

Yan Zhao

List of Publications by Year in descending order

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101535

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times ranked

9308
citing authors

#	ARTICLE	IF	CITATIONS
1	Recent progress in organic field-effect transistor-based integrated circuits. <i>Journal of Polymer Science</i> , 2022, 60, 311-327.	3.8	46
2	Achieving Efficient p-Type Organic Thermoelectrics by Modulation of Acceptor Unit in Photovoltaic Conjugated Copolymers. <i>Advanced Science</i> , 2022, 9, e2103646.	11.2	13
3	Constrain Effect of Charge Traps in Organic Field-Effect Transistors with Ferroelectric Polymer as a Dielectric Interfacial Layer. <i>ACS Applied Materials & Interfaces</i> , 2022, , .	8.0	1
4	Isomeric Acceptor-Acceptor Polymers: Enabling Electron Transport with Strikingly Different Semiconducting Properties in n-Channel Organic Thin-Film Transistors. <i>Chemistry of Materials</i> , 2022, 34, 1403-1413.	6.7	26
5	An all-C-H-activation strategy to rapidly synthesize high-mobility well-balanced ambipolar semiconducting polymers. <i>Matter</i> , 2022, 5, 1953-1968.	10.0	27
6	Dielectric properties and dielectric relaxation process of polymethylphenylsiloxane/silicon dioxide nanocomposites. <i>Journal of Applied Polymer Science</i> , 2022, 139, .	2.6	9
7	A flexible biohybrid reflex arc mimicking neurotransmitter transmission. <i>Cell Reports Physical Science</i> , 2022, 3, 100962.	5.6	6
8	An OFET-Based Involutive Logic Circuit with Wide-Range Threshold Shift Compensability. <i>Advanced Electronic Materials</i> , 2022, 8, .	5.1	2
9	Molecular Packing and Charge Transport Behaviors of Semiconducting Polymers Over a Wide Temperature Range. <i>Advanced Functional Materials</i> , 2022, 32, .	14.9	8
10	Role of in situ polymethylmethacrylate in addition type silicone rubber with specific reference to adhesion and damping properties. <i>Journal of Applied Polymer Science</i> , 2021, 138, 50252.	2.6	4
11	Preparation of durable, self-cleaning and photocatalytic superhydrophobic Ni ₃ S ₂ coating on 304 stainless steel surface against contaminations. <i>Journal of Materials Science</i> , 2021, 56, 6719-6731.	3.7	7
12	Significantly enhanced thermal stability from a new kind of n-type organic semiconductor DFA4: a fully fused F8IC. <i>Journal of Materials Chemistry C</i> , 2021, 9, 13625-13629.	5.5	4
13	Thiadiazoloquinoxaline-Fused Acenaphthenequinone imide: A Highly Electron-Withdrawing Acceptor for Ambipolar Semiconducting Polymers with Strong Near-Infrared Absorption. <i>Macromolecules</i> , 2021, 54, 3120-3129.	4.8	20
14	Organic Synaptic Transistors: The Evolutionary Path from Memory Cells to the Application of Artificial Neural Networks. <i>Advanced Functional Materials</i> , 2021, 31, 2101951.	14.9	73
15	A comprehensive nano-interpenetrating semiconducting photoresist toward all-photolithography organic electronics. <i>Science Advances</i> , 2021, 7, .	10.3	31
16	Crystal Engineering of Angular-Shaped Heteroarenes Based on Cyclopenta[<i>b</i>]thiopyran for Controlling the Charge Carrier Mobility. <i>Journal of the American Chemical Society</i> , 2021, 143, 11088-11101.	18.7	11
17	Electrically Conductive Metal-Organic Framework Thin Film-Based On-Chip Micro-Biosensor: A Platform to Unravel Surface Morphology-Dependent Biosensing. <i>Advanced Functional Materials</i> , 2021, 31, 2102855.	14.9	31
18	Regulation of the backbone structure and optoelectrical properties of bis-pyridal[2,1,3]thiadiazole-based ambipolar semiconducting polymers via a fluorination strategy. <i>Journal of Materials Chemistry C</i> , 2021, 9, 15083-15094.	5.5	7

