

# Zhenan Bao

## List of Publications by Year in descending order

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735  
papers

139,362  
citations

37

190  
h-index

102

350  
g-index

762  
all docs

762  
docs citations

762  
times ranked

73282  
citing authors

#	ARTICLE	IF	CITATIONS
1	Evaluation of Solution-Processed Reduced Graphene Oxide Films as Transparent Conductors. ACS Nano, 2008, 2, 463-470.	14.6	2,955
2	Skin-like pressure and strain sensors based on transparent elastic films of carbon nanotubes. Nature Nanotechnology, 2011, 6, 788-792.	31.5	2,839
3	Highly sensitive flexible pressure sensors with microstructured rubber dielectric layers. Nature Materials, 2010, 9, 859-864.	27.5	2,749
4	Pathways for practical high-energy long-cycling lithium metal batteries. Nature Energy, 2019, 4, 180-186.	39.5	2,101
5	25th Anniversary Article: The Evolution of Electronic Skin (E <sup>2</sup> Skin): A Brief History, Design Considerations, and Recent Progress. Advanced Materials, 2013, 25, 5997-6038.	21.0	2,001
6	Pursuing prosthetic electronic skin. Nature Materials, 2016, 15, 937-950.	27.5	1,821
7	Flexible polymer transistors with high pressure sensitivity for application in electronic skin and health monitoring. Nature Communications, 2013, 4, 1859.	12.8	1,713
8	Soluble and processable regioregular poly(3-hexylthiophene) for thin film field-effect transistor applications with high mobility. Applied Physics Letters, 1996, 69, 4108-4110.	3.3	1,616
9	Skin electronics from scalable fabrication of an intrinsically stretchable transistor array. Nature, 2018, 555, 83-88.	27.8	1,588
10	Integrated Materials Design of Organic Semiconductors for Field-Effect Transistors. Journal of the American Chemical Society, 2013, 135, 6724-6746.	13.7	1,280
11	The rise of plastic bioelectronics. Nature, 2016, 540, 379-385.	27.8	1,280
12	An electrically and mechanically self-healing composite with pressure- and flexion-sensitive properties for electronic skin applications. Nature Nanotechnology, 2012, 7, 825-832.	31.5	1,270
13	Large-scale complementary integrated circuits based on organic transistors. Nature, 2000, 403, 521-523.	27.8	1,239
14	An ultra-sensitive resistive pressure sensor based on hollow-sphere microstructure induced elasticity in conducting polymer film. Nature Communications, 2014, 5, 3002.	12.8	1,225
15	Solution-Processed Graphene/MnO <sub>2</sub> Nanostructured Textiles for High-Performance Electrochemical Capacitors. Nano Letters, 2011, 11, 2905-2911.	9.1	1,195
16	Ultra-high mobility transparent organic thin film transistors grown by an off-centre spin-coating method. Nature Communications, 2014, 5, 3005.	12.8	1,155
17	Stable Li-ion battery anodes by in-situ polymerization of conducting hydrogel to conformally coat silicon nanoparticles. Nature Communications, 2013, 4, 1943.	12.8	1,138
18	A highly stretchable autonomous self-healing elastomer. Nature Chemistry, 2016, 8, 618-624.	13.6	1,133

