

# Faxian Xiu

## List of Publications by Year in descending order

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88  
papers

4,956  
citations

87723

38  
h-index

91712

69  
g-index

90  
all docs

90  
docs citations

90  
times ranked

7188  
citing authors

#	ARTICLE	IF	CITATIONS
1	Bulk-Like Magnetic Moment of Epitaxial 2-D Superlattices. IEEE Transactions on Magnetism, 2022, 58, 1-5.	1.2	1
2	Tuning 2D magnetism in Fe <sub>3</sub> XGeTe <sub>2</sub> films by element doping. National Science Review, 2022, 9, .	4.6	7
3	Quasi-1D van der Waals Antiferromagnetic CrZr <sub>4</sub> Te <sub>14</sub> with Large In-Plane Anisotropic Negative Magnetoresistance. Advanced Materials, 2022, 34, e2200145.	11.1	7
4	Ultrafast photothermoelectric effect in Dirac semimetallic Cd <sub>3</sub> As <sub>2</sub> revealed by terahertz emission. Nature Communications, 2022, 13, 1623.	5.8	29
5	Giant nonlinear anomalous Hall effect induced by spin-dependent band structure evolution. Physical Review Research, 2022, 4, .	1.3	14
6	Unconventional Landau level transitions in Weyl semimetal NbP. Physical Review Materials, 2022, 6, .	0.9	3
7	Ultrathin and flexible hybrid films decorated by copper nanoparticles with a sandwich-like structure for electromagnetic interference shielding. Materials Chemistry Frontiers, 2022, 6, 2256-2265.	3.2	9
8	3D Dirac semimetal Cd <sub>3</sub> As <sub>2</sub> /CuPc heterojunction for promoted visible-infrared photo-detection. Optical Materials, 2021, 111, 110699.	1.7	8
9	Magnetic-Field-Induced Re-entrance of Superconductivity in Ta <sub>2</sub> PdS <sub>5</sub> Nanostrips. Nano Letters, 2021, 21, 288-297.	4.5	3
10	Plasmons in the van der Waals charge-density-wave material 2H-TaSe <sub>2</sub> . Nature Communications, 2021, 12, 386.	5.8	19
11	High Mobility 3D Dirac Semimetal (Cd <sub>3</sub> As <sub>2</sub> ) for Ultrafast Photoactive Terahertz Photonics. Advanced Functional Materials, 2021, 31, 2011011.	7.8	46
12	Coherent diffraction rings induced by thermal-mechanical effect of a flexible Dirac semimetallic composite structure. Journal of Applied Physics, 2021, 129, 093102.	1.1	2
13	Thermoelectric Origin of Giant Nonreciprocal Charge Transport in NbAs Nanobelts. Physical Review Applied, 2021, 15, .	1.5	2
14	Tunable Terahertz Plasmons in Graphite Thin Films. Physical Review Letters, 2021, 126, 147401.	2.9	6
15	Cycling Fermi arc electrons with Weyl orbits. Nature Reviews Physics, 2021, 3, 660-670.	11.9	17
16	Weyl Semiconductor Te/Sb <sub>2</sub> Se <sub>3</sub> Heterostructure for Broadband Photodetection and Its Binary Photoresponse by C <sub>60</sub> as Charge-Regulation Medium. Advanced Optical Materials, 2021, 9, 2101256.	3.6	12
17	Van der Waals ferromagnetic Josephson junctions. Nature Communications, 2021, 12, 6580.	5.8	31
18	Controllable Domain Walls in Two-Dimensional Ferromagnetic Material Fe <sub>3</sub> GeTe <sub>2</sub> Based on the Spin-Transfer Torque Effect. ACS Nano, 2021, 15, 19513-19521.	7.3	6

