Xiaosheng Fang

List of Publications by Year
in descending order

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175 papers	23,757 citations	4955 84 h-index	7511 151 g-index
181 all docs	181 docs citations	181 times ranked	17998 citing authors

#	Article	IF	Citations
1	ZnS nanostructures: From synthesis to applications. Progress in Materials Science, 2011, 56, 175-287.	16.0	1,134
2	New concept ultraviolet photodetectors. Materials Today, 2015, 18, 493-502.	8.3	661
3	An Ultrahigh Responsivity (9.7 mA W^{â^'1}) Selfâ€Powered Solarâ€Blind Photodetector Based on Individual ZnOâ€“Ga₂O₃ Heterostructures. Advanced Functional Materials, 2017, 27, 1700264.	7.8	616
4	Inorganic semiconductor nanostructures and their field-emission applications. Journal of Materials Chemistry, 2008, 18, 509-522.	6.7	586
5	Singleâ€Crystalline ZnS Nanobelts as Ultravioletâ€Light Sensors. Advanced Materials, 2009, 21, 2034-2039.	11.1	537
6	Nanostructured Photodetectors: From Ultraviolet to Terahertz. Advanced Materials, 2016, 28, 403-433.	11.1	492
7	A Comprehensive Review of One-Dimensional Metal-Oxide Nanostructure Photodetectors. Sensors, 2009, 9, 6504-6529.	2.1	491
8	Hierarchical MoS₂ Nanosheet@TiO₂ Nanotube Array Composites with Enhanced Photocatalytic and Photocurrent Performances. Small, 2016, 12, 1527-1536.	5.2	469
9	An Optimized Ultravioletâ€A Light Photodetector with Wideâ€Range Photoresponse Based on ZnS/ZnO Biaxial Nanobelt. Advanced Materials, 2012, 24, 2305-2309.	11.1	426
10	Lowâ€Dimensional Nanostructure Ultraviolet Photodetectors. Advanced Materials, 2013, 25, 5321-5328.	11.1	362
11	Photoelectric Detectors Based on Inorganic pâ€Type Semiconductor Materials. Advanced Materials, 2018, 30, e1706262.	11.1	344
12	Singleâ€Crystalline CdS Nanobelts for Excellent Fieldâ€Emitters and Ultrahigh Quantumâ€Efficiency Photodetectors. Advanced Materials, 2010, 22, 3161-3165.	11.1	342
13	High Performance BiOCl Nanosheets/TiO₂ Nanotube Arrays Heterojunction UV Photodetector: The Influences of Selfâ€Induced Inner Electric Fields in the BiOCl Nanosheets. Advanced Functional Materials, 2018, 28, 1707178.	7.8	337
14	Novel Transparent and Selfâ€Powered UV Photodetector Based on Crossed ZnO Nanofiber Array Homojunction. Small, 2018, 14, e1703754.	5.2	332
15	Oneâ€Step Hydrothermal Synthesis of 2D Hexagonal Nanoplates of Î±â€Fe₂O₃/Graphene Composites with Enhanced Photocatalytic Activity. Advanced Functional Materials, 2014, 24, 5719-5727.	7.8	331
16	Solar-Blind Avalanche Photodetector Based On Single ZnOâ€“Ga₂O₃ Coreâ€“Shell Microwire. Nano Letters, 2015, 15, 3988-3993.	4.5	331
17	Lowâ€Dimensional Metal Halide Perovskite Photodetectors. Advanced Materials, 2021, 33, e2003309.	11.1	319
18	Recent Developments in Oneâ€Dimensional Inorganic Nanostructures for Photodetectors. Advanced Functional Materials, 2010, 20, 4233-4248.	7.8	314

#	Article	IF	Citations
19	Enhancing the Photoelectric Performance of Photodetectors Based on Metal Oxide Semiconductors by Chargeâ€Carrier Engineering. Advanced Functional Materials, 2019, 29, 1807672.	7.8	313
20	ZnO and ZnS Nanostructures: Ultraviolet-Light Emitters, Lasers, and Sensors. Critical Reviews in Solid State and Materials Sciences, 2009, 34, 190-223.	6.8	306
