

Jian-Hua Zhao

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/8267660/publications.pdf>

Version: 2024-02-01

123
papers

2,907
citations

172457

29
h-index

189892

50
g-index

124
all docs

124
docs citations

124
times ranked

3461
citing authors

#	ARTICLE	IF	CITATIONS
1	Noncollinear spin state and unusual magnetoresistance in ferrimagnet Co-Gd. <i>Physical Review Materials</i> , 2022, 6, .	2.4	9
2	Large-Composition-Range Pure-Phase Homogeneous InAs _{1-x} Sb _x Nanowires. <i>Journal of Physical Chemistry Letters</i> , 2022, 13, 598-605.	4.6	3
3	Suppressing Andreev Bound State Zero Bias Peaks Using a Strongly Dissipative Lead. <i>Physical Review Letters</i> , 2022, 128, 076803.	7.8	13
4	Electrically tunable spin-orbit interaction in an InAs nanosheet. <i>Nanoscale Advances</i> , 2022, 4, 2642-2648.	4.6	1
5	Fabrication and characterization of InSb nanosheet/hBN/graphite heterostructure devices. <i>Nanotechnology</i> , 2022, 33, 325303.	2.6	3
6	Ultrafast enhancement and optical control of magnetization in ferromagnet/semiconductor layered structures via superdiffusive spin transports. <i>Materials Today Physics</i> , 2022, 26, 100723.	6.0	5
7	Strong and tunable spin-orbit interaction in a single crystalline InSb nanosheet. <i>Npj 2D Materials and Applications</i> , 2021, 5, .	7.9	20
8	A highly tunable quadruple quantum dot in a narrow bandgap semiconductor InAs nanowire. <i>Nanoscale</i> , 2021, 13, 3983-3990.	5.6	8
9	A charge sensor integration to tunable double quantum dots on two neighboring InAs nanowires. <i>Nanoscale</i> , 2021, 13, 1048-1054.	5.6	4
10	Axiotaxy driven growth of belt-shaped InAs nanowires in molecular beam epitaxy. <i>Nano Research</i> , 2021, 14, 2330.	10.4	0
11	Antiferromagnet-mediated spin-orbit torque induced magnetization switching in perpendicularly magnetized L10-MnGa. <i>Applied Physics Letters</i> , 2021, 118, 092401.	3.3	5
12	A double quantum dot defined by top gates in a single crystalline InSb nanosheet*. <i>Chinese Physics B</i> , 2021, 30, 128501.	1.4	7
13	High-Performance Room-Temperature UV-IR Photodetector Based on the InAs Nanosheet and Its Wavelength- and Intensity-Dependent Negative Photoconductivity. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 26187-26195.	8.0	17
14	Enhanced spin-orbit torque efficiency and neuron-like behaviors in ferrimagnet/heavy-metal heterostructure. <i>Applied Physics Letters</i> , 2021, 118, .	3.3	5
15	From high-quality semiconductor/superconductor nanowires to Majorana zero mode. <i>Wuli Xuebao/Acta Physica Sinica</i> , 2021, 70, 058101.	0.5	2
16	Foreign-catalyst-free GaSb nanowires directly grown on cleaved Si substrates by molecular-beam epitaxy. <i>Nanotechnology</i> , 2020, 31, 155601.	2.6	1
17	Spin Polarization Compensation in Ferrimagnetic CoPt Bilayers Revealed by Spin Hall Magnetoresistance. <i>Physical Review Applied</i> , 2020, 14, .	3.8	18
18	Linear and Nonlinear Two-Terminal Spin-Valve Effect from Chirality-Induced Spin Selectivity. <i>ACS Nano</i> , 2020, 14, 15983-15991.	14.6	47