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19	Paper-like electronic displays: Large-area rubber-stamped plastic sheets of electronics and microencapsulated electrophoretic inks. Proceedings of the National Academy of Sciences of the United States of America, 2001, 98, 4835-4840.	7.1	1,078
20	Enhancing the Supercapacitor Performance of Graphene/MnO <sub>2</sub> Nanostructured Electrodes by Conductive Wrapping. Nano Letters, 2011, 11, 4438-4442.	9.1	1,062
21	Semiconducting polymer nanoparticles as photoacoustic molecular imaging probes in living mice. Nature Nanotechnology, 2014, 9, 233-239.	31.5	1,057
22	A review of fabrication and applications of carbon nanotube film-based flexible electronics. Nanoscale, 2013, 5, 1727.	5.6	1,037
23	Self-healing chemistry enables the stable operation of silicon microparticle anodes for high-energy lithium-ion batteries. Nature Chemistry, 2013, 5, 1042-1048.	13.6	1,031
24	Intrinsically stretchable and healable semiconducting polymer for organic transistors. Nature, 2016, 539, 411-415.	27.8	1,030
25	Highly Conductive and Transparent PEDOT:PSS Films with a Fluorosurfactant for Stretchable and Flexible Transparent Electrodes. Advanced Functional Materials, 2012, 22, 421-428.	14.9	1,026
26	Hierarchical nanostructured conducting polymer hydrogel with high electrochemical activity. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 9287-9292.	7.1	1,025
27	A bioinspired flexible organic artificial afferent nerve. Science, 2018, 360, 998-1003.	12.6	982
28	Tuning charge transport in solution-sheared organic semiconductors using lattice strain. Nature, 2011, 480, 504-508.	27.8	981
29	Hybrid nanostructured materials for high-performance electrochemical capacitors. Nano Energy, 2013, 2, 213-234.	16.0	976
30	Patterning organic single-crystal transistor arrays. Nature, 2006, 444, 913-917.	27.8	963
31	A highly stretchable, transparent, and conductive polymer. Science Advances, 2017, 3, e1602076.	10.3	962
32	Electronic Skin: Recent Progress and Future Prospects for Skin-Attachable Devices for Health Monitoring, Robotics, and Prosthetics. Advanced Materials, 2019, 31, e1904765.	21.0	936
33	Side Chain Engineering in Solution-Processable Conjugated Polymers. Chemistry of Materials, 2014, 26, 604-615.	6.7	932
34	Organic Light-Emitting Diodes on Solution-Processed Graphene Transparent Electrodes. ACS Nano, 2010, 4, 43-48.	14.6	908
35	Highly stretchable polymer semiconductor films through the nanoconfinement effect. Science, 2017, 355, 59-64.	12.6	897
36	Solution coating of large-area organic semiconductor thin films with aligned single-crystalline domains. Nature Materials, 2013, 12, 665-671.	27.5	881

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37	Organic solar cells with solution-processed graphene transparent electrodes. <i>Applied Physics Letters</i> , 2008, 92, .	3.3	856
38	Synthetic Chemistry for Ultrapure, Processable, and High-Mobility Organic Transistor Semiconductors. <i>Accounts of Chemical Research</i> , 2001, 34, 359-369.	15.6	841
39	New Air-Stable n-Channel Organic Thin Film Transistors. <i>Journal of the American Chemical Society</i> , 1998, 120, 207-208.	13.7	836
40	Improving the Performance of Lithium-Sulfur Batteries by Conductive Polymer Coating. <i>ACS Nano</i> , 2011, 5, 9187-9193.	14.6	815
41	Tough and Water-Insensitive Self-Healing Elastomer for Robust Electronic Skin. <i>Advanced Materials</i> , 2018, 30, e1706846.	21.0	798
42	Robust and conductive two-dimensional metal-organic frameworks with exceptionally high volumetric and areal capacitance. <i>Nature Energy</i> , 2018, 3, 30-36.	39.5	786
43	Stretchable Organic Solar Cells. <i>Advanced Materials</i> , 2011, 23, 1771-1775.	21.0	754
44	A chameleon-inspired stretchable electronic skin with interactive colour changing controlled by tactile sensing. <i>Nature Communications</i> , 2015, 6, 8011.	12.8	749
45	Organic field-effect transistors with high mobility based on copper phthalocyanine. <i>Applied Physics Letters</i> , 1996, 69, 3066-3068.	3.3	745
46	An integrated self-healable electronic skin system fabricated via dynamic reconstruction of a nanostructured conducting network. <i>Nature Nanotechnology</i> , 2018, 13, 1057-1065.	31.5	736
47	A skin-inspired organic digital mechanoreceptor. <i>Science</i> , 2015, 350, 313-316.	12.6	708
48	Molecular design for electrolyte solvents enabling energy-dense and long-cycling lithium metal batteries. <i>Nature Energy</i> , 2020, 5, 526-533.	39.5	642
49	Siloxane-Terminated Solubilizing Side Chains: Bringing Conjugated Polymer Backbones Closer and Boosting Hole Mobilities in Thin-Film Transistors. <i>Journal of the American Chemical Society</i> , 2011, 133, 20130-20133.	13.7	628
50	Nanostructured conductive polypyrrole hydrogels as high-performance, flexible supercapacitor electrodes. <i>Journal of Materials Chemistry A</i> , 2014, 2, 6086-6091.	10.3	624
51	Highly Skin-Conformal Microhair Sensor for Pulse Signal Amplification. <i>Advanced Materials</i> , 2015, 27, 634-640.	21.0	621
52	High-Performance Air-Stable n-Channel Organic Thin Film Transistors Based on Halogenated Perylene Bisimide Semiconductors. <i>Journal of the American Chemical Society</i> , 2009, 131, 6215-6228.	13.7	619
53	Biodegradable and flexible arterial-pulse sensor for the wireless monitoring of blood flow. <i>Nature Biomedical Engineering</i> , 2019, 3, 47-57.	22.5	580
54	Designing polymers for advanced battery chemistries. <i>Nature Reviews Materials</i> , 2019, 4, 312-330.	48.7	579

