

# Jinbin Wang

## List of Publications by Year in descending order

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103  
papers

2,298  
citations

186254

28  
h-index

254170

43  
g-index

104  
all docs

104  
docs citations

104  
times ranked

3100  
citing authors

#	ARTICLE	IF	CITATIONS
1	Synthesis, structure, and room-temperature ferromagnetism of Ni-doped ZnO nanoparticles. <i>Journal of Materials Science</i> , 2007, 42, 6464-6468.	3.7	114
2	One-pot synthesis of mesoporous interconnected carbon-encapsulated Fe <sub>3</sub> O <sub>4</sub> nanospheres as superior anodes for Li-ion batteries. <i>RSC Advances</i> , 2012, 2, 2262.	3.6	103
3	Organic-Inorganic Copper(II)-Based Material: A Low-Toxic, Highly Stable Light Absorber for Photovoltaic Application. <i>Journal of Physical Chemistry Letters</i> , 2017, 8, 1804-1809.	4.6	103
4	Work function tunable laser induced graphene electrodes for Schottky type solar-blind photodetectors. <i>Applied Physics Letters</i> , 2022, 120, .	3.3	95
5	(C <sub>6</sub> H <sub>5</sub> CH <sub>2</sub> NH <sub>2</sub> ) <sub>2</sub> CuBr <sub>4</sub> : A Lead-Free, Highly Stable Two-Dimensional Perovskite for Solar Cell Applications. <i>ACS Applied Energy Materials</i> , 2018, 1, 2709-2716.	5.1	73
6	Self-assembled porous hierarchical-like CoO@C microsheets transformed from inorganic-organic precursors and their lithium-ion battery application. <i>CrystEngComm</i> , 2012, 14, 2669.	2.6	67
7	Gram-scale and template-free synthesis of ultralong tin disulfide nanobelts and their lithium ion storage performances. <i>Journal of Materials Chemistry A</i> , 2013, 1, 1117-1122.	10.3	61
8	Flexible electronic synapse enabled by ferroelectric field effect transistor for robust neuromorphic computing. <i>Applied Physics Letters</i> , 2020, 117, .	3.3	57
9	Epitaxial array of Fe <sub>3</sub> O <sub>4</sub> nanodots for high rate high capacity conversion type lithium ion batteries electrode with long cycling life. <i>Nano Energy</i> , 2020, 74, 104876.	16.0	51
10	Revealing the structural, electronic and optical properties of lead-free perovskite derivatives of Rb <sub>2</sub> SnX <sub>6</sub> (X = Cl, Br and I): A theory calculation. <i>Solar Energy</i> , 2019, 190, 272-277.	6.1	50
11	Creating polar antivortex in PbTiO <sub>3</sub> /SrTiO <sub>3</sub> superlattice. <i>Nature Communications</i> , 2021, 12, 2054.	12.8	50
12	Atomic imaging of mechanically induced topological transition of ferroelectric vortices. <i>Nature Communications</i> , 2020, 11, 1840.	12.8	49
13	Solvothermal Synthesis of Uniform Co <sub>3</sub> O <sub>4</sub> /C Hollow Quasi-Nanospheres for Enhanced Lithium Ion Intercalation Applications. <i>European Journal of Inorganic Chemistry</i> , 2012, 2012, 3825-3829.	2.0	47
14	The coexistence of the negative and positive electrocaloric effect in ferroelectric thin films for solid-state refrigeration. <i>Europhysics Letters</i> , 2013, 102, 47004.	2.0	46
15	Magnetism mechanism in ZnO and ZnO doped with nonmagnetic elements X (X = Li, Mg, and Al): A first-principles study. <i>Applied Physics Letters</i> , 2012, 100, .	3.3	44
16	Deterministic, Reversible, and Nonvolatile Low-Voltage Writing of Magnetic Domains in Epitaxial BaTiO <sub>3</sub> /Fe <sub>3</sub> O <sub>4</sub> Heterostructure. <i>ACS Nano</i> , 2018, 12, 9558-9567.	14.6	43
17	A ferroelectric memristor based on the migration of oxygen vacancies. <i>RSC Advances</i> , 2016, 6, 54113-54118.	3.6	41
18	Atomic-scale observations of electrical and mechanical manipulation of topological polar flux closure. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020, 117, 18954-18961.	7.1	41

