

Wei Deng

List of Publications by Year in descending order

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63
papers

3,197
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172207

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docs citations

63
times ranked

4316
citing authors

#	ARTICLE	IF	CITATIONS
1	Aligned Single-Crystalline Perovskite Microwire Arrays for High-Performance Flexible Image Sensors with Long-Term Stability. <i>Advanced Materials</i> , 2016, 28, 2201-2208.	11.1	346
2	Solution-Processed Graphene Quantum Dot Deep-UV Photodetectors. <i>ACS Nano</i> , 2015, 9, 1561-1570.	7.3	249
3	Ultrahigh-Responsivity Photodetectors from Perovskite Nanowire Arrays for Sequentially Tunable Spectral Measurement. <i>Nano Letters</i> , 2017, 17, 2482-2489.	4.5	242
4	Organometal Halide Perovskite Quantum Dot Light-Emitting Diodes. <i>Advanced Functional Materials</i> , 2016, 26, 4797-4802.	7.8	231
5	High-Sensitivity and Fast-Response Graphene/Crystalline Silicon Schottky Junction-Based Near-IR Photodetectors. <i>IEEE Electron Device Letters</i> , 2013, 34, 1337-1339.	2.2	136
6	Alignment and Patterning of Ordered Small-Molecule Organic Semiconductor Micro-Nanocrystals for Device Applications. <i>Advanced Materials</i> , 2016, 28, 2475-2503.	11.1	129
7	2D Ruddlesden-Popper Perovskite Nanoplate Based Deep-Blue Light-Emitting Diodes for Light Communication. <i>Advanced Functional Materials</i> , 2019, 29, 1903861.	7.8	101
8	Channel-restricted meniscus self-assembly for uniformly aligned growth of single-crystal arrays of organic semiconductors. <i>Materials Today</i> , 2019, 24, 17-25.	8.3	98
9	Wafer-Scale Precise Patterning of Organic Single-Crystal Nanowire Arrays via a Photolithography-Assisted Spin-Coating Method. <i>Advanced Materials</i> , 2015, 27, 7305-7312.	11.1	84
10	Organic molecular crystal-based photosynaptic devices for an artificial visual-perception system. <i>NPG Asia Materials</i> , 2019, 11, .	3.8	81
11	A Microchannel-Confined Crystallization Strategy Enables Blade Coating of Perovskite Single Crystal Arrays for Device Integration. <i>Advanced Materials</i> , 2020, 32, e1908340.	11.1	75
12	A Fully Solution-Printed Photosynaptic Transistor Array with Ultralow Energy Consumption for Artificial Vision Neural Networks. <i>Advanced Materials</i> , 2022, 34, e2200380.	11.1	75
13	Dual-Band, High-Performance Phototransistors from Hybrid Perovskite and Organic Crystal Array for Secure Communication Applications. <i>ACS Nano</i> , 2019, 13, 5910-5919.	7.3	72
14	Organic-inorganic hybrid perovskite quantum dots for light-emitting diodes. <i>Journal of Materials Chemistry C</i> , 2018, 6, 4831-4841.	2.7	62
15	Patterning Liquid Crystalline Organic Semiconductors via Inkjet Printing for High-Performance Transistor Arrays and Circuits. <i>Advanced Functional Materials</i> , 2021, 31, 2100237.	7.8	57
16	Precise Patterning of Laterally Stacked Organic Microbelt Heterojunction Arrays by Surface-Energy-Controlled Stepwise Crystallization for Ambipolar Organic Field-Effect Transistors. <i>Advanced Materials</i> , 2018, 30, e1800187.	11.1	56
17	Unraveling the Mechanism of the Persistent Photoconductivity in Organic Phototransistors. <i>Advanced Functional Materials</i> , 2019, 29, 1905657.	7.8	54
18	A Facile Method for the Growth of Organic Semiconductor Single Crystal Arrays on Polymer Dielectric toward Flexible Field-Effect Transistors. <i>Advanced Functional Materials</i> , 2019, 29, 1902494.	7.8	54