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55	Self-Sorted, Aligned Nanotube Networks for Thin-Film Transistors. <i>Science</i> , 2008, 321, 101-104.	12.6	571
56	A hierarchically patterned, bioinspired e-skin able to detect the direction of applied pressure for robotics. <i>Science Robotics</i> , 2018, 3, .	17.6	568
57	Crystalline Ultrasoother Self-Assembled Monolayers of Alkylsilanes for Organic Field-Effect Transistors. <i>Journal of the American Chemical Society</i> , 2009, 131, 9396-9404.	13.7	562
58	Effect of Mesoscale Crystalline Structure on the Field-Effect Mobility of Regioregular Poly(3-hexyl) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50	14.9	546
59	A Sensitive and Biodegradable Pressure Sensor Array for Cardiovascular Monitoring. <i>Advanced Materials</i> , 2015, 27, 6954-6961.	21.0	544
60	Effects of Thermal Annealing Upon the Morphology of Polymerâ€“Fullerene Blends. <i>Advanced Functional Materials</i> , 2010, 20, 3519-3529.	14.9	539
61	Stretchable and self-healing polymers and devices for electronic skin. <i>Progress in Polymer Science</i> , 2013, 38, 1961-1977.	24.7	539
62	Morphology control strategies for solution-processed organic semiconductor thin films. <i>Energy and Environmental Science</i> , 2014, 7, 2145-2159.	30.8	535
63	High-Performance Plastic Transistors Fabricated by Printing Techniques. <i>Chemistry of Materials</i> , 1997, 9, 1299-1301.	6.7	525
64	Electronic Properties of Transparent Conductive Films of PEDOT:PSS on Stretchable Substrates. <i>Chemistry of Materials</i> , 2012, 24, 373-382.	6.7	503
65	Soft and elastic hydrogel-based microelectronics for localized low-voltage neuromodulation. <i>Nature Biomedical Engineering</i> , 2019, 3, 58-68.	22.5	499
66	Halogenated Materials as Organic Semiconductors. <i>Chemistry of Materials</i> , 2011, 23, 446-455.	6.7	489
67	Skin-inspired electronic devices. <i>Materials Today</i> , 2014, 17, 321-331.	14.2	487
68	Electronic sensing of vapors with organic transistors. <i>Applied Physics Letters</i> , 2001, 78, 2229-2231.	3.3	486
69	High-Mobility Field-Effect Transistors from Large-Area Solution-Grown Aligned C<sub>60</sub> Single Crystals. <i>Journal of the American Chemical Society</i> , 2012, 134, 2760-2765.	13.7	481
70	Stretchable Energyâ€“Harvesting Tactile Electronic Skin Capable of Differentiating Multiple Mechanical Stimuli Modes. <i>Advanced Materials</i> , 2014, 26, 7324-7332.	21.0	481
71	Doped Organic Transistors. <i>Chemical Reviews</i> , 2016, 116, 13714-13751.	47.7	477
72	A stretchable and biodegradable strain and pressure sensor for orthopaedic application. <i>Nature Electronics</i> , 2018, 1, 314-321.	26.0	469

