Magnetic skyrmions: advances in physics and potential

Nature Reviews Materials

2,

DOI: 10.1038/natrevmats.2017.31

Citation Report

#	Article	IF	Citations
1	Biâ€Stability of Magnetic Skyrmions in Ultrathin Multilayer Nanodots Induced by Magnetostatic Interaction. Physica Status Solidi - Rapid Research Letters, 2017, 11, 1700259.	1.2	15
2	Skyrmions in magnetic multilayers. Physics Reports, 2017, 704, 1-49.	10.3	412
3	Skyrmion dynamicsÂin a frustrated ferromagnetic filmÂand current-induced helicity locking-unlocking transition. Nature Communications, 2017, 8, 1717.	5.8	147
4	Tuning domain wall velocity with Dzyaloshinskii-Moriya interaction. Applied Physics Letters, 2017, 111, .	1.5	40
5	Skyrmion dynamics in width-varying nanotracks and implications for skyrmionic applications. Applied Physics Letters, 2017, 111, .	1.5	29
6	Topological spin-hedgehog crystals of a chiral magnet as engineered with magnetic anisotropy. Physical Review B, 2017, 96, .	1.1	25
7	Helical waves in easy-plane antiferromagnets. Physical Review B, 2017, 96, .	1.1	4
8	Excess velocity of magnetic domain walls close to the depinning field. Physical Review B, 2017, 96, .	1.1	18
9	Tailoring magnetic skyrmions by geometric confinement of magnetic structures. Applied Physics Letters, 2017, 111, 242405.	1.5	8
10	A compact skyrmionic leakyâ€“integrateâ€“fire spiking neuron device. Nanoscale, 2018, 10, 6139-6146.	2.8	96
11	Collective magnetic skyrmion gyrotropic modes in a dot chain. Journal of Physics Communications, 2018, 2, 035009.	0.5	7
13	Direct Observation of Domain-Wall Surface Tension by Deflating or Inflating a Magnetic Bubble. Physical Review Applied, 2018, 9, .	1.5	27
14	Dynamics of a magnetic skyrmionium driven by spin waves. Applied Physics Letters, 2018, 112, .	1.5	43
15	Skyrmion glass in a 2D Heisenberg ferromagnet with quenched disorder. New Journal of Physics, 2018, 20, 033006.	1.2	16
16	Designing Hysteresis with Dipolar Chains. Physical Review Letters, 2018, 120, 157202.	2.9	11
17	Analysis of electrical-field-dependent Dzyaloshinskii-Moriya interaction and magnetocrystalline anisotropy in a two-dimensional ferromagnetic monolayer. Physical Review B, 2018, 97, .	1.1	79
18	Fast micromagnetic simulations on GPUâ€”recent advances made with $mathsf{mumax}^3$. Journal Physics D: Applied Physics, 2018, 51, 123002.	1.3	96
19	Stabilization of magnetic skyrmions by RKKY interactions. Physical Review B, 2018, 97, .	1.1	19

#	Article	IF	Citations
20	Face Centered Cubic and Hexagonal Close Packed Skyrmion Crystals in Centrosymmetric Magnets. Physical Review Letters, 2018, 120, 077202.	2.9	35
21	Magnetization pinning in modulated nanowires: from topological protection to the â€œcorkscrewâ€• mechanism. Nanoscale, 2018, 10, 5923-5927.	2.8	51
22	Antiferromagnetic spintronics. Reviews of Modern Physics, 2018, 90, .	16.4	1,536
23	Potential implementation of reservoir computing models based on magnetic skyrmions. AIP Advances, 2018, 8, .	0.6	121
24	Vortex-chirality-dependent standing spin-wave modes in soft magnetic nanotubes. Journal of Applied Physics, 2018, 123, .	1.1	13
25	Chirality in Magnetic Multilayers Probed by the Symmetry and the Amplitude of Dichroism in X-Ray Resonant Magnetic Scattering. Physical Review Letters, 2018, 120, 037202.	2.9	59
26	Multiplet of Skyrmion States on a Curvilinear Defect: Reconfigurable Skyrmion Lattices. Physical Review Letters, 2018, 120, 067201.	2.9	64
27	Mesoscale Dzyaloshinskii-Moriya interaction: geometrical tailoring of the magnetochirality. Scientific Reports, 2018, 8, 866.	1.6	43
28	Chemical Pressure Stabilization of the Cubic B20 Structure in Skyrmion Hosting Fe_{1â€“x}Co_xGe Alloys. Chemistry of Materials, 2018, 30, 1146-1154.	3.2	21
29	Observation of unconventional anomalous Hall effect in epitaxial CrTe thin films. Nano Research, 2018, 11, 3116-3121.	5.8	63
30	Probing condensed matter physics with magnetometry based on nitrogen-vacancy centres in diamond. Nature Reviews Materials, 2018, 3, .	23.3	376
31	A transmission electron microscope study of NÃ©el skyrmion magnetic textures in multilayer thin film systems with large interfacial chiral interaction. Scientific Reports, 2018, 8, 5703.	1.6	38
32	Theory of high-resolution tunneling spin transport on a magnetic skyrmion. Physical Review B, 2018, 97, .	1.1	2
33	Nanoscale control of perpendicular magnetic anisotropy, coercive force and domain structure in ultrathin Ru/Co/W/Ru films. Journal of Magnetism and Magnetic Materials, 2018, 454, 78-84.	1.0	12
34	Direct writing of room temperature and zero field skyrmion lattices by a scanning local magnetic field. Applied Physics Letters, 2018, 112, .	1.5	68
35	Topological Hall effect in diffusive ferromagnetic thin films with spin-flip scattering. Physical Review B, 2018, 97, .	1.1	11
36	Theory of isolated magnetic skyrmions: From fundamentals to room temperature applications. Scientific Reports, 2018, 8, 4464.	1.6	255
37	Laser-Induced Skyrmion Writing and Erasing in an Ultrafast Cryo-Lorentz Transmission Electron Microscope. Physical Review Letters, 2018, 120, 117201.	2.9	115

#	Article	IF	Citations
38	Avalanches and Criticality in Driven Magnetic Skyrmions. Physical Review Letters, 2018, 120, 117203.	2.9	22
39	Magnetic Recording Measurements. , 2018, , .		0
40	Topological Defects in Helical Magnets. Journal of Experimental and Theoretical Physics, 2018, 127, 922-932.	0.2	4
41	Realization of artificial skyrmion in CoCrPt/NiFe bilayers. Chinese Physics B, 2018, 27, 127503.	0.7	2
42	Magnetic Skyrmion Dynamics in Wedge-shaped Nanotrack and Its Potential Applications.. , 2018, , .		0
43	Magnetostatics of magnetic skyrmion crystals. New Journal of Physics, 2018, 20, 063029.	1.2	5
44	Single Chiral Skyrmions in Ultrathin Magnetic Films. Materials, 2018, 11, 2238.	1.3	7
45	Alternative to the topological interpretation of the transverse resistivity anomalies in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>SrRuO</mml:mi><mml:mn>3</mml:mn></mml:msub> Physical Review B, 2018, 98, .	1.1	17
46	Spin-motive force due to domain-wall motion in the presence of Dzyaloshinskii-Moriya interaction. Physical Review B, 2018, 98, .	1.1	5
47	General theory of the topological Hall effect in systems with chiral spin textures. Physical Review B, 2018, 98, .	1.1	44
48	Strain-mediated voltage-controlled switching of magnetic skyrmions in nanostructures. Npj Computational Materials, 2018, 4, .	3.5	46
49	Observation of room-temperature magnetic skyrmions in Pt/Co/W structures with a large spin-orbit coupling. Physical Review B, 2018, 98, .	1.1	25
50	Collective antiskyrmion-mediated phase transition and defect-induced melting in chiral magnetic films. Scientific Reports, 2018, 8, 16675.	1.6	8
51	Duplication, Collapse, and Escape of Magnetic Skyrmions Revealed Using a Systematic Saddle Point Search Method. Physical Review Letters, 2018, 121, 197202.	2.9	36
52	Creation of a thermally assisted skyrmion lattice in Pt/Co/Ta multilayer films. Applied Physics Letters, 2018, 113, .	1.5	38
53	Antiferromagnetic MnNi tips for spin-polarized scanning probe microscopy. Review of Scientific Instruments, 2018, 89, 123706.	0.6	6
54	Formation of a Domain Structure in Multilayer CoPt Films by Magnetic Probe of an Atomic Force Microscope. Physics of the Solid State, 2018, 60, 2200-2206.	0.2	18
55	Chiral Skyrmion and Skyrmionium States Engineered by the Gradient of Curvature. Physical Review Applied, 2018, 10, .	1.5	26

#	Article	IF	Citations
56	Perspective: Magnetic skyrmionsâ€"Overview of recent progress in an active research field. Journal of Applied Physics, 2018, 124, .	1.1	387
57	Cooperative Charge Pumping and Enhanced Skyrmion Mobility. Physical Review Letters, 2018, 121, 257203.	2.9	9
58	Modeling the Shape of Axisymmetric Skyrmions in Magnetic Multilayers. Physical Review Applied, 2018, 10, .	1.5	31
59	Control of ferromagnetism and magnetic anisotropy via tunable electron correlation and spin-orbital coupling in La0.67Ca0.33MnO3/Ca(Ir,Ru)O3 superlattices. Applied Physics Letters, 2018, 113, 231601.	1.5	10
60	A Comparative Study on Racetrack Memories: Domain Wall vs. Skyrmion. , 2018, , .		10
61	Relaxation Dynamics of Zero-Field Skyrmions over a Wide Temperature Range. Nano Letters, 2018, 18, 7777-7783.	4.5	22
62	Elusive spin textures discovered. Nature, 2018, 564, 43-44.	13.7	8
63	Annealing effect and interlayer modulation on magnetic damping of CoFeB/interlayer/Pt thin films. Applied Physics Letters, 2018, 113, .	1.5	16
64	Topological Hall effect for electron scattering on nanoscale skyrmions in external magnetic field. Physical Review B, 2018, 98, .	1.1	8
65	Morphological stripe-bubble transition in remanent magnetic domain patterns of Co/Pt multilayer films and its dependence on Co thickness. Physical Review B, 2018, 98, .	1.1	20
66	Dzyaloshinskii-Moriya interaction at disordered interfaces from ab initio theory: Robustness against intermixing and tunability through dusting. Applied Physics Letters, 2018, 113, .	1.5	42
67	Topological Materials in Heusler Compounds. Springer Series in Solid-state Sciences, 2018, , 199-210.	0.3	1
68	Torsion-induced vortex switching and skyrmion-like state in ferroelectric nanodisks. Journal of Physics Condensed Matter, 2018, 30, 465304.	0.7	14
69	Enhancement of spin-orbit coupling at manganite surfaces. Physical Review B, 2018, 98, .	1.1	5
70	New magnetic phase of the chiral skyrmion material Cu ₂ OSeO ₃. Science Advances, 2018, 4, eaat7323.	4.7	66
71	Skyrmions in the MoirÃ© of van der Waals 2D Magnets. Nano Letters, 2018, 18, 7194-7199.	4.5	168
72	Impurity-induced orbital magnetization in a Rashba electron gas. Physical Review B, 2018, 98, .	1.1	4
73	Magnetic Skyrmions in Thin Films. Springer Series in Solid-state Sciences, 2018, , 117-150.	0.3	1

