Gang Xiang

List of Publications by Year
in descending order

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117	1,775	304368	329751
papers	citations	22 h-index	37 g-index

117	117	117	2086
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Investigating student understanding of a heat engine: a case study of a Stirling engine. Physics Education, 2022, 57, 015011.	0.3	0
2	A Skyrmion Diode Based on Skyrmion Hall Effect. IEEE Transactions on Electron Devices, 2022, 69, 1293-1297.	1.6	15
3	Mn-doped SiGe thin films grown by UHV/CVD with room-temperature ferromagnetism and high hole mobility. Science China Materials, 2022, 65, 2826-2832.	3.5	6
4	Facile fabrication of highly porous nylon-11 layer for flexible high-performance triboelectric nanogenerator. Journal of Applied Physics, 2022, 131, .	1.1	3
5	Adsorption of Noble Gases on Hydrogenated Group IV Monolayers: Stability and Electronic Properties. Journal of Electronic Materials, 2022, 51, 4073-4078.	1.0	1
6	Spark plasma sintering-assisted synthesis and high-T ferromagnetism of Mn-doped SiGe alloys. Scripta Materialia, 2022, 218, 114802.	2.6	2
7	Strain-Modulated Magnetism in MoS2. Nanomaterials, 2022, 12, 1929.	1.9	10
8	Structural, magnetic and Magneto-transport properties of Mn-doped SiGe thin films. Journal of Magnetism and Magnetic Materials, 2022, 560, 169630.	1.0	3
9	Polymer-assisted deposition and room-temperature ferromagnetism of amorphous Mn-doped gallium oxide films. Scripta Materialia, 2022, 220, 114919.	2.6	3
10	The effect of vacancy defects on the conductive properties of SiGe. Physics Letters, Section A: General, Atomic and Solid State Physics, 2021, 386, 126993.	0.9	6
11	High performance photoresponse of transparent Î²-Ga2O3 film prepared by polymer-assisted deposition. Materials Letters, 2021, 284, 128912.	1.3	10
12	Anomalous stepped-hysteresis and T-induced unit-cell-volume reduction in carbon nanotubes continuously filled with faceted Fe3C nanowires. Nano Express, 2021, 2, 010027.	1.2	1
13	Highly conductive and transparent electrospun indium tin oxide nanofibers calcined by microwave plasma. Nanotechnology, 2021, 32, 325602.	1.3	5
14	The gate length effect of high-performance monolayer SiAs2 FETs. Semiconductor Science and Technology, 2021, 36, 085006.	1.0	1
15	Synthesis and thermoelectric properties of Bi-doped SnSe thin films*. Chinese Physics B, 2021, 30, 116302.	0.7	7
16	Tuning electronic structure and optical properties of monolayer GeAs and GeAs2 by alloying with nitrogen and phosphorus elements. Physica B: Condensed Matter, 2021, 614, 413033.	1.3	3
17	Electric field tunable bandgap and anisotropic high carrier mobility in SiAs2/GeAs2 lateral heterostructure. Computational Materials Science, 2021, 198, 110697.	1.4	6
18	BiOCl/group-IV Xene bilayer heterojunctions: stability and electronic and photocatalytic properties. Physical Chemistry Chemical Physics, 2021, 23, 13323-13330.	1.3	3