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19	Bis-acenaphthoquinone diimides with high electron deficiency and good coplanar conformation. <i>Chemical Communications</i> , 2021, 57, 7822-7825.	4.1	13
20	Toward Efficient Charge Transport of Polymer-Based Organic Field-Effect Transistors: Molecular Design, Processing, and Functional Utilization. <i>Accounts of Materials Research</i> , 2021, 2, 1047-1058.	11.7	27
21	Wafer-scale integration of stretchable semiconducting polymer microstructures via capillary gradient. <i>Nature Communications</i> , 2021, 12, 7038.	12.8	23
22	A sulfur-containing hetero-octulene: synthesis, host-guest properties, and transistor applications. <i>Chemical Communications</i> , 2020, 56, 9990-9993.	4.1	15
23	Ultrafast <i>In Situ</i> Synthesis of Large-Area Conductive Metal-Organic Frameworks on Substrates for Flexible Chemiresistive Sensing. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 57235-57244.	8.0	34
24	Multifunctional Highly Oleophobic and Superhydrophilic Fabric Coatings Prepared by Facile Photopolymerization. <i>Advanced Sustainable Systems</i> , 2020, 4, 2000049.	5.3	18
25	A self-roughened and biodegradable superhydrophobic coating with UV shielding, solar-induced self-healing and versatile oil-water separation ability. <i>Journal of Materials Chemistry A</i> , 2019, 7, 2122-2128.	10.3	205
26	Low Bandgap Donor-Acceptor π -Conjugated Polymers From Diarylcyclopentadienone-Fused Naphthalimides. <i>Frontiers in Chemistry</i> , 2019, 7, 362.	3.6	19
27	Bioinspired Slippery Lubricant-Infused Surfaces With External Stimuli Responsive Wettability: A Mini Review. <i>Frontiers in Chemistry</i> , 2019, 7, 826.	3.6	18
28	Attaining Melt Processing of Complementary Semiconducting Polymer Blends at 130 °C via Side-Chain Engineering. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 4904-4909.	8.0	22
29	Highly mobile charge-transfer excitons in two-dimensional WS ₂ /tetracene heterostructures. <i>Science Advances</i> , 2018, 4, eaao3104.	10.3	132
30	Continuous Melt-Drawing of Highly Aligned Flexible and Stretchable Semiconducting Microfibers for Organic Electronics. <i>Advanced Functional Materials</i> , 2018, 28, 1705584.	14.9	39
31	Zone-Annealing-Assisted Solvent-Free Processing of Complementary Semiconducting Polymer Blends for Organic Field-Effect Transistors. <i>Advanced Electronic Materials</i> , 2018, 4, 1700414.	5.1	9
32	Semiconducting polymer blends that exhibit stable charge transport at high temperatures. <i>Science</i> , 2018, 362, 1131-1134.	12.6	147
33	Bis-indigos: New Electron-Deficient Building Blocks for Constructing Conjugated Polymers with Extended Electron Delocalization. <i>Asian Journal of Organic Chemistry</i> , 2018, 7, 2248-2253.	2.7	15
34	A two-dimensional molecule with a large conjugation degree: synthesis, two-photon absorption and charge transport ability. <i>Journal of Materials Chemistry C</i> , 2017, 5, 5199-5206.	5.5	24
35	High-Performance Hydrogen Storage Nanoparticles Inside Hierarchical Porous Carbon Nanofibers with Stable Cycling. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 15502-15509.	8.0	20
36	Melt-Processing of Complementary Semiconducting Polymer Blends for High Performance Organic Transistors. <i>Advanced Materials</i> , 2017, 29, 1605056.	21.0	82