#	Article	IF	Citations
74	Writing skyrmions with a magnetic dipole. Journal of Applied Physics, 2018, 124, .	1.1	20
75	Spontaneous nanometric magnetic bubbles with various topologies in spin-reoriented La1â^'xSrxMnO3. Applied Physics Letters, 2018, 113, .	1.5	7
76	Electronic and magnetic structure investigation of vanadium doped ZnO nanostructure. Vacuum, 2018, 158, 257-262.	1.6	25
77	Skyrmion Lattice Topological Hall Effect near Room Temperature. Scientific Reports, 2018, 8, 15510.	1.6	25
78	Ferroelectrically tunable magnetic skyrmions in ultrathin oxide heterostructures. Nature Materials, 2018, 17, 1087-1094.	13.3	265
79	Universality of defect-skyrmion interaction profiles. Nature Communications, 2018, 9, 4395.	5.8	53
80	Spatial Bunching of Same-Index Polarization Singularities in Two-Dimensional Random Vector Waves. Physical Review X, 2018, 8, .	2.8	5
81	Pb-induced skyrmions in a double layer of Fe on Ir(111). Physical Review B, 2018, 98, .	1.1	3
82	Thermodynamic evidence of a second skyrmion lattice phase and tilted conical phase in<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>Cu</mml:mi><mml:mn> Physical Review B, 2018, 98, .	1.1	32
83	High-resolution combined tunneling electron charge and spin transport theory of NÃ©el and Bloch skyrmions. Physical Review B, 2018, 98, .	1.1	5
84	Nucleation of stripe domains in thin ferromagnetic films. Physical Review B, 2018, 98, .	1.1	4
85	Magnetic Ground State Stabilized by Three-Site Interactions: <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mi>Fe</mml:mi><mml:mo>/</mml:mo><mml:mi>Rh</mml:mi><mml:mo stretchy="false">(</mml:mo><mml:mn>111</mml:mn><mml:mo) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 287 Td (stretchy="false	2.9	38
86	Evolution of topological skyrmions across the spin reorientation transition in Pt/Co/Ta multilayers. Physical Review B, 2018, 97, .	1.1	41
87	Creation of localized skyrmion bubbles in Co/Pt bilayers using a spin-valve nanopillar. Physical Review B, 2018, 97, .	1.1	7
88	Electrical-field-induced magnetic Skyrmion ground state in a two-dimensional chromium tri-iodide ferromagnetic monolayer. AIP Advances, 2018, 8, .	0.6	25
89	Tuning the Dzyaloshinskiiâ€"Moriya interaction in Pt/Co/MgO heterostructures through the MgO thickness. Nanoscale, 2018, 10, 12062-12067.	2.8	66
90	Magnetic domain wall creep and depinning: A scalar field model approach. Physical Review E, 2018, 97, 062122.	0.8	18
91	Ferrimagnetic Heterostructures for Applications in Magnetic Recording. , 2018, , 267-331.		12

#	Article	IF	Citations
92	Lorentz transmission electron microscopy studies on topological magnetic domains. Chinese Physics B, 2018, 27, 066802.	0.7	19
93	Topological Order Generated by a Random Field in a 2D Exchange Model. Physical Review Letters, 2018, 121, 017201.	2.9	14
94	Compass-anisotropy-modulated helical states and skyrmion crystals in chiral magnets. Physics Letters, Section A: General, Atomic and Solid State Physics, 2018, 382, 2944-2951.	0.9	3
95	Correlation between domain wall creep parameters of thin ferromagnetic films. Applied Physics Letters, 2018, 112, .	1.5	11
96	Heusler, Weyl and Berry. Nature Reviews Materials, 2018, 3, 244-256.	23.3	250
97	Twisted skyrmions at domain boundaries and the method of image skyrmions. Physical Review B, 2018, 98, .	1.1	16
98	Quantum collapse of a magnetic skyrmion. Physical Review B, 2018, 98, .	1.1	35
99	Fluctuation-induced NÃ©el and Bloch skyrmions at topological insulator surfaces. Physical Review B, 2018, 98, .	1.1	8
100	Defectâ€Induced Anomalous Transverse Resistivity in an Itinerant Ferromagnetic Oxide. Physica Status Solidi (B): Basic Research, 2018, 255, 1800175.	0.7	24
101	Magnetic field gradient driven dynamics of isolated skyrmions and antiskyrmions in frustrated magnets. New Journal of Physics, 2018, 20, 053037.	1.2	37
102	Circular heat and momentum flux radiated by magneto-optical nanoparticles. Physical Review B, 2018, 97, .	1.1	41
103	Efficient in-line skyrmion injection method for synthetic antiferromagnetic systems. New Journal of Physics, 2018, 20, 013029.	1.2	8
104	Distinct magnetic field dependence of NÃ©el skyrmion sizes in ultrathin nanodots. Scientific Reports, 2018, 8, 6280.	1.6	34
105	Enhanced interfacial Dzyaloshinskii-Moriya interaction and isolated skyrmions in the inversion-symmetry-broken Ru/Co/W/Ru films. Applied Physics Letters, 2018, 112, .	1.5	36
106	Determination of chirality and density control of NÃ©el-type skyrmions with in-plane magnetic field. Communications Physics, 2018, 1, .	2.0	48
107	Trochoidal motion and pair generation in skyrmion and antiskyrmion dynamics under spinâ€"orbit torques. Nature Electronics, 2018, 1, 451-457.	13.1	66
108	Magnetic domain texture and the Dzyaloshinskii-Moriya interaction in Pt/Co/IrMn and Pt/Co/FeMn thin films with perpendicular exchange bias. Physical Review B, 2018, 98, .	1.1	22
109	Imaging Magnetic Domains in Functional Nanoscale Heterostructures using Lorentz microscopy. Microscopy and Microanalysis, 2018, 24, 910-911.	0.2	0

#	Article	IF	Citations
110	Scalable magnetic skyrmions in nanostructures. Computational Materials Science, 2018, 154, 481-487.	1.4	13
111	Skyrmion Gas Manipulation for Probabilistic Computing. Physical Review Applied, 2018, 9, .	1.5	148
112	Pure spin currents in magnetically ordered insulator/normal metal heterostructures. Journal Physics D: Applied Physics, 2018, 51, 313001.	1.3	41
113	Role of the Heavy Metalâ€™s Crystal Phase in Oscillations of Perpendicular Magnetic Anisotropy and the Interfacial Dzyaloshinskii-Moriya Interaction in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mi mathvariant="normal">W</mml:mi><mml:mo>/</mml:mo><mml:mi>Co</mml:mi><mml:mtext>â^'</mml:mtext><mml:mi>Fe</mml:mi><mml:mi mathvariant="normal">B</mml:mi><mml:mo>/</mml:mo><mml:mi>MgO</mml:mi></mml:mrow></mml:math> Films. Physical Review Applied, 2018, 9, .	1.5	29
114	Comparing skyrmions and merons in chiral liquid crystals and magnets. Physical Review E, 2018, 97, 062706.	0.8	39
115	Majorana bound states in magnetic skyrmions imposed onto a superconductor. Physical Review B, 2019, 100, .	1.1	46
116	Orbital Magnetic Moments in Strained SrRuO₃ Thin Films. Journal of the Physical Society of Japan, 2019, 88, 084708.	0.7	4
117	Tunable magnetic skyrmions in spintronic nanostructures for cellular-level magnetic neurostimulation. Journal Physics D: Applied Physics, 2019, 52, 465002.	1.3	8
118	Switching magnetization with a Weyl semimetal. Nature Nanotechnology, 2019, 14, 923-924.	15.6	0
119	Stabilty of biskyrmions in centrosymmetric magnetic films. Physical Review B, 2019, 100, .	1.1	22
120	Route to form skyrmions in soft magnetic films. APL Materials, 2019, 7, .	2.2	15
121	Experimental Observation of Exchange-Driven Chiral Effects in Curvilinear Magnetism. Physical Review Letters, 2019, 123, 077201.	2.9	57
122	Hydrodynamics of three-dimensional skyrmions in frustrated magnets. Physical Review B, 2019, 100, .	1.1	12
123	Optimizing propagating spin wave spectroscopy. Applied Physics Letters, 2019, 115, .	1.5	13
124	Mapping magnetization states in ultrathin films with Dzyaloshinskiiâ€"Moriya interaction. New Journal of Physics, 2019, 21, 093022.	1.2	9
125	Isolated zero field sub-10â€‰nm skyrmions in ultrathin Co films. Nature Communications, 2019, 10, 3823.	5.8	84
126	Skyrmions and Hall transport. Journal of Physics Condensed Matter, 2019, 31, 383001.	0.7	15
127	Weak localization in systems with chiral spin textures and skyrmion crystals. Physical Review B, 2019, 100, .	1.1	2

#	Article	IF	Citations
128	Surface pinning and triggered unwinding of skyrmions in a cubic chiral magnet. Physical Review B, 2019, 100, .	1.1	2
129	Directional spin-wave propagation in the skyrmion chain. Journal of Magnetism and Magnetic Materials, 2019, 490, 165542.	1.0	6
130	Spintronics, from giant magnetoresistance to magnetic skyrmions and topological insulators. Comptes Rendus Physique, 2019, 20, 817-831.	0.3	42
131	Manipulation of magnetic skyrmions by superconducting vortices in ferromagnet-superconductor heterostructures. Physical Review B, 2019, 100, .	1.1	32
132	Control of vortex chirality in bi-component magnetic nanodisks. Applied Physics Letters, 2019, 115, 042402.	1.5	7
133	Chiral spin ordering of electron gas in solids with broken time reversal symmetry. Scientific Reports, 2019, 9, 10817.	1.6	4
134	Experimental Observation of Single Skyrmion Signatures in a Magnetic Tunnel Junction. Physical Review Letters, 2019, 122, 257201.	2.9	47
135	Formation of Zeroâ€Field Magnetic Bubbles and Magnetic Phase Transitions in PbFe 12 O 19 via In Situ Lorentz Microscopy. Physica Status Solidi (B): Basic Research, 2019, 256, 1900157.	0.7	2
136	Direct current-tunable MHz to multi-GHz skyrmion generation and control. Scientific Reports, 2019, 9, 9496.	1.6	7
137	Measuring the formation energy barrier of skyrmions in zinc-substituted <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>Cu</mml:mi><mml:mn>2</mml:mn></mml Physical Review B, 2019, 99, .	1.1	19
138	Interfacial spin Seebeck effect in noncollinear magnetic systems. Physical Review B, 2019, 99, .	1.1	18
139	Universality of annihilation barriers of large magnetic skyrmions in chiral and frustrated magnets. Physical Review B, 2019, 100, .	1.1	27
140	Tuning Magnetic Chirality by Dipolar Interactions. Physical Review Letters, 2019, 123, 157201.	2.9	25
141	Photonic Heterostructures for Spin-Flipped Beam Splitting. Physical Review Applied, 2019, 12, .	1.5	13
142	Skyrmion-Based Ultra-Low Power Electric-Field-Controlled Reconfigurable (SUPER) Logic Gate. IEEE Electron Device Letters, 2019, 40, 1984-1987.	2.2	45
143	Scaling and channelling behavior of helical and skyrmion spin textures in thin films of Te-doped Cu2OSeO3. Microscopy and Microanalysis, 2019, 25, 30-31.	0.2	0
144	Comparative study of topological Hall effect and skyrmions in NiMnIn and NiMnGa. Applied Physics Letters, 2019, 115, 172404.	1.5	20
145	Complex magnetism of B20-MnGe: from spin-spirals, hedgehogs to monopoles. Journal of Physics Condensed Matter, 2019, 31, 485801.	0.7	12

