements. Physical Review B, 2005, 71, .	1.1	146
30	Controlling Nucleation and Crystallization in Solutionâ€Processed Organic Semiconductors for Thinâ€Film Transistors. Advanced Materials, 2009, 21, 3605-3609.	11.1	141
31	Controlled Deposition of a Highâ€Performance Smallâ€Molecule Organic Singleâ€Crystal Transistor Array by Direct Inkâ€Jet Printing. Advanced Materials, 2012, 24, 497-502.	11.1	141
32	Effects of polymorphism on charge transport in organic semiconductors. Physical Review B, 2009, 80,	1.1	137
33	Controlled Deposition of Highly Ordered Soluble Acene Thin Films: Effect of Morphology and Crystal Orientation on Transistor Performance. Advanced Materials, 2009, 21, 4926-4931.	11.1	133
34	Endothermic singlet fission is hindered by excimer formation. Nature Chemistry, 2018, 10, 305-310.	6.6	130
35	Synthesis and Stability of Soluble Hexacenes. Organic Letters, 2010, 12, 2060-2063.	2.4	129
36	Anisotropic mobility in large grain size solution processed organic semiconductor thin films. Applied Physics Letters, 2008, 92, .	1.5	126

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37	High Mobility Fieldâ€Effect Transistors with Versatile Processing from a Smallâ€Molecule Organic Semiconductor. Advanced Materials, 2013, 25, 4352-4357.	11.1	126
38	A survey of electron-deficient pentacenes as acceptors in polymer bulk heterojunction solar cells. Chemical Science, 2011, 2, 363-368.	3.7	121
39	Electronic Interactions and Thermal Disorder in Molecular Crystals Containing Cofacial Pentacene Units. Chemistry of Materials, 2005, 17, 5024-5031.	3.2	120
40	Solvent-dependent electrical characteristics and stability of organic thin-film transistors with drop cast bis(triisopropylsilylethynyl) pentacene. Applied Physics Letters, 2008, 93, .	1.5	116
41	Optical and transient photoconductive properties of pentacene and functionalized pentacene thin films: Dependence on film morphology. Journal of Applied Physics, 2005, 98, 033701.	1.1	114
42	Thermally Induced Solid-State Phase Transition of Bis(triisopropylsilylethynyl) Pentacene Crystals. Journal of Physical Chemistry B, 2006, 110, 16397-16403.	1.2	113
43	Ultrafast carrier dynamics in pentacene, functionalized pentacene, tetracene, and rubrene single crystals. Applied Physics Letters, 2006, 88, 162101.	1.5	107
44	Molecular solubility and hansen solubility parameters for the analysis of phase separation in bulk heterojunctions. Journal of Polymer Science, Part B: Polymer Physics, 2012, 50, 1405-1413.	2.4	107
45	Vertically Segregated Structure and Properties of Small Molecule–Polymer Blend Semiconductors for Organic Thinâ€Film Transistors. Advanced Functional Materials, 2013, 23, 366-376.	7.8	106
46	Soluble n-type pentacene derivatives as novel acceptors for organic solar cells. Journal of Materials Chemistry, 2009, 19, 3049.	6.7	101
47	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
48	Manipulating molecules with strong coupling: harvesting triplet excitons in organic exciton microcavities. Chemical Science, 2020, 11, 343-354.	3.7	98
49	High-mobility spin-cast organic thin film transistors. Applied Physics Letters, 2008, 93, .	1.5	97
50	Physicochemically Stable Polymerâ€Coupled Oxide Dielectrics for Multipurpose Organic Electronic Applications. Advanced Functional Materials, 2011, 21, 2198-2207.	7.8	97
51	Striking the right balance of intermolecular coupling for high-efficiency singlet fission. Chemical Science, 2018, 9, 6240-6259.	3.7	97
52	Solution-Processed TIPS-Pentacene Organic Thin-Film-Transistor Circuits. IEEE Electron Device Letters, 2007, 28, 877-879.	2.2	96
53	A simple and robust approach to reducing contact resistance in organic transistors. Nature Communications, 2018, 9, 5130.	5.8	96
54	The influence of side chains on the structures and properties of functionalized pentacenes. Journal of Materials Chemistry, 2008, 18, 1961.	6.7	92

