

Xufeng Kou

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/6414939/publications.pdf>

Version: 2024-02-01

91
papers

6,415
citations

116194

36
h-index

73587

79
g-index

94
all docs

94
docs citations

94
times ranked

7761
citing authors

#	ARTICLE	IF	CITATIONS
1	Thickness-Driven Quantum Anomalous Hall Phase Transition in Magnetic Topological Insulator Thin Films. ACS Nano, 2022, 16, 1134-1141.	7.3	4
2	Topological spintronics and magnetoelectronics. Nature Materials, 2022, 21, 15-23.	13.3	101
3	Efficient orbital torque in polycrystalline O_3 ferromagnetic stacks: Theory and experiment. Physical Review B, 2022, 105, .	1.1	14
4	Cryogenic CMOS RF Device Modeling for Scalable Quantum Computer Design. IEEE Journal of the Electron Devices Society, 2022, 10, 532-539.	1.2	3
5	Topological insulators-based magnetic heterostructures. Advances in Physics: X, 2021, 6, .	1.5	3
6	Temperature dependence of spin-orbit torque-driven magnetization switching in <i>in situ</i> grown Bi ₂ Te ₃ /MnTe heterostructures. Applied Physics Letters, 2021, 118, .	1.5	12
7	Direct Visualization and Manipulation of Tunable Quantum Well State in Semiconducting Nb ₂ SiTe ₄ . ACS Nano, 2021, 15, 15850-15857.	7.3	2
8	Van der Waals ferromagnetic Josephson junctions. Nature Communications, 2021, 12, 6580.	5.8	31
9	Narrow-Band Semiconductor Heterostructures for Efficient Spintronic Memory Device Applications. , 2021, , .		1
10	Spectroscopic fingerprint of chiral Majorana modes at the edge of a quantum anomalous Hall insulator/superconductor heterostructure. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 238-242.	3.3	22
11	Two-dimensional ferromagnetic superlattices. National Science Review, 2020, 7, 745-754.	4.6	39
12	Observation of Quantum Anomalous Hall Effect and Exchange Interaction in Topological Insulator/Antiferromagnet Heterostructure. Advanced Materials, 2020, 32, e2001460.	11.1	27
13	Observation of Topological Electronic Structure in Quasi-1D Superconductor TaSe ₃ . Matter, 2020, 3, 2055-2065.	5.0	26
14	Mid- and long-infrared emission properties of In _x Ga _{1-x} As _y Sb _{1-y} quaternary alloy with Type-II InAs/GaSb superlattice distribution. Journal of Alloys and Compounds, 2020, 847, 156390.	2.8	6
15	Termination switching of antiferromagnetic proximity effect in topological insulator. Science Advances, 2020, 6, eaaz8463.	4.7	20
16	Highly Efficient Electric-Field Control of Giant Rashba Spin-Orbit Coupling in Lattice-Matched InSb/CdTe Heterostructures. ACS Nano, 2020, 14, 17396-17404.	7.3	15
17	Probing the low-temperature limit of the quantum anomalous Hall effect. Science Advances, 2020, 6, eaaz3595.	4.7	35
18	Pressure-induced superconductivity and topological phase transitions in the topological nodal-line semimetal SrAs ₃ . Npj Quantum Materials, 2020, 5, .	1.8	27