#	Article	IF	Citations
146	Nonequilibrium skyrmion accumulation induced by direct current in Ir/Co/Pt heterostructure. Applied Physics Express, 2019, 12, 073002.	1.1	8
147	Electric-field control of collective spin excitations in NÃ©el-type skyrmions. Applied Physics Express, 2019, 12, 093003.	1.1	3
148	Topological Magnetic-Spin Textures in Two-Dimensional van der Waals Cr₂Ge₂Te₆. Nano Letters, 2019, 19, 7859-7865.	4.5	116
149	Tuning Resonance Frequency of Spin Wave Localized in an Isolated Skyrmion by Magnetoelectric Couplings. Spin, 2019, 09, 1950009.	0.6	1
150	Dynamics of an antiferromagnetic skyrmion in a racetrack with a defect. Physical Review B, 2019, 100, .	1.1	37
151	Formation of NÃ©el-type skyrmions in an antidot lattice with perpendicular magnetic anisotropy. Physical Review B, 2019, 100, .	1.1	18
152	Analytical modeling of the interaction between skyrmions and extended defects. Physical Review B, 2019, 100, .	1.1	16
153	Evidence for Magnetic Skyrmions at the Interface of Ferromagnet/Topological-Insulator Heterostructures. Nano Letters, 2019, 19, 6144-6151.	4.5	60
154	Thermal collapse of a skyrmion. Journal of Applied Physics, 2019, 126, .	1.1	12
155	Magneto-Optical and Micromagnetic Properties of Ferromagnet/Heavy Metal Thin Film Structures. International Journal of Nanoscience, 2019, 18, 1940019.	0.4	8
156	Controlling skyrmion bubble confinement by dipolar interactions. Applied Physics Letters, 2019, 115, .	1.5	7
157	Ultrafast control of spin interactions in honeycomb antiferromagnetic insulators. Physical Review B, 2019, 100, .	1.1	19
158	Micromagnetic and Magnetooptical Properties of Ferromagnetic/Heavy Metal Thin Film Structures. Physics of the Solid State, 2019, 61, 1577-1582.	0.2	5
159	Opportunities and challenges for magnetoelectric devices. APL Materials, 2019, 7, .	2.2	84
160	Current-induced spin-orbit torques in ferromagnetic and antiferromagnetic systems. Reviews of Modern Physics, 2019, 91, .	16.4	899
161	Tunable skyrmion-skyrmion binding on the surface of a topological insulator. Physical Review B, 2019, 100, .	1.1	9
162	Electrifying skyrmion bubbles. Nature, 2019, 568, 322-323.	13.7	2
163	Stabilization of the skyrmion crystal phase and transport in thin-film antiferromagnets. Physical Review B, 2019, 100, .	1.1	9

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164	Generation and stability of structurally imprinted target skyrmions in magnetic multilayers. Applied Physics Letters, 2019, 115, .	1.5	14
165	Smectic Liquid-Crystalline Structure of Skyrmions in Chiral Magnet Co8.5Zn7.5Mn4(110) Thin Film. Physical Review Letters, 2019, 123, 137203.	2.9	24
166	Skyrmion motion induced by voltage-controlled in-plane strain gradients. Applied Physics Letters, 2019, 115, .	1.5	40
167	Ultrafast spin dynamics and spintronics for ferrimagnets close to the spin compensation point (Review). Low Temperature Physics, 2019, 45, 935-963.	0.2	44
168	Identifying magnetic skyrmions in polycrystalline MnSi via magnetometry. Materials Letters, 2019, 257, 126714.	1.3	4
169	Magnetic topological insulators. Nature Reviews Physics, 2019, 1, 126-143.	11.9	636
170	Chaotic dynamics in spin-vortex pairs. Physical Review B, 2019, 99, .	1.1	12
171	Magnon Modes for a Magnetic Disc in a Cone Vortex State. Low Temperature Physics, 2019, 45, 92-97.	0.2	1
172	The limit to realize an isolated magnetic single skyrmionic state. Journal of Materials Chemistry C, 2019, 7, 1337-1344.	2.7	5
173	Concept of artificial magnetoelectric materials via geometrically controlling curvilinear helimagnets. Journal Physics D: Applied Physics, 2019, 52, 345001.	1.3	24
174	Collective modes of three-dimensional magnetic structures: A study of target skyrmions. Journal of Magnetism and Magnetic Materials, 2019, 489, 165447.	1.0	11
175	Comparison of first-principles methods to extract magnetic parameters in ultrathin films: Co/Pt(111). Physical Review B, 2019, 99, .	1.1	39
176	Spin-orbit torque magnetoresistive random-access memory (SOT-MRAM). , 2019, , 203-235.		4
177	Order and disorder in the magnetization of the chiral crystal <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi mathvariant="normal">CrNb</mml:mi><mml:mn>3</mml:mn></mml:msub><mml:msub><mml:mi mathvariant="normal">S</mml:mi><mml:mn>6</mml:mn></mml:msub></mml:math>. Physical Review B, 2019, 99, .	1.1	27
178	Electrical Detection of Magnetic Skyrmions. Journal of Low Temperature Physics, 2019, 197, 321-336.	0.6	22
180	Quantification of Mixed Bloch-NÃ©el Topological Spin Textures Stabilized by the Dzyaloshinskii-Moriya Interaction in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mrow><mml:mi>Co</mml:mi><mml:mo>/</mml:mo><mml:mi>Pd</mml:mi></mml:mrow></mml:mrow> Multilayers. Physical Review Letters, 2019, 122, 237201.	2.9	40
181	Continuous nucleation dynamics of magnetic skyrmions in T-shaped chiral ferromagnetic nanojunction. Journal of Magnetism and Magnetic Materials, 2019, 489, 165372.	1.0	3
182	Configurational entropy of magnetic skyrmions as an ideal gas. Physical Review B, 2019, 99, .	1.1	17

#	Article	IF	Citations
183	Modulation of Heavy Metal/Ferromagnetic Metal Interface for Highâ€Performance Spintronic Devices. Advanced Electronic Materials, 2019, 5, 1900134.	2.6	64
184	Impact of interlayer coupling on magnetic skyrmion size. Journal of Magnetism and Magnetic Materials, 2019, 489, 165399.	1.0	8
185	Structure and Magnetic Properties of (Cr,Ni)₄₋_xCo_xSi. Solid State Phenomena, 2019, 289, 108-113.	0.3	1
186	Nanoscale magnetic skyrmions and target states in confined geometries. Physical Review B, 2019, 99, .	1.1	44
187	Application of machine learning to two-dimensional Dzyaloshinskii-Moriya ferromagnets. Physical Review B, 2019, 99, .	1.1	23
188	Effect of Dzyaloshinskiiâ€"Moriya Interaction Energy Confinement on Currentâ€Driven Dynamics of Skyrmions. Physica Status Solidi - Rapid Research Letters, 2019, 13, 1900090.	1.2	11
189	Deterministic Switching of Ferroelectric Bubble Nanodomains. Advanced Functional Materials, 2019, 29, 1808573.	7.8	30
190	Dipolar interactions in Fe: A study with the neutron Larmor precession technique MIEZE in a longitudinal field configuration. Physical Review B, 2019, 99, .	1.1	9
191	Topological and Chiral Spin Hall Effects. Physica Status Solidi (B): Basic Research, 2019, 256, 1900033.	0.7	7
192	Spin-wave mediated interactions for majority computation using Skyrmions and spin-torque nano-oscillators. Journal of Magnetism and Magnetic Materials, 2019, 486, 165271.	1.0	5
193	Scaling of domain cascades in stripe and skyrmion phases. Nature Communications, 2019, 10, 1988.	5.8	9
194	Spin fluctuations, geometrical size effects, and zero-field topological order in textured MnSi thin films. Physical Review B, 2019, 99, .	1.1	4
195	Current-Driven Dynamics of Frustrated Skyrmions in a Synthetic Antiferromagnetic Bilayer. Physical Review Applied, 2019, 11, .	1.5	31
196	Skyrmion Hall effect with spatially modulated Dzyaloshinskiiâ€"Moriya interaction. Frontiers of Physics, 2019, 14, 1.	2.4	6
197	Twists in ferromagnetic monolayers with trigonal prismatic symmetry. Physical Review B, 2019, 99, .	1.1	9
198	Topological transitions among skyrmion- and hedgehog-lattice states in cubic chiral magnets. Nature Communications, 2019, 10, 1059.	5.8	112
199	Interaction of Skyrmions and Pearl Vortices in Superconductor-Chiral Ferromagnet Heterostructures. Physical Review Letters, 2019, 122, 097001.	2.9	36
200	Chiral magnetic skyrmions with arbitrary topological charge. Physical Review B, 2019, 99, .	1.1	79

#	Article	IF	Citations
201	Quantifying chiral exchange interaction for NÃ©el-type skyrmions via Lorentz transmission electron microscopy. Physical Review B, 2019, 99, .	1.1	21
202	Spin Torque Efficiency and Analytic Error Rate Estimates of Skyrmion Racetrack Memory. Scientific Reports, 2019, 9, 4827.	1.6	26
203	Shape of a skyrmion. Journal of Physics Condensed Matter, 2019, 31, 165802.	0.7	2
204	Chirally coupled nanomagnets. Science, 2019, 363, 1435-1439.	6.0	123
205	Observation of magnetic skyrmions in unpatterned symmetric multilayers at room temperature and zero magnetic field. Scientific Reports, 2019, 9, 4144.	1.6	35
206	SkyLogicâ€"A Proposal for a Skyrmion-Based Logic Device. IEEE Transactions on Electron Devices, 2019, 66, 1990-1996.	1.6	26
207	Manipulation of magnetic skyrmions in a locally modified synthetic antiferromagnetic racetrack. Journal of Magnetism and Magnetic Materials, 2019, 482, 155-159.	1.0	11
208	Element-specific soft x-ray spectroscopy, scattering, and imaging studies of the skyrmion-hosting compound <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>Co</mml:mi><mml:mn>8</mml:mn></mml Physical Review B, 2019, 99, .	1.1	29
209	Low-field formation of room-temperature biskyrmions in centrosymmetric MnPdGa magnet. Applied Physics Letters, 2019, 114, .	1.5	27
210	Current-Induced Nucleation and Dynamics of Skyrmions in a <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" overflow="scroll"><mml:mi>Co</mml:mi></mml:math> -based HeuslerÂAlloy. Physical Review Applied, 2019, 11, .	1.5	26
211	Two-dimensional skyrmion bags in liquid crystals and ferromagnets. Nature Physics, 2019, 15, 655-659.	6.5	140
212	Observation of Nanoscale Skyrmions in SrIrO₃/SrRuO₃ Bilayers. Nano Letters, 2019, 19, 3169-3175.	4.5	112
213	Oxidation dependence of the Dzyaloshinskii-Moriya interaction in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>Pt</mml:mi><mml:mo>/</mml:mo><mml:mi>Co</mml:m mathvariant="normal">O</mml:mi><mml:mi>x</mml:mi></mml:msub></mml:mrow></mml:math> trilayers (<mml:math) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 252 Td (xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow	1.1	33
214	Stabilizing zero-field skyrmions in Ir/Fe/Co/Pt thin film multilayers by magnetic history control. Applied Physics Letters, 2019, 114, .	1.5	37
215	Anatomy of Skyrmionic Textures in Magnetic Multilayers. Advanced Materials, 2019, 31, e1807683.	11.1	75
216	Sculpting stable structures in pure liquids. Science Advances, 2019, 5, eaav4283.	4.7	25
217	Geometrically Tailored Skyrmions at Zero Magnetic Field in Multilayered Nanostructures. Physical Review Applied, 2019, 11, .	1.5	44
218	Skyrmion lifetime in ultrathin films. Physical Review B, 2019, 99, .	1.1	50