21	A Novel Sustainable Flour Derived Hierarchical Nitrogenâ€Doped Porous Carbon/Polyaniline Electrode for Advanced Asymmetric Supercapacitors. Advanced Energy Materials, 2016, 6, 1601111.	10.2	303
22	Selfâ€Powered MXene/GaN van der Waals Heterojunction Ultraviolet Photodiodes with Superhigh Efficiency and Stable Current Outputs. Advanced Materials, 2021, 33, e2101059.	11.1	302
23	A Realâ€Time Wearable UVâ€Radiation Monitor based on a Highâ€Performance pâ€CuZnS/nâ€TiO₂ Photodetector. Advanced Materials, 2018, 30, e1803165.	11.1	300
24	Electrical Transport Properties of Large, Individual NiCo₂O₄ Nanoplates. Advanced Functional Materials, 2012, 22, 998-1004.	7.8	297
25	ZnS Nanostructure Arrays: A Developing Material Star. Advanced Materials, 2011, 23, 585-598.	11.1	296
26	New Ultraviolet Photodetector Based on Individual Nb₂O₅ Nanobelts. Advanced Functional Materials, 2011, 21, 3907-3915.	7.8	285
27	Materials and Designs for Wearable Photodetectors. Advanced Materials, 2019, 31, e1808138.	11.1	279
28	Ultrahigh External Quantum Efficiency from Thin SnO₂ Nanowire Ultraviolet Photodetectors. Small, 2011, 7, 1012-1017.	5.2	278
29	Ultrasensitive Selfâ€Powered Solarâ€Blind Deepâ€Ultraviolet Photodetector Based on Allâ€Solidâ€State Polyaniline/MgZnO Bilayer. Small, 2016, 12, 5809-5816.	5.2	268
30	Recent Progress of Heterojunction Ultraviolet Photodetectors: Materials, Integrations, and Applications. Advanced Functional Materials, 2020, 30, 1909909.	7.8	264
31	Highâ€Performance Trifunctional Electrocatalysts Based on FeCo/Co₂P Hybrid Nanoparticles for Zincâ€“Air Battery and Selfâ€Powered Overall Water Splitting. Advanced Energy Materials, 2020, 10, 1903854.	10.2	259
32	Selfâ€Powered Ultraviolet Photodetectors Driven by Builtâ€in Electric Field. Small, 2017, 13, 1701687.	5.2	245
33	From nanofibers to ordered ZnO/NiO heterojunction arrays for self-powered and transparent UV photodetectors. Journal of Materials Chemistry C, 2019, 7, 223-229.	2.7	245
34	Controlled Growth from ZnS Nanoparticles to ZnSâ€“CdS Nanoparticle Hybrids with Enhanced Photoactivity. Advanced Functional Materials, 2015, 25, 445-454.	7.8	239
35	Photo/Electrochemical Applications of Metal Sulfide/TiO₂ Heterostructures. Advanced Energy Materials, 2020, 10, 1902355.	10.2	236
36	Switch type PANI/ZnO core-shell microwire heterojunction for UV photodetection. Journal of Materials Science and Technology, 2022, 105, 259-265.	5.6	230

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37	Synthesis and Development of Grapheneâ€“Inorganic Semiconductor Nanocomposites. Chemical Reviews, 2015, 115, 8294-8343.	23.0	227
38	An Efficient Way to Assemble ZnS Nanobelts as Ultravioletâ€Light Sensors with Enhanced Photocurrent and Stability. Advanced Functional Materials, 2010, 20, 500-508.	7.8	222
39	Energy Harvesting for Nanostructured Selfâ€Powered Photodetectors. Advanced Functional Materials, 2014, 24, 2591-2610.	7.8	217
40	High-Performance Silicon-Compatible Large-Area UV-to-Visible Broadband Photodetector Based on Integrated Lattice-Matched Type II Se/n-Si Heterojunctions. Nano Letters, 2018, 18, 4697-4703.	4.5	212