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37	Direct arylation polymerization of asymmetric push-pull aryl halides. <i>Polymer Chemistry</i> , 2017, 8, 2438-2441.	3.9	14
38	Symmetry Breaking in Side Chains Leading to Mixed Orientations and Improved Charge Transport in Isoindigo-Bithiophene Based Polymer Thin Films. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 25426-25433.	8.0	58
39	Synthesis and properties of a series of quinoxaline-based copolymers: an example to understand the effect of the structure of the mainchain and sidechain on the charge transport ability of the polymers. <i>Materials Chemistry Frontiers</i> , 2017, 1, 2085-2093.	5.9	9
40	Complementary Semiconducting Polymer Blends: Influence of Side Chains of Matrix Polymers. <i>Macromolecules</i> , 2017, 50, 6202-6209.	4.8	23
41	Asymmetric Supercapacitors: Preparation of MnCo ₂ O ₄ @Ni(OH) ₂ Core-Shell Flowers for Asymmetric Supercapacitor Materials with Ultrahigh Specific Capacitance (<i>Adv. Funct. Mater.</i> 23/2016). <i>Advanced Functional Materials</i> , 2016, 26, 4038-4038.	14.9	9
42	Preparation of MnCo ₂ O ₄ @Ni(OH) ₂ Core-Shell Flowers for Asymmetric Supercapacitor Materials with Ultrahigh Specific Capacitance. <i>Advanced Functional Materials</i> , 2016, 26, 4085-4093.	14.9	517
43	Anisotropic Charge-Carrier Transport in High-Mobility Donor-Acceptor Conjugated Polymer Semiconductor Films. <i>Chemistry - an Asian Journal</i> , 2016, 11, 2725-2729.	3.3	7
44	Differentiating Two Nitrosylruthenium Isomeric Complexes by Steady-State and Ultrafast Infrared Spectroscopies. <i>Journal of Physical Chemistry B</i> , 2016, 120, 11502-11509.	2.6	4
45	Amine-boranes bearing borane-incompatible functionalities: application to selective amine protection and surface functionalization. <i>Chemical Communications</i> , 2016, 52, 11885-11888.	4.1	32
46	Recent progress in hollow sphere-based electrodes for high-performance supercapacitors. <i>Nanotechnology</i> , 2016, 27, 342001.	2.6	43
47	Thermoelectric Enhancement of Ternary Copper Chalcogenide Nanocrystals by Magnetic Nickel Doping. <i>Advanced Electronic Materials</i> , 2016, 2, 1500473.	5.1	30
48	Structural dynamics of nitrosylruthenium isomeric complexes studied with steady-state and transient pump-probe infrared spectroscopies. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2016, 166, 62-67.	3.9	1
49	Complementary Semiconducting Polymer Blends: The Influence of Conjugation-Break Spacer Length in Matrix Polymers. <i>Macromolecules</i> , 2016, 49, 2601-2608.	4.8	61
50	3D Printing: 3D Printing Fabrication of Amorphous Thermoelectric Materials with Ultralow Thermal Conductivity (<i>Small</i> 44/2015). <i>Small</i> , 2015, 11, 5888-5888.	10.0	1
51	3D Printing Fabrication of Amorphous Thermoelectric Materials with Ultralow Thermal Conductivity. <i>Small</i> , 2015, 11, 5889-5894.	10.0	93
52	Conjugation-Break Spacers in Semiconducting Polymers: Impact on Polymer Processability and Charge Transport Properties. <i>Macromolecules</i> , 2015, 48, 2048-2053.	4.8	106
53	Complementary Semiconducting Polymer Blends for Efficient Charge Transport. <i>Chemistry of Materials</i> , 2015, 27, 7164-7170.	6.7	57
54	Hot-Injection Synthesis of Cu-Doped Cu ₂ ZnSnSe ₄ Nanocrystals to Reach Thermoelectric zT of 0.70 at 450 Å°C. <i>ACS Applied Materials & Interfaces</i> , 2015, 7, 24403-24408.	8.0	55

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55	Organic printed photonics: From microring lasers to integrated circuits. <i>Science Advances</i> , 2015, 1, e1500257.	10.3	172
56	Solution processed organic thermoelectrics: towards flexible thermoelectric modules. <i>Energy and Environmental Science</i> , 2015, 8, 401-422.	30.8	360
57	Transistors: Inkjet Printing Short-Channel Polymer Transistors with High-Performance and Ultrahigh Photoresponsivity (<i>Adv. Mater.</i> 27/2014). <i>Advanced Materials</i> , 2014, 26, 4752-4752.	21.0	1
58	Inkjet Printing Short-Channel Polymer Transistors with High-Performance and Ultrahigh Photoresponsivity. <i>Advanced Materials</i> , 2014, 26, 4683-4689.	21.0	82
59	Band Gap Tunable Zn ₂ SnO ₄ Nanocubes through Thermal Effect and Their Outstanding Ultraviolet Light Photoresponse. <i>Scientific Reports</i> , 2014, 4, 6847.	3.3	60
60	A Potential Perylene Diimide Dimer-Based Acceptor Material for Highly Efficient Solution-Processed Non-Fullerene Organic Solar Cells with 4.03% Efficiency. <i>Advanced Materials</i> , 2013, 25, 5791-5797.	21.0	444
61	25th Anniversary Article: Recent Advances in n-Type and Ambipolar Organic Field-Effect Transistors. <i>Advanced Materials</i> , 2013, 25, 5372-5391.	21.0	608
62	Solution-Processed DPP-Based Small Molecule that Gives High Photovoltaic Efficiency with Judicious Device Optimization. <i>ACS Applied Materials & Interfaces</i> , 2013, 5, 2033-2039.	8.0	163
63	Naphthalenediimide-Based Copolymers Incorporating Vinyl-Linkages for High-Performance Ambipolar Field-Effect Transistors and Complementary-Like Inverters under Air. <i>Chemistry of Materials</i> , 2013, 25, 3589-3596.	6.7	119
64	Wide band gap copolymers based on phthalimide: synthesis, characterization, and photovoltaic properties with 3.70% efficiency. <i>Polymer Chemistry</i> , 2013, 4, 2174.	3.9	28
65	Large-area, flexible imaging arrays constructed by light-charge organic memories. <i>Scientific Reports</i> , 2013, 3, 1080.	3.3	92
66	Substrate-Free Ultra-Flexible Organic Field-Effect Transistors and Five-Stage Ring Oscillators. <i>Advanced Materials</i> , 2013, 25, 5455-5460.	21.0	106
67	Diketopyrrolopyrrole-Based π -Conjugated Copolymer Containing $\hat{1}^2$ -Unsubstituted Quintetthiophene Unit: A Promising Material Exhibiting High Hole-Mobility for Organic Thin-Film Transistors. <i>Chemistry of Materials</i> , 2012, 24, 4350-4356.	6.7	85
68	Effect of polymer chain conformation on field-effect transistor performance: synthesis and properties of two arylene imide based D-A copolymers. <i>Journal of Materials Chemistry</i> , 2012, 22, 14639.	6.7	37
69	Effects of structure-manipulated molecular stacking on solid-state optical properties and device performances. <i>Polymer Chemistry</i> , 2012, 3, 2832.	3.9	41
70	Solution-Processed and Air-Stable n-Type Organic Thin-Film Transistors Based on Thiophene-Fused Dicyanoquinonediimine (DCNQI) Derivatives. <i>ACS Applied Materials & Interfaces</i> , 2012, 4, 3994-4000.	8.0	16
71	Phenanthro[1,10,9,8-cdefg]carbazole-containing copolymer for high performance thin-film transistors and polymer solar cells. <i>Journal of Materials Chemistry</i> , 2012, 22, 3696.	6.7	26
72	Synthesis and charge-transporting properties of electron-deficient CN ₂ -fluorene based D-A copolymers. <i>Polymer Chemistry</i> , 2012, 3, 2170.	3.9	24