#	Article	IF	Citations
219	Building traps for skyrmions by the incorporation of magnetic defects into nanomagnets: Pinning and scattering traps by magnetic properties engineering. Journal of Magnetism and Magnetic Materials, 2019, 480, 171-185.	1.0	24
220	Enhancement of the Dzyaloshinskii-Moriya interaction and domain wall velocity through interface intermixing in Ta/CoFeB/MgO. Physical Review B, 2019, 99, .	1.1	56
221	Construction of a Room-Temperature Pt/Co/Ta Multilayer Film with Ultrahigh-Density Skyrmions for Memory Application. ACS Applied Materials & Interfaces, 2019, 11, 12098-12104.	4.0	60
222	Theoretical guidelines to create and tune electric skyrmion bubbles. Science Advances, 2019, 5, eaau7023.	4.7	59
223	Creation and Destruction of Skyrmions via Electrical Modulation of Local Magnetic Anisotropy in Magnetic Thin Films. Physical Review Applied, 2019, 11, .	1.5	6
224	Flat Bands, Indirect Gaps, and Unconventional Spin-Wave Behavior Induced by a Periodic Dzyaloshinskii-Moriya Interaction. Physical Review Letters, 2019, 122, 067204.	2.9	41
225	Field-induced double spin spiral in a frustrated chiral magnet. Npj Quantum Materials, 2019, 4, .	1.8	11
226	Statistical Thermodynamics of Chiral Skyrmions in a Ferromagnetic Material. Materials, 2019, 12, 3702.	1.3	9
227	Individual skyrmion manipulation by local magnetic field gradients. Communications Physics, 2019, 2, .	2.0	74
228	Chiral edge currents for ac-driven skyrmions in confined pinning geometries. Physical Review B, 2019, 100, .	1.1	5
229	Magnetic skyrmions in nanostructures of non-centrosymmetric materials. APL Materials, 2019, 7, .	2.2	20
230	Interface-driven unusual anomalous Hall effect in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi mathvariant="normal">M</mml:mi><mml:msub><mml:mi mathvariant="normal">n</mml:mi><mml:mi>x</mml:mi></mml:msub><mml:mi>Ga</mml:mi><mml:mo>/</mml:mo><mml:mi>Pt</m bilayers. Physical Review B, 2019, 100, .	1.1	9
231	Generation and Hall effect of skyrmions enabled using nonmagnetic point contacts. Physical Review B, 2019, 100, .	1.1	14
232	Formation of Magnetic Nanostructures Using an Atomic Force Microscope Probe. Technical Physics, 2019, 64, 1716-1721.	0.2	0
233	Evidence of the Topological Hall Effect in Pt/Antiferromagnetic Insulator Bilayers. Physical Review Letters, 2019, 123, 237206.	2.9	31
234	Optical second harmonic generation in cobalt nanolayers influenced by nonmagnetic heavy metals. , 2019, , .		0
235	Thermoelectric microscopy of magnetic skyrmions. Scientific Reports, 2019, 9, 18443.	1.6	14
236	Electrical Detection of Domain Walls and Skyrmions in Co Films Using Noncollinear Magnetoresistance. Physical Review Letters, 2019, 123, 237205.	2.9	16

#	Article	IF	Citations
237	Enhancement of Interfacial Dzyaloshinskii-Moriya Interaction: A Comprehensive Investigation of Magnetic Dynamics. Physical Review Applied, 2019, 12, .	1.5	12
238	Skyrmion Logic System for Large-Scale Reversible Computation. Physical Review Applied, 2019, 12, .	1.5	70
239	Existence of in-Plane Magnetic Skyrmion and its Motion under Current Flow. Physical Review Applied, 2019, 12, .	1.5	35
240	Magnetic tunnel junctions: An efficient way for electrical skyrmion detection investigated by ab initio theory. Physical Review B, 2019, 100, .	1.1	5
241	Quantitative imaging of hybrid chiral spin textures in magnetic multilayer systems by Lorentz microscopy. Physical Review B, 2019, 100, .	1.1	21
242	Weak Crystallization of Fluctuating Skyrmion Textures in MnSi. Physical Review X, 2019, 9, .	2.8	22
243	Magnetic Vortex Induced by Nonmagnetic Impurity in Ferromagnets: Magnetic Multipole and Toroidal around the Vacancy. Journal of the Physical Society of Japan, 2019, 88, 063702.	0.7	4
244	Current-Induced Dynamics of the Antiferromagnetic Skyrmion and Skyrmionium. Physical Review Applied, 2019, 12, .	1.5	46
245	From skyrmions to <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi mathvariant="double-struck">Z</mml:mi><mml:mn>2</mml:mn></mml:msub></mml:math> vortices in distorted chiral antiferromagnets. Physical Review B, 2019, 100, .	1.1	15
246	Control of spintronic and electronic properties of bimetallic and vacancy-ordered vanadium carbide MXenes via surface functionalization. Physical Chemistry Chemical Physics, 2019, 21, 25802-25808.	1.3	22
247	Configurational entropy for skyrmion-like magnetic structures. Journal of Magnetism and Magnetic Materials, 2019, 475, 734-740.	1.0	41
248	Control of ultracold atoms with a chiral ferromagnetic film. Physical Review A, 2019, 99, .	1.0	2
249	Voltage-Driven High-Speed Skyrmion Motion in a Skyrmion-Shift Device. Physical Review Applied, 2019, 11, .	1.5	41
250	Generation of magnetic skyrmions through pinning effect. Modern Physics Letters B, 2019, 33, 1950040.	1.0	2
251	Emergence of Topological Hall Effect in a SrRuO₃ Single Layer. Advanced Materials, 2019, 31, e1807008.	11.1	121
252	Manipulation of Magnetization by Spinâ€"Orbit Torque. Advanced Quantum Technologies, 2019, 2, 1800052.	1.8	50
253	Magnetic skyrmions: intriguing physics and new spintronic device concepts. National Science Review, 2019, 6, 210-212.	4.6	104
254	Electric Field-Induced Creation and Directional Motion of Domain Walls and Skyrmion Bubbles. Nano Letters, 2019, 19, 353-361.	4.5	97

#	Article	IF	Citations
255	Interlayer coupling-driven magnetic ordering and magnetization processes in ultrathin Au/Co/Mo/Co/Au film. Journal of Magnetism and Magnetic Materials, 2019, 475, 683-694.	1.0	8
256	Novel spin-orbit coupling driven emergent states in iridate-based heterostructures. Journal of Physics and Chemistry of Solids, 2019, 128, 39-53.	1.9	21
257	Thermal creation of skyrmions in ferromagnetic films with perpendicular anisotropy and Dzyaloshinskii-Moriya interaction. Journal of Magnetism and Magnetic Materials, 2020, 493, 165724.	1.0	10
258	An Artificial Skyrmion Platform with Robust Tunability in Synthetic Antiferromagnetic Multilayers. Advanced Functional Materials, 2020, 30, 1907140.	7.8	14
259	Magnetic Textures and Dynamics in Magnetic Weyl Semimetals. Annalen Der Physik, 2020, 532, 1900287.	0.9	35
260	Room-temperature stabilization of antiferromagnetic skyrmions in synthetic antiferromagnets. Nature Materials, 2020, 19, 34-42.	13.3	297
261	Epitaxial growth of Co on stepped Ru(0001): Stabilization of CoRu magnetic surface alloy. Surface Science, 2020, 692, 121512.	0.8	1
262	Electric and antiferromagnetic chiral textures at multiferroic domain walls. Nature Materials, 2020, 19, 386-390.	13.3	64
263	Skyrmion-electronics: writing, deleting, reading and processing magnetic skyrmions toward spintronic applications. Journal of Physics Condensed Matter, 2020, 32, 143001.	0.7	268
264	Thermal Decay of a Single NÃ©el Skyrmion via Helicity Slip in a Nanodisk. Physica Status Solidi - Rapid Research Letters, 2020, 14, 1900525.	1.2	3
265	Topological solitons, cholesteric fingers and singular defect lines in Janus liquid crystal shells. Soft Matter, 2020, 16, 2669-2682.	1.2	20
266	Counting Rules of Nambuâ€"Goldstone Modes. Annual Review of Condensed Matter Physics, 2020, 11, 169-187.	5.2	45
267	Stability and dynamics of skyrmions in ultrathin magnetic nanodisks under strain. Acta Materialia, 2020, 183, 145-154.	3.8	30
268	A ferromagnetic skyrmion-based nano-oscillator with modified profile of Dzyaloshinskii-Moriya interaction. Journal of Magnetism and Magnetic Materials, 2020, 496, 165912.	1.0	27
269	Design and Performance Analysis of Artificial Neural Network Based Artificial Synapse for Bio-inspired Computing. Advances in Intelligent Systems and Computing, 2020, , 1294-1302.	0.5	2
270	Artificial Dense Lattices of Magnetic Skyrmions. Materials, 2020, 13, 99.	1.3	11
271	Longitudinal spin Seebeck effect in pyrochlore iridates with bulk and interfacial Dzyaloshinskii-Moriya interaction. Physical Review B, 2020, 101, .	1.1	5
272	Tunable Magnetic Anisotropy and Dzyaloshinskii-Moriya Interaction in an Ultrathin van der Waals Fe3GeTe2/In2Se3 Heterostructure. Frontiers in Physics, 2020, 8, .	1.0	10

#	Article	IF	Citations
273	SIMBA: A Skyrmionic In-Memory Binary Neural Network Accelerator. IEEE Transactions on Magnetics, 2020, 56, 1-12.	1.2	3
274	Discovery of Realâ€Space Topological Ferroelectricity in Metallic Transition Metal Phosphides. Advanced Materials, 2020, 32, e2003479.	11.1	13
275	Robust Skyrmion Shift Device Through Engineering the Local Exchange-Bias Field. Physical Review Applied, 2020, 14, .	1.5	12
276	Unidirectional tilt of domain walls in equilibrium in biaxial stripes with Dzyaloshinskiiâ€"Moriya interaction. Journal Physics D: Applied Physics, 2020, 53, 395003.	1.3	5
277	Prediction of confined and controllable Bloch points in nanocubes of chiral magnets. Physical Review B, 2020, 102, .	1.1	5
278	Effect of curvature on the eigenstates of magnetic skyrmions. Physical Review B, 2020, 102, .	1.1	22
279	Meissner currents induced by topological magnetic textures in hybrid superconductor/ferromagnet structures. Physical Review B, 2020, 102, .	1.1	9
280	Ferrimagnetic Skyrmions in Topological Insulator/Ferrimagnet Heterostructures. Advanced Materials, 2020, 32, e2003380.	11.1	41
281	Spontaneous creation and annihilation dynamics and strain-limited stability of magnetic skyrmions. Nature Communications, 2020, 11, 3536.	5.8	10
282	Enhancement of perpendicular magnetic anisotropy and Dzyaloshinskiiâ€"Moriya interaction in thin ferromagnetic films by atomic-scale modulation of interfaces. NPG Asia Materials, 2020, 12, .	3.8	28
283	In-plane NÃ©el wall chirality and orientation of interfacial Dzyaloshinskii-Moriya vector in magnetic films. Physical Review B, 2020, 102, .	1.1	6
284	Probing the pinning strength of magnetic vortex cores with sub-nanometer resolution. Nature Communications, 2020, 11, 2833.	5.8	19
285	The microscopic origin of DMI in magnetic bilayers and prediction of giant DMI in new bilayers. Npj Computational Materials, 2020, 6, .	3.5	32
286	Bimeron clusters in chiral antiferromagnets. Npj Computational Materials, 2020, 6, .	3.5	34
287	Magnetic skyrmionium diode with a magnetic anisotropy voltage gating. Applied Physics Letters, 2020, 117, .	1.5	30
288	Spontaneous skyrmionic lattice from anisotropic symmetric exchange in a Ni-halide monolayer. Nature Communications, 2020, 11, 5784.	5.8	113
289	Chiral Spin Spirals at the Surface of the van der Waals Ferromagnet Fe₃GeTe₂. Nano Letters, 2020, 20, 8563-8568.	4.5	35
290	Extreme anti-reflection enhanced magneto-optic Kerr effect microscopy. Nature Communications, 2020, 11, 5937.	5.8	21