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73	Quadruple H-Bonding Cross-Linked Supramolecular Polymeric Materials as Substrates for Stretchable, Antitearing, and Self-Healable Thin Film Electrodes. <i>Journal of the American Chemical Society</i> , 2018, 140, 5280-5289.	13.7	464
74	Self-healing soft electronics. <i>Nature Electronics</i> , 2019, 2, 144-150.	26.0	464
75	Lithium Metal Anodes with an Adaptive "Solid-Liquid" Interfacial Protective Layer. <i>Journal of the American Chemical Society</i> , 2017, 139, 4815-4820.	13.7	460
76	Stretchable Self-Healing Polymeric Dielectrics Cross-Linked Through Metal-Ligand Coordination. <i>Journal of the American Chemical Society</i> , 2016, 138, 6020-6027.	13.7	453
77	Organic Semiconductor Growth and Morphology Considerations for Organic Thin-Film Transistors. <i>Advanced Materials</i> , 2010, 22, 3857-3875.	21.0	451
78	Tunable Flexible Pressure Sensors using Microstructured Elastomer Geometries for Intuitive Electronics. <i>Advanced Functional Materials</i> , 2014, 24, 5427-5434.	14.9	424
79	A wireless body area sensor network based on stretchable passive tags. <i>Nature Electronics</i> , 2019, 2, 361-368.	26.0	421
80	Continuous wireless pressure monitoring and mapping with ultra-small passive sensors for health monitoring and critical care. <i>Nature Communications</i> , 2014, 5, 5028.	12.8	418
81	Perylene-dimide Nanowires and Their Use in Fabricating Field-Effect Transistors and Complementary Inverters. <i>Nano Letters</i> , 2007, 7, 2847-2853.	9.1	410
82	Transparent, Optical, Pressure-Sensitive Artificial Skin for Large-Area Stretchable Electronics. <i>Advanced Materials</i> , 2012, 24, 3223-3227.	21.0	410
83	Skin-Inspired Electronics: An Emerging Paradigm. <i>Accounts of Chemical Research</i> , 2018, 51, 1033-1045.	15.6	407
84	Hierarchical N-Doped Carbon as CO <sub>2</sub> Adsorbent with High CO <sub>2</sub> Selectivity from Rationally Designed Polypyrrole Precursor. <i>Journal of the American Chemical Society</i> , 2016, 138, 1001-1009.	13.7	405
85	Multifunctional materials for implantable and wearable photonic healthcare devices. <i>Nature Reviews Materials</i> , 2020, 5, 149-165.	48.7	403
86	Surface Fluorination of Reactive Battery Anode Materials for Enhanced Stability. <i>Journal of the American Chemical Society</i> , 2017, 139, 11550-11558.	13.7	398
87	The Physical Chemistry of Organic Field-Effect Transistors. <i>Journal of Physical Chemistry B</i> , 2000, 104, 671-678.	2.6	396
88	Organic Thin-Film Transistors Fabricated on Resorbable Biomaterial Substrates. <i>Advanced Materials</i> , 2010, 22, 651-655.	21.0	384
89	Organic single-crystal field-effect transistors. <i>Materials Today</i> , 2007, 10, 20-27.	14.2	381
90	Flexible and Stretchable Devices. <i>Advanced Materials</i> , 2016, 28, 4177-4179.	21.0	378