#	ARTICLE	IF	CITATIONS
19	Highly Sensitive InSb Nanosheets Infrared Photodetector Passivated by Ferroelectric Polymer. <i>Advanced Functional Materials</i> , 2020, 30, 2006156.	14.9	41
20	Measurements of spin-orbit interaction in epitaxially grown InAs nanosheets. <i>Applied Physics Letters</i> , 2020, 117, 132101.	3.3	5
21	Low-temperature resistivity anomaly and weak spin disorder in $C_{2o}MnGa$ epitaxial thin films. <i>Physical Review B</i> , 2020, 101, .	3.2	12
22	Enhancing the light emission of GaAs nanowires by pressure-modulated charge transfer. <i>Nanoscale Advances</i> , 2020, 2, 2558-2563.	4.6	1
23	Nanoscale thermal transport across an GaAs/AlGaAs heterostructure interface. <i>Structural Dynamics</i> , 2020, 7, 025101.	2.3	13
24	Threshold MnAs thickness for the formation of ordered $\hat{1}\pm/\hat{1}^2$ stripes in MnAs/GaAs(001). <i>Journal Physics D: Applied Physics</i> , 2020, 53, 265005.	2.8	0
25	Ultrafast Magnetization Precession in Perpendicularly Magnetized $L1_{0-2}MnAl$ Thin Films with $Co_{2-2}MnSi$ Buffer Layers*. <i>Chinese Physics Letters</i> , 2020, 37, 058501.	3.3	7
26	Unusual Anomalous Hall Effect in a $Co_{2MnSi}/MnGa/Pt$ Trilayer. <i>Chinese Physics Letters</i> , 2020, 37, 077303.	3.3	3
27	Silver-assisted growth of high-quality $InAs_{1-x}Sb_x$ nanowires by molecular-beam epitaxy. <i>Nanotechnology</i> , 2020, 31, 465602.	2.6	7
28	Magnetic characterization of a thin $Co_{2-2}MnSi/L1_{0-2}MnGa$ synthetic antiferromagnetic bilayer prepared by MBE*. <i>Chinese Physics B</i> , 2020, 29, 107501.	1.4	3
29	Detection of charge states of an InAs nanowire triple quantum dot with an integrated nanowire charge sensor. <i>Applied Physics Letters</i> , 2020, 117, .	3.3	2
30	Highly Efficient Terahertz Emission from InAs Nanostructures. , 2020, , .		0
31	Piezostain modulation of magnetic damping in MBE-grown epitaxial $Co_{2FeAl}/GaAs$ heterostructure. <i>Journal Physics D: Applied Physics</i> , 2019, 52, 455001.	2.8	2
32	Semiconductor-metal transition in GaAs nanowires under high pressure. <i>Chinese Physics B</i> , 2019, 28, 076401.	1.4	2
33	Giant modulation of magnetism in $(Ga,Mn)As$ ultrathin films via electric field. <i>Journal of Semiconductors</i> , 2019, 40, 092501.	3.7	5
34	Tunable Perpendicular Magnetic Anisotropy in Off-Stoichiometric Full-Heusler Alloy $Co_{2-2}MnAl$ *. <i>Chinese Physics Letters</i> , 2019, 36, 067502.	3.3	7
35	Visible-IR Wide-Spectrum Photodetector at Room Temperature Based on p-n Junction-Type $GaAs_{1-x}Sb_x/InAs$ Core-Shell Nanowire. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 38973-38981.	8.0	15
36	Spin-orbit torque induced magnetization switching in ferrimagnetic Heusler alloy $Co_{2-2}Mn_3Ga$ with large perpendicular magnetic anisotropy. <i>Applied Physics Letters</i> , 2019, 115, .	3.3	16