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19	Radiation tolerance of perovskite solar cells under gamma ray. <i>Organic Electronics</i> , 2019, 71, 79-84.	2.6	40
20	Room temperature electrocaloric effect on PbZr <sub>0.8</sub> Ti <sub>0.2</sub> O <sub>3</sub> thin film. <i>Journal of Applied Physics</i> , 2010, 107, 014109.	2.5	37
21	$\hat{\Gamma}\pm\text{-In}_2\text{Se}_3$ Nanoflakes Modulated by Ferroelectric Polarization and Pt Nanodots for Photodetection. <i>ACS Applied Nano Materials</i> , 2019, 2, 4443-4450.	5.0	34
22	Highly Robust Flexible Ferroelectric Field Effect Transistors Operable at High Temperature with Low Power Consumption. <i>Advanced Functional Materials</i> , 2020, 30, 1906131.	14.9	32
23	Facile synthesis of layered LiV <sub>3</sub> O <sub>8</sub> hollow nanospheres as superior cathode materials for high-rate Li-ion batteries. <i>RSC Advances</i> , 2012, 2, 10470.	3.6	31
24	Subunit cell level measurement of polarization in an individual polar vortex. <i>Science Advances</i> , 2019, 5, eaav4355.	10.3	31
25	Highly transparent, all-oxide, heteroepitaxy ferroelectric thin film for flexible electronic devices. <i>Applied Surface Science</i> , 2018, 458, 540-545.	6.1	30
26	Improved ferroelectric properties of bismuth titanate films by Nd and Mn cosubstitution. <i>Applied Physics Letters</i> , 2007, 90, 012906.	3.3	29
27	Enhanced electrocaloric effect in a Ba(1-x)SrxTiO <sub>3</sub> compositionally graded film. <i>RSC Advances</i> , 2014, 4, 24533.	3.6	29
28	An ultrathin flexible electronic device based on the tunneling effect: a flexible ferroelectric tunnel junction. <i>Journal of Materials Chemistry C</i> , 2018, 6, 5193-5198.	5.5	29
29	Temperature dependence of polarization switching properties of Bi <sub>3.15</sub> Nd <sub>0.85</sub> Ti <sub>3</sub> O <sub>12</sub> ferroelectric thin film. <i>Journal of Applied Physics</i> , 2011, 110, .	2.5	28
30	Shape-controlled hydrothermal synthesis of ferroelectric Bi <sub>4</sub> Ti <sub>3</sub> O <sub>12</sub> nanostructures. <i>CrystEngComm</i> , 2013, 15, 1397.	2.6	27
31	An extremely high power factor in Seebeck effects based on a new n-type copper-based organic/inorganic hybrid C <sub>6</sub> H <sub>4</sub> NH <sub>2</sub> CuBr <sub>2</sub> I film with metal-like conductivity. <i>Journal of Materials Chemistry A</i> , 2017, 5, 13834-13841.	10.3	27
32	$\hat{\Gamma}^3$ -ray Radiation on Flexible Perovskite Solar Cells. <i>ACS Applied Energy Materials</i> , 2020, 3, 7318-7324.	5.1	27
33	Novel synthesis of V <sub>2</sub> O <sub>5</sub> hollow microspheres for lithium ion batteries. <i>Science China Materials</i> , 2016, 59, 567-573.	6.3	26
34	Tuning Fe concentration in epitaxial gallium ferrite thin films for room temperature multiferroic properties. <i>Acta Materialia</i> , 2018, 145, 488-495.	7.9	26
35	In-Plane Strain-Modulated Photoresponsivity of the $\hat{\Gamma}\pm\text{-In}_2\text{Se}_3$ -Based Flexible Transistor. <i>ACS Applied Electronic Materials</i> , 2020, 2, 140-146.	4.3	26
36	Solution-processed Y-doped SnSrO <sub>3</sub> electron transport layer for Ga <sub>2</sub> O <sub>3</sub> based heterojunction solar-blind photodetector with high sensitivity. <i>Vacuum</i> , 2022, 201, 111064.	3.5	26