#	ARTICLE	IF	CITATIONS
19	Imaging Magnetization Switching Induced by Spin-Orbit Torque in Perpendicularly Magnetized Ta/CoFeB Structure. IEEE Transactions on Magnetics, 2020, 56, 1-6.	1.2	0
20	Temperature-Driven Gate Geometry Effects in Nanoscale Cryogenic MOSFETs. IEEE Electron Device Letters, 2020, 41, 661-664.	2.2	8
21	Tailoring the Hybrid Anomalous Hall Response in Engineered Magnetic Topological Insulator Heterostructures. Nano Letters, 2020, 20, 1731-1737.	4.5	26
22	Bulk Fermi surface of the layered superconductor TaS_3 with three-dimensional strong topological state. Physical Review B, 2020, 101, .	1.1	16
23	Epitaxial growth of lattice-matched InSb/CdTe heterostructures on the GaAs(111) substrate by molecular beam epitaxy. Applied Physics Letters, 2020, 116, .	1.5	12
24	Epitaxial Growth of Bi ₂ X ₃ Topological Insulators. Springer Series in Materials Science, 2019, , 319-349.	0.4	1
25	Tuning the magnetotransport behavior of topological insulator with a transition-metal oxide layer. Journal of Physics Condensed Matter, 2019, 31, 405001.	0.7	2
26	Fabrication and Characterization of an InAs(Sb)/In _x Ga _{1-x} As _y Sb _{1-y} Type-II Superlattice. Physica Status Solidi - Rapid Research Letters, 2019, 13, 1900474.	1.2	3
27	Topological Hall effect at above room temperature in heterostructures composed of a magnetic insulator and a heavy metal. Nature Electronics, 2019, 2, 182-186.	13.1	117
28	Topological insulator: Spintronics and quantum computations. Frontiers of Physics, 2019, 14, 1.	2.4	144
29	Exploring interfacial exchange coupling and sublattice effect in heavy metal/ferrimagnetic insulator heterostructures using Hall measurements, x-ray magnetic circular dichroism, and neutron reflectometry. Physical Review B, 2019, 99, .	1.1	39
30	Fabrication and Characterization of an InAs(Sb)/In _x Ga _{1-x} As _y Sb _{1-y} Type-II Superlattice. Physica Status Solidi - Rapid Research Letters, 2019, 13, 1970045.	1.2	2
31	Review of Quantum Hall Trio. Journal of Physics and Chemistry of Solids, 2019, 128, 2-23. Anomalous helicity-dependent photocurrent in the topological insulator (T_{ETQ})	1.9	10
32	Te_2Te_3 Physical Review B, 2018, 97, .	1.1	12
33	Room-Temperature Skyrmions in an Antiferromagnet-Based Heterostructure. Nano Letters, 2018, 18, 980-986.	4.5	98
34	Deep Learning for Spatial Supply Noise Estimation in a Processor Chip. , 2018, , . Spin-Torque Ferromagnetic Resonance in		1
35	$W\text{Co}$ Part-per-million quantization and current-induced breakdown of the quantum anomalous Hall effect. Physical Review B, 2018, 98, .	1.1	65

