

# Dan Xie

## List of Publications by Year in descending order

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93  
papers

3,705  
citations

109321

35  
h-index

133252

59  
g-index

94  
all docs

94  
docs citations

94  
times ranked

5784  
citing authors

#	ARTICLE	IF	CITATIONS
1	A Flexible UV-Vis-NIR Photodetector based on a Perovskite/Conjugated Polymer Composite. <i>Advanced Materials</i> , 2016, 28, 5969-5974.	21.0	329
2	Confined Formation of Ultrathin ZnO Nanorods/Reduced Graphene Oxide Mesoporous Nanocomposites for High-Performance Room-Temperature NO <sub>2</sub> Sensors. <i>ACS Applied Materials &amp; Interfaces</i> , 2016, 8, 35454-35463.	8.0	210
3	Bilayer of polyelectrolyte films for spontaneous power generation in air up to an integrated 1,000%V output. <i>Nature Nanotechnology</i> , 2021, 16, 811-819.	31.5	193
4	Graphene/semiconductor heterojunction solar cells with modulated antireflection and graphene work function. <i>Energy and Environmental Science</i> , 2013, 6, 108-115.	30.8	154
5	A lead-free two-dimensional perovskite for a high-performance flexible photoconductor and a light-stimulated synaptic device. <i>Nanoscale</i> , 2018, 10, 6837-6843.	5.6	146
6	Novel Field-Effect Schottky Barrier Transistors Based on Graphene-MoS <sub>2</sub> Heterojunctions. <i>Scientific Reports</i> , 2014, 4, 5951.	3.3	134
7	Photoelectric Synaptic Plasticity Realized by 2D Perovskite. <i>Advanced Functional Materials</i> , 2019, 29, 1902538.	14.9	132
8	Reduced Graphene Oxide/Mesoporous ZnO NSs Hybrid Fibers for Flexible, Stretchable, Twisted, and Wearable NO <sub>2</sub> E-Textile Gas Sensor. <i>ACS Sensors</i> , 2019, 4, 2809-2818.	7.8	114
9	Wafer-Scale Integration of Graphene-based Electronic, Optoelectronic and Electroacoustic Devices. <i>Scientific Reports</i> , 2014, 4, 3598.	3.3	113
10	UV light irradiation enhanced gas sensor selectivity of NO <sub>2</sub> and SO <sub>2</sub> using rGO functionalized with hollow SnO <sub>2</sub> nanofibers. <i>Sensors and Actuators B: Chemical</i> , 2019, 290, 443-452.	7.8	112
11	Enhanced photovoltaic properties in graphene/polycrystalline BiFeO <sub>3</sub> /Pt heterojunction structure. <i>Applied Physics Letters</i> , 2011, 99, .	3.3	97
12	Precise Control of the Number of Layers of Graphene by Picosecond Laser Thinning. <i>Scientific Reports</i> , 2015, 5, 11662.	3.3	91
13	Ultrafast Photodetector by Integrating Perovskite Directly on Silicon Wafer. <i>ACS Nano</i> , 2020, 14, 2860-2868.	14.6	86
14	A Solution-Processed High-Performance Phototransistor based on a Perovskite Composite with Chemically Modified Graphenes. <i>Advanced Materials</i> , 2017, 29, 1606175.	21.0	80
15	Graphene based Schottky junction solar cells on patterned silicon-pillar-array substrate. <i>Applied Physics Letters</i> , 2011, 99, 233505.	3.3	76
16	Thickness Tunable Wedding-Cake-like MoS <sub>2</sub> Flakes for High-Performance Optoelectronics. <i>ACS Nano</i> , 2019, 13, 3649-3658.	14.6	75
17	Sprayed, Scalable, Wearable, and Portable NO <sub>2</sub> Sensor Array Using Fully Flexible AgNPs-All-Carbon Nanostructures. <i>ACS Applied Materials &amp; Interfaces</i> , 2018, 10, 34485-34493.	8.0	74
18	Application of chemical vapor-deposited monolayer ReSe <sub>2</sub> in the electrocatalytic hydrogen evolution reaction. <i>Nano Research</i> , 2018, 11, 1787-1797.	10.4	71