#	ARTICLE	IF	CITATIONS
37	Gate defined quantum dot realized in a single crystalline InSb nanosheet. Applied Physics Letters, 2019, 114, .	3.3	12
38	Efficiently Rotating the Magnetization Vector in a Magnetic Semiconductor via Organic Molecules. ACS Applied Materials & Interfaces, 2019, 11, 6615-6623.	8.0	7
39	Magneto-transport properties of the off-stoichiometric $\text{Co}_{2-x}\text{MnAl}$ film epitaxially grown on GaAs (001). Journal of Semiconductors, 2019, 40, 052501.	3.7	5
40	Coexistence of induced superconductivity and quantum Hall states in InSb nanosheets. Physical Review B, 2019, 99, .	3.2	18
41	Ultrafast Structural Dynamics along the $\hat{\Gamma}^2$ Phase Transition Path in MnAs. Physical Review Letters, 2019, 122, 145702.	7.8	6
42	Dimension Engineering of High-Quality InAs Nanostructures on a Wafer Scale. Nano Letters, 2019, 19, 1632-1642.	9.1	29
43	Interface-driven unusual anomalous Hall effect in $M_n \text{Pt} / \text{Ga} / \text{Pt} / \text{MnAs}$ bilayers. Physical Review B, 2019, 100, .	3.2	9
44	Two-Dimensional Quantum Transport in Free-Standing InSb Nanosheets. Nano Letters, 2019, 19, 561-569.	9.1	24
45	Control of magnetic anisotropy in epitaxial Co_2MnAl thin films through piezo-voltage-induced strain. Journal of Applied Physics, 2019, 125, .	2.5	11
46	Experimental evidence for an anisotropic Berry-phase effect on the anomalous Hall effect in MnAs films. Physical Review B, 2018, 97, .	3.2	3
47	Spontaneous perpendicular exchange bias effect in $L_1\text{-MnGa/FeMn}$ bilayers grown by molecular-beam epitaxy. Applied Physics Letters, 2018, 112, .	3.3	11
48	Tunneling Anisotropic Magnetoresistance in $L_1\text{-MnGa}$ Based Antiferromagnetic Perpendicular Tunnel Junction. Chinese Physics Letters, 2018, 35, 087501.	3.3	3
49	Anisotropic Pauli Spin-Blockade Effect and Spin-Orbit Interaction Field in an InAs Nanowire Double Quantum Dot. Nano Letters, 2018, 18, 4741-4747.	9.1	27
50	MnGa-based fully perpendicular magnetic tunnel junctions with ultrathin Co_2MnSi interlayers. Scientific Reports, 2017, 7, 43064.	3.3	31
51	Near Full-Composition-Range High-Quality $\text{GaAs}_{1-x}\text{Sb}_x$ Nanowires Grown by Molecular-Beam Epitaxy. Nano Letters, 2017, 17, 622-630.	9.1	74
52	Foreign-catalyst-free growth of InAs/InSb axial heterostructure nanowires on Si (111) by molecular-beam epitaxy. Nanotechnology, 2017, 28, 135704.	2.6	12
53	Enhanced spin-orbit torques in MnAl/Ta films with improving chemical ordering. Applied Physics Letters, 2017, 110, .	3.3	19
54	Anomalous resistivity upturn in epitaxial $L_{21}\text{-Co}_2\text{MnAl}$ films. Scientific Reports, 2017, 7, 42931.	3.3	30