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19	One-Pot Synthesis of a Magnetic TiO₂/PTh/Î³-Fe₂O₃ Heterojunction Nanocomposite for Removing Trace Arsenite via Simultaneous Photocatalytic Oxidation and Adsorption. Industrial & Engineering Chemistry Research, 2021, 60, 528-540.	1.8	32
20	Morphology-Dependent Room-Temperature Ferromagnetism in Undoped ZnO Nanostructures. Nanomaterials, 2021, 11, 3199.	1.9	11
21	2D multifunctional SiAs2/GeAs2 van der waals heterostructure. Nanotechnology, 2021, , .	1.3	1
22	Electronic and Magnetic Tunability of SnSe Monolayer via Doping of Transition-Metal Atoms. Journal of Electronic Materials, 2020, 49, 290-296.	1.0	13
23	Web buckle-mediated room-temperature ferromagnetism in strained MoS2 thin films. Applied Physics Letters, 2020, 116, .	1.5	14
24	Hole mobility enhancement in strained nanocrystalline architecture of group IV semiconductors. Journal of Alloys and Compounds, 2020, 821, 153212.	2.8	3
25	The electric and magnetic properties of novel two-dimensional MnBr2 and MnI2 from first-principles calculations. Journal of Applied Physics, 2020, 128, .	1.1	13
26	High Curie Temperature Ferromagnetism and High Hole Mobility in Tensile Strained Mnâ€Doped SiGe Thin Films. Advanced Functional Materials, 2020, 30, 2002513.	7.8	20
27	Probing electrical properties of individual carbon nanotubes filled with Fe3C nanowires. Nanotechnology, 2020, 31, 475706.	1.3	2
28	Structure and electrical transport properties of Î±-Fe filled carbon-foam. Physica B: Condensed Matter, 2020, 594, 412335.	1.3	1
29	Removal of Trace Arsenite through Simultaneous Photocatalytic Oxidation and Adsorption by Magnetic Fe₃O₄@PpPDA@TiO₂ Coreâ€“Shell Nanoparticles. ACS Applied Nano Materials, 2020, 3, 8495-8504.	2.4	47
30	Two-dimensional Siâ€“Ge monolayers: Stabilities, structures, and electronic properties. Journal of Applied Physics, 2020, 127, .	1.1	6
31	Coreâ€“Shell Structured Magnetic Î³-Fe₂O₃@PANI Nanocomposites for Enhanced As(V) Adsorption. Industrial & Engineering Chemistry Research, 2020, 59, 7554-7563.	1.8	38
32	A magnetic Î³-Fe₂O₃@PANI@TiO₂ coreâ€“shell nanocomposite for arsenic removal via a coupled visible-light-induced photocatalytic oxidationâ€“adsorption process. Nanoscale Advances, 2020, 2, 2018-2024.	2.2	51
33	Enhanced Valley Zeeman Splitting in Fe-Doped Monolayer MoS₂. ACS Nano, 2020, 14, 4636-4645.	7.3	69
34	Fabrication of vertically aligned ferromagnetic ZnO nanopillar arrays on sapphire substrates by polymer-assisted deposition. AIP Advances, 2020, 10, 015337.	0.6	3
35	Electronic Structures and Lattice Dynamics of Layered BiOCl Single Crystals. Journal of Physical Chemistry Letters, 2020, 11, 1038-1044.	2.1	39
36	Synthesis and photoluminescence of high density GeSe triangular nanoplate arrays on Si substrates. Nanotechnology, 2020, 31, 285702.	1.3	7

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37	Rapid synthesis of thermoelectric SnSe thin films by MPCVD. RSC Advances, 2020, 10, 11990-11993.	1.7	17
38	Synthesis and growth mechanism of Mn-doped nanodot embedded silica nanowires. Physica B: Condensed Matter, 2019, 571, 10-17.	1.3	2
39	Biaxial Strainâ€Mediated Room Temperature Ferromagnetism of ReS₂ Web Buckles. Advanced Electronic Materials, 2019, 5, 1900814.	2.6	10
40	The structure and property characteristics of Mn-doped SiGe alloy nanowires prepared by catalyst-free growth. Physica B: Condensed Matter, 2019, 575, 411696.	1.3	1
41	Defect dependence of electronic transport of multiwall carbon nanotube buckypaper filled with iron-based nanowires. Journal of Applied Physics, 2019, 126, 075105.	1.1	2
42	Encapsulation of FePt and FePt3 alloys inside carbon-foam materials. Materials Research Express, 2019, 6, 065613.	0.8	0
43	Homoepitaxy of Ge on ozone-treated Ge (1â€0â€0) substrate by ultra-high vacuum chemical vapor deposition. Journal of Crystal Growth, 2019, 507, 113-117.	0.7	7
44	Chlorine-assisted synthesis of Fe₃C-filled mm-long vertically aligned arrays of multiwall carbon nanotubes. Materials Research Express, 2019, 6, 015040.	0.8	3
45	Magnetic nickel chrysotile nanotubes tethered with pH-sensitive poly(methacrylic acid) brushes for Cu(II) adsorption. Journal of Molecular Liquids, 2019, 276, 611-623.	2.3	20
46	Direct catalyst-free self-assembly of large area of horizontal ferromagnetic ZnO nanowire arrays. Materials Letters, 2019, 234, 384-387.	1.3	6
47	Impact of side passivation on the electronic structures and optical properties of GeSe nanobelts. Superlattices and Microstructures, 2019, 125, 365-370.	1.4	4
48	The electronic structures and optical properties of light-element atom adsorbed SnSe monolayers. Materials Research Express, 2018, 5, 035013.	0.8	4
49	Asperomagnetic order in diluted magnetic semiconductor (Ba,Na)(Zn,Mn)2As2. Applied Physics Letters, 2018, 112, .	1.5	13
50	A Fascinating Metallo-Supramolecular Polymer Network with Thermal/Magnetic/Light-Responsive Shape-Memory Effects Anchored by Fe₃O₄ Nanoparticles. Macromolecules, 2018, 51, 705-715.	2.2	109
51	Observation of lamellar like fringes and Barkhausen effects in iron-carbon filled vertically aligned carbon nanotubes. Journal of Applied Physics, 2018, 124, 214303.	1.1	2
52	Observation of curling effects in tubular and planar graphene-like structures by pyrolysis of ferrocene/dichlorobenzene mixtures. Materials Today Chemistry, 2018, 10, 120-127.	1.7	2
53	The Effect of U Atom Adsorption on the Structural, Electronic and Magnetic Properties of Single-Walled Carbon Nanotubes. Journal of Electronic Materials, 2018, 47, 5810-5815.	1.0	1
54	Highly efficient ratiometric extracellular oxygen sensors through physical incorporation of a conjugated polymer and PtTFPP in graft copolymers. Sensors and Actuators B: Chemical, 2018, 273, 242-252.	4.0	18