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37	Spatial distribution of manganese and room temperature ferromagnetism in manganese-doped ZnO nanorods. Applied Physics Letters, 2008, 93, .	3.3	25
38	Giant electrocaloric effects in ferroelectric nanostructures with vortex domain structures. RSC Advances, 2013, 3, 7928.	3.6	25
39	Characterization of domain distributions by second harmonic generation in ferroelectrics. Npj Computational Materials, 2018, 4, .	8.7	25
40	TiO <sub>2</sub> nanorod arrays/ZnO nanosheets heterostructured photoanode for quantum-dot-sensitized solar cells. Solar Energy, 2018, 166, 371-378.	6.1	22
41	A ferroelectric tunnel junction based on the piezoelectric effect for non-volatile nanoferroelectric devices. Journal of Materials Chemistry C, 2013, 1, 418-421.	5.5	21
42	Enhanced room temperature electrocaloric effect in barium titanate thin films with diffuse phase transition. RSC Advances, 2014, 4, 21826.	3.6	21
43	Influence of vortex domain switching on the electrocaloric property of a ferroelectric nanoparticle. RSC Advances, 2014, 4, 30211.	3.6	21
44	Resistive switching behavior in $\text{In}_2\text{Se}_3$ nanoflakes modulated by ferroelectric polarization and interface defects. RSC Advances, 2019, 9, 30565-30569.	3.6	21
45	Switchable photoelectrochemical response controlled by ferroelectric polarization in (101)-oriented Pb(Zr <sub>0.2</sub> Ti <sub>0.8</sub> )O <sub>3</sub> thin film. Materials and Design, 2017, 129, 186-191.	7.0	20
46	Flexible resistive switching device based on the TiO <sub>2</sub> nanorod arrays for non-volatile memory application. Journal of Alloys and Compounds, 2020, 822, 153552.	5.5	20
47	Engineering polar vortex from topologically trivial domain architecture. Nature Communications, 2021, 12, 4620.	12.8	20
48	MoS <sub>2</sub> nanosheets uniformly coated TiO <sub>2</sub> nanowire arrays with enhanced electrochemical performances for lithium-ion batteries. Journal of Alloys and Compounds, 2018, 758, 91-98.	5.5	18
49	Negative differential resistance effect in resistive switching devices based on h-LuFeO <sub>3</sub> /CoFe <sub>2</sub> O <sub>4</sub> heterojunctions. Physical Chemistry Chemical Physics, 2020, 22, 5819-5825.	2.8	17
50	Electronic properties and chemical trends of the arsenic in situ impurities in $\text{Hg}_x\text{Cd}_{1-x}\text{Te}$ . First-principles study. Physical Review B, 2007, 76, .	3.2	15
51	Effect of surface tension on electrocaloric effects in the ferroelectric nanomaterial with vortex domain structures. Journal of Applied Physics, 2013, 114, 044301.	2.5	14
52	Hierarchical micro-mesoporous carbon prepared from waste cotton textile for lithium-sulfur batteries. Ionics, 2019, 25, 4057-4066.	2.4	14
53	Improved Response/Recovery Time and Sensitivity of SnSe Nanosheet Humidity Sensor by LiCl Incorporation. Advanced Electronic Materials, 2020, 6, 1901330.	5.1	14
54	Piezoresponse force microscopy observation of domain switching in Bi <sub>3.15</sub> Nd <sub>0.85</sub> Ti <sub>3</sub> O <sub>12</sub> thin film prepared by pulsed laser deposition. Journal of Applied Physics, 2011, 110, 054105.	2.5	13