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19	Heterostructured graphene quantum dot/WSe <sub>2</sub> /Si photodetector with suppressed dark current and improved detectivity. Nano Research, 2018, 11, 3233-3243.	10.4	67
20	Programmable van der Waals heterostructure-enabled optoelectronic synaptic floating-gate transistors with ultra-low energy consumption. Information Materials, 2022, 4, .	17.3	58
21	Enhanced dielectric and multiferroic properties of single-phase Y and Zr co-doped BiFeO <sub>3</sub> ceramics. Journal of Applied Physics, 2013, 114, .	2.5	55
22	Unzipping of black phosphorus to form zigzag-phosphorene nanobelts. Nature Communications, 2020, 11, 3917.	12.8	55
23	2D perovskite microsheets for high-performance photodetectors. Journal of Materials Chemistry C, 2019, 7, 5353-5358.	5.5	54
24	MoS <sub>2</sub> Field-Effect Transistors With Lead Zirconate-Titanate Ferroelectric Gating. IEEE Electron Device Letters, 2015, 36, 784-786.	3.9	53
25	All-Inorganic Perovskite Nanowires-InGaZnO Heterojunction for High-Performance Ultraviolet-Visible Photodetectors. ACS Applied Materials & Interfaces, 2018, 10, 7231-7238.	8.0	53
26	Novel Transfer Behaviors in 2D MoS <sub>2</sub> /WSe <sub>2</sub> Heterotransistor and Its Applications in Visible-Near Infrared Photodetection. Advanced Electronic Materials, 2017, 3, 1600502.	5.1	51
27	Anisotropic Growth and Scanning Tunneling Microscopy Identification of Ultrathin Even-Layered PdSe <sub>2</sub> Ribbons. Small, 2019, 15, e1902789.	10.0	50
28	TiO <sub>2</sub> enhanced ultraviolet detection based on a graphene/Si Schottky diode. Journal of Materials Chemistry A, 2015, 3, 8133-8138.	10.3	46
29	Flexible graphene woven fabrics for touch sensing. Applied Physics Letters, 2013, 102, .	3.3	45
30	Light-Enhanced Ion Migration in Two-Dimensional Perovskite Single Crystals Revealed in Carbon Nanotubes/Two-Dimensional Perovskite Heterostructure and Its Photomemory Application. ACS Central Science, 2019, 5, 1857-1865.	11.3	45
31	Organic Dye-Sensitized CH <sub>3</sub> NH <sub>3</sub> PbI <sub>3</sub> Hybrid Flexible Photodetector with Bulk Heterojunction Architectures. ACS Applied Materials & Interfaces, 2016, 8, 31289-31294.	8.0	43
32	Room-temperature out-of-plane and in-plane ferroelectricity of two-dimensional $\text{In}_2\text{Se}_3$ nanoflakes. Applied Physics Letters, 2019, 114, .	3.3	40
33	Mixed-Dimensional Van der Waals Heterostructures Enabled Optoelectronic Synaptic Devices for Neuromorphic Applications. Advanced Functional Materials, 2021, 31, 2105625.	14.9	39
34	Temperature Control of P(VDF-TrFE) Copolymer Thin Films. Integrated Ferroelectrics, 2013, 141, 187-194.	0.7	36
35	Efficient and Reversible Electron Doping of Semiconductor-Enriched Single-Walled Carbon Nanotubes by Using Decamethylcobaltocene. Scientific Reports, 2017, 7, 6751.	3.3	36
36	High-Quality Single Crystal Perovskite for Highly Sensitive X-Ray Detector. IEEE Electron Device Letters, 2020, 41, 256-259.	3.9	36