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55	Exchange bias coupling in NiO/Ni bilayer tubular nanostructures synthetized by electrodeposition and thermal oxidation. Journal of Magnetism and Magnetic Materials, 2017, 429, 74-78.	1.0	8
56	Cm-size free-standing self-organized buckypaper of bucky-onions filled with ferromagnetic Fe₃C. RSC Advances, 2017, 7, 845-850.	1.7	22
57	The structures and diffusion behaviors of point defects and their influences on the electronic properties of 2D stanene. RSC Advances, 2017, 7, 9840-9846.	1.7	14
58	Spin-dependent transport in GaAs nanowire-based devices. Journal of Magnetism and Magnetic Materials, 2017, 441, 678-682.	1.0	1
59	Observation of large coercivities in radial carbon nanotube structures filled with Fe₃C and FeCo single-crystals by viscous boundary layer pyrolysis of ferrocene and cobaltocene. RSC Advances, 2017, 7, 4753-4758.	1.7	5
60	Vibrational properties of layered <scp>BiTeCl</scp> single crystal. Journal of Raman Spectroscopy, 2017, 48, 1783-1788.	1.2	8
61	Anisotropy of magnetic interactions and spin filter behavior in hexagonal (Ga,Mn)As nanoribbons. Physica E: Low-Dimensional Systems and Nanostructures, 2017, 93, 291-294.	1.3	1
62	Peeling off effects in vertically aligned Fe3C filled carbon nanotubes films grown by pyrolysis of ferrocene. Journal of Applied Physics, 2017, 121, 244302.	1.1	3
63	The composition dependence of magnetic, electronic and optical properties of Mn-doped SixGe1â^'xnanowires. Semiconductor Science and Technology, 2017, 32, 075005.	1.0	3
64	Uniform annealing effect of electron irradiation on ferromagnetic GaMnAs thin films. Journal of Magnetism and Magnetic Materials, 2017, 422, 124-127.	1.0	4
65	Micrometre-length continuous single-crystalline nm-thin Fe₃C-nanowires with unusual 010 preferred orientation inside radial few-wall carbon nanotube structures: the key role of sulfur in viscous boundary layer CVS of ferrocene. RSC Advances, 2017, 7, 13272-13280.	1.7	12
66	Structural, electronic, and magnetic properties of transition-metal atom adsorbed two-dimensional GaAs nanosheet. Chinese Physics B, 2016, 25, 097305.	0.7	3
67	Cl-assisted highly efficient synthesis of FePd3 alloys encapsulated in graphite papers: a two stage CVD approach. RSC Advances, 2016, 6, 40676-40682.	1.7	3
68	cm-Length free-standing Fe₃C-filled thin graphite-like films and buckypaper-like films with high smoothness. RSC Advances, 2016, 6, 99960-99968.	1.7	1
69	In situ encapsulation of Pd crystals inside foam-like carbon films continuously filled with Î±-Fe: investigating the nucleation of FePd3 alloys. RSC Advances, 2016, 6, 54189-54192.	1.7	3
70	Poly(methacrylic acid)-graft-Ni3Si2O5(OH)4 multiwalled nanotubes as a novel nanosorbent for effective removal of copper(II) ions. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2016, 502, 89-101.	2.3	17
71	The static and dynamic magnetic properties of monolayer iron dioxide and iron dichalcogenides. RSC Advances, 2016, 6, 31758-31761.	1.7	26
72	Tuning high magnetizations in foam-like carbon-based films completely filled with Î±-Fe. Carbon, 2016, 101, 28-36.	5.4	12

