Jian-Sheng Jie

List of Publications by Year
in descending order

252	15,465	16451 64	22166 113
papers	citations	h-index	g-index

254	254	254	16126
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	MoS₂/Si Heterojunction with Vertically Standing Layered Structure for Ultrafast, Highâ€Detectivity, Selfâ€Driven Visibleâ€“Near Infrared Photodetectors. Advanced Functional Materials, 2015, 25, 2910-2919.	14.9	554
2	Photoconductive Characteristics of Single-Crystal CdS Nanoribbons. Nano Letters, 2006, 6, 1887-1892.	9.1	540
3	Preparation of Large-Area Uniform Silicon Nanowires Arrays through Metal-Assisted Chemical Etching. Journal of Physical Chemistry C, 2008, 112, 4444-4450.	3.1	504
4	Highly Polarization-Sensitive, Broadband, Self-Powered Photodetector Based on Graphene/PdSe₂/Germanium Heterojunction. ACS Nano, 2019, 13, 9907-9917.	14.6	420
5	Silicon nanowires for rechargeable lithium-ion battery anodes. Applied Physics Letters, 2008, 93, .	3.3	372
6	Aligned Singleâ€Crystalline Perovskite Microwire Arrays for Highâ€Performance Flexible Image Sensors with Longâ€Term Stability. Advanced Materials, 2016, 28, 2201-2208.	21.0	346
7	High-Responsivity, High-Detectivity, Ultrafast Topological Insulator Bi₂Se₃/Silicon Heterostructure Broadband Photodetectors. ACS Nano, 2016, 10, 5113-5122.	14.6	300
8	One-dimensional IIâ€“VI nanostructures: Synthesis, properties and optoelectronic applications. Nano Today, 2010, 5, 313-336.	11.9	293
9	Monolayer Graphene Film on ZnO Nanorod Array for Highâ€Performance Schottky Junction Ultraviolet Photodetectors. Small, 2013, 9, 2872-2879.	10.0	271
10	Photoresponse Properties of CdSe Single-Nanoribbon Photodetectors. Advanced Functional Materials, 2007, 17, 1795-1800.	14.9	257
11	Ultrabroadband and High-Detectivity Photodetector Based on WS₂/Ge Heterojunction through Defect Engineering and Interface Passivation. ACS Nano, 2021, 15, 10119-10129.	14.6	252
12	Solution-Processed Graphene Quantum Dot Deep-UV Photodetectors. ACS Nano, 2015, 9, 1561-1570.	14.6	249
13	Ultrahigh-Responsivity Photodetectors from Perovskite Nanowire Arrays for Sequentially Tunable Spectral Measurement. Nano Letters, 2017, 17, 2482-2489.	9.1	242
14	p-Type ZnO Nanowire Arrays. Nano Letters, 2008, 8, 2591-2597.	9.1	237
15	Organometal Halide Perovskite Quantum Dot Lightâ€Emitting Diodes. Advanced Functional Materials, 2016, 26, 4797-4802.	14.9	231
16	Ultrafast, Broadband Photodetector Based on MoSe₂/Silicon Heterojunction with Vertically Standing Layered Structure Using Graphene as Transparent Electrode. Advanced Science, 2016, 3, 1600018.	11.2	210
17	Tunable nâ€Type Conductivity and Transport Properties of Gaâ€doped ZnO Nanowire Arrays. Advanced Materials, 2008, 20, 168-173.	21.0	203
18	Van der Waals Epitaxial Growth of Mosaicâ€Like 2D Platinum Ditelluride Layers for Roomâ€Temperature Midâ€Infrared Photodetection up to 10.6 Âμm. Advanced Materials, 2020, 32, e2004412.	21.0	202

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19	Indium-doped zinc oxide nanobelts. Chemical Physics Letters, 2004, 387, 466-470.	2.6	200
20	Metal Acetylacetonate Series in Interface Engineering for Full Lowâ€Temperatureâ€Processed, Highâ€Performance, and Stable Planar Perovskite Solar Cells with Conversion Efficiency over 16% on 1 cm² Scale. Advanced Materials, 2017, 29, 1603923.	21.0	190