#	Article	IF	Citations
291	Near-BPS baby Skyrmions. Journal of High Energy Physics, 2020, 2020, 1.	1.6	5
292	Magnonic Quadrupole Topological Insulator in Antiskyrmion Crystals. Physical Review Letters, 2020, 125, 207204.	2.9	33
293	Particle-size dependent structural transformation of skyrmion lattice. Nature Communications, 2020, 11, 5685.	5.8	15
294	Target Bubbles in Fe₃Sn₂ Nanodisks at Zero Magnetic Field. ACS Nano, 2020, 14, 10986-10992.	7.3	31
295	Strain relaxation induced transverse resistivity anomalies in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi>Sr</mml:mi><mml:mi>Ru</mml:mi><mml:msub><mml:mi mathvariant="normal">O</mml:mi><mml:mn>3</mml:mn></mml:msub></mml:math> thin films. Physical Review B, 2020, 102, .	1.1	15
296	A double quantum dot spin valve. Communications Physics, 2020, 3, .	2.0	23
297	Observation of compact ferrimagnetic skyrmions in DyCo₃ film. Nanoscale, 2020, 12, 18137-18143.	2.8	13
298	Skyrmion mass from spin-phonon interaction. Physical Review B, 2020, 102, .	1.1	4
299	Dynamics of deformed skyrmions and helicity reversal in composite spin valve pillar. Materials Today: Proceedings, 2020, 33, 2375-2380.	0.9	0
300	Detection of the Chiral Spin Structure in Ferromagnetic SrRuO₃ Thin Film. ACS Applied Materials & Interfaces, 2020, 12, 37757-37763.	4.0	10
301	Skyrmion-based magnetic traps for ultracold atoms. Physical Review A, 2020, 101, .	1.0	2
302	Stabilizing chiral spin structures via an alternating Dzyaloshinskii-Moriya interaction. Physical Review B, 2020, 102, .	1.1	6
303	Current-induced generation of skyrmions in Pt/Co/Os/Pt thin films. Physical Review B, 2020, 102, .	1.1	6
304	Physical foundations and basic properties of magnetic skyrmions. Nature Reviews Physics, 2020, 2, 492-498.	11.9	107
305	Current-driven nucleation and propagation of antiferromagnetic skyrmionium. Physical Review B, 2020, 102, .	1.1	10
306	Magnetic Skyrmions in a Hall Balance with Interfacial Canted Magnetizations. Advanced Materials, 2020, 32, e1907452.	11.1	26
307	Nonlocal chiral symmetry breaking in curvilinear magnetic shells. Communications Physics, 2020, 3, .	2.0	49
308	Dynamics of antiferromagnetic skyrmions in the absence or presence of pinning defects. Physical Review B, 2020, 102, .	1.1	18

#	Article	IF	Citations
309	Large Dzyaloshinskii-Moriya interaction induced by chemisorbed oxygen on a ferromagnet surface. Science Advances, 2020, 6, eaba4924.	4.7	60
310	Combing the helical phase of chiral magnets with electric currents. Physical Review B, 2020, 102, .	1.1	14
311	Dynamic excitations of chiral magnetic textures. APL Materials, 2020, 8, .	2.2	28
312	Thermal generation, manipulation and thermoelectric detection of skyrmions. Nature Electronics, 2020, 3, 672-679.	13.1	86
313	Stable states of vortex-like magnetic formations in inhomogeneous magnetically uniaxial films and their behavior in a longitudinal magnetic field. Journal of Applied Physics, 2020, 128, .	1.1	6
314	Stability of long-lived antiskyrmions in the Mn-Pt-Sn tetragonal Heusler material. Physical Review B, 2020, 102, .	1.1	9
315	Dipole-dominated dissipative magnetic solitons in quasi-one-dimensional spin-torque oscillators. Low Temperature Physics, 2020, 46, 773-778.	0.2	1
316	Sub-nanoscale atom-by-atom crafting of skyrmion-defect interaction profiles. Scientific Reports, 2020, 10, 14655.	1.6	16
317	Large topological Hall effect in an easy-cone ferromagnet (Cr0.9B0.1)Te. Applied Physics Letters, 2020, 117, .	1.5	15
318	Skyrmion Lattice Phases in Thin Film Multilayer. Advanced Functional Materials, 2020, 30, 2004037.	7.8	30
319	The Experimentalist's Guide to the Cycloid, or Noncollinear Antiferromagnetism in Epitaxial BiFeO₃. Advanced Materials, 2020, 32, e2003711.	11.1	45
320	Fractional antiferromagnetic skyrmion lattice induced by anisotropic couplings. Nature, 2020, 586, 37-41.	13.7	117
321	Depth-Resolved Magnetization Dynamics Revealed by X-Ray Reflectometry Ferromagnetic Resonance. Physical Review Letters, 2020, 125, 137201.	2.9	14
322	Strain-tunable ferromagnetism and chiral spin textures in two-dimensional Janus chromium dichalcogenides. Physical Review B, 2020, 102, .	1.1	86
323	Jahn-Teller Effect and Spin-Orbit Coupling: Friends or Foes?. Physical Review X, 2020, 10, .	2.8	29
324	Microscopic magnetic Hamiltonian for exotic spin textures in metals. Physical Review B, 2020, 102, .	1.1	15
325	Planar topological Hall effect from conical spin spirals. Physical Review B, 2020, 102, .	1.1	11
326	Magnetic droplet solitons. Journal of Applied Physics, 2020, 128, .	1.1	14

#	Article	IF	Citations
327	Topological energy barrier for skyrmion lattice formation in MnSi. Physical Review B, 2020, 102, .	1.1	4
328	Driven topological transitions in active nematic films. Soft Matter, 2020, 16, 9331-9338.	1.2	22
329	Analytic Property of Vortex-Type Spin Structures in Itinerant Electron System with Inversion Symmetry. Journal of the Physical Society of Japan, 2020, 89, 094710.	0.7	1
330	The internal dynamic modes of an antiskyrmion in ultrathin ferromagnetic nanodisks. AIP Advances, 2020, 10, .	0.6	6
331	Electron Beam Lithography of Magnetic Skyrmions. Advanced Materials, 2020, 32, e2003003.	11.1	30
332	Giant Dzyaloshinskii-Moriya interaction in epitaxial Co/Fe bilayers with <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>C</mml:mi><mml:mrow><mml:mn>4</mml:mn><mml:mo> symmetry. Physical Review B, 2020, 102, .	1.1	10
333	Identifying materials with chargeâ€“spin physics using chargeâ€“spin susceptibility computed from first principles. Journal of Chemical Physics, 2020, 153, 074105.	1.2	2
334	Control of Light by Topological Solitons in Soft Chiral Birefringent Media. Physical Review X, 2020, 10, .	2.8	19
335	Coexistence of distinct skyrmion phases observed in hybrid ferromagnetic/ferrimagnetic multilayers. Nature Communications, 2020, 11, 6365.	5.8	31
336	First-principles Dzyaloshinskiiâ€“Moriya interaction in a non-collinear framework. Scientific Reports, 2020, 10, 20339.	1.6	20
337	Signatures of a liquid-crystal transition in spin-wave excitations of skyrmions. Communications Physics, 2020, 3, .	2.0	10
338	Competing interactions and spin-vector chirality in spin chains. Physical Review B, 2020, 102, .	1.1	2
339	Magnon Landau Levels and Spin Responses in Antiferromagnets. Physical Review Letters, 2020, 125, 257201.	2.9	8
340	Reservoir Computing with Random Skyrmion Textures. Physical Review Applied, 2020, 14, .	1.5	79
341	Large surface magnetization in noncentrosymmetric antiferromagnets. Physical Review B, 2020, 102, .	1.1	2
342	Structural analysis of high-pressure phase for skyrmion-hosting multiferroic <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>Cu</mml:mi><mml:mn> Physical Review B, 2020, 102, .	1.1	0
343	Refined electron-spin transport model for single-element ferromagnetic systems: Application to nickel nanocontacts. Physical Review B, 2020, 102, .	1.1	4
344	Electrons in intense laser fields with local phase, polarization, and skyrmionic textures. Physical Review A, 2020, 102, .	1.0	10

#	Article	IF	Citations
345	Ultrafast Ratchet Dynamics of Skyrmions by Defect Engineering in Materials with Poor Conductivity Under Gigahertz Magnetic Fields. Physical Review Applied, 2020, 14, .	1.5	14
346	Stability of in-plane and out-of-plane chiral skyrmions in epitaxial MnSi(111)/Si(111) thin films: Surface twists versus easy-plane anisotropy. Physical Review B, 2020, 102, .	1.1	7
347	Electrical Control of Skyrmion Density via Skyrmion-Stripe Transformation. Physical Review Applied, 2020, 14, .	1.5	8
348	Role of an additional interfacial spin-transfer torque for current-driven skyrmion dynamics in chiral magnetic layers. Physical Review B, 2020, 102, .	1.1	15
349	Magnetic Direct-Write Skyrmion Nanolithography. ACS Nano, 2020, 14, 14960-14970.	7.3	17
350	Magnetization dynamics of nanoscale magnetic materials: A perspective. Journal of Applied Physics, 2020, 128, .	1.1	63
351	Robust metastable skyrmions with tunable size in the chiral magnet <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>Fe</mml:mi><mml:mi>Pt</mml:mi><mml:msub><mml:m mathvariant="normal">N</mml:mi></mml:mrow></mml:math>. Physical Review B, 2020, 102, .	1.1	6
352	Quasinormal modes in kink excitations and kinkâ€"antikink interactions: a toy model. European Physical Journal C, 2020, 80, 1.	1.4	12
353	Wiggling Skyrmions Confined in a Linear Potential Well. Physica Status Solidi - Rapid Research Letters, 2020, 14, 2000214.	1.2	1
354	Large anisotropic topological Hall effect in a hexagonal non-collinear magnet Fe5Sn3. Applied Physics Letters, 2020, 116, .	1.5	23
355	Ferroelectrically tunable magnetism in BiFeO3/BaTiO3 heterostructure revealed by the first-principles calculations. Journal of Advanced Research, 2020, 24, 371-377.	4.4	7
356	Unusual anomalous Hall effect in perpendicularly magnetized YIG films with a small Gilbert damping constant. Physical Review B, 2020, 101, .	1.1	16
357	Tuning interfacial Dzyaloshinskii-Moriya interactions in thin amorphous ferrimagnetic alloys. Scientific Reports, 2020, 10, 7447.	1.6	30
358	Theory of an electron asymmetric scattering on skyrmion textures in two-dimensional systems. Journal of Physics Condensed Matter, 2020, 32, 415302.	0.7	4
359	The profile of chiral skyrmions of small radius. Nonlinearity, 2020, 33, 3395-3408.	0.6	17
360	Intrinsic Mixed Blochâ€"NÃ©el Character and Chirality of Skyrmions in Asymmetric Epitaxial Trilayers. ACS Applied Materials & Interfaces, 2020, 12, 25419-25427.	4.0	12
361	Oxygen Vacancyâ€Induced Topological Hall Effect in a Nonmagnetic Band Insulator. Advanced Quantum Technologies, 2020, 3, 2000021.	1.8	9
362	Control of the magnetic domain of Pt/Co/Ru/MgO multilayer: Effect of Co thickness and Ru insertion. AIP Advances, 2020, 10, .	0.6	4