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73	Fabrication of cm scale buckypapers of horizontally aligned multiwalled carbon nanotubes highly filled with Fe₃C: the key roles of Cl and Ar-flow rates. Chemical Communications, 2016, 52, 4195-4198.	2.2	36
74	Electricâ€fieldâ€induced magnetism of firstâ€row d⁰ semiconductor nanowires and nanotubes (Phys. Status Solidi B 3/2015). Physica Status Solidi (B): Basic Research, 2015, 252, .	0.7	0
75	Electricâ€fieldâ€induced magnetism of firstâ€row d⁰ semiconductor nanowires and nanotubes. Physica Status Solidi (B): Basic Research, 2015, 252, 484-489.	0.7	2
76	External electric field induced band dispersion engineering in Si1â^'xGex nanowires. Computational Materials Science, 2015, 102, 51-56.	1.4	0
77	The role of Br in the selective synthesis of thin-walled carbon-nanotubes with micrometre-length Fe₃C-filling, Fe₃C tip-filled carbon nanotubes or empty carbon nanotubes by pyrolysis of ferrocene and (6-bromohexyl)ferrocene mixtures. RSC Advances, 2015, 5, 53956-53962.	1.7	1
78	Synthesis of planar-graphite structures with embedded Fe(x)Pd(x) or CoPdâ€“CoPd2 phases and of carbon nanotubes filled with Fe(x)Pd(x) with variable filling ratio. Carbon, 2015, 95, 634-639.	5.4	6
79	Electric-field-induced Spontaneous Magnetization and Phase Transitions in Zigzag Boron Nitride Nanotubes. Scientific Reports, 2015, 5, 12416.	1.6	2
80	Enhanced saturation magnetization in buckypaper-films of thin walled carbon nanostructures filled with Fe₃C, FeCo, FeNi, CoNi, Co and Ni crystals: the key role of Cl. Physical Chemistry Chemical Physics, 2015, 17, 18159-18166.	1.3	29
81	The structural, electronic and magnetic properties of Ga8â^'Mn As8 clusters. Journal of Magnetism and Magnetic Materials, 2015, 384, 155-159.	1.0	2
82	Impact of Surface Passivation on the Electronic Structure and Optical Properties oftheSi _{1â^' x} Ge _x Nanowires. Chinese Physics Letters, 2015, 32, 027301.	1.3	2
83	Homostructured negative differential resistance device based on zigzag phosphorene nanoribbons. RSC Advances, 2015, 5, 40358-40362.	1.7	27
84	Growth of tapered silica nanowires with a shallow U-shaped vapor chamber: Growth mechanism and structural and optical properties. Journal of Applied Physics, 2015, 117, 164303.	1.1	5
85	Uniaxial strain-dependent magnetic and electronic properties of (Ga,Mn)As nanowires. Chinese Physics B, 2014, 23, 096103.	0.7	4
86	Phase transition and elastic properties of TiN under pressure from first-principles calculations. Computational Materials Science, 2014, 86, 200-205.	1.4	14
87	Electronic structures and magnetic stabilities of 2D Mn-doped GaAs nanosheets: The role of long-range exchange interactions and doping strategies. Journal of Applied Physics, 2014, 116, .	1.1	16
88	The effects of B and P impurities on the electronic and optical properties of Si_{1 â^' x}Ge_x nanowires. Semiconductor Science and Technology, 2014, 29, 075023.	1.0	1
89	Phase transition, elastic and thermodynamical properties of TcC under high pressure from first-principles calculations. Physica Status Solidi (B): Basic Research, 2014, 251, 1372-1379.	0.7	6
90	Anti-rumor dynamics and emergence of the timing threshold on complex network. Physica A: Statistical Mechanics and Its Applications, 2014, 411, 87-94.	1.2	34