#	ARTICLE	IF	CITATIONS
55	Coherent Transport in a Linear Triple Quantum Dot Made from a Pure-Phase InAs Nanowire. Nano Letters, 2017, 17, 4158-4164.	9.1	17
56	Electrical Transport of Perpendicularly Magnetized L10-MnGa and MnAl Films. Spin, 2017, 07, 1730001.	1.3	1
57	Valley Polarization of Trions and Magnetoresistance in Heterostructures of MoS ₂ and Yttrium Iron Garnet. ACS Nano, 2017, 11, 12257-12265.	14.6	35
58	Molecular Patterning and Directed Self-Assembly of Gold Nanoparticles on GaAs. ACS Applied Materials & Interfaces, 2017, 9, 43363-43369.	8.0	9
59	Manipulation of morphology and structure of the top of GaAs nanowires grown by molecular-beam epitaxy. Journal of Semiconductors, 2017, 38, 103001.	3.7	2
60	Magnetic properties of (Ga,Mn)As (110) epitaxial films. Europhysics Letters, 2017, 118, 17003.	2.0	2
61	<i>L</i> ₁₀ -MnGa based magnetic tunnel junction for high magnetic field sensor. Journal Physics D: Applied Physics, 2017, 50, 285002.	2.8	9
62	GaAsSb/InAs core-shell nanowires grown by molecular-beam epitaxy. Journal of Alloys and Compounds, 2017, 724, 659-665.	5.5	6
63	Design and Synthesis of an Artificial Perpendicular Hard Ferrimagnet with High Thermal and Magnetic Field Stabilities. Scientific Reports, 2017, 7, 16990.	3.3	8
64	Composition-tuned magneto-optical Kerr effect in <i>L</i> ₁₀ -Mn _x Ga films with giant perpendicular anisotropy. Journal Physics D: Applied Physics, 2016, 49, 245001.	2.8	7
65	Unveiling the Mechanism for the Split Hysteresis Loop in Epitaxial Co ₂ Fe _{1-x} Mn _x Al Full-Heusler Alloy Films. Scientific Reports, 2016, 6, 18615.	3.3	7
66	Engineering the polar magneto-optical Kerr effect in strongly strained L10-MnAl films. Journal Physics D: Applied Physics, 2016, 49, 415001.	2.8	4
67	Anomalous Hall effect and spin-orbit torques in MnGa/IrMn films: Modification from strong spin Hall effect of the antiferromagnet. Physical Review B, 2016, 94, .	3.2	35
68	Orbital two-channel Kondo effect in epitaxial ferromagnetic L10-MnAl films. Nature Communications, 2016, 7, 10817.	12.8	42
69	Modulated switching current density and spin-orbit torques in MnGa/Ta films with inserting ferromagnetic layers. Scientific Reports, 2016, 6, 38375.	3.3	30
70	Manipulation of magnetism in perpendicularly magnetized Heusler alloy Co ₂ FeAl _{0.5} Si _{0.5} by electric-field at room temperature. Journal of Applied Physics, 2016, 120, .	2.5	2
71	Hybrid magnetoresistance in Pt-based multilayers: Effect originated from strong interfacial spin-orbit coupling. Scientific Reports, 2016, 6, 20522.	3.3	6
72	Piezo Voltage Controlled Planar Hall Effect Devices. Scientific Reports, 2016, 6, 28458.	3.3	40

#	ARTICLE	IF	CITATIONS
73	Tailoring the interfacial exchange coupling of perpendicularly magnetized Co _{1-x} Mn _{1.5} Ga bilayers. Journal Physics D: Applied Physics, 2016, 49, 245003.	2.8	7
74	Electrical generation and control of the valley carriers in a monolayer transition metal dichalcogenide. Nature Nanotechnology, 2016, 11, 598-602.	31.5	259
75	Room-temperature spin transport in InAs nanowire lateral spin valve. RSC Advances, 2016, 6, 75736-75740.	3.6	3
76	Anomalous Hall effect in $Mn_{1.5}Ga$ with controllable orbital two-channel Kondo effect. Physical Review B, 2016, 93, .	3.2	26
77	Anomalous Hall effect in $Mn_{1.5}Ga$ with controllable orbital two-channel Kondo effect. Physical Review B, 2016, 93, .	3.2	19
78	Observation of orbital two-channel Kondo effect in a ferromagnetic L10-MnGa film. Scientific Reports, 2016, 6, 34549.	3.3	10
79	Measurements of the spin-orbit interaction and Landé g factor in a pure-phase InAs nanowire double quantum dot in the Pauli spin-blockade regime. Applied Physics Letters, 2016, 109, .	3.3	17
80	Free-Standing Two-Dimensional Single-Crystalline InSb Nanosheets. Nano Letters, 2016, 16, 834-841.	9.1	72
81	Negative photoconductivity of InAs nanowires. Physical Chemistry Chemical Physics, 2016, 18, 818-826.	2.8	68
82	Crystal Phase- and Orientation-Dependent Electrical Transport Properties of InAs Nanowires. Nano Letters, 2016, 16, 2478-2484.	9.1	38
83	Two-step fabrication of self-catalyzed Ga-based semiconductor nanowires on Si by molecular-beam epitaxy. Nanoscale, 2016, 8, 10615-10621.	5.6	20
84	Magneto-Transport Behaviors of (Ga,Mn)As Based Nano-structures and Devices. , 2016, , 585-614.		0
85	The in-plane anisotropic magnetic damping of ultrathin epitaxial Co ₂ FeAl film. AIP Advances, 2015, 5, .	1.3	14
86	Robust Manipulation of Magnetism in Dilute Magnetic Semiconductor (Ga,Mn)As by Organic Molecules. Advanced Materials, 2015, 27, 8043-8050.	21.0	26
87	Phase-coherent transport and spin relaxation in InAs nanowires grown by molecule beam epitaxy. Applied Physics Letters, 2015, 106, .	3.3	21
88	Temperature dependent magnetic anisotropy of epitaxial Co ₂ FeAl films grown on GaAs. Journal of Applied Physics, 2015, 117, .	2.5	17
89	Voltage manipulation of the magnetization reversal in Fe/n-GaAs/piezoelectric heterostructure. Journal of Magnetism and Magnetic Materials, 2015, 375, 148-152.	2.3	17
90	Magnetotransport Behaviors of (Ga,Mn)As-Based Nanostructures and Devices. , 2015, , 1-25.		0