#	ARTICLE	IF	CITATIONS
37	Role of dimensional crossover on spin-orbit torque efficiency in magnetic insulator thin films. Nature Communications, 2018, 9, 3612.	5.8	84
38	Topological Transitions Induced by Antiferromagnetism in a Thin-Film Topological Insulator. Physical Review Letters, 2018, 121, 096802.	2.9	42
39	Nanoscale Engineering of Ge-based Diluted Magnetic Semiconductors for Room-Temperature Spintronics Application. , 2018, , 403-419.		1
40	Exchange-biasing topological charges by antiferromagnetism. Nature Communications, 2018, 9, 2767.	5.8	61
41	Proximity-Induced Magnetic Order in a Transferred Topological Insulator Thin Film on a Magnetic Insulator. ACS Nano, 2018, 12, 5042-5050.	7.3	41
42	Large Hall angle-driven magneto-transport phenomena in topological Dirac semimetal Cd ₃ As ₂ . Applied Physics Letters, 2018, 113, .	1.5	4
43	Large Room Temperature Charge-to-Spin Conversion Efficiency in Topological Insulator/CoFeB bilayers. , 2018, , .		4
44	Nanoengineering of an Si/MnGe quantum dot superlattice for high Curie-temperature ferromagnetism. Nanoscale, 2017, 9, 3086-3094.	2.8	13
45	Observation of Quantum Hall effect in an ultra-thin (Bi _{0.53} Sb _{0.47}) ₂ Te ₃ film. Applied Physics Letters, 2017, 110, .	1.5	12
46	Zero-field edge plasmons in a magnetic topological insulator. Nature Communications, 2017, 8, 1836.	5.8	32
47	Tailoring exchange couplings in magnetic topological-insulator/antiferromagnet heterostructures. Nature Materials, 2017, 16, 94-100.	13.3	137
48	Chiral transport along magnetic domain walls in the quantum anomalous Hall effect. Npj Quantum Materials, 2017, 2, .	1.8	37
49	Spin-torque ferromagnetic resonance measurements utilizing spin Hall magnetoresistance in W/Co ₄₀ Fe ₄₀ B ₂₀ /MgO structures. Applied Physics Letters, 2016, 109, .	1.5	36
50	Electric-Field Control of Spin-Orbit Interaction for Low-Power Spintronics. Proceedings of the IEEE, 2016, 104, 1974-2008.	16.4	53
51	Enhancing electric-field control of ferromagnetism through nanoscale engineering of high-T _c Mn _x Ge _{1-x} nanomesh. Nature Communications, 2016, 7, 12866.	5.8	35
52	Electric-field control of spin-orbit torque in a magnetically doped topological insulator. Nature Nanotechnology, 2016, 11, 352-359.	15.6	212
53	Resonant magneto-optic Kerr effect in the magnetic topological insulator Cr_2Te_3 . Physical Review B, 2015, 92, .	1.1	7
54	Magnetic topological insulators and quantum anomalous hall effect. Solid State Communications, 2015, 215-216, 34-53.	0.9	90

#	ARTICLE	IF	CITATIONS
55	Nanoscale ^{125}I -nuclear magnetic resonance depth imaging of topological insulators. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, E3645-50.	3.3	16
56	Precise Quantization of the Anomalous Hall Effect near Zero Magnetic Field. Physical Review Letters, 2015, 114, 187201.	2.9	255
57	High-Current Gain Two-Dimensional MoS ₂ -Base Hot-Electron Transistors. Nano Letters, 2015, 15, 7905-7912.	4.5	52
58	Metal-to-insulator switching in quantum anomalous Hall states. Nature Communications, 2015, 6, 8474.	5.8	136
59	Spintronics of Topological Insulators. , 2015, , 1-25.		0
60	Superlattice of Fe ₃ Ge ₅ nanodots and nanolayers for spintronics application. Nanotechnology, 2014, 25, 505702.	1.3	6
61	Nanoscale Growth of GaAs on Patterned Si(111) Substrates by Molecular Beam Epitaxy. Crystal Growth and Design, 2014, 14, 593-598.	1.4	24
62	Electrical Detection of Spin-Polarized Surface States Conduction in (Bi _{0.53} Sb _{0.47}) ₂ Te ₃ Topological Insulator. Nano Letters, 2014, 14, 5423-5429.	4.5	150
63	Scale-Invariant Quantum Anomalous Hall Effect in Magnetic Topological Insulators beyond the Two-Dimensional Limit. Physical Review Letters, 2014, 113, 137201.	2.9	453
64	Proximity Induced High-Temperature Magnetic Order in Topological Insulator - Ferrimagnetic Insulator Heterostructure. Nano Letters, 2014, 14, 3459-3465.	4.5	192
65	Magnetization switching through giant spin-orbit torque in a magnetically doped topological insulator heterostructure. Nature Materials, 2014, 13, 699-704.	13.3	773
66	Thickness-dependent bulk electronic properties in Bi ₂ Se ₃ thin films revealed by infrared spectroscopy. Physical Review B, 2013, 88, .	1.1	45
67	Manipulating Surface-Related Ferromagnetism in Modulation-Doped Topological Insulators. Nano Letters, 2013, 13, 4587-4593.	4.5	77
68	Interplay between Different Magnetisms in Cr-Doped Topological Insulators. ACS Nano, 2013, 7, 9205-9212.	7.3	114
69	Electronic, and magnetic properties of the magnetically doped topological insulators Bi ₂ Se ₃ thin films	1.1	126
70	Review of 3D topological insulator thin-film growth by molecular beam epitaxy and potential applications. Physica Status Solidi - Rapid Research Letters, 2013, 7, 50-63.	1.2	145
71	Separation of top and bottom surface conduction in Bi ₂ Te ₃ thin films. Nanotechnology, 2013, 24, 015705.	1.3	44
72	Direct Atom-by-Atom Chemical Identification of Nanostructures and Defects of Topological Insulators. Nano Letters, 2013, 13, 2851-2856.	4.5	53