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91	A Flexible Bimodal Sensor Array for Simultaneous Sensing of Pressure and Temperature. <i>Advanced Materials</i> , 2014, 26, 796-804.	21.0	375
92	High-performance sodium <sup>+</sup> organic battery by realizing four-sodium storage in disodium rhodizonate. <i>Nature Energy</i> , 2017, 2, 861-868.	39.5	372
93	Organic thin film transistors. <i>Materials Today</i> , 2004, 7, 20-27.	14.2	369
94	Thin Film Deposition, Patterning, and Printing in Organic Thin Film Transistors. <i>Chemistry of Materials</i> , 2004, 16, 4824-4840.	6.7	368
95	Materials and structural designs of stretchable conductors. <i>Chemical Society Reviews</i> , 2019, 48, 2946-2966.	38.1	367
96	Highly stable organic polymer field-effect transistor sensor for selective detection in the marine environment. <i>Nature Communications</i> , 2014, 5, 2954.	12.8	362
97	Introducing organic nanowire transistors. <i>Materials Today</i> , 2008, 11, 38-47.	14.2	359
98	Stretchable organic optoelectronic sensorimotor synapse. <i>Science Advances</i> , 2018, 4, eaat7387.	10.3	359
99	Stretchable, elastic materials and devices for solar energy conversion. <i>Energy and Environmental Science</i> , 2011, 4, 3314.	30.8	356
100	Synthesis, Crystal Structure, and Transistor Performance of Tetracene Derivatives. <i>Journal of the American Chemical Society</i> , 2004, 126, 15322-15323.	18.7	353
101	Use of a 1 <i>H</i> -Benzoimidazole Derivative as an <i>n</i> -Type Dopant and To Enable Air-Stable Solution-Processed <i>n</i> -Channel Organic Thin-Film Transistors. <i>Journal of the American Chemical Society</i> , 2010, 132, 8852-8853.	13.7	353
102	Materials and Fabrication Needs for Low-Cost Organic Transistor Circuits. <i>Advanced Materials</i> , 2000, 12, 227-230.	21.0	351
103	Stabilization of Hexaaminobenzene in a 2D Conductive Metal <sup>+</sup> Organic Framework for High Power Sodium Storage. <i>Journal of the American Chemical Society</i> , 2018, 140, 10315-10323.	13.7	351
104	A Stiff and Healable Polymer Based on Dynamic <sup>+</sup> Covalent Boroxine Bonds. <i>Advanced Materials</i> , 2016, 28, 8277-8282.	21.0	349
105	Biocompatible and totally disintegrable semiconducting polymer for ultrathin and ultralightweight transient electronics. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017, 114, 5107-5112.	7.1	347
106	Mechanically tunable conductive interpenetrating network hydrogels that mimic the elastic moduli of biological tissue. <i>Nature Communications</i> , 2018, 9, 2740.	12.8	344
107	Artificial multimodal receptors based on ion relaxation dynamics. <i>Science</i> , 2020, 370, 961-965.	12.6	343
108	Controlled Deposition of Crystalline Organic Semiconductors for Field <sup>+</sup> Effect <sup>+</sup> Transistor Applications. <i>Advanced Materials</i> , 2009, 21, 1217-1232.	21.0	342

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109	Electronic skins and machine learning for intelligent soft robots. <i>Science Robotics</i> , 2020, 5, .	17.6	339
110	A Crystal-Engineered Hydrogen-Bonded Octachloroperylene Diimide with a Twisted Core: An n-Channel Organic Semiconductor. <i>Angewandte Chemie - International Edition</i> , 2010, 49, 740-743.	13.8	337
111	Rational solvent molecule tuning for high-performance lithium metal battery electrolytes. <i>Nature Energy</i> , 2022, 7, 94-106.	39.5	336
112	Light amplification in organic thin films using cascade energy transfer. <i>Nature</i> , 1997, 389, 466-469.	27.8	334
113	Chlorination: A General Route toward Electron Transport in Organic Semiconductors. <i>Journal of the American Chemical Society</i> , 2009, 131, 3733-3740.	13.7	334
114	Selective dispersion of high purity semiconducting single-walled carbon nanotubes with regioregular poly(3-alkylthiophene)s. <i>Nature Communications</i> , 2011, 2, 541.	12.8	333
115	Organic smart pixels. <i>Applied Physics Letters</i> , 1998, 73, 142-144.	3.3	330
116	Water-stable organic transistors and their application in chemical and biological sensors. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2008, 105, 12134-12139.	7.1	327
117	The meniscus-guided deposition of semiconducting polymers. <i>Nature Communications</i> , 2018, 9, 534.	12.8	324
118	From computational discovery to experimental characterization of a high hole mobility organic crystal. <i>Nature Communications</i> , 2011, 2, 437.	12.8	321
119	High Performance All-Polymer Solar Cell via Polymer Side-Chain Engineering. <i>Advanced Materials</i> , 2014, 26, 3767-3772.	21.0	320
120	Concentrated mixed cation acetate-water-in-salt-solutions as green and low-cost high voltage electrolytes for aqueous batteries. <i>Energy and Environmental Science</i> , 2018, 11, 2876-2883.	30.8	315
121	Designing Boron Nitride Islands in Carbon Materials for Efficient Electrochemical Synthesis of Hydrogen Peroxide. <i>Journal of the American Chemical Society</i> , 2018, 140, 7851-7859.	13.7	310
122	Printable organic and polymeric semiconducting materials and devices. <i>Journal of Materials Chemistry</i> , 1999, 9, 1895-1904.	6.7	308
123	Effects of Polymer Coatings on Electrodeposited Lithium Metal. <i>Journal of the American Chemical Society</i> , 2018, 140, 11735-11744.	13.7	307
124	High-Performance Organic Single-Crystal Transistors on Flexible Substrates. <i>Advanced Materials</i> , 2006, 18, 2320-2324.	21.0	306
125	Diketopyrrolopyrrole-Based Semiconducting Polymer Nanoparticles for In Vivo Photoacoustic Imaging. <i>Advanced Materials</i> , 2015, 27, 5184-5190.	21.0	305
126	Biodegradable Polymeric Materials in Degradable Electronic Devices. <i>ACS Central Science</i> , 2018, 4, 337-348.	11.3	302



