Wei Gao

List of Publications by Year
in descending order

72 papers	1,361 citations	361413 20 h-index	395702 33 g-index
72 all docs	72 docs citations	72 times ranked	1257 citing authors

#	Article	IF	Citations
1	Some aspects on 3D numerical modeling of high velocity impact of particles in cold spraying by explicit finite element analysis. Applied Surface Science, 2009, 255, 7878-7892.	6.1	122
2	2D WS₂ Based Asymmetric Schottky Photodetector with High Performance. Advanced Electronic Materials, 2021, 7, 2000964.	5.1	68
3	2D In₂S₃ Nanoflake Coupled with Graphene toward Highâ€Sensitivity and Fastâ€Response Bulkâ€Silicon Schottky Photodetector. Small, 2019, 15, e1904912.	10.0	67
4	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.	12.2	61
5	Self-Powered SnS_{1â€“x}Se_x Alloy/Silicon Heterojunction Photodetectors with High Sensitivity in a Wide Spectral Range. ACS Applied Materials & Interfaces, 2019, 11, 40222-40231.	8.0	58
6	Strain engineering coupled with optical regulation towards a high-sensitivity In₂S₃ photodetector. Materials Horizons, 2020, 7, 1427-1435.	12.2	53
7	High-performance NO₂ sensors based on spontaneously functionalized hexagonal boron nitride nanosheets via chemical exfoliation. Nanoscale, 2019, 11, 21909-21916.	5.6	50
8	Unique and Tunable Photodetecting Performance for Two-Dimensional Layered MoSe₂/WSe₂ pâ€“n Junction on the 4H-SiC Substrate. ACS Applied Materials & Interfaces, 2019, 11, 19277-19285.	8.0	44
9	High Performance Selfâ€Driven Polarizationâ€Sensitive Photodetectors Based on GeAs/InSe Heterojunction. Advanced Optical Materials, 2021, 9, 2101017.	7.3	44
10	Narrow-gap physical vapour deposition synthesis of ultrathin SnS_{1â”x}Se_x (0 â‰¤ Tj ETQq0 0 0 rgBT /Overlock properties. Nanoscale, 2018, 10, 8787-8795.	5.6	42
11	Hybrid fillers of hexagonal and cubic boron nitride in epoxy composites for thermal management applications. RSC Advances, 2019, 9, 7388-7399.	3.6	42
12	A high performance self-powered photodetector based on a 1D Teâ€“2D WS₂ mixed-dimensional heterostructure. Nanoscale Advances, 2021, 3, 2657-2665.	4.6	36
13	Novel two-dimensional monoelemental and ternary materials: growth, physics and application. Nanophotonics, 2020, 9, 2147-2168.	6.0	29
14	Out of plane stacking of InSe-based heterostructures towards high performance electronic and optoelectronic devices using a graphene electrode. Journal of Materials Chemistry C, 2018, 6, 12509-12517.	5.5	28
15	Epitaxial growth of large-scale In₂S₃ nanoflakes and the construction of a high performance In₂S₃/Si photodetector. Journal of Materials Chemistry C, 2019, 7, 12104-12113.	5.5	26
16	Universal Strategy Integrating Strain and Interface Engineering to Drive Highâ€Performance 2D Material Photodetectors. Advanced Optical Materials, 2021, 9, 2100450.	7.3	26
17	Plasma spray synthesis of La10(SiO4)6O3 as a new electrolyte for intermediate temperature solid oxide fuel cells. Journal of Power Sources, 2008, 179, 739-744.	7.8	24
18	A solution-fabricated tellurium/silicon mixed-dimensional van der Waals heterojunction for self-powered photodetectors. Journal of Materials Chemistry C, 2022, 10, 7283-7293.	5.5	24