41	Efficient Selfâ€Assembly Synthesis of Uniform CdS Spherical Nanoparticlesâ€Au Nanoparticles Hybrids with Enhanced Photoactivity. Advanced Functional Materials, 2014, 24, 3725-3733.	7.8	211
42	2D Perovskite Sr₂Nb₃O₁₀ for Highâ€Performance UV Photodetectors. Advanced Materials, 2020, 32, e1905443.	11.1	210
43	ZnO Hollowâ€Sphere Nanofilmâ€Based Highâ€Performance and Lowâ€Cost Photodetector. Small, 2011, 7, 2449-2453.	5.2	209
44	Novel Composites of Î±â€Fe₂O₃ Tetrakaidecahedron and Graphene Oxide as an Effective Photoelectrode with Enhanced Photocurrent Performances. Advanced Functional Materials, 2016, 26, 3331-3339.	7.8	206
45	Novel UVâ€“Visible Photodetector in Photovoltaic Mode with Fast Response and Ultrahigh Photosensitivity Employing Se/TiO₂ Nanotubes Heterojunction. Small, 2017, 13, 1602448.	5.2	202
46	Siliconâ€Compatible Photodetectors: Trends to Monolithically Integrate Photosensors with Chip Technology. Advanced Functional Materials, 2019, 29, 1808182.	7.8	198
47	Self-Powered Dual-Color UVâ€“Green Photodetectors Based on SnO₂ Millimeter Wire and Microwires/CsPbBr₃ Particle Heterojunctions. Journal of Physical Chemistry Letters, 2019, 10, 836-841.	2.1	190
48	Structure and Cathodoluminescence of Individual ZnS/ZnO Biaxial Nanobelt Heterostructures. Nano Letters, 2008, 8, 2794-2799.	4.5	185
49	Binary response Se/ZnO pâ€n heterojunction UV photodetector with high on/off ratio and fast speed. Laser and Photonics Reviews, 2017, 11, 1600257.	4.4	177
50	Large scale, highly efficient and self-powered UV photodetectors enabled by all-solid-state n-TiO₂nanowell/p-NiO mesoporous nanosheet heterojunctions. Journal of Materials Chemistry C, 2016, 4, 10032-10039.	2.7	168
51	Self-powered UV photodetectors based on ZnO nanomaterials. Applied Physics Reviews, 2021, 8, .	5.5	167
52	Highly stable and spectrum-selective ultraviolet photodetectors based on lead-free copper-based perovskites. Materials Horizons, 2020, 7, 530-540.	6.4	164
53	MXeneâ€Contacted Silicon Solar Cells with 11.5% Efficiency. Advanced Energy Materials, 2019, 9, 1900180.	10.2	161
54	Novel Route to Feâ€Based Cathode as an Efficient Bifunctional Catalysts for Rechargeable Znâ€“Air Battery. Advanced Energy Materials, 2018, 8, 1800955.	10.2	146

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55	Application of Nanostructured TiO₂ in UV Photodetectors: A Review. Advanced Materials, 2022, 34, e2109083.	11.1	145
56	General Fabrication of Monolayer SnO₂ Nanonets for Highâ€Performance Ultraviolet Photodetectors. Advanced Functional Materials, 2012, 22, 1229-1235.	7.8	141
57	Scalable-Production, Self-Powered TiO₂ Nanowellâ€“Organic Hybrid UV Photodetectors with Tunable Performances. ACS Applied Materials & Interfaces, 2016, 8, 33924-33932.	4.0	136
58	Novel pâ€“p Heterojunctions Selfâ€Powered Broadband Photodetectors with Ultrafast Speed and High Responsivity. Advanced Functional Materials, 2017, 27, 1703166.	7.8	136
59	Electrocatalytic nitrate/nitrite reduction to ammonia synthesis using metal nanocatalysts and bio-inspired metalloenzymes. Nano Energy, 2021, 86, 106088.	8.2	136