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55	Domain wall contribution to the electrocaloric effect in BaTiO <sub>3</sub> nanoparticle: a phase-field investigation. <i>Journal of Nanoparticle Research</i> , 2013, 15, 1.	1.9	13
56	Preparation of Cu <sub>2</sub> ZnSnS <sub>4</sub> thin films using spin-coating method with thermolysis and annealing. <i>Journal of Sol-Gel Science and Technology</i> , 2015, 73, 452-459.	2.4	13
57	Highly Ordered SnO <sub>2</sub> Nanopillar Array as Binder-Free Anodes for Long-Life and High-Rate Li-Ion Batteries. <i>Nanomaterials</i> , 2021, 11, 1307.	4.1	12
58	Ionization effect and displacement effect induced photoresponsivity degradation on $\hat{\pm}$ -In <sub>2</sub> Se <sub>3</sub> based transistors for photodetectors. <i>Radiation Physics and Chemistry</i> , 2020, 174, 108969.	2.8	12
59	Surface-step-terrace tuned second-order nonlinear optical coefficients of epitaxial ferroelectric BaTiO <sub>3</sub> films. <i>Journal of Materials Chemistry C</i> , 2018, 6, 11679-11685.	5.5	11
60	Enhanced electromagnon excitations in Nd-doped BiFeO <sub>3</sub> nanoparticles near morphotropic phase boundaries. <i>Physical Chemistry Chemical Physics</i> , 2019, 21, 21381-21388.	2.8	11
61	Large resistive switching in Pt/BNT/HfO <sub>2</sub> /Pt capacitors. <i>RSC Advances</i> , 2014, 4, 50891-50896.	3.6	10
62	Investigation of multilevel data storage in silicon-based polycrystalline ferroelectric tunnel junction. <i>Scientific Reports</i> , 2017, 7, 4525.	3.3	10
63	Crystallographically engineered hierarchical polydomain nanostructures in perovskite ferroelectric films. <i>Acta Materialia</i> , 2019, 171, 282-290.	7.9	10
64	The total dose effect of $\hat{\pm}$ -ray induced domain evolution on $\hat{\pm}$ -In <sub>2</sub> Se <sub>3</sub> nanoflakes. <i>Physical Chemistry Chemical Physics</i> , 2020, 22, 7160-7164.	2.8	10
65	Switchable diode effect in polycrystalline Bi <sub>3.15</sub> Nd <sub>0.85</sub> Ti <sub>3</sub> O <sub>12</sub> thin films for resistive memories. <i>Applied Physics Letters</i> , 2013, 103, .	3.3	9
66	A neutron irradiation-induced displacement damage of indium vacancies in $\hat{\pm}$ -In <sub>2</sub> Se <sub>3</sub> nanoflakes. <i>Physical Chemistry Chemical Physics</i> , 2020, 22, 15799-15804.	2.8	9
67	Mechanical Manipulation of Nano-twinned Ferroelectric Domain Structures for Multilevel Data Storage. <i>Advanced Functional Materials</i> , 2021, 31, 2011029.	14.9	9
68	Role of oxygen vacancies in the origin of ferromagnetism in Mn-doped ZnO. <i>Crystal Research and Technology</i> , 2011, 46, 1250-1256.	1.3	8
69	ZnO propeller-like nanostructures and the influence of carriers on field emission. <i>Journal of Materials Science: Materials in Electronics</i> , 2011, 22, 724-727.	2.2	7
70	Theory prediction of PC3 monolayer as a promising anode material in potassium-ion batteries. <i>Ionics</i> , 2021, 27, 2465-2471.	2.4	7
71	Ferromagnetism Study in ZnO Codoped with Al and Co from First-Principles Calculations. <i>Journal of Physical Chemistry C</i> , 2011, 115, 24478-24484.	3.1	6
72	Thermally activated polarization dynamics under the effects of lattice mismatch strain and external stress in ferroelectric film. <i>Journal of Applied Physics</i> , 2012, 112, 014112.	2.5	6

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73	Ferroelectric-gate thin-film transistors with Bi <sub>3.15</sub> Nd <sub>0.85</sub> Ti <sub>3</sub> O <sub>12</sub> gate insulators on LaNiO <sub>3</sub> -buffered Si substrates. RSC Advances, 2014, 4, 60497-60501.	3.6	6
74	Switchable Cu <sub>2</sub> O/WO <sub>x</sub> p-n junction for high density crossbar arrays. RSC Advances, 2016, 6, 102603-102607.	3.6	6
75	Study of photovoltaic performance of Sb <sub>2</sub> S <sub>3</sub> /CdS quantum dot co-sensitized solar cells fabricated using iodine-based gel polymer electrolytes. Applied Physics A: Materials Science and Processing, 2018, 124, 1.	2.3	6
76	Effect of interfacial delamination on coating crack in thick diamond-like carbon coatings under indentation. Acta Mechanica Sinica/Lixue Xuebao, 2020, 36, 524-535.	3.4	6
77	Electrically driven motion, destruction, and chirality change of polar vortices in oxide superlattices. Science China: Physics, Mechanics and Astronomy, 2022, 65, 1.	5.1	6
78	COMPARISON OF FERROELECTRIC PROPERTIES OF COSUBSTITUTED BISMUTH TITANATE FILMS BETWEEN Bi <sub>3.15</sub> Nd <sub>0.85</sub> Ti <sub>2.97</sub> Mg <sub>0.03</sub> AND Bi <sub>3.15</sub> Nd <sub>0.85</sub> Ti <sub>2.95</sub> Mn <sub>0.05</sub> . Surface Review and Letters, 2009, 16, 153-156.	1.1	5
79	Multi-channel ferroelectric-gate field effect transistors with excellent performance based on ZnO nanofibers. RSC Advances, 2014, 4, 54924-54927.	3.6	5
80	Influence of 90° charged domain walls on the electrocaloric effect in PbTiO <sub>3</sub> ferroelectric thin films. Journal of Applied Physics, 2016, 120, 214105.	2.5	5
81	Epitaxial growth and magnetic properties of h-LuFeO <sub>3</sub> thin films. Journal of Materials Science, 2017, 52, 13879-13885.	3.7	5
82	Effects of physical properties of N-doped carbon on carbon/N-doped carbon/sulfur composite cathodes. Ionics, 2021, 27, 3271.	2.4	5
83	Proton-Induced Effect on AlGaN/GaN HEMTs After Hydrogen Treatment. IEEE Transactions on Device and Materials Reliability, 2021, 21, 297-302.	2.0	5
84	Zn/Mg co-alloyed for higher photoelectric performance and unchanged spectral response in In <sup>2+</sup> -Ga <sub>2</sub> O <sub>3</sub> solar-blind photodetector. Journal Physics D: Applied Physics, 2022, 55, 035103.	2.8	5
85	Super-flexibility in Freestanding Single-Crystal SrRuO <sub>3</sub> Conductive Oxide Membranes. ACS Applied Electronic Materials, 2022, 4, 2987-2992.	4.3	5
86	Size effect on the ultrathin ferroelectric film directly grown on silicon for electronic devices. RSC Advances, 2013, 3, 24362.	3.6	4
87	Self-assembling epitaxial growth of a single crystalline CoFe <sub>2</sub> O <sub>4</sub> nanopillar array <i>via</i> dual-target pulsed laser deposition. Journal of Materials Chemistry C, 2018, 6, 4854-4860.	5.5	4
88	The electronic, elastic and thermodynamic properties of carbon-and nitrogen-doped Hf <sub>2</sub> PB: a theoretical approach. Materials Research Express, 2019, 6, 056507.	1.6	4
89	Realization of a Flexible Humidity Sensor Based on In <sub>2</sub> Se <sub>3</sub> Nanosheets. ChemNanoMat, 2022, 8, .	2.8	4
90	Electrically Controlled Wavelength-Tunable Photoluminescence from van der Waals Heterostructures. ACS Applied Materials & Interfaces, 2022, 14, 19869-19877.	8.0	4