21	Surfaceâ€Dominated Transport Properties of Silicon Nanowires. Advanced Functional Materials, 2008, 18, 3251-3257.	14.9	180
22	Solutionâ€Processed 3D RGOâ€“MoS₂/Pyramid Si Heterojunction for Ultrahigh Detectivity and Ultraâ€Broadband Photodetection. Advanced Materials, 2018, 30, e1801729.	21.0	175
23	Mixed-dimensional PdSe₂/SiNWA heterostructure based photovoltaic detectors for self-driven, broadband photodetection, infrared imaging and humidity sensing. Journal of Materials Chemistry A, 2020, 8, 3632-3642.	10.3	158
24	Synthesis and optical properties of well-aligned ZnO nanorod array on an undoped ZnO film. Applied Physics Letters, 2005, 86, 031909.	3.3	154
25	On the Mechanism of Hydrophilicity of Graphene. Nano Letters, 2016, 16, 4447-4453.	9.1	148
26	Surface Charge Transfer Doping of Lowâ€Dimensional Nanostructures toward Highâ€Performance Nanodevices. Advanced Materials, 2016, 28, 10409-10442.	21.0	144
27	Homoepitaxial Growth and Lasing Properties of ZnS Nanowire and Nanoribbon Arrays. Advanced Materials, 2006, 18, 1527-1532.	21.0	140
28	In Situ Fabrication of PdSe₂/GaN Schottky Junction for Polarization-Sensitive Ultraviolet Photodetection with High Dichroic Ratio. ACS Nano, 2022, 16, 5545-5555.	14.6	139
29	High-Sensitivity and Fast-Response Graphene/Crystalline Silicon Schottky Junction-Based Near-IR Photodetectors. IEEE Electron Device Letters, 2013, 34, 1337-1339.	3.9	136
30	Alignment and Patterning of Ordered Smallâ€Molecule Organic Semiconductor Microâ€/Nanocrystals for Device Applications. Advanced Materials, 2016, 28, 2475-2503.	21.0	129
31	Crystalline Si/Graphene Quantum Dots Heterojunction Solar Cells. Journal of Physical Chemistry C, 2014, 118, 5164-5171.	3.1	125
32	Facile Oneâ€Step Growth and Patterning of Aligned Squaraine Nanowires via Evaporationâ€Induced Selfâ€Assembly. Advanced Materials, 2008, 20, 1716-1720.	21.0	123
33	Surface passivation and band engineering: a way toward high efficiency grapheneâ€“planar Si solar cells. Journal of Materials Chemistry A, 2013, 1, 8567.	10.3	123
34	High-efficiency graphene/Si nanoarray Schottky junction solar cells via surface modification and graphene doping. Journal of Materials Chemistry A, 2013, 1, 6593.	10.3	122
35	Monolayer graphene film/silicon nanowire array Schottky junction solar cells. Applied Physics Letters, 2011, 99, .	3.3	120
36	Ultrahigh Speed and Broadband Fewâ€Layer MoTe₂/Si 2Dâ€“3D Heterojunctionâ€Based Photodiodes Fabricated by Pulsed Laser Deposition. Advanced Functional Materials, 2020, 30, 1907951.	14.9	119

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37	12.35% efficient graphene quantum dots/silicon heterojunction solar cells using graphene transparent electrode. Nano Energy, 2017, 31, 359-366.	16.0	114
38	Photoconductivity of a Single Smallâ€Molecule Organic Nanowire. Advanced Materials, 2008, 20, 2427-2432.	21.0	108
39	Carrier-free functionalized multidrug nanorods for synergistic cancer therapy. Biomaterials, 2013, 34, 8960-8967.	11.4	104
40	Synthesis and Characterization of Aligned ZnO Nanorods on Porous Aluminum Oxide Template. Journal of Physical Chemistry B, 2004, 108, 11976-11980.	2.6	102
41	2D Ruddlesdenâ€“Popper Perovskite Nanoplate Based Deepâ€Blue Lightâ€Emitting Diodes for Light Communication. Advanced Functional Materials, 2019, 29, 1903861.	14.9	101
42	Channel-restricted meniscus self-assembly for uniformly aligned growth of single-crystal arrays of organic semiconductors. Materials Today, 2019, 24, 17-25.	14.2	98