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37	Lateral multilayer/monolayer MoS <sub>2</sub> heterojunction for high performance photodetector applications. Scientific Reports, 2017, 7, 4505.	3.3	35
38	Self-Powered MoS <sub>2</sub> "PDPP3T Heterotransistor" Based Broadband Photodetectors. Advanced Electronic Materials, 2019, 5, 1800580.	5.1	35
39	Resistive switching behavior in diamond-like carbon films grown by pulsed laser deposition for resistance switching random access memory application. Journal of Applied Physics, 2012, 111, 084501.	2.5	31
40	Graphene-Based Devices for Thermal Energy Conversion and Utilization. Advanced Functional Materials, 2020, 30, 1903888.	14.9	30
41	High-performance single crystal CH <sub>3</sub> NH <sub>3</sub> PbI <sub>3</sub> perovskite x-ray detector. Applied Physics Letters, 2021, 118, .	3.3	28
42	Optogenetics-Inspired Neuromorphic Optoelectronic Synaptic Transistors with Optically Modulated Plasticity. Advanced Optical Materials, 2021, 9, 2002232.	7.3	28
43	Wafer-Scale Photolithography-Pixeled Pb-Free Perovskite X-ray Detectors. ACS Nano, 2022, 16, 10199-10208.	14.6	25
44	Investigation of the improved performance in a graphene/polycrystalline BiFeO <sub>3</sub> /Pt photovoltaic heterojunction: Experiment, modeling, and application. Journal of Applied Physics, 2012, 112, .	2.5	23
45	Hybrid graphene/cadmium-free ZnSe/ZnS quantum dots phototransistors for UV detection. Scientific Reports, 2018, 8, 5107.	3.3	21
46	Photomodulated Hysteresis Behaviors in Perovskite Phototransistors with Ultra-Low Operating Voltage. Journal of Physical Chemistry C, 2017, 121, 11665-11671.	3.1	20
47	Influence of low-dimension carbon-based electrodes on the performance of SnO <sub>2</sub> nanofiber gas sensors at room temperature. Nanotechnology, 2019, 30, 345503.	2.6	18
48	Directly integrated mixed-dimensional van der Waals graphene/perovskite heterojunction for fast photodetection. Informa Mater, 2022, 4, .	17.3	18
49	Unipolar to ambipolar conversion in graphene field-effect transistors. Applied Physics Letters, 2012, 101, .	3.3	17
50	Reduced Graphene Oxide for Room Temperature Ammonia (NH <sub>3</sub> ) Gas Sensor. Journal of Nanoscience and Nanotechnology, 2018, 18, 7927-7932.	0.9	17
51	WSe <sub>2</sub> /graphene heterojunction synaptic phototransistor with both electrically and optically tunable plasticity. 2D Materials, 2021, 8, 035034.	4.4	17
52	Out-of-plane and in-plane ferroelectricity of atom-thick two-dimensional InSe. Nanotechnology, 2021, 32, 385202.	2.6	15
53	Characteristics of Pt/BiFeO <sub>3</sub> /TiO <sub>2</sub> /Si capacitors with TiO <sub>2</sub> layer formed by liquid-delivery metal organic chemical vapor deposition. Applied Physics Letters, 2010, 97, .	3.3	13
54	High-performance heterogeneous complementary inverters based on n-channel MoS <sub>2</sub> and p-channel SWCNT transistors. Nano Research, 2017, 10, 276-283.	10.4	13

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55	Tuning the Structural and Optical Properties of Bismuth Titanate by Different Nd Substitution Content. <i>Integrated Ferroelectrics</i> , 2012, 133, 73-80.	0.7	12
56	Reconfigurable optical memory based on MoS <sub>2</sub> /QDs mixed-dimensional van der Waals heterostructure. <i>2D Materials</i> , 2021, 8, 025021.	4.4	12
57	Optically stimulated synaptic transistor based on MoS <sub>2</sub> /quantum dots mixed-dimensional heterostructure with gate-tunable plasticity. <i>Optics Letters</i> , 2021, 46, 1748.	3.3	12
58	NO <sub>2</sub> -induced performance enhancement of PEDOT:PSS/Si hybrid solar cells with a high efficiency of 13.44%. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 7184-7189.	2.8	11
59	Ambipolar/unipolar conversion in graphene transistors by surface doping. <i>Applied Physics Letters</i> , 2013, 103, 193502.	3.3	10
60	Poly (ethylene imine)-modulated transport behaviors of graphene field effect transistors with double Dirac points. <i>Journal of Applied Physics</i> , 2017, 121, .	2.5	10
61	Highly Sensitive, Selective, Flexible and Scalable Room-Temperature NO <sub>2</sub> Gas Sensor Based on Hollow SnO <sub>2</sub> /ZnO Nanofibers. <i>Molecules</i> , 2021, 26, 6475.	3.8	9
62	Threshold voltage control of carbon nanotube-based synaptic transistors via chemical doping for plasticity modulation and symmetry improvement. <i>Carbon</i> , 2021, 184, 295-302.	10.3	7
63	Fabrication and Properties of $\text{Pt}/\text{Bi}_{3.15}\text{Nd}_{0.85}\text{Ti}_3\text{O}_{12}/\text{HfO}_2/\text{Si}$ Structure for Ferroelectric DRAM (FEDRAM) FET. <i>IEEE Electron Device Letters</i> , 2009, 30, 463-465.	3.9	6
64	Comparative Study on Structural and Ferroelectric Properties of Dual-Site Rare-Earth Ions Substituted Multiferroelectric BiFeO <sub>3</sub> . <i>Integrated Ferroelectrics</i> , 2012, 132, 30-38.	0.7	6
65	Temperature dependence of optical and structural properties of ferroelectric B <sub>3.15</sub> Nd <sub>0.85</sub> Ti <sub>3</sub> O <sub>12</sub> thin film derived by sol-gel process. <i>Journal of Sol-Gel Science and Technology</i> , 2012, 61, 236-242.	2.4	6
66	A small-signal generator based on a multi-layer graphene/molybdenum disulfide heterojunction. <i>Applied Physics Letters</i> , 2013, 103, .	3.3	6
67	Controllable Hysteresis and Threshold Voltage of Single-Walled Carbon Nano-tube Transistors with Ferroelectric Polymer Top-Gate Insulators. <i>Scientific Reports</i> , 2016, 6, 23090.	3.3	5
68	Light-Induced Modulation in Resistance Switching of Carbon Nanotube/BiFeO <sub>3</sub> /Pt Heterostructure. <i>Integrated Ferroelectrics</i> , 2012, 134, 58-64.	0.7	4
69	Optimization of graphene/silicon heterojunction solar cells. , 2012, , .		4
70	Flexible and large-area sound-emitting device using reduced graphene oxide. , 2013, , .		4
71	Sucrose-templated nanoporous BiFeO <sub>3</sub> for promising magnetically recoverable multifunctional environmental purification applications: adsorption and photocatalysis. <i>RSC Advances</i> , 2016, 6, 67550-67555.	3.6	4
72	The Effect of Thin Film Fabrication Techniques on the Performance of rGO Based NO <sub>2</sub> Gas Sensors at Room Temperature. <i>Chemosensors</i> , 2022, 10, 119.	3.6	4