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55	The Influence of the Solvent Evaporation Rate on the Phase Separation and Electrical Performances of Soluble Aceneâ€Polymer Blend Semiconductors. Advanced Functional Materials, 2012, 22, 267-281.	7.8	90
56	Morphology and molecular orientation of thin-film bis(triisopropylsilylethynyl) pentacene. Journal of Materials Research, 2007, 22, 1701-1709.	1.2	89
57	Photoinduced pâ€to nâ€type Switching in Thermoelectric Polymerâ€Carbon Nanotube Composites. Advanced Materials, 2016, 28, 2782-2789.	11.1	89
58	Photochemical upconversion of near-infrared light from below the silicon bandgap. Nature Photonics, 2020, 14, 585-590.	15.6	88
59	Optical, Fluorescent, and (Photo)conductive Properties of High-Performance Functionalized Pentacene and Anthradithiophene Derivatives. Journal of Physical Chemistry C, 2009, 113, 14006-14014.	1.5	86
60	Addressing challenges. Nature Materials, 2014, 13, 773-775.	13.3	85
61	Dynamic Exchange During Triplet Transport in Nanocrystalline TIPS-Pentacene Films. Journal of the American Chemical Society, 2016, 138, 16069-16080.	6.6	84
62	Sensitizing Singlet Fission with Perovskite Nanocrystals. Journal of the American Chemical Society, 2019, 141, 4919-4927.	6.6	83
63	Correlation between microstructure, electronic properties and flicker noise in organic thin film transistors. Applied Physics Letters, 2008, 92, 132103.	1.5	82
64	Enhanced Performance Consistency in Nanoparticle/TIPS Pentaceneâ∈Based Organic Thin Film Transistors. Advanced Functional Materials, 2011, 21, 3617-3623.	7.8	81
65	Isomerically Pure <i>syn</i> -Anthradithiophenes: Synthesis, Properties, and FET Performance. Organic Letters, 2012, 14, 3660-3663.	2.4	81
66	Anisotropy of transient photoconductivity in functionalized pentacene single crystals. Applied Physics Letters, 2006, 89, 192113.	1.5	79
67	Delayed Molecular Triplet Generation from Energized Lead Sulfide Quantum Dots. Journal of Physical Chemistry Letters, 2017, 8, 1458-1463.	2.1	78
68	Conjugated Polymer-Mediated Polymorphism of a High Performance, Small-Molecule Organic Semiconductor with Tuned Intermolecular Interactions, Enhanced Long-Range Order, and Charge Transport. Chemistry of Materials, 2013, 25, 4378-4386.	3.2	77
69	Crossover from band-like to thermally activated charge transport in organic transistors due to strain-induced traps. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, E6739-E6748.	3.3	77
70	Spray-deposited poly(3,4-ethylenedioxythiophene):poly(styrenesulfonate) top electrode for organic solar cells. Applied Physics Letters, 2008, 93, .	1.5	76
71	Origin of the bias stress instability in single-crystal organic field-effect transistors. Physical Review B, 2010, 82, .	1.1	76
72	Quantitative analysis of the density of trap states at the semiconductor-dielectric interface in organic field-effect transistors. Applied Physics Letters, 2015, 107, .	1.5	75

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73	Decoupling the Effects of Selfâ€Assembled Monolayers on Gold, Silver, and Copper Organic Transistor Contacts. Advanced Materials Interfaces, 2015, 2, 1400384.	1.9	75
74	High-performance organic integrated circuits based on solution processable polymer-small molecule blends. Applied Physics Letters, 2008, 93, .	1.5	74
7 5	Singlet Exciton Fission in a Hexacene Derivative. Advanced Materials, 2013, 25, 1445-1448.	11.1	73
76	Direct Structural Mapping of Organic Fieldâ€Effect Transistors Reveals Bottlenecks to Carrier Transport. Advanced Materials, 2012, 24, 5553-5558.	11.1	70
77	Controlling the Microstructure of Solution-Processable Small Molecules in Thin-Film Transistors through Substrate Chemistry. Chemistry of Materials, 2011, 23, 1194-1203.	3.2	67