43	Polyhedral Organic Microcrystals: From Cubes to Rhombic Dodecahedra. Angewandte Chemie - International Edition, 2009, 48, 9121-9123.	13.8	97
44	Device structure-dependent field-effect and photoresponse performances of p-type ZnTe:Sb nanoribbons. Journal of Materials Chemistry, 2012, 22, 6206.	6.7	96
45	Graphene Transparent Conductive Electrodes for Highly Efficient Silicon Nanostructures-Based Hybrid Heterojunction Solar Cells. Journal of Physical Chemistry C, 2013, 117, 11968-11976.	3.1	96
46	Efficient and Stable Silicon Photocathodes Coated with Vertically Standing Nano-MoS₂ Films for Solar Hydrogen Production. ACS Applied Materials & Interfaces, 2017, 9, 6123-6129.	8.0	96
47	Synthesis and Characterization of ZnO:In Nanowires with Superlattice Structure. Journal of Physical Chemistry B, 2004, 108, 17027-17031.	2.6	95
48	Single-crystalline ZnTe nanowires for application as high-performance Green/Ultraviolet photodetector. Optics Express, 2011, 19, 6100.	3.4	91
49	Surface induced negative photoconductivity in p-type ZnSeâ€‰:â€‰Bi nanowires and their nano-optoelectronic applications. Journal of Materials Chemistry, 2011, 21, 6736.	6.7	89
50	High-efficiency, air stable graphene/Si micro-hole array Schottky junction solar cells. Journal of Materials Chemistry A, 2013, 1, 15348.	10.3	86
51	Waferâ€Scale Precise Patterning of Organic Singleâ€Crystal Nanowire Arrays via a Photolithographyâ€Assisted Spinâ€Coating Method. Advanced Materials, 2015, 27, 7305-7312.	21.0	84
52	Silicon nanowire sensors for Hg2+ and Cd2+ ions. Applied Physics Letters, 2009, 94, .	3.3	83
53	Surface plasmon resonance enhanced highly efficient planar silicon solar cell. Nano Energy, 2014, 9, 112-120.	16.0	83
54	Organic molecular crystal-based photosynaptic devices for an artificial visual-perception system. NPG Asia Materials, 2019, 11, .	7.9	81

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55	Aluminium-doped n-type ZnS nanowires as high-performance UV and humidity sensors. Journal of Materials Chemistry, 2012, 22, 6856.	6.7	79
56	Tuning Electrical and Photoelectrical Properties of CdSe Nanowires via Indium Doping. Small, 2009, 5, 345-350.	10.0	78
57	A Microchannelâ€Confined Crystallization Strategy Enables Blade Coating of Perovskite Single Crystal Arrays for Device Integration. Advanced Materials, 2020, 32, e1908340.	21.0	75
58	A Fully Solutionâ€Printed Photosynaptic Transistor Array with Ultralow Energy Consumption for Artificialâ€Vision Neural Networks. Advanced Materials, 2022, 34, e2200380.	21.0	75
59	Applications of silicon nanowires functionalized with palladium nanoparticles in hydrogen sensors. Nanotechnology, 2007, 18, 345502.	2.6	74
60	Flexible graphene/silicon heterojunction solar cells. Journal of Materials Chemistry A, 2015, 3, 14370-14377.	10.3	74
61	Growth of Ternary Oxide Nanowires by Gold-Catalyzed Vapor-Phase Evaporation. Journal of Physical Chemistry B, 2004, 108, 8249-8253.	2.6	72
62	Dual-Band, High-Performance Phototransistors from Hybrid Perovskite and Organic Crystal Array for Secure Communication Applications. ACS Nano, 2019, 13, 5910-5919.	14.6	72
63	Facile Oneâ€Step Fabrication of Ordered Organic Nanowire Films. Advanced Materials, 2009, 21, 4172-4175.	21.0	68
64	Transparent and flexible selenium nanobelt-based visible light photodetector. CrystEngComm, 2012, 14, 1942.	2.6	68