#	ARTICLE	IF	CITATIONS
91	Electrical characteristics of field-effect transistors based on indium arsenide nanowire thinner than 10 nm. Applied Physics Letters, 2014, 105, .	3.3	24
92	Quantitative determination of the Mn site distribution in ultrathin Ga _{0.80} Mn _{0.20} layers with high critical temperatures: A Rutherford backscattering channeling investigation. Physical Review B, 2014, 89, .	3.2	6
93	Anomalous Hall effect in epitaxial Mn _{1-x} Co _x films with variable chemical ordering. Physical Review B, 2014, 89, .	3.2	43
94	Different temperature scaling of strain-induced magneto-crystalline anisotropy and Gilbert damping in Co ₂ FeAl film epitaxied on GaAs. Applied Physics Letters, 2014, 105, 072413.	3.3	31
95	The thickness-dependent dynamic magnetic property of Co ₂ FeAl films grown by molecular beam epitaxy. Applied Physics Letters, 2014, 105, .	3.3	30
96	Suspended InAs nanowire gate-all-around field-effect transistors. Applied Physics Letters, 2014, 105, .	3.3	26
97	Controlled Synthesis of Phase-Pure InAs Nanowires on Si(111) by Diminishing the Diameter to 10 nm. Nano Letters, 2014, 14, 1214-1220.	9.1	110
98	Structure and Magnetic Properties of (In,Mn)As Based Core-Shell Nanowires Grown on Si(111) by Molecular-Beam Epitaxy. Chinese Physics Letters, 2014, 31, 078103.	3.3	4
99	Magnetization dynamics and Gilbert damping in a hybrid Fe/GaAs heterostructure. Solid State Communications, 2014, 192, 31-35.	1.9	2
100	Probing the thiol-gold planar interface by spin polarized tunneling. Applied Physics Letters, 2014, 104, 152403.	3.3	4
101	Enhancement of the Curie temperature of ferromagnetic semiconductor (Ga,Mn)As. Science China: Physics, Mechanics and Astronomy, 2013, 56, 99-110.	5.1	20
102	Perpendicularly magnetized MnAl (001) thin films epitaxied on GaAs. Applied Physics Letters, 2013, 102, .	3.3	69
103	Magnetic and Gilbert damping properties of Mn ₂₁ -Co ₂ FeAl film grown by molecular beam epitaxy. Applied Physics Letters, 2013, 103, .	3.3	47
104	Recent progress in perpendicularly magnetized Mn-based binary alloy films. Chinese Physics B, 2013, 22, 118505.	1.4	34
105	The magnetic switching process in MBE-grown Co ₂ MnAl Heusler alloy film. Solid State Communications, 2013, 163, 33-36.	1.9	8
106	All Zinc-Blende GaAs/(Ga,Mn)As Core-Shell Nanowires with Ferromagnetic Ordering. Nano Letters, 2013, 13, 1572-1577.	9.1	40
107	Tailoring magnetism of multifunctional Mn _x Ga films with giant perpendicular anisotropy. Applied Physics Letters, 2013, 102, .	3.3	61
108	Perpendicularly magnetized Mn _x Ga films: promising materials for future spintronic devices, magnetic recording and permanent magnets. Applied Physics A: Materials Science and Processing, 2013, 111, 379-387.	2.3	53