#	ARTICLE	IF	CITATIONS
73	Competing Weak Localization and Weak Antilocalization in Ultrathin Topological Insulators. Nano Letters, 2013, 13, 48-53.	4.5	128
74	Mapping the domain wall pinning profile by stochastic imaging reconstruction. Physical Review B, 2013, 87, .	1.1	7
75	Evidence of the two surface states of (Bi _{0.53} Sb _{0.47}) ₂ Te ₃ films grown by van der Waals epitaxy. Scientific Reports, 2013, 3, 3406.	1.6	36
76	Quantum Capacitance in Topological Insulators. Scientific Reports, 2012, 2, 669.	1.6	25
77	Revelation of Topological Surface States in Bi ₂ Se ₃ Thin Films by <i>In Situ</i> Al Passivation. ACS Nano, 2012, 6, 295-302.	7.3	102
78	Weak Anti-localization and Quantum Oscillations of Surface States in Topological Insulator Bi ₂ Se ₂ Te. Scientific Reports, 2012, 2, 726.	1.6	172
79	Surface-Dominated Conduction in a 6 nm thick Bi ₂ Se ₃ Thin Film. Nano Letters, 2012, 12, 1486-1490.	4.5	162
80	Gate-Controlled Surface Conduction in Na-Doped Bi ₂ Te ₃ Topological Insulator Nanoplates. Nano Letters, 2012, 12, 1170-1175.	4.5	126
81	Epitaxial growth of Bi ₂ Se ₃ topological insulator thin films on Si (111). Journal of Applied Physics, 2011, 109, .	1.1	126
82	Selectively-grown III-V compound semiconductor nano/micro structures on silicon for optoelectronics applications. , 2011, , .		0
83	Manipulating surface states in topological insulator nanoribbons. Nature Nanotechnology, 2011, 6, 216-221.	15.6	382
84	Structural evolution of GeMn/Ge superlattices grown by molecular beam epitaxy under different growth conditions. Nanoscale Research Letters, 2011, 6, 624.	3.1	8
85	Voltage-controlled ferromagnetic order in MnGe quantum dots. Nanotechnology, 2010, 21, 375606.	1.3	6
86	MnGe magnetic nanocolumns and nanowells. Nanotechnology, 2010, 21, 255602.	1.3	31
87	Effect of Mn concentration and growth temperature on nanostructures and magnetic properties of Ge _{1-x} Mn _x grown on Si. Journal of Crystal Growth, 2010, 312, 3034-3039.	0.7	10
88	Room-Temperature Electric-Field Controlled Ferromagnetism in Mn _{0.05} Ge _{0.95} Quantum Dots. ACS Nano, 2010, 4, 4948-4954.	7.3	34
89	“æž,,çš,,å...%ä¼è¼¼“å»æ”åˆ†æž: Chinese Optics Letters, 2010, 8, 560. 2		
90	Synthesis of High-Curie-Temperature Fe _{0.02} Ge _{0.98} Quantum Dots. Journal of the American Chemical Society, 2010, 132, 11425-11427.	6.6	13

#	ARTICLE	IF	CITATIONS
91	Mn-rich clusters in GeMn magnetic semiconductors: Structural evolution and magnetic property. Journal of Alloys and Compounds, 2010, 508, 273-277.	2.8	35