#	Article	IF	Citations
363	Perpendicular Magnetic Anisotropy and Dzyaloshinskii-Moriya Interaction at an Oxide/Ferromagnetic Metal Interface. Physical Review Letters, 2020, 124, 217202.	2.9	27
364	Materials with strong spin-textured bands. Npj Quantum Materials, 2020, 5, .	1.8	13
365	Thermal Brownian Motion of Skyrmion for True Random Number Generation. IEEE Transactions on Electron Devices, 2020, 67, 2553-2558.	1.6	20
366	Discovery of magnetic single- and triple- <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mi mathvariant="bold">q</mml:mi></mml:mrow></mml:math> States in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mi>Mn</mml:mi><mml:mrow><mml:mo>/</mml:mo><mml:mi>Re</mml:mi><mml:mo stretchy="false">(</mml:mo><mml:mn>0001</mml:mn><mml:mo>	2.9	35
367	Atomistic Perspective of Long Lifetimes of Small Skyrmions at Room Temperature. Physical Review Letters, 2020, 124, 247201.	2.9	24
368	Skyrmions in antiferromagnets: Thermal stability and the effect of external field and impurities. Journal of Applied Physics, 2020, 127, 213906.	1.1	19
369	Spin current pumped by confined breathing skyrmion. New Journal of Physics, 2020, 22, 053029.	1.2	2
370	Room-temperature skyrmions in strain-engineered FeGe thin films. Physical Review B, 2020, 101, .	1.1	15
371	Traps for pinning and scattering of antiferromagnetic skyrmions via magnetic properties engineering. Journal of Applied Physics, 2020, 127, .	1.1	11
372	Shear banding, intermittency, jamming, and dynamic phases for skyrmions in inhomogeneous pinning arrays. Physical Review B, 2020, 101, .	1.1	14
373	Skyrmion-based artificial synapses for neuromorphic computing. Nature Electronics, 2020, 3, 148-155.	13.1	346
374	Skyrmion dynamics and topological sorting on periodic obstacle arrays. New Journal of Physics, 2020, 22, 053025.	1.2	16
375	Intrinsic skyrmions in monolayer Janus magnets. Physical Review B, 2020, 101, .	1.1	94
376	A promising birthplace for skyrmions. Nature Materials, 2020, 19, 369-370.	13.3	1
377	Meron Spin Textures in Momentum Space. Physical Review Letters, 2020, 124, 106103.	2.9	44
378	Magnetic Skyrmion Spinâ€Torque Nanoâ€Oscillators. Physica Status Solidi - Rapid Research Letters, 2020, 14, 2000032.	1.2	4
379	Quantifying exchange forces of a spin spiral on the atomic scale. Nature Communications, 2020, 11, 1197.	5.8	7
380	Study of the intensity asymmetry in Brillouin light scattering from magnons in FeNi thin films. Journal of Magnetism and Magnetic Materials, 2020, 504, 166671.	1.0	5

#	Article	IF	Citations
381	Nanomaterials by design: a review of nanoscale metallic multilayers. Nanotechnology, 2020, 31, 292002.	1.3	65
382	Stabilization of Skyrmions in a Nanodisk Without an External Magnetic Field. Physical Review Applied, 2020, 13, .	1.5	8
383	Magnetic Skyrmion Tubes as Nonplanar Magnonic Waveguides. Physical Review Applied, 2020, 13, .	1.5	23
384	A spiking neuron constructed by the skyrmion-based spin torque nano-oscillator. Applied Physics Letters, 2020, 116, .	1.5	36
385	Electronic structure, magnetic anisotropy and Dzyaloshinskiiâ€"Moriya interaction in Janus Cr₂I₃X₃ (X = Br, Cl) bilayers. Physical Chemistry Chemical Physics, 2020, 22, 8647-8657.	1.3	24
386	Real-space imaging of atomic-scale spin textures at nanometer distances. Applied Physics Letters, 2020, 116, 122406.	1.5	5
387	Berry phase in superconducting multiterminal quantum dots. Physical Review B, 2020, 101, .	1.1	16
388	Defect-implantation for the all-electrical detection of non-collinear spin-textures. Nature Communications, 2020, 11, 1602.	5.8	12
389	Chiral Hall Effect in Noncollinear Magnets from a Cyclic Cohomology Approach. Physical Review Letters, 2020, 124, 096602.	2.9	44
390	Controlled Individual Skyrmion Nucleation at Artificial Defects Formed by Ion Irradiation. Small, 2020, 16, e1907450.	5.2	27
391	Magnetic skyrmion annihilation by quantum mechanical tunneling. New Journal of Physics, 2020, 22, 083013.	1.2	6
392	Skyrmion dynamics and transverse mobility: skyrmion Hall angle reversal on 2D periodic substrates with dc and biharmonic ac drives. European Physical Journal B, 2020, 93, 1.	0.6	8
393	Dynamics of chiral state transitions and relaxations in an FeGe thin plate via in situ Lorentz microscopy. Nanoscale, 2020, 12, 14919-14925.	2.8	6
394	Chiral Magnonics: Reprogrammable Nanoscale Spin Wave Networks Based on Chiral Domain Walls. IScience, 2020, 23, 101153.	1.9	13
395	A $$phi ^6$$ soliton with a long-range tail. European Physical Journal C, 2020, 80, 1.	1.4	5
396	Current-driven skyrmionium in a frustrated magnetic system. Applied Physics Letters, 2020, 117, .	1.5	22
397	Instability of skyrmions in magnetic fields. Applied Physics Letters, 2020, 116, 262406.	1.5	7
398	Imitation of spin density wave order in Cu3Nb2O8. Physical Review B, 2020, 102, .	1.1	6

#	Article	IF	Citations
399	Topology-Dependent Brownian Gyromotion of a Single Skyrmion. Physical Review Letters, 2020, 125, 027206.	2.9	50
400	Interfacial tuning of chiral magnetic interactions for large topological Hall effects in LaMnO ₃ /SrIrO ₃ heterostructures. Science Advances, 2020, 6, eaaz3902.	4.7	50
401	Direct imaging of an inhomogeneous electric current distribution using the trajectory of magnetic half-skyrmions. Science Advances, 2020, 6, eaay1876.	4.7	20
402	Systematic derivation of realistic spin models for beyond-Heisenberg solids. Physical Review B, 2020, 101, .	1.1	61
403	Generation of magnetic skyrmions by focused vortex laser pulses. Journal of Applied Physics, 2020, 127, .	1.1	13
404	Crystal Chemistry and Bonding Patterns of Bismuth-Based Topological Insulators. Inorganic Chemistry, 2020, 59, 3437-3451.	1.9	18
405	Engineering skyrmions and emergent monopoles in topological spin crystals. Applied Physics Letters, 2020, 116, .	1.5	41
406	The emergence of magnetic skyrmions. Physics Today, 2020, 73, 44-49.	0.3	24
407	Anisotropic critical behavior of current-driven skyrmion dynamics in chiral magnets with disorder. New Journal of Physics, 2020, 22, 033043.	1.2	5
408	Helicity of magnetic vortices and skyrmions in soft ferromagnetic nanodots and films biased by stray radial fields. Physical Review B, 2020, 101, .	1.1	11
409	Brightening odd-parity excitons in transition-metal dichalcogenides: Rashba spin-orbit interaction, skyrmions, and cavity polaritons. Physical Review B, 2020, 101, .	1.1	4
410	Quantum Depinning of a Magnetic Skyrmion. Physical Review Letters, 2020, 124, 097202.	2.9	10
411	Stability and dynamics of in-plane skyrmions in collinear ferromagnets. Physical Review B, 2020, 101, .	1.1	22
412	Turning a chiral skyrmion inside out. Physical Review B, 2020, 101, .	1.1	21
413	Variation of sign and magnitude of the Dzyaloshinskii-Moriya interaction of a ferromagnet with an oxide interface. Physical Review B, 2020, 101, .	1.1	19
414	Stripe domains reorientation in ferromagnetic films with perpendicular magnetic anisotropy. JPhys Materials, 2020, 3, 024001.	1.8	13
415	Statistical Properties and Configurational Entropy of a Two-Dimensional NÃ©el Magnetic Skyrmions Population. Applied Sciences (Switzerland), 2020, 10, 352.	1.3	6
416	Overcoming the Limits of the Interfacial Dzyaloshinskiiâ€“Moriya Interaction by Antiferromagnetic Order in Multiferroic Heterostructures. Advanced Materials, 2020, 32, e1904415.	11.1	34

#	Article	IF	Citations
417	Creating zero-field skyrmions in exchange-biased multilayers through X-ray illumination. Nature Communications, 2020, 11, 949.	5.8	67
418	Suppression of the skyrmion Hall effect in planar nanomagnets by the magnetic properties engineering: Skyrmion transport on nanotracks with magnetic strips. Journal of Magnetism and Magnetic Materials, 2020, 504, 166655.	1.0	21
419	The formation process and structure of the skyrmion bubble lattice in magnetic multilayers. Journal of Applied Physics, 2020, 127, 063901.	1.1	1
420	Numerical Study of Multiple Helical Spin Density Waves and Vortex Spin Structures in Itinerant Electron System. Journal of the Physical Society of Japan, 2020, 89, 024706.	0.7	2
421	A low-cost vibrating sample magnetometry based on audio components. Journal of Magnetism and Magnetic Materials, 2020, 502, 166560.	1.0	9
422	Reversible control of Dzyaloshinskii-Moriya interaction at the graphene/Co interface via hydrogen absorption. Physical Review B, 2020, 101, .	1.1	19
423	Propagation dynamics of spin excitations along skyrmion strings. Nature Communications, 2020, 11, 256.	5.8	81
424	Skyrmions get pushed beyond the limit. Nature Electronics, 2020, 3, 16-17.	13.1	2
425	Existence and stability of skyrmion bags in thin magnetic films. Applied Physics Letters, 2020, 116, .	1.5	14
426	Current-Induced Dynamics and Chaos of Antiferromagnetic Bimerons. Physical Review Letters, 2020, 124, 037202.	2.9	82
427	Homogenization of Chiral Magnetic Materials: A Mathematical Evidence of Dzyaloshinskiiâ€™s Predictions on Helical Structures. Journal of Nonlinear Science, 2020, 30, 1229-1262.	1.0	7
428	Determining Surface Terminations and Chirality of Noncentrosymmetric FeGe Thin Films via Scanning Tunneling Microscopy. ACS Applied Materials & Interfaces, 2020, 12, 9896-9901.	4.0	4
429	Breathing mode of a skyrmion on a lattice. Physical Review B, 2020, 101, .	1.1	8
430	Dynamical switching of confined magnetic skyrmions under circular magnetic fields. Physical Review B, 2020, 101, .	1.1	4
431	Dynamics of an elliptical ferromagnetic skyrmion driven by the spinâ€“orbit torque. Applied Physics Letters, 2020, 116, .	1.5	27
432	Ion-Irradiation-Induced Cobalt/Cobalt Oxide Heterostructures: Printing 3D Interfaces. ACS Applied Materials & Interfaces, 2020, 12, 9858-9864.	4.0	5
433	Room-Temperature Skyrmions at Zero Field in Exchange-Biased Ultrathin Films. Physical Review Applied, 2020, 13, .	1.5	29
434	Modification of magnetocrystalline anisotropy via ion-implantation. AIP Advances, 2020, 10, .	0.6	7