78	Geminate and Nongeminate Recombination of Triplet Excitons Formed by Singlet Fission. Physical Review Letters, 2014, 112, 238701.	2.9	67
79	Tailored interfaces for self-patterning organic thin-film transistors. Journal of Materials Chemistry, 2012, 22, 19047.	6.7	66
80	Effect of Acene Length on Electronic Properties in 5â€, 6â€, and 7â€Ringed Heteroacenes. Advanced Materials, 2011, 23, 3698-3703.	11.1	65
81	Vibrationâ€Assisted Crystallization Improves Organic/Dielectric Interface in Organic Thinâ€Film Transistors. Advanced Materials, 2013, 25, 6956-6962.	11.1	65
82	A Reiterative Approach to 2,3-Disubstituted Naphthalenes and Anthracenes. Organic Letters, 2000, 2, 85-87.	2.4	64
83	Guiding Crystallization around Bends and Sharp Corners. Advanced Materials, 2012, 24, 2692-2698.	11.1	62
84	Control of Energy Flow Dynamics between Tetracene Ligands and PbS Quantum Dots by Size Tuning and Ligand Coverage. Nano Letters, 2018, 18, 865-873.	4.5	62
85	Direct Observation of Correlated Triplet Pair Dynamics during Singlet Fission Using Ultrafast Mid-IR Spectroscopy. Journal of Physical Chemistry C, 2018, 122, 2012-2022.	1.5	62
86	Highly conductive wet-spun PEDOT:PSS fibers for applications in electronic textiles. Journal of Materials Chemistry C, 2020, 8, 11618-11630.	2.7	62
87	Polymer Directed Self-Assembly of pH-Responsive Antioxidant Nanoparticles. Langmuir, 2015, 31, 3612-3620.	1.6	61
88	Zone-Refinement Effect in Small Moleculeâ^'Polymer Blend Semiconductors for Organic Thin-Film Transistors. Journal of the American Chemical Society, 2011, 133, 412-415.	6.6	59
89	Solvent-type-dependent polymorphism and charge transport in a long fused-ring organic semiconductor. Nanoscale, 2014, 6, 449-456.	2.8	59
90	Thermal and mechanical cracking in bis(triisopropylsilylethnyl) pentacene thin films. Journal of Polymer Science, Part B: Polymer Physics, 2006, 44, 3631-3641.	2.4	58

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91	Late stage crystallization and healing during spin-coating enhance carrier transport in small-molecule organic semiconductors. Journal of Materials Chemistry C, 2014, 2, 5681-5689.	2.7	58
92	Effect of Crystallization Modes in TIPS-pentacene/Insulating Polymer Blends on the Gas Sensing Properties of Organic Field-Effect Transistors. Scientific Reports, 2019, 9, 21.	1.6	58
93	Spray printing of organic semiconducting single crystals. Nature Communications, 2016, 7, 13531.	5.8	57
94	Large-area patterning of a solution-processable organic semiconductor to reduce parasitic leakage and off currents in thin-film transistors. Applied Physics Letters, 2007, 90, 244103.	1.5	56
95	Fabrication and characterization of controllable grain boundary arrays in solution-processed small molecule organic semiconductor films. Journal of Applied Physics, 2012, 111, .	1.1	56
96	Solution-processable, crystalline material for quantitative singlet fission. Materials Horizons, 2017, 4, 915-923.	6.4	56
97	Photophysical Properties of Dioxolane-Substituted Pentacene Derivatives Dispersed in Tris(quinolin-8-olato)aluminum(III). Journal of Physical Chemistry B, 2006, 110, 7928-7937.	1.2	55
98	Singlet Fission and Triplet Transfer to PbS Quantum Dots in TIPS-Tetracene Carboxylic Acid Ligands. Journal of Physical Chemistry Letters, 2018, 9, 1454-1460.	2.1	53
99	Direct probe of the nuclear modes limiting charge mobility in molecular semiconductors. Materials Horizons, 2019, 6, 182-191.	6.4	53
100	The Electronic Nature and Reactivity of the Larger Acenes. Israel Journal of Chemistry, 2014, 54, 642-649.	1.0	50
101	Temperature dependence of exciton and charge carrier dynamics in organic thin films. Physical Review B, 2011, 84, .	1.1	49
102	Quantifying Resistances across Nanoscale Low- and High-Angle Interspherulite Boundaries in Solution-Processed Organic Semiconductor Thin Films. ACS Nano, 2012, 6, 9879-9886.	7.3	48