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19	High-resolution patterning of organic semiconductor single crystal arrays for high-integration organic field-effect transistors. <i>Materials Today</i> , 2020, 40, 82-90.	8.3	53
20	Facile Assembly of High-Quality Organic-Inorganic Hybrid Perovskite Quantum Dot Thin Films for Bright Light-Emitting Diodes. <i>Advanced Functional Materials</i> , 2018, 28, 1705189.	7.8	52
21	Water-Surface Drag Coating: A New Route Toward High-Quality Conjugated Small-Molecule Thin Films with Enhanced Charge Transport Properties. <i>Advanced Materials</i> , 2021, 33, e2005915.	11.1	52
22	Saturated Vapor-Assisted Growth of Single-Crystalline Organic-Inorganic Hybrid Perovskite Nanowires for High-Performance Photodetectors with Robust Stability. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 10287-10295.	4.0	49
23	Meniscus-guided coating of organic crystalline thin films for high-performance organic field-effect transistors. <i>Journal of Materials Chemistry C</i> , 2020, 8, 9133-9146.	2.7	49
24	Organic Nanowire/Crystalline Silicon Heterojunctions for High-Sensitivity, Broadband Photodetectors. <i>ACS Applied Materials & Interfaces</i> , 2015, 7, 2039-2045.	4.0	43
25	Precise Patterning of Organic Semiconductor Crystals for Integrated Device Applications. <i>Small</i> , 2019, 15, e1900332.	5.2	41
26	Aligned nanowire arrays on thin flexible substrates for organic transistors with high bending stability. <i>Journal of Materials Chemistry C</i> , 2014, 2, 1314-1320.	2.7	36
27	Few-layer formamidinium lead bromide nanoplatelets for ultrapure-green and high-efficiency light-emitting diodes. <i>Nano Research</i> , 2019, 12, 171-176.	5.8	34
28	PbSe Quantum Dot Solar Cells Based on Directly Synthesized Semiconductive Inks. <i>ACS Energy Letters</i> , 2020, 5, 3797-3803.	8.8	34
29	In Situ Integration of Squaraine-Nanowire-Array-Based Schottky-Type Photodetectors with Enhanced Switching Performance. <i>ACS Applied Materials & Interfaces</i> , 2013, 5, 12288-12294.	4.0	30
30	Scalable Growth of Organic Single-Crystal Films via an Orientation Filter Funnel for High-Performance Transistors with Excellent Uniformity. <i>Advanced Materials</i> , 2022, 34, e2109818.	11.1	29
31	1D Organic-Inorganic Hybrid Perovskite Micro/Nanocrystals: Fabrication, Assembly, and Optoelectronic Applications. <i>Small Methods</i> , 2018, 2, 1700340.	4.6	27
32	Precisely Patterned Growth of Ultra-Long Single-Crystalline Organic Microwire Arrays for Near-Infrared Photodetectors. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 7912-7918.	4.0	26
33	External-force-driven solution epitaxy of large-area 2D organic single crystals for high-performance field-effect transistors. <i>Nano Research</i> , 2019, 12, 2796-2801.	5.8	26
34	In-situ device integration of large-area patterned organic nanowire arrays for high-performance optical sensors. <i>Scientific Reports</i> , 2013, 3, 3248.	1.6	25
35	A High-yield Two-step Transfer Printing Method for Large-scale Fabrication of Organic Single-crystal Devices on Arbitrary Substrates. <i>Scientific Reports</i> , 2014, 4, 5358.	1.6	25
36	High-mobility air-stable n-type field-effect transistors based on large-area solution-processed organic single-crystal arrays. <i>Nano Research</i> , 2018, 11, 882-891.	5.8	25