#	Article	IF	Citations
435	Very large Dzyaloshinskii-Moriya interaction in two-dimensional Janus manganese dichalcogenides and its application to realize skyrmion states. Physical Review B, 2020, 101, .	1.1	156
436	An intriguing intermediate state as a bridge between antiferroelectric and ferroelectric perovskites. Materials Horizons, 2020, 7, 1912-1918.	6.4	34
437	3D analytical model of skyrmion-like structures in an antiferromagnet with DMI. Journal of Magnetism and Magnetic Materials, 2020, 507, 166800.	1.0	7
438	Realization of Isolated and High-Density Skyrmions at Room Temperature in Uncompensated Synthetic Antiferromagnets. Nano Letters, 2020, 20, 3299-3305.	4.5	42
439	Emergent ferromagnetism with tunable perpendicular magnetic anisotropy in short-periodic SrIrO3/SrRuO3 superlattices. Applied Physics Letters, 2020, 116, .	1.5	13
440	Deformation of NÃ©el-type skyrmions revealed by Lorentz transmission electron microscopy. Applied Physics Letters, 2020, 116, 142402.	1.5	13
441	Scaling, rotation, and channeling behavior of helical and skyrmion spin textures in thin films of Te-doped Cu ₂ OSeO ₃. Science Advances, 2020, 6, eaax2138.	4.7	19
442	Formation and magnetic-field stability of magnetic dipole skyrmions and bubbles in a ferrimagnet. Applied Physics Letters, 2020, 116, .	1.5	9
443	Static and dynamic properties of bimerons in a frustrated ferromagnetic monolayer. Physical Review B, 2020, 101, .	1.1	40
444	A ferromagnetic skyrmion-based diode with a voltage-controlled potential barrier. Nanoscale, 2020, 12, 9507-9516.	2.8	34
445	Robust cycloid crossover driven by anisotropy in the skyrmion host GaV4S8. Physical Review B, 2020, 101, .	1.1	8
446	Controlling magnetism by interface engineering. , 2020, , 361-379.		2
447	Effect of interfacial Dzyaloshinskii-Moriya interaction on polarized neutrons reflection. Journal of Magnetism and Magnetic Materials, 2020, 509, 166899.	1.0	0
448	Chiral spin structure of electron gas in systems with magnetic skyrmions. Journal of Magnetism and Magnetic Materials, 2020, 506, 166755.	1.0	0
449	Deterministic approach to skyrmionic dynamics at nonzero temperatures: Pinning sites and racetracks. Physical Review B, 2020, 101, .	1.1	8
450	Manipulation of the Dzyaloshinskiiâ€“Moriya Interaction in Co/Pt Multilayers with Strain. Physical Review Letters, 2020, 124, 157202.	2.9	74
451	Magnetic Skyrmion Materials. Chemical Reviews, 2021, 121, 2857-2897.	23.0	292
452	Emerging Spintronics Phenomena and Applications. IEEE Transactions on Magnetics, 2021, 57, 1-34.	1.2	20

#	Article	IF	Citations
453	Dense skyrmion crystal stabilized through interfacial exchange coupling: Role of in-plane anisotropy. Frontiers of Physics, 2021, 16, 1.	2.4	2
454	Beyond skyrmions: Review and perspectives of alternative magnetic quasiparticles. Physics Reports, 2021, 895, 1-28.	10.3	307
455	Spin textures and magnetotransport properties in cobalt/ruthenium and cobalt/palladium bilayers. Journal of Magnetism and Magnetic Materials, 2021, 519, 167447.	1.0	1
456	High-resolution tunneling spin transport characteristics of topologically distinct magnetic skyrmionic textures from theoretical calculations. Journal of Magnetism and Magnetic Materials, 2021, 519, 167440.	1.0	1
457	Magnetic skyrmions for unconventional computing. Materials Horizons, 2021, 8, 854-868.	6.4	74
458	Irreversible two-step transition of helix reorientation in MnSi. Journal of Alloys and Compounds, 2021, 859, 157756.	2.8	0
459	Molecular Chains: Arranging and Programming Logic Gates. Nano Letters, 2021, 21, 550-555.	4.5	6
460	Magnetic properties and the interfacial Dzyaloshinskii-Moriya interaction in exchange biased Pt/Co/NixOy films. Applied Surface Science, 2021, 543, 148720.	3.1	14
461	Topological Hall Effect in a Topological Insulator Interfaced with a Magnetic Insulator. Nano Letters, 2021, 21, 84-90.	4.5	28
462	Thickness dependence of interfacial Dzyaloshinskii-Moriya interaction, magnetic anisotropy and spin waves damping in Pt/Co/Ir and Ir/Co/Pt trilayers. Journal of Magnetism and Magnetic Materials, 2021, 519, 167485.	1.0	15
463	Off-axis electron holography of NÃ©el-type skyrmions in multilayers of heavy metals and ferromagnets. Ultramicroscopy, 2021, 220, 113155.	0.8	9
464	Recent Progress on Topological Structures in Ferroic Thin Films and Heterostructures. Advanced Materials, 2021, 33, e2000857.	11.1	84
465	Origin of the hump anomalies in the Hall resistance loops of ultrathin <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>SrRuO</mml:mi><mml:mn>3</mml:mn></m multilayers. Physical Review Materials, 2021, 5, .	3.9	18
466	NÃ©el Skyrmionic States and Chiral Stripes in the Magnetic Bilayer with Transverse Easy Axis. Journal of Superconductivity and Novel Magnetism, 2021, 34, 951-958.	0.8	3
467	Nonequilibrium states in quantum materials under time-period driving. Wuli Xuebao/Acta Physica Sinica, 2021, .	0.2	1
468	Magnetic Skyrmions as Information Entropy Carriers. IEEE Transactions on Magnetics, 2022, 58, 1-5.	1.2	5
469	Targeted Writing and Deleting of Magnetic Skyrmions in Two-Terminal Nanowire Devices. Nano Letters, 2021, 21, 1253-1259.	4.5	19
470	Chirality-induced linear response properties in noncoplanar <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>Mn</mml:mi><mml:mn>3</mml:mn></m Physical Review B, 2021, 103, .	3.2	8

#	Article	IF	Citations
471	Electronic properties of two-dimensional Janus atomic crystal. Wuli Xuebao/Acta Physica Sinica, 2021, .	0.2	6
472	Antiferromagnetic Skyrmions and Bimerons. Topics in Applied Physics, 2021, , 441-457.	0.4	0
473	Electronic mechanism for nanoscale skyrmions and topological metals. Physical Review B, 2021, 103, .	1.1	20
474	Rare-earth-free ferrimagnetic Mn4N sub-20Ânm thin films as potential high-temperature spintronic material. AIP Advances, 2021, 11, 015334.	0.6	11
475	Experimental identification of two distinct skyrmion collapse mechanisms. Nature Physics, 2021, 17, 395-402.	6.5	32
476	Fractal Analysis of Skyrmions Generated by Field-Assisted Fine-tuning of Magnetic Anisotropy. Physical Review Applied, 2021, 15, .	1.5	6
477	Honeycomb layered oxides: structure, energy storage, transport, topology and relevant insights. Chemical Society Reviews, 2021, 50, 3990-4030.	18.7	43
478	Square skyrmion crystal in centrosymmetric itinerant magnets. Physical Review B, 2021, 103, .	1.1	76
480	Spintronics. , 2021, , 305-424.		1
481	Unconventional applications of skyrmions. , 2021, , 393-416.		0
482	Interfacial Dzyaloshinskiiâ€“Moriya Interaction, Perpendicular Magnetic Anisotropy, and Damping in CoFeB-/Oxide-Based Systems. IEEE Transactions on Magnetics, 2022, 58, 1-5.	1.2	0
483	Megahertz dynamics in skyrmion systems probed with muon-spin relaxation. Physical Review B, 2021, 103, .	1.1	9
484	The 2021 quantum materials roadmap. JPhys Materials, 2020, 3, 042006.	1.8	111
485	Skyrmions in ferrimagnets. , 2021, , 315-332.		0
486	Tunable interfacial Dzyaloshinskiiâ€“Moriya interaction in symmetrical Au/[Fe/Au]_n multilayers. Nanoscale, 2021, 13, 2665-2672.	2.8	8
487	Short period magnetization texture of B20-MnGe explained by thermally fluctuating local moments. Physical Review B, 2021, 103, .	1.1	18
488	Signal detection based on the chaotic motion of an antiferromagnetic domain wall. Applied Physics Letters, 2021, 118, .	1.5	4
489	Interfacial Dzyaloshinskiiâ€“Moriya interaction in the epitaxial W/Co/Pt multilayers. Nanoscale, 2021, 13, 7685-7693.	2.8	10

#	Article	IF	Citations
490	Oxygen vacancy induced electronic structure modification of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>KTaO</mml:mi><mml:mn>3</mml:mn></mml:msub><mml:msub></m Physical Review B, 2021, 103, .	1.1	23
491	Observation of second-order meron polarization textures in optical microcavities. Optica, 2021, 8, 255.	4.8	28
492	Giant topological Hall effect around room temperature in noncollinear ferromagnet NdMn2Ge2 single crystal. Applied Physics Letters, 2021, 118, .	1.5	18
493	Scattering modes of skyrmions in a bilayer system with ferromagnetic coupling. Nanotechnology, 2021, 32, 175702.	1.3	6
494	Emulating spin transport with nonlinear optics, from high-order skyrmions to the topological Hall effect. Nature Communications, 2021, 12, 1092.	5.8	39
495	Commensurability between Element Symmetry and the Number of Skyrmions Governing Skyrmion Diffusion in Confined Geometries. Advanced Functional Materials, 2021, 31, 2010739.	7.8	26
496	Direct Observation of Feâ€Ge Ordering in Fe_{5â^'}_xGeTe₂ Crystals and Resultant Helimagnetism. Advanced Functional Materials, 2021, 31, 2009758.	7.8	33
497	Topological structures, spontaneous symmetry breaking and energy spectra in dipole hexagonal lattices. Scientific Reports, 2021, 11, 4154.	1.6	2
498	Ultrathin Co films with Pt and Au coversâ€"magnetic and structural properties driven by Ga⁺ ion irradiation. New Journal of Physics, 2021, 23, 023015.	1.2	5
499	NÃ©elâ€Type Elliptical Skyrmions in a Laterally Asymmetric Magnetic Multilayer. Advanced Materials, 2021, 33, e2006924.	11.1	32
500	Focused-Electron-Beam Engineering of 3D Magnetic Nanowires. Nanomaterials, 2021, 11, 402.	1.9	14
501	Intrinsic DMI-free skyrmion formation and robust dynamic behaviors in magnetic hemispherical shells. Scientific Reports, 2021, 11, 3886.	1.6	17
502	Thermodynamics of magnetic emergent crystals under coupled magnetoelastic fields. New Journal of Physics, 2021, 23, 023016.	1.2	4
503	A frustrated bimeronium: Static structure and dynamics. Applied Physics Letters, 2021, 118, .	1.5	13
504	Phase Selection in Mnâ€"Si Alloys by Fast Solidâ€State Reaction with Enhanced Skyrmion Stability. Advanced Functional Materials, 2021, 31, 2009723.	7.8	9
505	Thermoelectric Signature of Individual Skyrmions. Physical Review Letters, 2021, 126, 077202.	2.9	18
506	Thermodynamically stable skyrmion lattice in a tetragonal frustrated antiferromagnet with dipolar interaction. Physical Review B, 2021, 103, .	1.1	51
507	Enhanced Interface-Driven Perpendicular Magnetic Anisotropy by Symmetry Control in Oxide Superlattices. Physical Review Applied, 2021, 15, .	1.5	16