103	Engineering Molecular Ligand Shells on Quantum Dots for Quantitative Harvesting of Triplet Excitons Generated by Singlet Fission. Journal of the American Chemical Society, 2019, 141, 12907-12915.	6.6	48
104	Suppressing bias stress degradation in high performance solution processed organic transistors operating in air. Nature Communications, 2021, 12, 2352.	5.8	48
105	Formation of the Donor–Acceptor Charge-Transfer Exciton and Its Contribution to Charge Photogeneration and Recombination in Small-Molecule Bulk Heterojunctions. Journal of Physical Chemistry C, 2012, 116, 18108-18116.	1.5	47
106	Surface Potential Imaging of Solution Processable Aceneâ€Based Thin Film Transistors. Advanced Materials, 2008, 20, 4513-4516.	11.1	46
107	Heterogeneous Nucleation Promotes Carrier Transport in Solutionâ€Processed Organic Fieldâ€Effect Transistors. Advanced Functional Materials, 2013, 23, 291-297.	7.8	46
108	Long-lived charge traps in functionalized pentacene and anthradithiophene studied by time-resolved electric force microscopy. Journal of Materials Chemistry, 2009, 19, 6116.	6.7	45

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109	Boosting Direct Xâ€Ray Detection in Organic Thin Films by Small Molecules Tailoring. Advanced Functional Materials, 2019, 29, 1806119.	7.8	45
110	Emissive spin-0 triplet-pairs are a direct product of triplet–triplet annihilation in pentacene single crystals and anthradithiophene films. Nature Chemistry, 2021, 13, 163-171.	6.6	45
111	A new functionalization strategy for pentacene. Chemical Communications, 2007, , 4746.	2.2	44
112	Solvent Vapor Annealing in the Molecular Regime Drastically Improves Carrier Transport in Small-Molecule Thin-Film Transistors. ACS Applied Materials & Samp; Interfaces, 2013, 5, 2325-2330.	4.0	44
113	Structural and Electronic Properties of Crystalline, Isomerically Pure Anthradithiophene Derivatives. Advanced Functional Materials, 2016, 26, 2341-2348.	7.8	44
114	Rational Design of Organic Semiconductors for Texture Control and Selfâ€Patterning on Halogenated Surfaces. Advanced Functional Materials, 2014, 24, 5052-5058.	7.8	43
115	Energy Transfer and Exciplex Formation and Their Impact on Exciton and Charge Carrier Dynamics in Organic Films. Journal of Physical Chemistry Letters, 2011, 2, 362-366.	2.1	42
116	Interface engineering to enhance charge injection and transport in solution-deposited organic transistors. Organic Electronics, 2017, 50, 100-105.	1.4	41
117	Dynamics of singlet fission and electron injection in self-assembled acene monolayers on titanium dioxide. Chemical Science, 2018, 9, 3004-3013.	3.7	41
118	Silylethynylated Anthracene Derivatives for use in Organic Light-Emitting Diodes. Japanese Journal of Applied Physics, 2005, 44, 3921-3922.	0.8	40
119	Solution-Processed Organic and Halide Perovskite Transistors on Hydrophobic Surfaces. ACS Applied Materials & Samp; Interfaces, 2017, 9, 18120-18126.	4.0	40
120	Triplet Transfer Mediates Triplet Pair Separation during Singlet Fission in 6,13â€Bis(triisopropylsilylethynyl)â€Pentacene. Advanced Functional Materials, 2017, 27, 1703929.	7.8	40
121	Establishing Efficient Electrical Contact to the Weak Crystals of Triethylsilylethynyl Anthradithiophene. Chemistry of Materials, 2007, 19, 5210-5215.	3.2	39
122	Electron Transfer Parameters of Triisopropylsilylethynyl-Substituted Oligoacenes. Journal of Physical Chemistry C, 2008, 112, 20518-20524.	1.5	39
123	Harnessing Molecular Vibrations to Probe Triplet Dynamics During Singlet Fission. Journal of Physical Chemistry Letters, 2017, 8, 5700-5706.	2.1	39
124	Effects of Grain Boundary Density on the Gas Sensing Properties of Triethylsilylethynylâ€Anthradithiophene Fieldâ€Effect Transistors. Advanced Materials Interfaces, 2018, 5, 1701399.	1.9	39
