Guangheng Wu

List of Publications by Year
in descending order

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50 papers	1,863 citations	279798 23 h-index	254184 43 g-index
51 all docs	51 docs citations	51 times ranked	1986 citing authors

#	Article	IF	Citations
1	A Centrosymmetric Hexagonal Magnet with Superstable Biskyrmion Magnetic Nanodomains in a Wide Temperature Range of 100â€“340 K. Advanced Materials, 2016, 28, 6887-6893.	21.0	209
2	Observation of Various and Spontaneous Magnetic Skyrmionic Bubbles at Room Temperature in a Frustrated Kagome Magnet with Uniaxial Magnetic Anisotropy. Advanced Materials, 2017, 29, 1701144.	21.0	189
3	Electric-field-driven non-volatile multi-state switching of individual skyrmions in a multiferroic heterostructure. Nature Communications, 2020, 11, 3577.	12.8	117
4	Weak Antilocalization Effect and Noncentrosymmetric Superconductivity in a Topologically Nontrivial Semimetal LuPdBi. Scientific Reports, 2014, 4, 5709.	3.3	112
5	Combined giant inverse and normal magnetocaloric effect for room-temperature magnetic cooling. Physical Review B, 2007, 76, .	3.2	111
6	Superhigh strains by variant reorientation in the nonmodulated ferromagnetic NiMnGa alloys. Applied Physics Letters, 2002, 81, 2818-2820.	3.3	83
7	Magnetostructural Transformation and Magnetoresponsive Properties of ${m MnNiGe}_{1-x}{m Sn}_{x}$ Alloys. IEEE Transactions on Magnetics, 2011, 47, 4041-4043.	2.1	68
8	Large topological Hall effect in a geometrically frustrated kagome magnet Fe3Sn2. Applied Physics Letters, 2019, 114, .	3.3	68
9	Real-Space Observation of Nonvolatile Zero-Field Biskyrmion Lattice Generation in MnNiGa Magnet. Nano Letters, 2017, 17, 7075-7079.	9.1	64
10	Creation of Single Chain of Nanoscale Skyrmion Bubbles with Record-High Temperature Stability in a Geometrically Confined Nanostripe. Nano Letters, 2018, 18, 1274-1279.	9.1	62
11	High electron mobility and large magnetoresistance in the half-Heusler semimetal LuPtBi. Physical Review B, 2015, 92, .	3.2	51
12	Large low-field positive magnetoresistance in nonmagnetic half-Heusler ScPtBi single crystal. Applied Physics Letters, 2015, 107, .	3.3	50
13	Currentâ€Induced Helicity Reversal of a Single Skyrmionic Bubble Chain in a Nanostructured Frustrated Magnet. Advanced Materials, 2020, 32, e1904815.	21.0	47
14	Local Disorder-Induced Elevation of Intrinsic Anomalous Hall Conductance in an Electron-Doped Magnetic Weyl Semimetal. Physical Review Letters, 2020, 125, 086602.	7.8	45
15	33% Giant Anomalous Hall Current Driven by Both Intrinsic and Extrinsic Contributions in Magnetic Weyl Semimetal Co₃Sn₂S₂. Advanced Functional Materials, 2020, 30, 2000830.	14.9	44
16	Manipulating the Topology of Nanoscale Skyrmion Bubbles by Spatially Geometric Confinement. ACS Nano, 2019, 13, 922-929.	14.6	43
17	NMR Evidence for the Topologically Nontrivial Nature in a Family of Half-Heusler Compounds. Scientific Reports, 2016, 6, 23172.	3.3	41
18	Metamagnetic phase transformation in Mn50Ni37In10Co3 polycrystalline alloy. Applied Physics Letters, 2011, 98, .	3.3	40