60	Stackingâ€Orderâ€Dependent Optoelectronic Properties of Bilayer Nanofilm Photodetectors Made From Hollow ZnS and ZnO Microspheres. Advanced Materials, 2012, 24, 5872-5877.	11.1	134
61	Thin SnO₂ Nanowires with Uniform Diameter as Excellent Field Emitters: A Stability of More Than 2400 Minutes. Advanced Functional Materials, 2012, 22, 1613-1622.	7.8	134
62	Bio-inspired transparent MXene electrodes for flexible UV photodetectors. Materials Horizons, 2020, 7, 1828-1833.	6.4	134
63	Nickel Cobaltite Nanostructures for Photoelectric and Catalytic Applications. Small, 2015, 11, 4267-4283.	5.2	127
64	Piezoâ€Phototronic Effect Modulated Deep UV Photodetector Based on ZnOâ€Ga₂O₃ Heterojuction Microwire. Advanced Functional Materials, 2018, 28, 1706379.	7.8	126
65	Facetâ€Dependent, Fast Response, and Broadband Photodetector Based on Highly Stable Allâ€Inorganic CsCu₂I₃ Single Crystal with 1D Electronic Structure. Advanced Functional Materials, 2020, 30, 2002634.	7.8	126
66	Solutionâ€Processed Selfâ€Powered Transparent Ultraviolet Photodetectors with Ultrafast Response Speed for Highâ€Performance Communication System. Advanced Functional Materials, 2019, 29, 1809013.	7.8	123
67	Growth and Device Application of CdSe Nanostructures. Advanced Functional Materials, 2012, 22, 1551-1566.	7.8	122
68	Solution-processed one-dimensional CsCu₂I₃ nanowires for polarization-sensitive and flexible ultraviolet photodetectors. Materials Horizons, 2020, 7, 1613-1622.	6.4	120
69	Broadband Photoresponse Enhancement of a Highâ€Performance tâ€Se Microtube Photodetector by Plasmonic Metallic Nanoparticles. Advanced Functional Materials, 2016, 26, 6641-6648.	7.8	118
70	Enhanced Field Emission Performance of ZnO Nanorods by Two Alternative Approaches. Journal of Physical Chemistry C, 2007, 111, 12673-12676.	1.5	116
71	Supersaturationâ€Controlled Growth of Monolithically Integrated Leadâ€Free Halide Perovskite Singleâ€Crystalline Thin Film for Highâ€Sensitivity Photodetectors. Advanced Materials, 2021, 33, e2103010.	11.1	114
72	High Responsivity and High Rejection Ratio of Self-Powered Solar-Blind Ultraviolet Photodetector Based on PEDOT:PSS/Î²-Ga₂O₃ Organic/Inorganic pâ€“n Junction. Journal of Physical Chemistry Letters, 2019, 10, 6850-6856.	2.1	113

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73	A surface oxide thin layer of copper nanowires enhanced the UV selective response of a ZnO film photodetector. Journal of Materials Chemistry C, 2016, 4, 8416-8421.	2.7	111
74	ZnO Film UV Photodetector with Enhanced Performance: Heterojunction with CdMoO₄ Microplates and the Hot Electron Injection Effect of Au Nanoparticles. Small, 2017, 13, 1702177.	5.2	109
75	Hexagonal-like Nb2O5 Nanoplates-Based Photodetectors and Photocatalyst with High Performances. Scientific Reports, 2015, 5, 7716.	1.6	105
76	WO3 nanowires on carbon papers: electronic transport, improved ultraviolet-light photodetectors and excellent field emitters. Journal of Materials Chemistry, 2011, 21, 6525.	6.7	103
77	Millimeter-Sized Single-Crystal CsPbrB₃/CuI Heterojunction for High-Performance Self-Powered Photodetector. Journal of Physical Chemistry Letters, 2019, 10, 2400-2407.	2.1	99