65	Chlorine-doped n-type CdS nanowires with enhanced photoconductivity. Nanotechnology, 2010, 21, 505203.	2.6	66
66	Controllable Synthesis and Optical Properties of Novel ZnO Cone Arrays via Vapor Transport at Low Temperature. Journal of Physical Chemistry B, 2005, 109, 2733-2738.	2.6	65
67	Schottky solar cells based on graphene nanoribbon/multiple silicon nanowires junctions. Applied Physics Letters, 2012, 100, 193103.	3.3	65
68	High-gain visible-blind UV photodetectors based on chlorine-doped n-type ZnS nanoribbons with tunable optoelectronic properties. Journal of Materials Chemistry, 2011, 21, 12632.	6.7	64
69	Surface Charge Transfer Doping of Monolayer Phosphorene via Molecular Adsorption. Journal of Physical Chemistry Letters, 2015, 6, 4701-4710.	4.6	63
70	Single-crystal CdSe nanoribbon field-effect transistors and photoelectric applications. Applied Physics Letters, 2006, 89, 133118.	3.3	62
71	Two-dimensional layered material/silicon heterojunctions for energy and optoelectronic applications. Nano Research, 2016, 9, 72-93.	10.4	62
72	Organicâ€“inorganic hybrid perovskite quantum dots for light-emitting diodes. Journal of Materials Chemistry C, 2018, 6, 4831-4841.	5.5	62

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73	Patterning Liquid Crystalline Organic Semiconductors via Inkjet Printing for Highâ€Performance Transistor Arrays and Circuits. Advanced Functional Materials, 2021, 31, 2100237.	14.9	57
74	Precise Patterning of Laterally Stacked Organic Microbelt Heterojunction Arrays by Surfaceâ€Energyâ€Controlled Stepwise Crystallization for Ambipolar Organic Fieldâ€Effect Transistors. Advanced Materials, 2018, 30, e1800187.	21.0	56
75	An ultrasensitive self-driven broadband photodetector based on a 2D-WS₂/GaAs type-II Zener heterojunction. Nanoscale, 2020, 12, 4435-4444.	5.6	56
76	Clean surface transfer of graphene films via an effective sandwich method for organic light-emitting diode applications. Journal of Materials Chemistry C, 2014, 2, 201-207.	5.5	55
77	Unraveling the Mechanism of the Persistent Photoconductivity in Organic Phototransistors. Advanced Functional Materials, 2019, 29, 1905657.	14.9	54
78	A Facile Method for the Growth of Organic Semiconductor Single Crystal Arrays on Polymer Dielectric toward Flexible Fieldâ€Effect Transistors. Advanced Functional Materials, 2019, 29, 1902494.	14.9	54
79	Annealing effect on optical properties of ZnO films fabricated by cathodic electrodeposition. Thin Solid Films, 2005, 492, 61-65.	1.8	53
80	Transport properties of single-crystal CdS nanoribbons. Applied Physics Letters, 2006, 89, 223117.	3.3	53
81	Layerâ€Defining Strategy to Grow Twoâ€Dimensional Molecular Crystals on a Liquid Surface down to the Monolayer Limit. Angewandte Chemie - International Edition, 2019, 58, 16082-16086.	13.8	53
82	High-resolution patterning of organic semiconductor single crystal arrays for high-integration organic field-effect transistors. Materials Today, 2020, 40, 82-90.	14.2	53
83	Surface charge transfer doping induced inversion layer for high-performance graphene/silicon heterojunction solar cells. Journal of Materials Chemistry A, 2017, 5, 285-291.	10.3	52
84	Facile Assembly of Highâ€Quality Organicâ€“Inorganic Hybrid Perovskite Quantum Dot Thin Films for Bright Lightâ€Emitting Diodes. Advanced Functional Materials, 2018, 28, 1705189.	14.9	52