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127	Conductance of Small Molecular Junctions. <i>Physical Review Letters</i> , 2002, 88, 226801.	7.8	298
128	Exploration of the Stille Coupling Reaction for the Synthesis of Functional Polymers. <i>Journal of the American Chemical Society</i> , 1995, 117, 12426-12435.	13.7	297
129	Conducting AFM and 2D GIXD Studies on Pentacene Thin Films. <i>Journal of the American Chemical Society</i> , 2005, 127, 11542-11543.	13.7	291
130	Microengineering Pressure Sensor Active Layers for Improved Performance. <i>Advanced Functional Materials</i> , 2020, 30, 2003491.	14.9	290
131	Chemical and Engineering Approaches To Enable Organic Field-Effect Transistors for Electronic Skin Applications. <i>Accounts of Chemical Research</i> , 2012, 45, 361-371.	15.6	287
132	Flexible Wireless Temperature Sensors Based on Ni Microparticle-Filled Binary Polymer Composites. <i>Advanced Materials</i> , 2013, 25, 850-855.	21.0	281
133	High-Performance Lithium Metal Negative Electrode with a Soft and Flowable Polymer Coating. <i>ACS Energy Letters</i> , 2016, 1, 1247-1255.	17.4	281
134	A Three-Dimensionally Interconnected Carbon Nanotube-Conducting Polymer Hydrogel Network for High-Performance Flexible Battery Electrodes. <i>Advanced Energy Materials</i> , 2014, 4, 1400207.	19.5	280
135	An Elastic Autonomous Self-Healing Capacitive Sensor Based on a Dynamic Dual Crosslinked Chemical System. <i>Advanced Materials</i> , 2018, 30, e1801435.	21.0	280
136	High-Performance Organic Thin-Film Transistors through Solution-Sheared Deposition of Small-Molecule Organic Semiconductors. <i>Advanced Materials</i> , 2008, 20, 2588-2594.	21.0	275
137	Fabrication of Field-Effect Transistors from Hexathiapentacene Single-Crystal Nanowires. <i>Nano Letters</i> , 2007, 7, 668-675.	9.1	272
138	Rational Design of Capacitive Pressure Sensors Based on Pyramidal Microstructures for Specialized Monitoring of Biosignals. <i>Advanced Functional Materials</i> , 2020, 30, 1903100.	14.9	265
139	Graphene-sponges as high-performance low-cost anodes for microbial fuel cells. <i>Energy and Environmental Science</i> , 2012, 5, 6862.	30.8	264
140	Stretchable temperature-sensing circuits with strain suppression based on carbon nanotube transistors. <i>Nature Electronics</i> , 2018, 1, 183-190.	26.0	263
141	Oligofluorene-Thiophene Derivatives as High-Performance Semiconductors for Organic Thin Film Transistors. <i>Chemistry of Materials</i> , 2003, 15, 1778-1787.	6.7	258
142	Thermodynamically stable whilst kinetically labile coordination bonds lead to strong and tough self-healing polymers. <i>Nature Communications</i> , 2019, 10, 1164.	12.8	258
143	Ambipolar, High Performance, Acene-Based Organic Thin Film Transistors. <i>Journal of the American Chemical Society</i> , 2008, 130, 6064-6065.	13.7	256
144	Wireless smart contact lens for diabetic diagnosis and therapy. <i>Science Advances</i> , 2020, 6, eaba3252.	10.3	255