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19	Vertically stacked Bi₂Se₃/MoTe₂ heterostructure with large band offsets for nanoelectronics. Nanoscale, 2021, 13, 15403-15414.	5.6	23
20	Direct Growth of Hexagonal Boron Nitride Nanofilms on Stainless Steel for Corrosion Protection. ACS Applied Nano Materials, 2021, 4, 12024-12033.	5.0	23
21	High performance tin diselenide photodetectors dependent on thickness: a vertical graphene sandwiched device and interfacial mechanism. Nanoscale, 2019, 11, 13309-13317.	5.6	22
22	High-pressure phase transition and unusual compressibility of apatite-type La10Si6O27. Journal of Alloys and Compounds, 2014, 586, 279-284.	5.5	21
23	Highly sensitive infrared polarized photodetector enabled by out-of-plane PSN architecture composing of p-MoTe2, semimetal-MoTe2 and n-SnSe2. Nano Research, 2022, 15, 5384-5391.	10.4	21
24	Synthesis of double-shelled SnO₂ hollow cubes for superior isopropanol sensing performance. New Journal of Chemistry, 2019, 43, 4721-4726.	2.8	20
25	Hybrid 1D/2D heterostructure with electronic structure engineering toward high-sensitivity and polarization-dependent photodetector. Science China Materials, 2022, 65, 732-740.	6.3	19
26	Polarityâ€Switchable and Selfâ€Driven Photoâ€Response Based on Vertically Stacked Typeâ€III GeSe/SnS₂ Heterojunction. Advanced Materials Interfaces, 2022, 9, .	3.7	18
27	Brillouin scattering study of liquid methane under high pressures and high temperatures. Journal of Chemical Physics, 2010, 133, 044503.	3.0	16
28	Strong In-Plane Optical and Electrical Anisotropies of Multilayered Î³-InSe for High-Responsivity Polarization-Sensitive Photodetectors. ACS Applied Materials & Interfaces, 2022, 14, 21383-21391.	8.0	16
29	Multifunctional GeAs/WS₂ Heterojunctions for Highly Polarization-Sensitive Photodetectors in the Short-Wave Infrared Range. ACS Applied Materials & Interfaces, 2022, 14, 22607-22614.	8.0	16
30	Lateral size selection of liquid exfoliated hexagonal boron nitride nanosheets. RSC Advances, 2018, 8, 5976-5983.	3.6	15
31	The electronic properties and band-gap discontinuities at the cubic boron nitride/diamond hetero-interface. RSC Advances, 2019, 9, 8435-8443.	3.6	15
32	Strong Anisotropy and Piezoâ€Phototronic Effect in SnO₂ Microwires. Advanced Electronic Materials, 2020, 6, 1901441.	5.1	15
33	Raman Anisotropy and Polarization-Sensitive Photodetection in 2D Bi₂O₂Seâ€“WSe₂ Heterostructure. ACS Omega, 2021, 6, 34763-34770.	3.5	15
34	High pressure effects on the Jahnâ€“Teller distortion in perovskite La0.5â^'xBixCa0.5MnO3. Journal of Alloys and Compounds, 2001, 321, 72-75.	5.5	14
35	Self-driven SnS_{1â^'x}Se_x alloy/GaAs heterostructure based unique polarization sensitive photodetectors. Nanoscale, 2021, 13, 15193-15204.	5.6	14
36	Direct Growth of Hexagonal Boron Nitride Thick Films on Dielectric Substrates by Ion Beam Assisted Deposition for Deepâ€UV Photodetectors. Advanced Optical Materials, 2021, 9, 2100342.	7.3	14

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37	Gateâ€Tunable Photovoltaic Effect in MoTe₂ Lateral Homojunction. Advanced Electronic Materials, 2022, 8, .	5.1	14
38	Doping effects on structural and magnetic evolutions of orthoferrite SmFe _(1â^' x) Al _x O ₃. Chinese Physics B, 2014, 23, 046105.	1.4	12
39	Mg doping effect on high-pressure behaviors of apatite-type lanthanum silicate. Journal of Alloys and Compounds, 2014, 611, 24-29.	5.5	12
40	The pressure-induced phase transition of Ga2O3. Journal of Physics Condensed Matter, 2002, 14, 10627-10630.	1.8	11
41	Circular SnS_{0.5}Se_{0.5} Nanosheets with Highly Anisotropic Performance for Nanoelectronics. ACS Applied Nano Materials, 2020, 3, 10270-10283.	5.0	10
42	A reasonably designed 2D WS₂ and CdS microwire heterojunction for high performance photoresponse. Nanoscale, 2021, 13, 5660-5669.	5.6	10
43	High-Performance Broadband Photodetectors Based on n-MoS₂/p-Ge_{0.9}Sn_{0.1} Heterojunctions. ACS Applied Electronic Materials, 2021, 3, 3218-3225.	4.3	10
44	Self-assembly based plasmonic nanoparticle array coupling with hexagonal boron nitride nanosheets. Nanoscale, 2017, 9, 13004-13013.	5.6	9
45	Self-Ordered Orientation of Crystalline Hexagonal Boron Nitride Nanodomains Embedded in Boron Carbonitride Films for Band Gap Engineering. Coatings, 2019, 9, 185.	2.6	9
46	Electrical Properties of Atmospheric Plasma-Sprayed La10(SiO4)6O3 Electrolyte Coatings. Journal of Thermal Spray Technology, 2011, 20, 888-891.	3.1	8
47	One-step growth of Si3N4 stemâ€“branch featured nanostructures: Morphology control by VS and VLS mode. Journal of Solid State Chemistry, 2011, 184, 2553-2558.	2.9	7
48	In-situhigh-pressure behaviors of double-perovskite Sr₂ZnTeO₆. Chinese Physics B, 2013, 22, 059101.	1.4	7
49	Improved photodetection performance enabled by gradient alloyed quantum dots. APL Materials, 2021, 9, .	5.1	7
50	Defect engineering of hexagonal boron nitride nanosheets via hydrogen plasma irradiation. Applied Surface Science, 2022, 593, 153386.	6.1	7
51	Effect of feedstock powder characteristics on microstructure and mechanical properties of lanthanum silicate coatings deposited by atmospheric plasma spraying. Applied Surface Science, 2008, 254, 5548-5551.	6.1	6
52	Pressure-induced structural phase transition in AlN:Mg and AlN:Co nanowires. Journal of Solid State Chemistry, 2013, 202, 33-37.	2.9	6
53	New approach to improve the conductivity of apatite-type lanthanum germanate La9.33Ge6O26 as electrolyte for IT-SOFCs. RSC Advances, 2014, 4, 15968-15974.	3.6	6
54	Membranes based on porous hexagonal boron nitride nanorods for ultrafast and effective molecular separation. Journal of Membrane Science, 2022, 647, 120307.	8.2	6

