Zhengran He

List of Publications by Year
in descending order

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41 papers	1,215 citations	361045 20 h-index	377514 34 g-index
43 all docs	43 docs citations	43 times ranked	785 citing authors

#	Article	IF	Citations
1	Enhanced Performance Consistency in Nanoparticle/TIPS Pentaceneâ€Based Organic Thin Film Transistors. Advanced Functional Materials, 2011, 21, 3617-3623.	7.8	81
2	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
3	Self-assembly diketopyrrolopyrrole-based materials and polymer blend with enhanced crystal alignment and property for organic field-effect transistors. Organic Electronics, 2019, 65, 96-99.	1.4	68
4	Switching phase separation mode by varying the hydrophobicity of polymer additives in solution-processed semiconducting small-molecule/polymer blends. Applied Physics Letters, 2013, 103, .	1.5	65
5	Air-flow navigated crystal growth for TIPS pentacene-based organic thin-film transistors. Organic Electronics, 2012, 13, 1819-1826.	1.4	61
6	Nanoparticles for organic electronics applications. Materials Research Express, 2020, 7, 012004.	0.8	61
7	Improving performance of TIPS pentacene-based organic thin film transistors with small-molecule additives. Organic Electronics, 2014, 15, 150-155.	1.4	60
8	Highly enhanced performance of integrated piezo photo-transistor with dual inverted OLED gate and nanowire array channel. Nano Energy, 2019, 66, 104101.	8.2	55
9	Temperature gradient controlled crystal growth from TIPS pentacene-poly(Î±-methyl styrene) blends for improving performance of organic thin film transistors. Organic Electronics, 2016, 32, 195-199.	1.4	52
10	Solution-grown small-molecule organic semiconductor with enhanced crystal alignment and areal coverage for organic thin film transistors. AIP Advances, 2015, 5, .	0.6	48
11	Solution-based 5,6,11,12-tetrachlorotetracene crystal growth for high-performance organic thin film transistors. Organic Electronics, 2015, 22, 191-196.	1.4	46
12	Review Article: Crystal alignment for high performance organic electronics devices. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2019, 37, 040801.	0.9	42
13	Air-stable solution-processed n-channel organic thin film transistors with polymer-enhanced morphology. Applied Physics Letters, 2015, 106, .	1.5	40
14	Polymer additive controlled morphology for high performance organic thin film transistors. Soft Matter, 2019, 15, 5790-5803.	1.2	40
15	Conjugated Polymer Controlled Morphology and Charge Transport of Small-Molecule Organic Semiconductors. Scientific Reports, 2020, 10, 4344.	1.6	39
16	Layer-dependent anisotropic frictional behavior in two-dimensional monolayer hybrid perovskite/ITO layered heterojunctions. Physical Chemistry Chemical Physics, 2019, 21, 2540-2546.	1.3	31
17	High Performance and Efficiency Resonant Photo-Effect-Transistor by Near-Field Nano-Strip-Controlled Organic Light Emitting Diode Gate. Journal of Physical Chemistry Letters, 2020, 11, 6526-6534.	2.1	24
18	Self-assembly crystal microribbons with nucleation additive for high-performance organic thin film transistors. Japanese Journal of Applied Physics, 2019, 58, 061009.	0.8	23

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19	Ultra-low misorientation angle in small-molecule semiconductor/polyethylene oxide blends for organic thin film transistors. Journal of Polymer Research, 2020, 27, 1.	1.2	23
20	Long-range crystal alignment with polymer additive for organic thin film transistors. Journal of Polymer Research, 2019, 26, 1.	1.2	22
21	Manipulate organic crystal morphology and charge transport. Organic Electronics, 2022, 103, 106448.	1.4	21
22	Small-molecule additives for organic thin film transistors. Journal of Materials Science: Materials in Electronics, 2019, 30, 20899-20913.	1.1	20
23	Poly(Î±-methylstyrene) polymer and small-molecule semiconductor blend with reduced crystal misorientation for organic thin film transistors. Journal of Materials Science: Materials in Electronics, 2019, 30, 14335-14343.	1.1	19
24	Effect of Polymer Molecular Weight on Morphology and Charge Transport of Small-Molecular Organic Semiconductors. Electronic Materials Letters, 2020, 16, 441-450.	1.0	19
25	Nanoscale alignment of semiconductor crystals for high-fidelity organic electronics applications. Applied Nanoscience (Switzerland), 2021, 11, 787-795.	1.6	18
26	Phase segregation controlled semiconductor crystallization for organic thin film transistors. Journal of Science: Advanced Materials and Devices, 2020, 5, 151-163.	1.5	17
27	A facile and novel route to improve TIPS pentacene based organic thin film transistor performance with elastomer. Synthetic Metals, 2020, 262, 116337.	2.1	17
28	Photo-Triggered Logic Circuits Assembled on Integrated Illuminants and Resonant Nanowires. ACS Applied Materials & Interfaces, 2020, 12, 46501-46508.	4.0	17
29	Modifying Electrical and Magnetic Properties of Single-Walled Carbon Nanotubes by Decorating with Iron Oxide Nanoparticles. Journal of Nanoscience and Nanotechnology, 2020, 20, 2611-2616.	0.9	14
30	Tailoring the molecular weight of polymer additives for organic semiconductors. Materials Advances, 2022, 3, 1953-1973.	2.6	14
31	Polyacrylate polymer assisted crystallization: Improved charge transport and performance consistency for solution-processable small-molecule semiconductor based organic thin film transistors. Journal of Science: Advanced Materials and Devices, 2019, 4, 467-472.	1.5	12
32	Phase segregation effect on TIPS pentacene crystallization and morphology for organic thin film transistors. Journal of Materials Science: Materials in Electronics, 2020, 31, 4503-4510.	1.1	9
33	Crystal growth of small-molecule organic semiconductors with nucleation additive. Current Applied Physics, 2021, 21, 107-115.	1.1	9
34	Dynamic photonic perovskite light-emitting diodes with post-treatment-enhanced crystallization as writable and wipeable inscribers. Nanoscale Advances, 2021, 3, 6659-6668.	2.2	9
35	Large-Dimensional Organic Semiconductor Crystals with Poly(butyl acrylate) Polymer for Solution-Processed Organic Thin Film Transistors. Electronic Materials Letters, 2021, 17, 33-42.	1.0	8
36	Polyferrocenylsilane Semicrystalline Polymer Additive for Solution-Processed p-Channel Organic Thin Film Transistors. Polymers, 2021, 13, 402.	2.0	7

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37	Tuning charge transport in organic semiconductors with nanoparticles and hexamethyldisilazane. Journal of Nanoparticle Research, 2021, 23, 1.	0.8	7
38	Poly(butyl acrylate) polymer enhanced phase segregation and morphology of organic semiconductor for solutionâ€processed thin film transistors. Journal of Applied Polymer Science, 2021, 138, 50654.	1.3	7
39	Ultra-high resolution position sensors with self-assembled nanowire arrays. Journal of Materials Chemistry C, 2020, 8, 9954-9959.	2.7	4
40	Poly(Î±-methyl styrene) polymer additive for organic thin film transistors. Journal of Materials Science: Materials in Electronics, 2022, 33, 1101-1122.	1.1	3
41	Organic Semiconductors with Benzoic Acid Based Additives for Solution- Processed Thin Film Transistors. Current Chinese Science, 2021, 1, 306-314.	0.2	0