85	Light-trapping enhanced ZnOâ€“MoS₂ coreâ€“shell nanopillar arrays for broadband ultraviolet-visible-near infrared photodetection. Journal of Materials Chemistry C, 2018, 6, 7077-7084.	5.5	52
86	Waterâ€Surface Drag Coating: A New Route Toward Highâ€Quality Conjugated Smallâ€Molecule Thin Films with Enhanced Charge Transport Properties. Advanced Materials, 2021, 33, e2005915.	21.0	52
87	Enhanced p-Type Conductivity of ZnTe Nanoribbons by Nitrogen Doping. Journal of Physical Chemistry C, 2010, 114, 7980-7985.	3.1	51
88	Sn-catalyzed synthesis of SnO2nanowires and their optoelectronic characteristics. Nanotechnology, 2011, 22, 485701.	2.6	51
89	Hue tunable, high color saturation and high-efficiency graphene/silicon heterojunction solar cells with MgF2/ZnS double anti-reflection layer. Nano Energy, 2018, 46, 257-265.	16.0	51
90	Hydrogen bond-modulated molecular packing and its applications in high-performance non-doped organic electroluminescence. Materials Horizons, 2020, 7, 2734-2740.	12.2	51

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91	Ultraminiaturized Stretchable Strain Sensors Based on Single Silicon Nanowires for Imperceptible Electronic Skins. Nano Letters, 2020, 20, 2478-2485.	9.1	51
92	Saturated Vapor-Assisted Growth of Single-Crystalline Organicâ€“Inorganic Hybrid Perovskite Nanowires for High-Performance Photodetectors with Robust Stability. ACS Applied Materials & Interfaces, 2018, 10, 10287-10295.	8.0	49
93	Meniscus-guided coating of organic crystalline thin films for high-performance organic field-effect transistors. Journal of Materials Chemistry C, 2020, 8, 9133-9146.	5.5	49
94	Tuning the electrical transport properties of n-type CdS nanowiresvia Ga doping and their nano-optoelectronic applications. Physical Chemistry Chemical Physics, 2011, 13, 14663.	2.8	47
95	Shape design of high drug payload nanoparticles for more effective cancer therapy. Chemical Communications, 2013, 49, 10989.	4.1	47
96	Memory phototransistors based on exponential-association photoelectric conversion law. Nature Communications, 2019, 10, 1294.	12.8	47
97	High-performance, fully transparent, and flexible zinc-doped indium oxide nanowire transistors. Applied Physics Letters, 2009, 94, .	3.3	46
98	Aligned ultralong nanowire arrays and their application in flexible photodetector devices. Journal of Materials Chemistry, 2012, 22, 14357.	6.7	46
99	Large-Scale Fabrication of Silicon Nanowires for Solar Energy Applications. ACS Applied Materials & Interfaces, 2017, 9, 34527-34543.	8.0	45
100	Non-aqueous cathodic electrodeposition of large-scale uniform ZnO nanowire arrays embedded in anodic alumina membrane. Materials Letters, 2005, 59, 1378-1382.	2.6	44
101	Topological insulator Bi₂Se₃nanowire/Si heterostructure photodetectors with ultrahigh responsivity and broadband response. Journal of Materials Chemistry C, 2016, 4, 5648-5655.	5.5	44
102	Organic Nanowire/Crystalline Silicon pâ€“n Heterojunctions for High-Sensitivity, Broadband Photodetectors. ACS Applied Materials & Interfaces, 2015, 7, 2039-2045.	8.0	43
103	Formation and Photoelectric Properties of Periodically Twinned ZnSe/SiO2 Nanocables. Journal of Physical Chemistry C, 2009, 113, 834-838.	3.1	42
104	High-performance CdS:P nanoribbon field-effect transistors constructed with high-Îº dielectric and top-gate geometry. Applied Physics Letters, 2010, 96, .	3.3	41