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55	Plasmonic enhancement in deep ultraviolet photoresponse of hexagonal boron nitride thin films. Applied Physics Letters, 2022, 120, .	3.3	6
56	Aggregationâ€Induced Emission Luminogens for Direct Exfoliation of 2D Layered Materials in Ethanol. Advanced Materials Interfaces, 2020, 7, 2000795.	3.7	5
57	Graphene-facilitated synthesized vertically aligned hexagonal boron nitride nanowalls and their gas adsorption properties. Nanotechnology, 2021, 32, 065601.	2.6	5
58	High performance DUV-visible 4H-SiC-based multilayered SnS₂ dual-mode photodetectors. Journal of Materials Chemistry C, 2021, 9, 15662-15670.	5.5	5
59	Crystal structure and ionic conductivity of Mg-doped apatite-type lanthanum silicates La ₁₀ Si _{6â^' x} Mg _x O _{27â^' x}. Chinese Physics B, 2014, 23, 048202.	1.4	4
60	Thick c-BN films deposited by radio frequency magnetron sputtering in argon/nitrogen gas mixture with additional hydrogen gas. Chinese Physics B, 2016, 25, 106801.	1.4	4
61	Weyl-Semimetal TaIrTe₄/Si Nanostructures for Self-Powered Schottky Photodetectors. ACS Applied Nano Materials, 2022, 5, 6523-6531.	5.0	4
62	Magnetic Circular Dichroism Study of Electronic Transition in Metal Fe₃GeTe₂. Journal of Physical Chemistry C, 2022, 126, 8152-8157.	3.1	3
63	An experimental exploration of chemical bond characteristic, bulk modulus and phase stability in ZnO:Cu nanocrystals under high pressure. Applied Physics A: Materials Science and Processing, 2011, 104, 425-428.	2.3	2
64	Pressure-induced phase transition of nanocrystalline iron sulphide coated by polyvinyl alcohol. Journal of Physics Condensed Matter, 2002, 14, 11297-11300.	1.8	1
65	Effect of Gun Current of APS on Microstructure of Apatite-type Lanthanum Silicate (ATLS) Electrolyte Coatings. ECS Transactions, 2009, 25, 1809-1816.	0.5	1
66	The phase transition of Zn_{0.854}Cu_{0.146}O under high pressure. Physica Status Solidi (B): Basic Research, 2011, 248, 1128-1131.	1.5	1
67	High pressure Raman study of LiBC. Physica Status Solidi (B): Basic Research, 2011, 248, 1158-1161.	1.5	1
68	Effect of Gun Current on Electrical Properties of Atmospheric Plasma-Sprayed Lanthanum Silicate Coatings. Journal of Thermal Spray Technology, 2013, 22, 1103-1108.	3.1	1
69	The Influence of Sintering Time of Feedstock Powders on the Electrical Properties of La10(SiO4)6O3 Electrolyte Coatings. ECS Transactions, 2011, 35, 1225-1233.	0.5	0
70	Subtle high-pressure behaviors of apatite-type La9.33Ge6O26. Journal of Alloys and Compounds, 2018, 735, 750-755.	5.5	0
71	Pressure-induced structural evolution of apatite-type La _{9.33} Si ₆ O ₂₆. Chinese Physics B, 2018, 27, 018202.	1.4	0
72	Low-temperature synthesis of apatite-type La 9.33 Ge 6 O 26 as electrolytes with high conductivity. Chinese Physics B, 2018, 27, 048201.	1.4	0