78	High-Performance Two-Dimensional Perovskite Ca₂Nb₃O₁₀ UV Photodetectors. Nano Letters, 2021, 21, 382-388.	4.5	98
79	New UVâ€A Photodetector Based on Individual Potassium Niobate Nanowires with High Performance. Advanced Optical Materials, 2014, 2, 771-778.	3.6	97
80	Improved Photoelectric Performance of UV Photodetector Based on ZnO Nanoparticleâ€Decorated BiOCl Nanosheet Arrays onto PDMS Substrate: The Heterojunction and Ti₃C₂T_x MXene Conduction Layer. Advanced Electronic Materials, 2020, 6, 2000168.	2.6	94
81	Crystallinityâ€Controlled Germanium Nanowire Arrays: Potential Field Emitters. Advanced Functional Materials, 2008, 18, 1080-1088.	7.8	92
82	Fabrication of 1D Te/2D ReS₂ Mixed-Dimensional van der Waals p-n Heterojunction for High-Performance Phototransistor. ACS Nano, 2021, 15, 3241-3250.	7.3	91
83	Orthogonal Lithography for Halide Perovskite Optoelectronic Nanodevices. ACS Nano, 2019, 13, 1168-1176.	7.3	90
84	Chemical Bath Deposition of p-Type Transparent, Highly Conducting (CuS)_x:(ZnS)_{1â€“x} Nanocomposite Thin Films and Fabrication of Si Heterojunction Solar Cells. Nano Letters, 2016, 16, 1925-1932.	4.5	89
85	One-dimensional inorganic semiconductor nanostructures: A new carrier for nanosensors. Pure and Applied Chemistry, 2010, 82, 2185-2198.	0.9	88
86	Shell-thickness dependent electron transfer and relaxation in type-II coreâ€“shell CdS/TiO₂ structures with optimized photoelectrochemical performance. Journal of Materials Chemistry A, 2015, 3, 22627-22635.	5.2	87
87	Selfâ€Powered nâ€ZnO₂/pâ€CuZnS Coreâ€“Shell Microwire UV Photodetector with Optimized Performance. Advanced Optical Materials, 2018, 6, 1800213.	3.6	83
88	Novel Structure for High Performance UV Photodetector Based on BiOCl/ZnO Hybrid Film. Small, 2017, 13, 1700156.	5.2	81
89	Selfâ€Powered Flexible TiO₂ Fibrous Photodetectors: Heterojunction with P3HT and Boosted Responsivity and Selectivity by Au Nanoparticles. Advanced Functional Materials, 2020, 30, 2001604.	7.8	81
90	Ultrafast Speed, Dark Current Suppression, and Self-Powered Enhancement in TiO₂-Based Ultraviolet Photodetectors by Organic Layers and Ag Nanowires Regulation. Journal of Physical Chemistry Letters, 2021, 12, 9912-9918.	2.1	79

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91	Design Principles and Material Engineering of ZnS for Optoelectronic Devices and Catalysis. Advanced Functional Materials, 2018, 28, 1802029.	7.8	77
92	Crystal orientation-ordered ZnS nanobelt quasi-arrays and their enhanced field-emission. Chemical Communications, 2007, , 3048.	2.2	76
93	Uniform carbon-coated CdS coreâ€“shell nanostructures: synthesis, ultrafast charge carrier dynamics, and photoelectrochemical water splitting. Journal of Materials Chemistry A, 2016, 4, 1078-1086.	5.2	75
94	Selfâ€Polarized BaTiO₃ for Greatly Enhanced Performance of ZnO UV Photodetector by Regulating the Distribution of Electron Concentration. Advanced Functional Materials, 2020, 30, 1907650.	7.8	74
95	Efficiency enhancement of TiO₂self-powered UV photodetectors using a transparent Ag nanowire electrode. Journal of Materials Chemistry C, 2018, 6, 3334-3340.	2.7	71