125	Site-selective measurement of coupled spin pairs in an organic semiconductor. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 5077-5082.	3.3	39
126	Isomerically pure electron-deficient anthradithiophenes and their acceptor performance in polymer solar cells. Chemical Communications, 2011, 47, 7617.	2.2	38

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127	Independent Tuning of Electronic Levels in Pentacene by Siteâ€Specific Substitution. ChemPhysChem, 2008, 9, 1519-1523.	1.0	37
128	Synthesis and charge transport studies of stable, soluble hexacenes. Chemical Communications, 2012, 48, 8261.	2.2	37
129	The Influence of Isomer Purity on Trap States and Performance of Organic Thinâ€Film Transistors. Advanced Electronic Materials, 2017, 3, 1600294.	2.6	37
130	Thin-film morphology and transistor performance of alkyl-substituted triethylsilylethynyl anthradithiophenes. Journal of Materials Chemistry, 2009, 19, 7984.	6.7	36
131	Slow charge transfer from pentacene triplet states at the Marcus optimum. Nature Chemistry, 2020, 12, 63-70.	6.6	36
132	Transport in organic semiconductors in large electric fields: From thermal activation to field emission. Applied Physics Letters, 2010, 96, 053308.	1.5	34
133	π-σ-Phosphonic acid organic monolayer–amorphous sol–gel hafnium oxide hybrid dielectric for low-voltage organic transistors on plastic. Journal of Materials Chemistry, 2009, 19, 7929.	6.7	33
134	Low-voltage polymer/small-molecule blend organic thin-film transistors and circuits fabricated via spray deposition. Applied Physics Letters, 2015, 106, .	1.5	33
135	Direct vs Delayed Triplet Energy Transfer from Organic Semiconductors to Quantum Dots and Implications for Luminescent Harvesting of Triplet Excitons. ACS Nano, 2020, 14, 4224-4234.	7.3	33
136	Polymeric Substrate Spin-Cast diF-TESADT OTFT Circuits. IEEE Electron Device Letters, 2008, 29, 1004-1006.	2.2	32
137	Elucidation of Excitation Energy Dependent Correlated Triplet Pair Formation Pathways in an Endothermic Singlet Fission System. Journal of the American Chemical Society, 2018, 140, 4613-4622.	6.6	32
138	Aggregate formation and its effect on (opto)electronic properties of guest-host organic semiconductors. Applied Physics Letters, 2010, 97, 163303.	1.5	31
139	Photophysical characterization and time-resolved spectroscopy of a anthradithiophene dimer: exploring the role of conformation in singlet fission. Physical Chemistry Chemical Physics, 2017, 19, 23162-23175.	1.3	31
140	Solution processed low-voltage organic transistors and complementary inverters. Applied Physics Letters, 2009, 95, .	1.5	30
141	Enhanced charge photogeneration promoted by crystallinity in small-molecule donor-acceptor bulk heterojunctions. Applied Physics Letters, 2014, 105, 043301.	1.5	30
142	High mobility transistors based on electrospray-printed small-molecule/polymer semiconducting blends. Journal of Materials Chemistry C, 2016, 4, 3499-3507.	2.7	30
143	Theory-Driven Insight into the Crystal Packing of Trialkylsilylethynyl Pentacenes. Chemistry of Materials, 2017, 29, 2502-2512.	3.2	30
144	Organic semiconductor composites: Influence of additives on the transient photocurrent. Applied Physics Letters, 2009, 94, 013306.	1.5	29

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145	Synthesis and Properties of Isomerically Pure Anthrabisbenzothiophenes. Organic Letters, 2012, 14, 62-65.	2.4	29
146	Presence of Short Intermolecular Contacts Screens for Kinetic Stability in Packing Polymorphs. Journal of the American Chemical Society, 2018, 140, 7519-7525.	6.6	29
147	Grain Boundary Induced Bias Instability in Soluble Acene-Based Thin-Film Transistors. Scientific Reports, 2016, 6, 33224.	1.6	27
148	Characterization of functionalized pentacene field-effect transistors and its logic gate application. Journal of Applied Physics, 2006, 100, 044511.	1.1	25