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73	Withdrawal of "Fabrication and Properties of $\text{Pt}_{3.15}\text{Bi}_{0.85}\text{Ti}_3\text{O}_{12}/\text{HfO}_2/\text{Si}$ Structure for Ferroelectric DRAM (FEDRAM) FET". IEEE Electron Device Letters, 2009, 30, 1111-1111.	3.9	3
74	Wafer-scale flexible graphene loudspeakers. , 2014, , .		3
75	Anomalous heavy doping in chemical-vapor-deposited titanium trisulfide nanostructures. Physical Review Materials, 2021, 5, .	2.4	3
76	FABRICATION AND PROPERTIES OF METAL-PZT-METAL CAPACITORS BY LIQUID DELIVERY MOCVD. Integrated Ferroelectrics, 2008, 100, 114-122.	0.7	2
77	PROTON IRRADIATION INFLUENCE ON THE MAGNETIC PROPERTIES OF GMR-SVs. Modern Physics Letters B, 2014, 28, 1450022.	1.9	2
78	Adsorption of $\text{NO}_2$ by hydrazine hydrate-reduced graphene oxide. Wuli Xuebao/Acta Physica Sinica, 2019, 68, 118102.	0.5	2
79	Wafer-scale flexible graphene strain sensors. , 2013, , .		1
80	Flexible nitrogen dioxide gas sensor based on reduced graphene oxide sensing material using silver nanowire electrode. Wuli Xuebao/Acta Physica Sinica, 2020, 69, 058101.	0.5	1
81	Anisotropic electrical properties of aligned PtSe <sub>2</sub> nanoribbon arrays grown by a pre-patterned selective selenization process. Nano Research, 0, , 1.	10.4	1
82	Cs <sub>2</sub> AgBiBr <sub>6</sub> -Tellurium heterojunction-based high-performance X-ray detectors. , 2022, , .		1
83	OPTICAL CHARACTERIZATION OF Sr <sub>1-x</sub> BaxBi <sub>4</sub> Ti <sub>4</sub> O <sub>15</sub> GRADED THIN FILMS. Integrated Ferroelectrics, 2008, 98, 128-135.	0.7	0
84	Buffer layer dependence of $\text{Bi}_{3.15}\text{Nd}_{0.85}\text{Ti}_3\text{O}_{12}$ (BNdT) based MFIS capacitor for FeFET application. , 2008, , .		0
85	ZnO nanorod array based optoelectronic device with graphene as transparent electrode. , 2012, , .		0
86	Multilayer graphene growth by a metal-catalyzed crystallization of diamond-like carbon. , 2012, , .		0
87	Light-Induced Modulation in Resistance Switching of Carbon Nanotube/ BiFeO <sub>3</sub> /Pt Heterostructure. Integrated Ferroelectrics, 2012, 132, 53-60.	0.7	0
88	Novel flexible nanogenerators. , 2014, , .		0
89	Transparent pentacene organic thin film transistors with polyimide dielectrics. , 2014, , .		0
90	Formaldehyde-sensing properties of reduced graphene oxide by layer-by-layer self-assemble method. , 2014, , .		0

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91	Tunable transfer behaviors of single-layer WSe <sub>2</sub> field effect transistors by hydrazine. , 2016, , .		0
92	Thermal Energy Conversion: Graphene-Based Devices for Thermal Energy Conversion and Utilization (Adv. Funct. Mater. 8/2020). Advanced Functional Materials, 2020, 30, 2070052.	14.9	0
93	Flexible and Transparent Ultraviolet Photodetector Enabled by Metal Doping ZnO Nanorods Based on Mica Substrate. , 2021, , .		0