96	Sizeâ€Controlled Graphene Nanodot Arrays/ZnO Hybrids for Highâ€Performance UV Photodetectors. Advanced Science, 2018, 5, 1700334.	5.6	70
97	An Allâ€Organic Selfâ€Powered Photodetector with Ultraflexible Dualâ€Polarity Output for Biosignal Detection. Advanced Materials, 2022, 34, .	11.1	70
98	Cathodoluminescence Modulation of ZnS Nanostructures by Morphology, Doping, and Temperature. Advanced Functional Materials, 2013, 23, 3701-3709.	7.8	69
99	Crossâ€Bar SnO₂â€NiO Nanofiberâ€Arrayâ€Based Transparent Photodetectors with High Detectivity. Advanced Electronic Materials, 2020, 6, 1901048.	2.6	68
100	Heteroepitaxial Growth of GaP/ZnS Nanocable with Superior Optoelectronic Response. Nano Letters, 2013, 13, 1941-1947.	4.5	67
101	Low-cost writing method for self-powered paper-based UV photodetectors utilizing Te/TiO₂ and Te/ZnO heterojunctions. Nanoscale Horizons, 2019, 4, 452-456.	4.1	64
102	Three-dimensional helical inorganic thermoelectric generators and photodetectors for stretchable and wearable electronic devices. Journal of Materials Chemistry C, 2018, 6, 4866-4872.	2.7	63
103	Wavelengthâ€Tunable Electroluminescent Light Sources from Individual Gaâ€Doped ZnO Microwires. Small, 2017, 13, 1604034.	5.2	62
104	Perovskite-Type 2D Materials for High-Performance Photodetectors. Journal of Physical Chemistry Letters, 2022, 13, 1215-1225.	2.1	62
105	Interface Engineering Ti₃C₂ MXene/Silicon Selfâ€Powered Photodetectors with High Responsivity and Detectivity for Weak Light Applications. Small, 2021, 17, e2100439.	5.2	61
106	High performance polarization-sensitive self-powered imaging photodetectors based on a p-Te/n-MoSe₂van der Waals heterojunction with strong interlayer transition. Materials Horizons, 2021, 8, 3113-3123.	6.4	61
107	Band Gap Tunable Zn2SnO4 Nanocubes through Thermal Effect and Their Outstanding Ultraviolet Light Photoresponse. Scientific Reports, 2014, 4, 6847.	1.6	60
108	A Paperâ€Based Wearable Photodetector for Simultaneous UV Intensity and Dosage Measurement. Advanced Functional Materials, 2021, 31, 2100026.	7.8	58

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109	Workâ€Functionâ€Tunable MXenes Electrodes to Optimize pâ€CsCu₂I₃/nâ€Ca₂Nb_{3â€‹}_xTa_xO₁₀ Junction Photodetectors for Image Sensing and Logic Electronics. Advanced Functional Materials, 2022, 32, .	7.8	58
110	Fastâ€Response, Highly Airâ€Stable, and Waterâ€Resistant Organic Photodetectors Based on a Singleâ€Crystal Pt Complex. Advanced Materials, 2020, 32, e1904634.	11.1	56
111	Highly Desirable Photodetectors Derived from Versatile Plasmonic Nanostructures. Advanced Functional Materials, 2017, 27, 1704181.	7.8	54
112	Solutionâ€Processed Transparent Selfâ€Powered pâ€CuSâ€ZnS/nâ€ZnO UV Photodiode. Physica Status Solidi - Rapid Research Letters, 2018, 12, 1700381.	1.2	54
113	Highâ€Performance SiC Nanobelt Photodetectors with Longâ€Term Stability Against 300 Â°C up to 180 Days. Advanced Functional Materials, 2019, 29, 1806250.	7.8	54
114	Robust and Stable Ratiometric Temperature Sensor Based on Znâ€“Inâ€“S Quantum Dots with Intrinsic Dualâ€Dopant Ion Emissions. Advanced Functional Materials, 2016, 26, 7224-7233.	7.8	53