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37	Matrix Manipulation of Directly-Synthesized PbS Quantum Dot Inks Enabled by Coordination Engineering. <i>Advanced Functional Materials</i> , 2021, 31, 2104457.	7.8	24
38	Very facile fabrication of aligned organic nanowires based high-performance top-gate transistors on flexible, transparent substrate. <i>Organic Electronics</i> , 2014, 15, 1317-1323.	1.4	23
39	Flexible integrated diode-transistor logic (DTL) driving circuits based on printed carbon nanotube thin film transistors with low operation voltage. <i>Nanoscale</i> , 2018, 10, 614-622.	2.8	23
40	Ordered and Patterned Assembly of Organic Micro/Nanocrystals for Flexible Electronic and Optoelectronic Devices. <i>Advanced Materials Technologies</i> , 2017, 2, 1600280.	3.0	21
41	Controlled Growth of Large-Area Aligned Single-Crystalline Organic Nanoribbon Arrays for Transistors and Light-Emitting Diodes Driving. <i>Nano-Micro Letters</i> , 2017, 9, 52.	14.4	21
42	Improving Ideality of p-Type Organic Field-Effect Transistors via Preventing Undesired Minority Carrier Injection. <i>Advanced Functional Materials</i> , 2021, 31, 2100202.	7.8	21
43	Fast deposition of an ultrathin, highly crystalline organic semiconductor film for high-performance transistors. <i>Nanoscale Horizons</i> , 2020, 5, 1096-1105.	4.1	20
44	Large-Scale Assembly of Organic Micro/Nanocrystals into Highly Ordered Patterns and Their Applications for Strain Sensors. <i>ACS Applied Materials & Interfaces</i> , 2014, 6, 11018-11024.	4.0	18
45	Precise Positioning of Organic Semiconductor Single Crystals with Two-Component Aligned Structure through 3D Wettability-Induced Sequential Assembly. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 36205-36212.	4.0	17
46	A Three-Dimensional Confined Crystallization Strategy Toward Controllable Growth of High-Quality and Large-Area Perovskite Single Crystals. <i>Advanced Functional Materials</i> , 2022, 32, .	7.8	17
47	Photodetectors based on small-molecule organic semiconductor crystals. <i>Chinese Physics B</i> , 2019, 28, 038102.	0.7	16
48	Theoretical Studies of Bipolar Transport in CnBTBT-FmTCNQ Donor-Acceptor Cocrystals. <i>Journal of Physical Chemistry Letters</i> , 2020, 11, 359-365.	2.1	15
49	Controlled 2D growth of organic semiconductor crystals by suppressing the coffee-ring effect. <i>Nano Research</i> , 2020, 13, 2478-2484.	5.8	11
50	Surfacial Marangoni Flow-Induced Growth of Ultrathin 2D Molecular Crystals on Target Substrates. <i>Advanced Materials Interfaces</i> , 2020, 7, 1901753.	1.9	10
51	Precise patterning of single crystal arrays of organic semiconductors by a patterned microchannel dip-coating method for organic field-effect transistors. <i>Journal of Materials Chemistry C</i> , 2021, 9, 5174-5181.	2.7	10
52	Ultra-Sensitive and Low-Power-Consumption Organic Phototransistor Enables Nighttime Illumination Perception for Bionic Mesopic Vision. <i>Laser and Photonics Reviews</i> , 2022, 16, .	4.4	10
53	Wafer-Scale Growth of Aligned C ₆₀ Single Crystals via Solution-Phase Epitaxy for High-Performance Transistors. <i>Advanced Functional Materials</i> , 2021, 31, 2105459.	7.8	9
54	An Inherent Multifunctional Sellotape Substrate for High-Performance Flexible and Wearable Organic Single-Crystal Nanowire Array-Based Transistors. <i>Advanced Electronic Materials</i> , 2016, 2, 1600129.	2.6	8

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55	Ambient instability of organic field-effect transistors and their improvement strategies. <i>Journal Physics D: Applied Physics</i> , 2022, 55, 053001.	1.3	8
56	Facile One-Step Fabrication of Ordered Ultra-Long Organic Microwires Film for Flexible Near-Infrared Photodetectors. <i>Journal of Nanoscience and Nanotechnology</i> , 2015, 15, 4450-4456.	0.9	7
57	Large-scale assembly of semiconductor nanowires into desired patterns for sensor applications. <i>New Journal of Chemistry</i> , 2013, 37, 1776.	1.4	6
58	Insights into the Origins of Minority Carrier Traps in Solution-Processed Organic Semiconductors and Their Effects on Transistor Photostability. <i>Advanced Electronic Materials</i> , 2022, 8, .	2.6	5
59	Patterned growth of single-crystal 3, 4, 9, 10-perylenetetracarboxylic dianhydride nanowire arrays for field-emission and optoelectronic devices. <i>Nanotechnology</i> , 2015, 26, 295302.	1.3	4
60	A facile method for fabrication of highly integrated organic field-effect transistors on photoresist-unwetable insulators with remarkable stability. <i>Organic Electronics</i> , 2016, 34, 104-110.	1.4	4
61	A phototransistor with visual adaptation. <i>Nature Electronics</i> , 2021, 4, 460-461.	13.1	4
62	Bilayer-passivated stable dif-TES-ADT organic thin-film transistors. <i>Applied Physics Letters</i> , 2021, 119, 183301.	1.5	4
63	Patterning of organic semiconductor crystal arrays via microchannel-assisted inkjet printing for organic field-effect transistors. <i>JPhys Materials</i> , 2022, 5, 035001.	1.8	3