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91	First-principles investigation on the thickness-dependent optoelectronic properties of two-dimensional perovskite BA <sub>2</sub> SnI <sub>4</sub> . <i>Physica B: Condensed Matter</i> , 2021, 616, 413070.	2.7	3
92	Voltage pulse controlling multilevel data ferroelectric storage memory with a nonepitaxial ultrathin film. <i>RSC Advances</i> , 2016, 6, 80011-80016.	3.6	2
93	Investigation of multilevel data memory using filament and polarization control. <i>RSC Advances</i> , 2016, 6, 81789-81793.	3.6	2
94	Unipolar resistive switching in porous perovskite-like Bi <sub>3.15</sub> Nd <sub>0.85</sub> Ti <sub>3</sub> O <sub>12</sub> thin films. <i>Journal of Materials Science: Materials in Electronics</i> , 2018, 29, 6660-6665.	2.2	2
95	The resistive switching behaviors of a flexible device based on a SrTiO <sub>3</sub> film. <i>Europhysics Letters</i> , 2019, 127, 26001.	2.0	2
96	Polar and Nonpolar Matrix Consisting of Twined Multiwalled Carbon Nanotube and High Nitrogen-Doped Porous Carbon Derived from Ionic Liquid for Stable Li-ion Battery. <i>Energy Technology</i> , 2019, 7, 1900470.	3.8	2
97	Giant caloric effects enhanced by the helix polarization at the 180° domain wall in tetragonal BaTiO <sub>3</sub> . <i>Journal of Physics Condensed Matter</i> , 2019, 31, 495702.	1.8	2
98	Influence of charge accumulation at the grain boundary on the electrical behavior of a ferroelectric field-effect transistor. <i>AIP Advances</i> , 2018, 8, 105027.	1.3	1
99	Ferroelectric Field Effect Transistors: Highly Robust Flexible Ferroelectric Field Effect Transistors Operable at High Temperature with Low Power Consumption (Adv. Funct. Mater. 1/2020). <i>Advanced Functional Materials</i> , 2020, 30, 2070005.	14.9	1
100	An Effective Strategy for Photoelectric Performance Enhancement of 2D Perovskite via Halogenating Organic Cation: A Theoretical Prediction. <i>Physica Status Solidi (B): Basic Research</i> , 2020, 257, 1900599.	1.5	1
101	Synthesis, structure, and room-temperature ferromagnetism of Ni-doped ZnO nanoparticles. , 2007, 42, 6464.		1
102	Pore-making ionic liquid driven carbon as polar mixture for carbon/sulfur composite cathodes. <i>Ionics</i> , 2020, 26, 2949-2957.	2.4	0
103	Improved thermal stability of AlCrSiN coatings based on the template effect of TiAlN layer. <i>Surface Engineering</i> , 2022, 38, 37-43.	2.2	0