115	Novel BeZnO Based Selfâ€Powered Dualâ€Color UV Photodetector Realized via a Oneâ€Step Fabrication Method. Laser and Photonics Reviews, 2017, 11, 1700222.	4.4	53
116	Designed growth and patterning of perovskite nanowires for lasing and wide color gamut phosphors with long-term stability. Nano Energy, 2020, 73, 104801.	8.2	53
117	Mechanically Compatible UV Photodetectors Based on Electrospun Freeâ€Standing Y³⁺â€Doped TiO₂ Nanofibrous Membranes with Enhanced Flexibility. Advanced Functional Materials, 2020, 30, 2005291.	7.8	51
118	Recent advances toward environment-friendly photodetectors based on lead-free metal halide perovskites and perovskite derivatives. Materials Horizons, 2021, 8, 1367-1389.	6.4	46
119	Ultrathin 2D NbWO₆ Perovskite Semiconductor Based Gas Sensors with Ultrahigh Selectivity under Low Working Temperature. Advanced Materials, 2022, 34, e2104958.	11.1	46
120	Tunable selfâ€powered nâ€SrTiO₃ photodetectors based on varying CuSâ€ZnS nanocomposite film (pâ€CuZnS, pâ€CuS, and nâ€ZnS). InformaÄnÃ-MateriÃ¡ly, 2019, 1, 542-551.	8.5	44
121	A wearable helical organicâ€“inorganic photodetector with thermoelectric generators as the power source. Journal of Materials Chemistry C, 2019, 7, 13097-13103.	2.7	41
122	CsPbI₃ Nanotube Photodetectors with High Detectivity. Small, 2019, 15, e1905253.	5.2	41
123	Polarization Sensitive Solarâ€Blind Ultraviolet Photodetectors Based on Ultrawide Bandgap KNb₃O₈ Nanobelt with Fringeâ€Like Atomic Lattice. Advanced Functional Materials, 2022, 32, .	7.8	41
124	Si nanowire semisphere-like ensembles as field emitters. Chemical Communications, 2007, , 4093.	2.2	40
125	Transparent Schottky Photodiode Based on AgNi NWs/SrTiO₃ Contact with an Ultrafast Photoresponse to Shortâ€Wavelength Blue Light and UVâ€Shielding Effect. Advanced Functional Materials, 2019, 29, 1905923.	7.8	40
126	Thermal stability of CsPbBr3 perovskite as revealed by in situ transmission electron microscopy. APL Materials, 2019, 7, .	2.2	39

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127	UV Photodetectors Based on BiOCl Nanosheet Arrays: The Effects of Morphologies and Electrode Configurations. Small, 2018, 14, e1801611.	5.2	38
128	CdS/CdSO₄ Nanoflower-Based Photodetector with Enhanced Photoelectric Performances. ACS Applied Nano Materials, 2020, 3, 10190-10199.	2.4	37
129	Two-dimensional Ti₃C₂ MXene-based nanostructures for emerging optoelectronic applications. Materials Horizons, 2021, 8, 2929-2963.	6.4	37
130	Solutionâ€Processed Transparent Sn⁴⁺â€Doped CuI Hybrid Photodetectors with Enhanced Performances. Advanced Materials Interfaces, 2019, 6, 1900669.	1.9	36
131	Wearable and Ultrasensitive Strain Sensor Based on Highâ€Quality GaN pn Junction Microwire Arrays. Small, 2020, 16, e1907461.	5.2	35
132	Highly UV Resistant Inchâ€Scale Hybrid Perovskite Quantum Dot Papers. Advanced Science, 2020, 7, 1902439.	5.6	33
133	Dualâ€Band Perovskite Bulk Heterojunction Selfâ€Powered Photodetector for Encrypted Communication and Imaging. Advanced Optical Materials, 2022, 10, .	3.6	33
134	Allâ€Solidâ€State Onâ€Chip Supercapacitors Based on Freeâ€Standing 4Hâ€SiC Nanowire Arrays. Advanced Energy Materials, 2019, 9, 1900073.	10.2	32