105	The application of single-layer graphene modified with solution-processed TiOx and PEDOT:PSS as a transparent conductive anode in organic light-emitting diodes. Organic Electronics, 2013, 14, 3348-3354.	2.6	41
106	Precise Patterning of Organic Semiconductor Crystals for Integrated Device Applications. Small, 2019, 15, e1900332.	10.0	41
107	Construction of high-quality CdS:Ga nanoribbon/silicon heterojunctions and their nano-optoelectronic applications. Nanotechnology, 2011, 22, 405201.	2.6	40
108	Self-driven, broadband and ultrafast photovoltaic detectors based on topological crystalline insulator SnTe/Si heterostructures. Journal of Materials Chemistry A, 2017, 5, 11171-11178.	10.3	40

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109	Quantum transport characteristics of heavily doped bismuth selenide nanoribbons. Npj Quantum Materials, 2019, 4, .	5.2	40
110	Bilayer graphene based surface passivation enhanced nano structured self-powered near-infrared photodetector. Optics Express, 2015, 23, 4839.	3.4	39
111	Tectonic arrangement of Bi2S3 nanocrystals into 2D networks. Journal of Materials Chemistry, 2009, 19, 3378.	6.7	38
112	p-CdTe nanoribbon/n-silicon nanowires array heterojunctions: photovoltaic devices and zero-power photodetectors. CrystEngComm, 2012, 14, 7222.	2.6	38
113	MoO₃ Nanodots Decorated CdS Nanoribbons for High-Performance, Homojunction Photovoltaic Devices on Flexible Substrates. Nano Letters, 2015, 15, 3590-3596.	9.1	38
114	Ultrahigh Mobility of pâ€Type CdS Nanowires: Surface Charge Transfer Doping and Photovoltaic Devices. Advanced Energy Materials, 2013, 3, 579-583.	19.5	37
115	Fabrication of p-type ZnSe:Sb nanowires for high-performance ultraviolet light photodetector application. Nanotechnology, 2013, 24, 095603.	2.6	36
116	Aligned nanowire arrays on thin flexible substrates for organic transistors with high bending stability. Journal of Materials Chemistry C, 2014, 2, 1314-1320.	5.5	36
117	Nano-Schottky barrier diodes based on Sb-doped ZnS nanoribbons with controlled p-type conductivity. Applied Physics Letters, 2011, 98, .	3.3	35
118	Large-area aligned growth of single-crystalline organic nanowire arrays for high-performance photodetectors. Nanotechnology, 2013, 24, 355201.	2.6	35
119	Tuning the Electronic and Optical Properties of Monolayers As, Sb, and Bi via Surface Charge Transfer Doping. Journal of Physical Chemistry C, 2017, 121, 19530-19537.	3.1	35
120	Characterizing the Conformational Distribution in an Amorphous Film of an Organic Emitter and Its Application in a â€œSelfâ€Dopingâ€•Organic Lightâ€Emitting Diode. Angewandte Chemie - International Edition, 2021, 60, 25878-25883.	13.8	35
121	Few-layer formamidinium lead bromide nanoplatelets for ultrapure-green and high-efficiency light-emitting diodes. Nano Research, 2019, 12, 171-176.	10.4	34
122	ZnSe nanowire/Si pâ€“n heterojunctions: device construction and optoelectronic applications. Nanotechnology, 2013, 24, 395201.	2.6	33
123	ZnSe nanoribbon/Si nanowire pâ€“n heterojunction arrays and their photovoltaic application with graphene transparent electrodes. Journal of Materials Chemistry, 2012, 22, 22873.	6.7	32
124	Macroscopic and Strong Ribbons of Functionality-Rich Metal Oxides from Highly Ordered Assembly of Unilamellar Sheets. Journal of the American Chemical Society, 2015, 137, 13200-13208.	13.7	32