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91	Theoretical study of the structural phase transition and elastic properties of HfN under high pressures. Journal of Physics and Chemistry of Solids, 2014, 75, 1295-1300.	1.9	4
92	Orientation effect on the electronic transport properties of C6 cluster. Computational and Theoretical Chemistry, 2014, 1029, 79-83.	1.1	1
93	Enhancement of ferromagnetism of ZnO:Co nanocrystals by post-annealing treatment: The role of oxygen interstitials and zinc vacancies. Materials Letters, 2014, 122, 256-260.	1.3	28
94	Controlling the quantity of Î±-Fe inside multiwall carbon nanotubes filled with Fe-based crystals: The key role of vapor flow-rate. Applied Physics Letters, 2014, 105, .	1.5	25
95	Vacancy dependent structural, electronic, and magnetic properties of zigzag silicene nanoribbons:Co. Journal of Applied Physics, 2013, 114, .	1.1	17
96	Optical properties and quantum confinement in ultrafine single crystal silicon nanowires synthesized by thermal evaporation without catalyst. RSC Advances, 2013, 3, 15982.	1.7	16
97	Comparison of electrical properties of aluminum oxide thin films on silicon and gallium arsenide substrates grown by atomic layer deposition. Surface and Coatings Technology, 2013, 228, S246-S248.	2.2	1
98	Engineering of electronic and optical properties of ZnO thin films via Cu doping. Chinese Physics B, 2013, 22, 047803.	0.7	11
99	Nanostructured Magnetic Materials. Journal of Nanomaterials, 2013, 2013, 1-2.	1.5	1
100	Zinc Vacancy-Induced Room-Temperature Ferromagnetism in Undoped ZnO Thin Films. Journal of Nanomaterials, 2012, 2012, 1-5.	1.5	13
101	Nonlinear Concentration-Dependent Electronic and Optical Properties of Si1â€“xGex Alloy Nanowires. Journal of Physical Chemistry C, 2012, 116, 17934-17938.	1.5	13
102	Magnetism in transition-metal-doped ZnO: A first-principles study. Journal of Applied Physics, 2012, 112, .	1.1	31
103	Quantitative magnetic force microscopy on permalloy dots using an iron filled carbon nanotube probe. Ultramicroscopy, 2011, 111, 1360-1365.	0.8	8
104	Magnetic force microscopy in the presence of a strong probe field. Applied Physics Letters, 2011, 99, 162514.	1.5	6
105	Nanoscale scanning probe ferromagnetic resonance imaging using localized modes. Nature, 2010, 466, 845-848.	13.7	95
106	Substrate orientation dependence of ferromagnetism in (Ga,Mn)As. Applied Physics Letters, 2008, 93, .	1.5	6
107	Random telegraph noise from magnetic nanoclusters in the ferromagnetic semiconductor<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mo>(</mml:mo><mml:mi>Ga</mml:mi><mml:mo>,</mml:mo><mml:mi>Mn</mml:mi><mml:mo> Physical Review B, 2007, 76, .	1.1	6
108	Theoretical analysis of the influence of magnetic domain walls on longitudinal and transverse magnetoresistance in tensile strained (Ga,Mn)As epilayers. Physical Review B, 2007, 76, .	1.1	24

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109	Noncollinear spin valve effect in ferromagnetic semiconductor trilayers. Physical Review B, 2007, 76, .	1.1	24
110	Current-Induced Polarization and the Spin Hall Effect at Room Temperature. Physical Review Letters, 2006, 97, 126603.	2.9	205
111	Tunable Anomalous Hall Effect in a Nonferromagnetic System. Physical Review Letters, 2006, 96, 196404.	2.9	28
112	Internal magnetic field in thin ZnSe epilayers. Applied Physics Letters, 2006, 89, 242116.	1.5	4
113	Magnetoresistance anomalies in (Ga,Mn)As epilayers with perpendicular magnetic anisotropy. Physical Review B, 2005, 71, .	1.1	42
114	Enhancement of Curie temperature in Ga1â^'xMnxAs epilayers grown on cross-hatched InyGa1â^'yAs buffer layers. Journal of Crystal Growth, 2004, 269, 298-303.	0.7	7
115	Photocatalytic activity studies of TiO2 thin films prepared by r.f. magnetron reactive sputtering. Vacuum, 2003, 72, 79-84.	1.6	29
116	Photocatalytic activity study of TiO2 thin films with and without Fe ion implantation. Nuclear Instruments & Methods in Physics Research B, 2002, 187, 479-484.	0.6	26
117	Photocatalytic activity of nanostructured TiO2 thin films prepared by dc magnetron sputtering method. Vacuum, 2001, 62, 361-366.	1.6	95