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19	Ferromagnetism in the Mn-based Heusler alloy Mn2NiSb. Journal of Applied Physics, 2009, 105, .	2.5	31
20	On the anisotropies of magnetization and electronic transport of magnetic Weyl semimetal Co3Sn2S2. Applied Physics Letters, 2019, 115, 212403.	3.3	31
21	Generation of high-density biskyrmions by electric current. Npj Quantum Materials, 2017, 2, .	5.2	30
22	Large and Anisotropic Linear Magnetoresistance in Single Crystals of Black Phosphorus Arising From Mobility Fluctuations. Scientific Reports, 2016, 6, 23807.	3.3	26
23	Tuning antiferromagnetic exchange interaction for spontaneous exchange bias in MnNiSnSi system. APL Materials, 2017, 5, .	5.1	25
24	Large anisotropic topological Hall effect in a hexagonal non-collinear magnet Fe5Sn3. Applied Physics Letters, 2020, 116, .	3.3	23
25	Large topological Hall effect in nonchiral hexagonal MnNiGa films. Applied Physics Letters, 2017, 110, .	3.3	21
26	Large anomalous Hall effect in a hexagonal ferromagnetic <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi mathvariant="normal">F</mml:mi><mml:msub><mml:mi mathvariant="normal">e</mml:mi><mml:mn>5</mml:mn></mml:msub><mml:mi mathvariant="normal">S</mml:mi><mml:msub><mml:mi mathvariant="normal">n</mml:mi><mml:mn>3</mml:mn></mml:msub></mml:mrow></mml:math> single	3.2	18
27	Structure and magnetic properties of highly ordered Co2NiGa alloys. Journal of Applied Physics, 2007, 101, 09N503.	2.5	17
28	Robust anomalous Hall effect and temperature-driven Lifshitz transition in Weyl semimetal Mn₃Ge. Nanoscale, 2021, 13, 2601-2608.	5.6	17
29	NMR investigation of atomic and electronic structures of half-Heusler topologically nontrivial semimetals. Physica Status Solidi (B): Basic Research, 2015, 252, 357-360.	1.5	16
30	Tunable positive magnetoresistance and crossover from weak antilocalization to weak localization transition in half-Heusler compounds RPtBi (Râ€‰=â€‰lanthanide). Applied Physics Letters, 2020, 116, 101902.	3.3	16
31	The structural and magnetic properties of Mn2â^'xFexNiGa Heusler alloys. Journal of Applied Physics, 2010, 107, .	2.5	14
32	Atomic-Level Characterization of Dynamics of Copper Ions in CuAgSe. Journal of Physical Chemistry C, 2016, 120, 3229-3234.	3.1	13
33	Manipulating Spin Chirality of Magnetic Skyrmion Bubbles by In-Plane Reversed Magnetic Fields in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" overflow="scroll"><mml:mo stretchy="false">(</mml:mo><mml:msub><mml:mi>Mn</mml:mi><mml:mrow><mml:mn>1</mml:mn><mml:mo>â^'	3.8	13
34	Physical Review Applied, 2019, 12, . Anomalous Hall effect in quarternary Heusler-type Ni50Mn17Fe8Ga25 melt-spun ribbons. Applied Physics Letters, 2009, 95, .	3.3	12
35	Crystal-orientation dependence of magnetic domain structures in the skyrmion-hosting magnets MnNiGa. APL Materials, 2018, 6, 076101.	5.1	12
36	Chiral-anomaly induced large negative magnetoresistance and nontrivial Ï€-Berry phase in half-Heusler compounds RPtBi (R=Tb, Ho, and Er). Applied Physics Letters, 2020, 116, .	3.3	12

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37	Magnetic properties in Laves phase CexDy1â^'xFe2 intermetallics. Journal of Applied Physics, 1997, 82, 4424-4427.	2.5	10
38	A new Heusler compound Cu2FeAl: electronic structure, magnetism and transport properties. Physica Status Solidi A, 2004, 201, 1570-1577.	1.7	10
39	Synthesis and magnetic properties of Al doped Zn0.995Mn0.005O powers. Applied Physics Letters, 2009, 94, .	3.3	9
40	Coherent spin rotation-induced zero thermal expansion in MnCoSi-based spiral magnets. NPG Asia Materials, 2021, 13, .	7.9	9
41	Half-metallic ferromagnetism in hypothetical wurtzite MBi (M=V, Cr, Mn). Journal of Applied Physics, 2005, 97, 10C306.	2.5	8
42	Thermally induced generation and annihilation of magnetic chiral skyrmion bubbles and achiral bubbles in Mnâ€“Niâ€“Ga magnets. Applied Physics Letters, 2020, 116, .	3.3	8
43	Magnetic-field-induced transformation and strain in polycrystalline FeMnGa ferromagnetic shape memory alloys with high cold-workability. Applied Physics Letters, 2021, 119, .	3.3	4
44	First-principles investigation of possible martensitic transformation and magnetic properties of Heusler-type Pt2-xMn1+xIn alloys. Functional Materials Letters, 2015, 08, 1550064.	1.2	3
45	A method of measuring dynamic strain under electromagnetic forming conditions. Review of Scientific Instruments, 2016, 87, 043902.	1.3	3
46	Planar topological Hall effect in a hexagonal ferromagnetic Fe5Sn3 single crystal. Applied Physics Letters, 2021, 118, 182407.	3.3	3
47	Large spontaneous shape memory and magnetic-field induced strain in Ni51Mn25.5Ga23.5single crystal. Physica Status Solidi (A) Applications and Materials Science, 2006, 203, 2532-2537.	1.8	2
48	Structure-controlled Synthesis and Magnetism of CoCu Nanowires. Chemistry Letters, 2013, 42, 1108-1109.	1.3	2
49	Electric field gradients in 2Hâ€“NbSe₂: ⁹³Nb NMR measurements and first-principles calculations. Journal of Physics Condensed Matter, 2020, 33, 045404.	1.8	1
50	Alternative Current Magnetic Permeability of Fe81Ga19 Alloy with Bias Magnetic Fields. Materials Research Society Symposia Proceedings, 2011, 1295, 71.	0.1	0