125	Conformal MoS₂/Silicon Nanowire Array Heterojunction with Enhanced Light Trapping and Effective Interface Passivation for Ultraweak Infrared Light Detection. Advanced Functional Materials, 2022, 32, 2108174.	14.9	32
126	CTAB Assisted Synthesis of CuS Microcrystals: Synthesis, Mechanism, and Electrical Properties. Journal of Materials Science and Technology, 2013, 29, 1047-1052.	10.7	31

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127	Surface Charge Transfer Doping via Transition Metal Oxides for Efficient p-Type Doping of IIâ€“VI Nanostructures. ACS Nano, 2016, 10, 10283-10293.	14.6	31
128	In Situ Integration of Squaraine-Nanowire-Array-Based Schottky-Type Photodetectors with Enhanced Switching Performance. ACS Applied Materials & Interfaces, 2013, 5, 12288-12294.	8.0	30
129	Integrated MoSe2 with n+p-Si photocathodes for solar water splitting with high efficiency and stability. Applied Physics Letters, 2018, 112, .	3.3	30
130	Single zinc-doped indium oxide nanowire as driving transistor for organic light-emitting diode. Applied Physics Letters, 2008, 92, .	3.3	29
131	Tuning the p-type conductivity of ZnSe nanowiresvia silver doping for rectifying and photovoltaic device applications. Journal of Materials Chemistry A, 2013, 1, 1148-1154.	10.3	29
132	Self-Assembly and Hierarchical Patterning of Aligned Organic Nanowire Arrays by Solvent Evaporation on Substrates with Patterned Wettability. ACS Applied Materials & Interfaces, 2013, 5, 5757-5762.	8.0	29
133	Centimeter-Long Single-Crystalline Si Nanowires. Nano Letters, 2017, 17, 7323-7329.	9.1	29
134	Scalable Growth of Organic Singleâ€Crystal Films via an Orientation Filter Funnel for Highâ€Performance Transistors with Excellent Uniformity. Advanced Materials, 2022, 34, e2109818.	21.0	29
135	Synthesis of CdSXSe1â^'X Nanoribbons with Uniform and Controllable Compositions via Sulfurization: Optical and Electronic Properties Studies. Journal of Physical Chemistry C, 2009, 113, 17183-17188.	3.1	27
136	Doping dependent crystal structures and optoelectronic properties of n-type CdSe:Ga nanowries. Nanoscale, 2011, 3, 4798.	5.6	27
137	1D Organicâ€“Inorganic Hybrid Perovskite Micro/Nanocrystals: Fabrication, Assembly, and Optoelectronic Applications. Small Methods, 2018, 2, 1700340.	8.6	27
138	Grapheneâ€Quantumâ€Dotsâ€Induced Centimeterâ€Sized Growth of Monolayer Organic Crystals for Highâ€Performance Transistors. Advanced Materials, 2020, 32, e2003315.	21.0	27
139	Photoconductive Properties of Selenium Nanowire Photodetectors. Journal of Nanoscience and Nanotechnology, 2009, 9, 6292-6298.	0.9	26
140	Precisely Patterned Growth of Ultra-Long Single-Crystalline Organic Microwire Arrays for Near-Infrared Photodetectors. ACS Applied Materials & Interfaces, 2016, 8, 7912-7918.	8.0	26
141	External-force-driven solution epitaxy of large-area 2D organic single crystals for high-performance field-effect transistors. Nano Research, 2019, 12, 2796-2801.	10.4	26
142	In-situ device integration of large-area patterned organic nanowire arrays for high-performance optical sensors. Scientific Reports, 2013, 3, 3248.	3.3	25
143	A High-yield Two-step Transfer Printing Method for Large-scale Fabrication of Organic Single-crystal Devices on Arbitrary Substrates. Scientific Reports, 2014, 4, 5358.	3.3	25
144	High-mobility air-stable n-type field-effect transistors based on large-area solution-processed organic single-crystal arrays. Nano Research, 2018, 11, 882-891.	10.4	25