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19	Two-dimensional ferromagnetic superlattices. National Science Review, 2020, 7, 745-754.	4.6	39
20	Third harmonic generation in Dirac semimetal Cd <sub>3</sub> As <sub>2</sub> . Applied Physics Letters, 2020, 117, .	1.5	21
21	A 3D topological Dirac semimetal/MoO <sub>3</sub> thin film heterojunction infrared photodetector with a current reversal phenomenon. Journal of Materials Chemistry C, 2020, 8, 16024-16031.	2.7	10
22	Gate-Tunable Surface States in Topological Insulator $\hat{I}^2$ -Ag <sub>2</sub> Te with High Mobility. Nano Letters, 2020, 20, 7004-7010.	4.5	15
23	Nonreciprocal superconducting NbSe <sub>2</sub> antenna. Nature Communications, 2020, 11, 5634.	5.8	43
24	Non-perturbative terahertz high-harmonic generation in the three-dimensional Dirac semimetal Cd <sub>3</sub> As <sub>2</sub> . Nature Communications, 2020, 11, 2451.	5.8	69
25	Anomalous Spin Behavior in Fe <sub>3</sub> GeTe <sub>2</sub> Driven by Current Pulses. ACS Nano, 2020, 14, 9512-9520.	7.3	17
26	Edge superconductivity in multilayer WTe <sub>2</sub> Josephson junction. National Science Review, 2020, 7, 1468-1475.	4.6	22
27	The discovery of dynamic chiral anomaly in a Weyl semimetal NbAs. Nature Communications, 2020, 11, 1259.	5.8	38
28	Light-Tunable Ferromagnetism in Atomically Thin $\text{Fe}_3\text{GeTe}_2$ Driven by Femtosecond Laser Pulse. Physical Review Letters, 2020, 125, 267205.	2.9	57
29	Ultraviolet to Long-Wave Infrared Photodetectors Based on a Three-Dimensional Dirac Semimetal/Organic Thin Film Heterojunction. Journal of Physical Chemistry Letters, 2019, 10, 3914-3921.	2.1	29
30	Ultrafast photocarrier dynamics in a 3D Dirac semimetal Cd <sub>3</sub> As <sub>2</sub> film studied with terahertz spectroscopy. Applied Physics Letters, 2019, 114, .	1.5	47
31	Proximity-induced surface superconductivity in Dirac semimetal Cd <sub>3</sub> As <sub>2</sub> . Nature Communications, 2019, 10, 2217.	5.8	50
32	Ultrahigh conductivity in Weyl semimetal NbAs nanobelts. Nature Materials, 2019, 18, 482-488.	13.3	68
33	Quantum Hall effect based on Weyl orbits in Cd <sub>3</sub> As <sub>2</sub> . Nature, 2019, 565, 331-336.	13.7	194
34	Slowing down photocarrier relaxation in Dirac semimetal Cd <sub>3</sub> As <sub>2</sub> via Mn doping. Optics Letters, 2019, 44, 4103.	1.7	20
35	Towards the manipulation of topological states of matter: a perspective from electron transport. Science Bulletin, 2018, 63, 580-594.	4.3	20
36	Cr doping induced negative transverse magnetoresistance in Cd <sub>3</sub> As <sub>2</sub> thin films. Physical Review B, 2018, 97, .	1.1	11