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73	A stable solution-processed polymer semiconductor with record high-mobility for printed transistors. <i>Scientific Reports</i> , 2012, 2, 754.	3.3	800
74	Benzodifuran-containing well-defined π -conjugated polymers for photovoltaic cells. <i>Journal of Polymer Science Part A</i> , 2012, 50, 2935-2943.	2.3	29
75	Highly π -Extended Copolymers with Diketopyrrolopyrrole Moieties for High-Performance Field-Effect Transistors. <i>Advanced Materials</i> , 2012, 24, 4618-4622.	21.0	707
76	A structurally ordered thiophene-thiazole copolymer for organic thin-film transistors. <i>Science China Chemistry</i> , 2012, 55, 760-765.	8.2	5
77	Inkjet Printing High-Resolution, Large-Area Graphene Patterns by Coffee-Ring Lithography. <i>Advanced Materials</i> , 2012, 24, 436-440.	21.0	154
78	Two-dimensional copolymers with D ⁺ A type side chains for organic thin-film transistors: Synthesis and properties. <i>Polymer Chemistry</i> , 2011, 2, 2842.	3.9	5
79	Inkjet-Printed Organic Electrodes for Bottom-Contact Organic Field-Effect Transistors. <i>Advanced Functional Materials</i> , 2011, 21, 786-791.	14.9	29
80	Interfacial Heterogeneity of Surface Energy in Organic Field-Effect Transistors. <i>Advanced Materials</i> , 2011, 23, 1009-1014.	21.0	60
81	All-Solution-Processed, High-Performance n-Channel Organic Transistors and Circuits: Toward Low-Cost Ambient Electronics. <i>Advanced Materials</i> , 2011, 23, 2448-2453.	21.0	172
82	Morphology Optimization for the Fabrication of High Mobility Thin-Film Transistors. <i>Advanced Materials</i> , 2011, 23, 3128-3133.	21.0	55
83	Organic Thin-Film Transistors: Interfacial Heterogeneity of Surface Energy in Organic Field-Effect Transistors (<i>Adv. Mater.</i> 8/2011). <i>Advanced Materials</i> , 2011, 23, 1008-1008.	21.0	0
84	Top-Gate Organic Thin-Film Transistors Constructed by a General Lamination Approach. <i>Advanced Materials</i> , 2010, 22, 3537-3541.	21.0	47
85	Dithiocarbamate-Coated SERS Substrates: Sensitivity Gain by Partial Surface Passivation. <i>Langmuir</i> , 2009, 25, 13833-13839.	3.5	61
86	Dithiocarbamate Assembly on Gold. <i>Journal of the American Chemical Society</i> , 2005, 127, 7328-7329.	13.7	255
87	Nanoprobe implantation into mammalian cells by cationic transfection Electronic supplementary information (ESI) available: details of instrumentation, nanoprobe implantation and additional microscopy images. See http://www.rsc.org/suppdata/cc/b3/b317061f/ . <i>Chemical Communications</i> , 2004, , 784.	4.1	23