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145	Fast and reversible thermoresponsive polymer switching materials for safer batteries. <i>Nature Energy</i> , 2016, 1, .	39.5	253
146	Multi-scale ordering in highly stretchable polymer semiconducting films. <i>Nature Materials</i> , 2019, 18, 594-601.	27.5	251
147	Decoupling of mechanical properties and ionic conductivity in supramolecular lithium ion conductors. <i>Nature Communications</i> , 2019, 10, 5384.	12.8	249
148	Ultrahigh electrical conductivity in solution-sheared polymeric transparent films. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015, 112, 14138-14143.	7.1	248
149	3D Porous Sponge-Inspired Electrode for Stretchable Lithium-Ion Batteries. <i>Advanced Materials</i> , 2016, 28, 3578-3583.	21.0	247
150	Conjugated liquid-crystalline polymers - soluble and fusible poly(phenylenevinylene) by the Heck coupling reaction. <i>Macromolecules</i> , 1993, 26, 5281-5286.	4.8	244
151	Selective metal deposition at graphene line defects by atomic layer deposition. <i>Nature Communications</i> , 2014, 5, 4781.	12.8	243
152	Polypyrrole/Agarose-Based Electronically Conductive and Reversibly Restorable Hydrogel. <i>ACS Nano</i> , 2014, 8, 10066-10076.	14.6	236
153	Defective Carbon-Based Materials for the Electrochemical Synthesis of Hydrogen Peroxide. <i>ACS Sustainable Chemistry and Engineering</i> , 2018, 6, 311-317.	6.7	236
154	Mechanically Durable and Highly Stretchable Transistors Employing Carbon Nanotube Semiconductor and Electrodes. <i>Advanced Materials</i> , 2016, 28, 4441-4448.	21.0	234
155	Ultrasensitive and stretchable graphene electrodes. <i>Science Advances</i> , 2017, 3, e1700159.	10.3	231
156	Core-Fluorinated Perylene Bisimide Dyes: Air Stable n-Channel Organic Semiconductors for Thin Film Transistors with Exceptionally High On-to-Off Current Ratios. <i>Advanced Materials</i> , 2007, 19, 3692-3695.	21.0	230
157	Topological supramolecular network enabled high-conductivity, stretchable organic bioelectronics. <i>Science</i> , 2022, 375, 1411-1417.	12.6	230
158	Humidity effect on electrical performance of organic thin-film transistors. <i>Applied Physics Letters</i> , 2005, 86, 042105.	3.3	229
159	Patterned Growth of Large Oriented Organic Semiconductor Single Crystals on Self-Assembled Monolayer Templates. <i>Journal of the American Chemical Society</i> , 2005, 127, 12164-12165.	13.7	229
160	The Role of OTS Density on Pentacene and C <sub>60</sub> Nucleation, Thin Film Growth, and Transistor Performance. <i>Advanced Functional Materials</i> , 2009, 19, 1962-1970.	14.9	227
161	Liquid-Crystalline Semiconducting Copolymers with Intramolecular Donor-Acceptor Building Blocks for High-Stability Polymer Transistors. <i>Journal of the American Chemical Society</i> , 2009, 131, 6124-6132.	13.7	225
162	A New Class of Ionically Conducting Fluorinated Ether Electrolytes with High Electrochemical Stability. <i>Journal of the American Chemical Society</i> , 2020, 142, 7393-7403.	13.7	225

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163	Ionic Conductive Self-Healing Binder for Low Cost Si Microparticles Anodes in Li-ion Batteries. <i>Advanced Energy Materials</i> , 2018, 8, 1703138.	19.5	224
164	Printing Process Suitable for Reel-to-Reel Production of High-Performance Organic Transistors and Circuits. <i>Advanced Materials</i> , 1999, 11, 741-745.	21.0	223
165	Correlating Carrier Type with Frontier Molecular Orbital Energy Levels in Organic Thin Film Transistors of Functionalized Acene Derivatives. <i>Journal of the American Chemical Society</i> , 2009, 131, 5264-5273.	13.7	221
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