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145	Air Effect on the Ideality of pâ€Type Organic Fieldâ€Effect Transistors: A Doubleâ€Edged Sword. Advanced Functional Materials, 2019, 29, 1906653.	14.9	25
146	Roles of interfaces in the ideality of organic field-effect transistors. Nanoscale Horizons, 2020, 5, 454-472.	8.0	25
147	Heterocrystal and bicrystal structures of ZnS nanowires synthesized by plasma enhanced chemical vapour deposition. Nanotechnology, 2006, 17, 2913-2917.	2.6	24
148	Surface charge transfer induced p-CdS nanoribbon/n-Si heterojunctions as fast-speed self-driven photodetectors. Journal of Materials Chemistry C, 2015, 3, 6307-6313.	5.5	24
149	Shape and composition control of Bi₁₉S₂₇(Br_{3â^'x},I_x) alloyed nanowires: the role of metal ions. Chemical Science, 2015, 6, 4615-4622.	7.4	24
150	Very facile fabrication of aligned organic nanowires based high-performance top-gate transistors on flexible, transparent substrate. Organic Electronics, 2014, 15, 1317-1323.	2.6	23
151	Flexible integrated diode-transistor logic (DTL) driving circuits based on printed carbon nanotube thin film transistors with low operation voltage. Nanoscale, 2018, 10, 614-622.	5.6	23
152	High-Performance Nanofloating Gate Memory Based on Lead Halide Perovskite Nanocrystals. ACS Applied Materials & Interfaces, 2019, 11, 24367-24376.	8.0	23
153	Cation exchange synthesis of two-dimensional vertical Cu₂S/CdS heterojunctions for photovoltaic device applications. Journal of Materials Chemistry A, 2020, 8, 789-796.	10.3	23
154	Functional Core/Shell Drug Nanoparticles for Highly Effective Synergistic Cancer Therapy. Advanced Healthcare Materials, 2014, 3, 1475-1485.	7.6	22
155	Fewâ€Layer Organic Crystalline van der Waals Heterojunctions for Ultrafast UV Phototransistors. Advanced Electronic Materials, 2020, 6, 2000062.	5.1	22
156	High-Performance CdSe:In Nanowire Field-Effect Transistors Based on Top-Gate Configuration with High-Îº Non-Oxide Dielectrics. Journal of Physical Chemistry C, 2010, 114, 4663-4668.	3.1	21
157	Ordered and Patterned Assembly of Organic Micro/Nanocrystals for Flexible Electronic and Optoelectronic Devices. Advanced Materials Technologies, 2017, 2, 1600280.	5.8	21
158	Controlled Growth of Large-Area Aligned Single-Crystalline Organic Nanoribbon Arrays for Transistors and Light-Emitting Diodes Driving. Nano-Micro Letters, 2017, 9, 52.	27.0	21
159	Graphene/MoS₂/Si Nanowires Schottky-NP Bipolar van der Waals Heterojunction for Ultrafast Photodetectors. IEEE Electron Device Letters, 2018, 39, 1688-1691.	3.9	21
160	Improving Ideality of Pâ€Type Organic Fieldâ€Effect Transistors via Preventing Undesired Minority Carrier Injection. Advanced Functional Materials, 2021, 31, 2100202.	14.9	21
161	Coaxial nanocables of p-type zinc telluride nanowires sheathed with silicon oxide: synthesis, characterization and properties. Nanotechnology, 2009, 20, 455702.	2.6	20
162	Fast deposition of an ultrathin, highly crystalline organic semiconductor film for high-performance transistors. Nanoscale Horizons, 2020, 5, 1096-1105.	8.0	20

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163	Growth and properties of well-aligned ZnO hexagonal cones prepared by carbonthermal reaction. Journal of Crystal Growth, 2004, 267, 223-230.	1.5	19
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