149	Intermolecular Effects on the Hole States of Triisopropylsilylethynyl-Substituted Oligoacenes. Journal of Physical Chemistry C, 2010, 114, 13838-13845.	1.5	25
150	Understanding Heterogeneous Nucleation in Binary, Solution-Processed, Organic Semiconductor Thin Films. Chemistry of Materials, 2012, 24, 2920-2928.	3.2	25
151	Photoresponse of the conductivity in functionalized pentacene compounds. Journal of Applied Physics, 2002, 92, 5208-5213.	1.1	24
152	Self-organizing properties of triethylsilylethynyl-anthradithiophene on monolayer graphene electrodes in solution-processed transistors. Nanoscale, 2013, 5, 11094.	2.8	24
153	Quantifying the Energy Barriers and Elucidating the Charge Transport Mechanisms across Interspherulite Boundaries in Solutionâ€Processed Organic Semiconductor Thin Films. Advanced Functional Materials, 2015, 25, 5662-5668.	7.8	24
154	Unified film patterning and annealing of an organic semiconductor with micro-grooved wet stamps. Journal of Materials Chemistry C, 2016, 4, 6996-7003.	2.7	24
155	Understanding the Crystal Packing and Organic Thinâ€Film Transistor Performance in Isomeric Guest–Host Systems. Advanced Materials, 2017, 29, 1700048.	11.1	24
156	Impact of Atomistic Substitution on Thin-Film Structure and Charge Transport in a Germanyl-ethynyl Functionalized Pentacene. Chemistry of Materials, 2019, 31, 6615-6623.	3.2	24
157	Persistent photoexcited conducting states in functionalized pentacene. Journal of Applied Physics, 2004, 96, 3312-3318.	1.1	23
158	OCELOT: An infrastructure for data-driven research to discover and design crystalline organic semiconductors. Journal of Chemical Physics, 2021, 154, 174705.	1.2	23
159	Functionalized pentacenes: a combined theoretical, Raman and UV–Vis spectroscopic study. Theoretical Chemistry Accounts, 2011, 128, 521-530.	0.5	22
160	Computationally aided design of a high-performance organic semiconductor: the development of a universal crystal engineering core. Chemical Science, 2019, 10, 10543-10549.	3.7	22
161	Enhanced Gas Sensing Performance of Organic Fieldâ€Effect Transistors by Modulating the Dimensions of Triethylsilylethynylâ€Anthradithiophene Microcrystal Arrays. Advanced Materials Interfaces, 2020, 7, 1901696.	1.9	22
162	Medical Applications of Tissue-Equivalent, Organic-Based Flexible Direct X-Ray Detectors. Frontiers in Physics, 2020, 8, .	1.0	22

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163	Singlet Fission in Concentrated TIPS-Pentacene Solutions: The Role of Excimers and Aggregates. Journal of the American Chemical Society, 2021, 143, 13749-13758.	6.6	22
164	Influence of Solid-State Microstructure on the Electronic Performance of 5,11-Bis(triethylsilylethynyl) Anthradithiophene. Chemistry of Materials, 2013, 25, 1823-1828.	3.2	21
165	Delimited Polyacenes: Edge Topology as a Tool To Modulate Carbon Nanoribbon Structure, Conjugation, and Mobility. Chemistry of Materials, 2018, 30, 947-957.	3.2	21
166	Importance of intramolecular electron spin relaxation in small molecule semiconductors. Physical Review B, 2011, 84, .	1.1	20
167	Simple, low-cost, water-processable n -type thermoelectric composite films from multiwall carbon nanotubes in polyvinylpyrrolidone. Synthetic Metals, 2017, 225, 86-92.	2.1	20
168	Employing Pneumatic Nozzle Printing for Controlling the Crystal Growth of Small Molecule Organic Semiconductor for Fieldâ€Effect Transistors. Advanced Electronic Materials, 2018, 4, 1700534.	2.6	20
169	1D versus 2D Growth of Soluble Acene Crystals from Soluble Acene/Polymer Blends Governed by a Residual Solvent Reservoir in a Phaseâ€Separated Polymer Matrix. Advanced Functional Materials, 2018, 28, 1802875.	7.8	20
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