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37	Atomic disorders in layer structured topological insulator SnBi <sub>2</sub> Te <sub>4</sub> nanoplates. Nano Research, 2018, 11, 696-706.	5.8	16
38	Signature of quantum Griffiths singularity state in a layered quasi-one-dimensional superconductor. Nature Communications, 2018, 9, 4656.	5.8	21
39	Terahertz probe of photoexcited carrier dynamics in the Dirac semimetal $Cd_3As_2$ . Physical Review B, 2018, 98, .	1.3	10
40	Enhanced Performance of Wideband Room Temperature Photodetector Based on Cd <sub>3</sub> As <sub>2</sub> Thin Film/Pentacene Heterojunction. ACS Photonics, 2018, 5, 3438-3445.	3.2	57
41	Chiral Landau levels in Weyl semimetal NbAs with multiple topological carriers. Nature Communications, 2018, 9, 1854.	5.8	37
42	Large Hall angle-driven magneto-transport phenomena in topological Dirac semimetal Cd <sub>3</sub> As <sub>2</sub> . Applied Physics Letters, 2018, 113, .	1.5	4
43	Inducing Strong Superconductivity in WTe <sub>2</sub> by a Proximity Effect. ACS Nano, 2018, 12, 7185-7196.	7.3	48
44	A robust and tuneable mid-infrared optical switch enabled by bulk Dirac fermions. Nature Communications, 2017, 8, 14111.	5.8	174
45	Room-temperature chiral charge pumping in Dirac semimetals. Nature Communications, 2017, 8, 13741.	5.8	113
46	Arrayed Van Der Waals Broadband Detectors for Dual-Band Detection. Advanced Materials, 2017, 29, 1604439.	11.1	218
47	Various and Tunable Transport Properties of WSe <sub>2</sub> Transistor Formed by Metal Contacts. Small, 2017, 13, 1604319.	5.2	17
48	Direct Observation of Landau Level Resonance and Mass Generation in Dirac Semimetal Cd <sub>3</sub> As <sub>2</sub> Thin Films. Nano Letters, 2017, 17, 2211-2219.	4.5	40
49	Tunable Positive to Negative Magnetoresistance in Atomically Thin WTe <sub>2</sub> . Nano Letters, 2017, 17, 878-885.	4.5	92
50	Evolution of Weyl orbit and quantum Hall effect in Dirac semimetal Cd <sub>3</sub> As <sub>2</sub> . Nature Communications, 2017, 8, 1272.	5.8	118
51	Superconductivity and magnetotransport of single-crystalline NbSe <sub>2</sub> nanoplates grown by chemical vapour deposition. Nanoscale, 2017, 9, 16591-16595.	2.8	17
52	Evidence for pressure-induced node-pair annihilation in $Cd_3As_2$ . Physical Review B, 2017, 95, 114407.	1.1	14
53	Wafer-scale two-dimensional ferromagnetic Fe <sub>3</sub> GeTe <sub>2</sub> thin films grown by molecular beam epitaxy. Npj 2D Materials and Applications, 2017, 1, .	3.9	157
54	Dirac Semimetal Thin-film Mode-locked Fiber Laser. , 2017, , .		2

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55	Thickness-dependent quantum oscillations in Cd <sub>3</sub> As <sub>2</sub> thin films. <i>New Journal of Physics</i> , 2016, 18, 083003.	1.2	40
56	Tunable Ambipolar Polarization-Sensitive Photodetectors Based on High-Anisotropy ReSe <sub>2</sub> Nanosheets. <i>ACS Nano</i> , 2016, 10, 8067-8077.	7.3	276
57	Observation of quasi-two-dimensional Dirac fermions in ZrTe <sub>5</sub> . <i>NPG Asia Materials</i> , 2016, 8, e325-e325.	3.8	51
58	Zeeman splitting and dynamical mass generation in Dirac semimetal ZrTe <sub>5</sub> . <i>Nature Communications</i> , 2016, 7, 12516.	5.8	149
59	Weak antilocalization in Cd <sub>3</sub> As <sub>2</sub> thin films. <i>Scientific Reports</i> , 2016, 6, 22377.	1.6	75
60	Surface-energy engineered Bi-doped SnTe nanoribbons with weak antilocalization effect and linear magnetoresistance. <i>Nanoscale</i> , 2016, 8, 19383-19389.	2.8	15
61	Enhanced thermoelectric properties of the Dirac semimetal Cd <sub>3</sub> As <sub>2</sub> . <i>Inorganic Chemistry Frontiers</i> , 2016, 3, 1637-1643.	3.0	34
62	Enhancing Perovskite Solar Cell Performance by Interface Engineering Using CH <sub>3</sub> NH <sub>3</sub> PbBr <sub>0.9</sub> I <sub>0.1</sub> Quantum Dots. <i>Journal of the American Chemical Society</i> , 2016, 138, 8581-8587.	6.6	232
63	Three-dimensional Dirac semimetal Cd <sub>3</sub> As <sub>2</sub> as high-performance 2-5 μm saturable absorbers. , 2016, , .		1
64	ReS <sub>2</sub> -Based Field-Effect Transistors and Photodetectors. <i>Advanced Functional Materials</i> , 2015, 25, 4076-4082.	7.8	282
65	Controllable Growth of Vertical Heterostructure GaTe <sub>x</sub> Se <sub>1-x</sub> /Si by Molecular Beam Epitaxy. <i>ACS Nano</i> , 2015, 9, 8592-8598.	7.3	53
66	Spin-Valve Effect in NiFe/MoS <sub>2</sub> /NiFe Junctions. <i>Nano Letters</i> , 2015, 15, 5261-5267.	4.5	135
67	Arrayed van der Waals Vertical Heterostructures Based on 2D GaSe Grown by Molecular Beam Epitaxy. <i>Nano Letters</i> , 2015, 15, 3571-3577.	4.5	146
68	Landau level splitting in Cd <sub>3</sub> As <sub>2</sub> under high magnetic fields. <i>Nature Communications</i> , 2015, 6, 7779.	5.8	126
69	Magnetotransport Properties of Cd <sub>3</sub> As <sub>2</sub> Nanostructures. <i>ACS Nano</i> , 2015, 9, 8843-8850.	7.3	57
70	Scalable Growth of High Mobility Dirac Semimetal Cd <sub>3</sub> As <sub>2</sub> Microbelts. <i>Nano Letters</i> , 2015, 15, 5830-5834.	4.5	41
71	Wafer-scale arrayed p-n junctions based on few-layer epitaxial GaTe. <i>Nano Research</i> , 2015, 8, 3332-3341.	5.8	41
72	Gate-tunable quantum oscillations in ambipolar Cd <sub>3</sub> As <sub>2</sub> thin films. <i>NPG Asia Materials</i> , 2015, 7, e221-e221.	3.8	68