135	Novel Î©â€Shaped Coreâ€“Shell Photodetector with High Ultraviolet Selectivity and Enhanced Responsivity. Advanced Functional Materials, 2017, 27, 1704477.	7.8	29
136	Constructing the Band Alignment of Graphitic Carbon Nitride (g-C₃N₄)/Copper(I) Oxide (Cu₂O) Composites by Adjusting the Contact Facet for Superior Photocatalytic Activity. ACS Applied Energy Materials, 2019, 2, 1803-1811.	2.5	29
137	Boosted Responsivity and Tunable Spectral Response in Bâ€Site Substituted 2D Ca₂Nb_{3â^'}_xTa_xO₁₀ Perovskite Photodetectors. Advanced Functional Materials, 2021, 31, 2101480.	7.8	29
138	Facile fabrication of heterostructure with p-BiOCl nanoflakes and n-ZnO thin film for UV photodetectors. Journal of Semiconductors, 2021, 42, 052301.	2.0	29
139	Doping Concentration Influenced Pyroâ€Phototronic Effect in Selfâ€Powered Photodetector Based on Gaâ€Incorporated ZnO Microwire/p⁺â€GaN Heterojunction. Advanced Optical Materials, 2022, 10, 2101851.	3.6	29
140	Solutionâ€Growth Strategy for Largeâ€Scale â€œCuGaO₂ Nanoplate/ZnS Microsphereâ€• Heterostructure Arrays with Enhanced UV Adsorption and Optoelectronic Properties. Advanced Functional Materials, 2017, 27, 1701066.	7.8	27
141	Enhanced Electrical Properties of Lithography-Free Fabricated MoS₂ Field Effect Transistors with Chromium Contacts. Journal of Physical Chemistry Letters, 2021, 12, 2705-2711.	2.1	26
142	Rose-like CuS microflowers and their enhanced visible-light photocatalytic performance. CrystEngComm, 2018, 20, 6529-6537.	1.3	24
143	Humidityâ€Dependent Characteristics of Fewâ€Layer MoS₂ Field Effect Transistors. Advanced Electronic Materials, 2020, 6, 2000659.	2.6	23
144	Ultralight and robust carbon nanofiber aerogels for advanced energy storage. Journal of Materials Chemistry A, 2021, 9, 900-907.	5.2	23

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145	Ultrafine CoP_x Nanoparticles Anchored on Nitrogen Doped Reduced Graphene Oxides for Superior Hydrogenation in Alkaline Media. Advanced Materials Interfaces, 2018, 5, 1800515.	1.9	22
146	Back-to-back symmetric Schottky type UVA photodetector based on ternary alloy BeZnO. Journal of Materials Chemistry C, 2018, 6, 7776-7782.	2.7	21
147	A transparent, self-powered photodetector based on p-CuI/n-TiO₂ heterojunction film with high onâ€“off ratio. Nanotechnology, 2022, 33, 105202.	1.3	20
148	Integration of filter membrane and Ca2Nb3O10 nanosheets for high performance flexible UV photodetectors. Journal of Materials Science and Technology, 2022, 129, 108-114.	5.6	20
149	Raman selection rule for surface optical phonons in ZnS nanobelts. Nanoscale, 2016, 8, 5954-5958.	2.8	18
150	Highly Crystallized Tin Dioxide Microwires toward Ultraviolet Photodetector and Humidity Sensor with High Performances. Advanced Electronic Materials, 2021, 7, 2100706.	2.6	16
151	Supersaturationâ€Controlled Growth of Monolithically Integrated Leadâ€Free Halide Perovskite Singleâ€Crystalline Thin Film for Highâ€Sensitivity Photodetectors (Adv. Mater. 41/2021). Advanced Materials, 2021, 33, 2170324.	11.1	16
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