#	ARTICLE	IF	CITATIONS
109	<p> Ferromagnetic Interfacial Interaction and the Proximity Effect in a $\text{Co}_2\text{FeAl}/\text{GaMnAs}$ Heterostructure Applied Physics Letters, 2013, 98, 073008. </p>	7.8	38
110	<p> Photoinduced Spin Precession in $\text{Fe}/\text{GaAs}(001)$ Heterostructure with Low Power Excitation. Applied Physics Express, 2013, 6, 073008. </p>	2.4	4
111	<p> Evidence for Structural Phase Transitions Induced by the Triple Phase Line Shift in Self-Catalyzed GaAs Nanowires. Nano Letters, 2012, 12, 5436-5442. </p>	9.1	82
112	<p> Multifunctional Co/Mn Ga Films with Ultrahigh Coercivity, Giant Perpendicular Magnetocrystalline Anisotropy and Large Magnetic Energy Product. Advanced Materials, 2012, 24, 4547-4551. </p>	21.0	151
113	<p> Enhancing the Curie Temperature of Ferromagnetic Semiconductor $(\text{Ga},\text{Mn})\text{As}$ to 200 K via Nanostructure Engineering. Nano Letters, 2011, 11, 2584-2589. </p>	9.1	273
114	<p> Strain-induced high ferromagnetic transition temperature of MnAs epilayer grown on GaAs (110). Nanoscale Research Letters, 2011, 6, 125. </p>	5.7	12
115	<p> Fabrication of $(\text{Ga},\text{Mn})\text{As}$ magnetic semiconductor quantum dots on Si substrates by droplet epitaxy. Physica Status Solidi C: Current Topics in Solid State Physics, 2011, 8, 393-395. </p>	0.8	1
116	<p> Improved tunneling magnetoresistance in $(\text{Ga},\text{Mn})\text{As}/\text{AlOx}/\text{CoFeB}$ magnetic tunnel junctions. Applied Physics Letters, 2011, 98, 262501. </p>	3.3	12
117	<p> Magnetic properties of full-Heusler alloy $\text{Co}_2\text{Fe}_{1-x}\text{Mn}_x\text{Al}$ films grown by molecular-beam epitaxy. Applied Physics Letters, 2010, 97, . </p>	3.3	28
118	<p> Magnetic anisotropies of laterally confined structures of epitaxial Fe films on GaAs (001). Applied Physics Letters, 2010, 97, 072503. </p>	3.3	8
119	<p> Intrinsically limited critical temperatures of highly doped $\text{Ga}_{1-x}\text{Mn}_x$ films. Physical Review B, 2010, 81, . </p>	3.2	19
120	<p> Strain and magnetic anisotropy of as-grown and annealed Fe films on $c(4\sqrt{3}\times 4)$ reconstructed GaAs (001) surface. Journal of Applied Physics, 2009, 106, . </p>	2.5	12
121	<p> Low-temperature magnetotransport behaviors of heavily Mn-doped $(\text{Ga},\text{Mn})\text{As}$ films with high ferromagnetic transition temperature. Applied Physics Letters, 2009, 95, . </p>	3.3	124
122	<p> Compositional Dependence of Epitaxial Co/Mn Ga Magnetic Properties as Probed by ^{57}Fe and $^{119}\text{In}/\text{Sn}$ Emission Mössbauer Spectroscopy. Physica Status Solidi (B): Basic Research, 0, , . </p>	1.5	0
123	<p> Dual-axis control of magnetic anisotropy in single crystal Co_2MnSi thin film through piezo-voltage-induced strain. Nanoscale Advances, 0, , . </p>	4.6	0