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73	Observations of a Metal-Insulator Transition and Strong Surface States in Bi <sub>2</sub> Sb <sub>3</sub> Thin Films. <i>Advanced Materials</i> , 2014, 26, 7110-7115.	11.1	37
74	Controllable Schottky Barriers between MoS <sub>2</sub> and Permalloy. <i>Scientific Reports</i> , 2014, 4, 6928.	1.6	68
75	High-quality Bi <sub>2</sub> Te <sub>3</sub> thin films grown on mica substrates for potential optoelectronic applications. <i>Applied Physics Letters</i> , 2013, 103, .	1.5	50
76	Structural characteristics of GeMn diluted magnetic semiconductor nanostructures. , 2012, , .		0
77	Metallic nanomesh electrodes with controllable optical properties for organic solar cells. <i>Applied Physics Letters</i> , 2012, 100, .	1.5	51
78	Manipulating surface states in topological insulator nanoribbons. <i>Nature Nanotechnology</i> , 2011, 6, 216-221.	15.6	382
79	Electrical spin injection and transport in germanium. <i>Physical Review B</i> , 2011, 84, .	1.1	158
80	Cr metal thin film memory. <i>Journal of Applied Physics</i> , 2011, 110, .	1.1	12
81	Voltage-controlled ferromagnetic order in MnGe quantum dots. <i>Nanotechnology</i> , 2010, 21, 375606.	1.3	6
82	MnGe magnetic nanocolumns and nanowells. <i>Nanotechnology</i> , 2010, 21, 255602.	1.3	31
83	Investigating the origin of Fermi level pinning in Ge Schottky junctions using epitaxially grown ultrathin MgO films. <i>Applied Physics Letters</i> , 2010, 96, .	1.5	111
84	Tadpole shaped Ge <sub>0.96</sub> Mn <sub>0.04</sub> magnetic semiconductors grown on Si. <i>Applied Physics Letters</i> , 2010, 96, 051905.	1.5	14
85	Fermi level depinning of Ge Schottky contacts using single crystalline MgO. , 2009, , .		0
86	Generation of nitrogen acceptors in ZnO using pulse thermal processing. <i>Applied Physics Letters</i> , 2008, 92, 151112.	1.5	16
87	UV photoconductors based on Ga-doped ZnO films. <i>Materials Research Society Symposia Proceedings</i> , 2005, 891, 1.	0.1	1
88	Magnetic-field-induced nonlinear transport in HfTe <sub>5</sub> . <i>National Science Review</i> , 0, , .	4.6	1