#	Article	IF	Citations
508	Fieldâ€Free Manipulation of Skyrmion Creation and Annihilation by Tunable Strain Engineering. Advanced Functional Materials, 2021, 31, 2008715.	7.8	31
509	Universal method for magnetic skyrmion bubble generation by controlling the stripe domain instability. NPG Asia Materials, 2021, 13, .	3.8	14
510	Domain-Wall Damping in Ultrathin Nanostripes with Dzyaloshinskii-Moriya Interaction. Physical Review Applied, 2021, 15, .	1.5	5
511	All-electrical detection of skyrmion lattice state and chiral surface twists. Physical Review B, 2021, 103, .	1.1	7
512	Helium Ions Put Magnetic Skyrmions on the Track. Nano Letters, 2021, 21, 2989-2996.	4.5	79
513	A ferromagnetic skyrmion-based nano-oscillator with modified perpendicular magnetic anisotropy. Physics Letters, Section A: General, Atomic and Solid State Physics, 2021, 392, 127157.	0.9	12
514	Creation and observation of Hopfions in magnetic multilayer systems. Nature Communications, 2021, 12, 1562.	5.8	95
515	Spinâ€Torque Memristors Based on Perpendicular Magnetic Tunnel Junctions for Neuromorphic Computing. Advanced Science, 2021, 8, 2004645.	5.6	34
516	First-principles calculation of the Dzyaloshinskii-Moriya interaction: A Green's function approach. Physical Review B, 2021, 103, .	1.1	14
517	A strategy for the design of magnetic memories in bubble-hosting magnets. Applied Physics Letters, 2021, 118, 122406.	1.5	12
519	Whirls and swirls of polarization. Science, 2021, 371, 992-993.	6.0	3
520	NÃ©el-type skyrmions and their current-induced motion in van der Waals ferromagnet-based heterostructures. Physical Review B, 2021, 103, .	1.1	110
521	Gapless Spin Wave Transport through a Quantum Canted Antiferromagnet. Physical Review X, 2021, 11, .	2.8	15
522	Proper and improper chiral magnetic interactions. Physical Review B, 2021, 103, .	1.1	14
523	Zero-field skyrmions in FeGe thin films stabilized through attaching a perpendicularly magnetized single-domain Ni layer. Chinese Physics B, 0, , .	0.7	2
524	Skyrmion driven by rotary magnetic field on the surface of magnetic nanotube: a Monte Carlo study. Nanotechnology, 2021, 32, 275702.	1.3	1
525	Frustration-driven magnetic fluctuations as the origin of the low-temperature skyrmion phase in Co7Zn7Mn6. Npj Quantum Materials, 2021, 6, .	1.8	16
526	Antiferromagnetic skyrmions and skyrmion density wave in a Rashba-coupled Hund insulator. Physical Review B, 2021, 103, .	1.1	9

#	Article	IF	Citations
527	Skyrmions near defects. Journal of Physics Condensed Matter, 2021, 33, 195802.	0.7	3
528	Magnetic texture based magnonics. Physics Reports, 2021, 905, 1-59.	10.3	107
529	Anisotropic Skyrmion Diffusion Controlled by Magnetic-Field-Induced Symmetry Breaking. Physical Review Applied, 2021, 15, .	1.5	20
530	Chiral spintronics. Nature Reviews Physics, 2021, 3, 328-343.	11.9	191
531	Temperature-modulated magnetic skyrmion phases and transformations analysis from first-order reversal curve study. Physical Review B, 2021, 103, .	1.1	3
532	Light-induced Dzyaloshinskii-Moriya interactions in antiferromagnetic metals. Physical Review B, 2021, 103, .	1.1	6
533	Understanding Complex Magnetic Spin Textures with Simulation-Assisted Lorentz Transmission Electron Microscopy. Physical Review Applied, 2021, 15, .	1.5	31
534	Observation of Hydrogen-Induced Dzyaloshinskii-Moriya Interaction and Reversible Switching of Magnetic Chirality. Physical Review X, 2021, 11, .	2.8	34
536	Understanding curvature effects on the magnetization reversal of patterned permalloy Archimedean spirals. Applied Physics Letters, 2021, 118, .	1.5	8
537	Electric field control of natural optical activity in a multiferroic helimagnet. Science, 2021, 372, 496-500.	6.0	19
538	Valley polarization, magnetic anisotropy and Dzyaloshinskii-Moriya interaction of two-dimensional graphene/Janus 2H-VSeX (XÂ= S, Te) heterostructures. Carbon, 2021, 174, 540-555.	5.4	47
539	The temperatureâ€“strain phase diagrams of ferromagnetic thin films under different magnetic fields. Journal of Physics Condensed Matter, 2021, 33, 235802.	0.7	7
540	Current-induced dynamics of skyrmion tubes in synthetic antiferromagnetic multilayers. Physical Review B, 2021, 103, .	1.1	16
541	Near-BPS baby Skyrmions with Gaussian tails. Journal of High Energy Physics, 2021, 2021, 1.	1.6	1
542	Investigation of self-nucleated skyrmion states in the ferromagnetic/nonmagnetic multilayer dot. Applied Physics Letters, 2021, 118, .	1.5	11
543	Skyrmions at vanishingly small Dzyaloshinskiiâ€“Moriya interaction or zero magnetic field. Journal of Physics Condensed Matter, 2021, 33, 255801.	0.7	3
544	Magnetic skyrmions and bimerons in films with anisotropic interfacial Dzyaloshinskii-Moriya interaction. Physical Review B, 2021, 103, .	1.1	12
545	Voltage-controllable magnetic skyrmion dynamics for spiking neuron device applications. Chinese Physics B, 2022, 31, 018503.	0.7	2

#	Article	IF	Citations
546	Synaptic devices based neuromorphic computing applications in artificial intelligence. Materials Today Physics, 2021, 18, 100393.	2.9	110
547	Tailoring Helicity Angle of Twisted Skyrmions in Multilayered Nanostructures. Physica Status Solidi - Rapid Research Letters, 2021, 15, 2100076.	1.2	3
548	Random walk of antiferromagnetic skyrmions in granular films. Physical Review B, 2021, 103, .	1.1	8
549	Emergence of Room Temperature Magnetotransport Anomaly in Epitaxial Pt/Î³â€²-Fe₄N/MgO Heterostructures toward Noncollinear Spintronics. ACS Applied Materials & Interfaces, 2021, 13, 26639-26648.	4.0	3
550	Tuning Dzyaloshinskii-Moriya interaction in ferrimagnetic GdCo: A first-principles approach. Physical Review B, 2021, 103, .	1.1	13
551	Deriving the skyrmion Hall angle from skyrmion lattice dynamics. Nature Communications, 2021, 12, 2723.	5.8	17
552	Skyrmion devices for memory and logic applications. APL Materials, 2021, 9, .	2.2	89
553	Skyrmion crystals in centrosymmetric itinerant magnets without horizontal mirror plane. Scientific Reports, 2021, 11, 11184.	1.6	46
554	Colossal topological Hall effect at the transition between isolated and lattice-phase interfacial skyrmions. Nature Communications, 2021, 12, 2758.	5.8	21
555	Confinement and Protection of Skyrmions by Patterns of Modified Magnetic Properties. Nano Letters, 2021, 21, 4320-4326.	4.5	32
556	Possible Topological Hall Effect above Room Temperature in Layered Cr_{1.2}Te₂ Ferromagnet. Nano Letters, 2021, 21, 4280-4286.	4.5	35
557	Graded magnetic materials. Journal Physics D: Applied Physics, 2021, 54, 303002.	1.3	23
558	Elastocaloric-effect-induced adiabatic magnetization in paramagnetic salts due to the mutual interactions. Scientific Reports, 2021, 11, 9431.	1.6	3
559	The relation between the radii and the densities of magnetic skyrmions. Communications in Theoretical Physics, 2021, 73, 075701.	1.1	0
560	Stability phase diagrams and tuning of magnetic skyrmionium and other states. Journal of Magnetism and Magnetic Materials, 2021, 526, 167706.	1.0	8
561	Bloch-type photonic skyrmions in optical chiral multilayers. Physical Review Research, 2021, 3, .	1.3	28
562	Nanoscale Materials for State-of-the-Art Magnetic Memory Technologies. Progress in Physics of Metals, 2021, 22, 175-203.	0.5	1
563	Stable humplike Hall effect and noncoplanar spin textures in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mrow><mml:mi>SrRuO</mml:mi></mml:mrow><mml:mn>3</ ultrathin films. Physical Review Research, 2021, 3, .	1.3	16

#	Article	IF	Citations
564	Stripe skyrmions and skyrmion crystals. Communications Physics, 2021, 4, .	2.0	17
565	Skyrmion formation and dynamics in magnetic bilayers via atomistic spin dynamics simulations. Physica E: Low-Dimensional Systems and Nanostructures, 2021, 130, 114720.	1.3	2
566	Stability and Lifetimes of Magnetic States of Nano- and Microstructures (Brief Review). JETP Letters, 2021, 113, 801-813.	0.4	10
567	Strain-driven radial vortex core reversal in geometric confined multiferroic heterostructures. Applied Physics Letters, 2021, 118, 262412.	1.5	8
568	Tailoring Dzyaloshinskiiâ€“Moriya interaction in a transition metal dichalcogenide by dual-intercalation. Nature Communications, 2021, 12, 3639.	5.8	28
569	Skyrmion battery effect via inhomogeneous magnetic anisotropy. Applied Physics Reviews, 2021, 8, .	5.5	6
570	Majority gate for two-dimensional ferromagnets lacking inversion symmetry. Physical Review Research, 2021, 3, .	1.3	0
571	Condensation of collective polar vortex modes. Physical Review B, 2021, 103, .	1.1	10
572	Domains and domain walls in ferroic materials. Journal of Applied Physics, 2021, 129, .	1.1	5
573	Guided skyrmion motion along pinning array interfaces. Journal of Magnetism and Magnetic Materials, 2021, 528, 167710.	1.0	17
574	Noncollinear topological textures in two-dimensional van der Waals materials: From magnetic to polar systems. International Journal of Modern Physics B, 0, , 2130004.	1.0	9
575	Acoustic control of magnetism toward energy-efficient applications. Applied Physics Reviews, 2021, 8, .	5.5	48
576	Interfacial coupling effect of Cr2O3 on the magnetic properties of Fe72Ga28 thin films. Scientific Reports, 2021, 11, 13429.	1.6	3
577	Large anisotropic Dzyaloshinskiiâ€“Moriya interaction in CoFeB(211)/Pt(110) films. Applied Physics Letters, 2021, 118, .	1.5	8
578	Modulations of interfacial magnetic properties using structurally inverted magnetic tri-layer systems: Toward skyrmion formation. Applied Physics Letters, 2021, 118, 262408.	1.5	7
579	Skyrmion-Based Programmable Logic Device with Complete Boolean Logic Functions. Physical Review Applied, 2021, 15, .	1.5	34
580	Effects of tilted magnetocrystalline anisotropy on magnetic domains in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>Fe</mml:mi><mml:mn>3</mml:mn></mml:m thin plates. Physical Review B, 2021, 103, .	1.1	10
581	Quantum states of a skyrmion in a two-dimensional antiferromagnet. Physical Review B, 2021, 103, .	1.1	6

#	Article	IF	Citations
582	Magnetism in curved geometries. Journal of Applied Physics, 2021, 129, .	1.1	29
583	Experimental observation of topological Hall effects in compensated ferrimagnet-heavy metal layered structures. Science China: Physics, Mechanics and Astronomy, 2021, 64, 1.	2.0	8
584	Rudermanâ€“Kittelâ€“Kasuyaâ€“Yosida-type interfacial Dzyaloshinskiiâ€“Moriya interaction in heavy metal/ferromagnet heterostructures. Nature Communications, 2021, 12, 3280.	5.8	5
585	Directional locking and the influence of obstacle density on skyrmion dynamics in triangular and honeycomb arrays. Journal of Physics Condensed Matter, 2021, 33, 305801.	0.7	4
586	Angular dependence of Hall effect and magnetoresistance in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi mathvariant="normal">SrRuO</mml:mi><mml:mn>3</mml:mn></mml:msub><mml:mo>â^'</mml:mo><mml:msub><mml:mi mathvariant="normal">SrIrO</mml:mi><mml:mn>3</mml:mn></mml:msub></mml:math> heterostructures. Physical Review B, 2021, 103, .	1.1	5
587	Control of Nonlocal Magnon Spin Transport via Magnon Drift Currents. Physical Review Letters, 2021, 126, 257201.	2.9	30
588	Kinetics of Magnetic Skyrmion Crystal Formation from the Conical Phase. Nano Letters, 2021, 21, 5547-5554.	4.5	0
589	Allâ€Electrical Magnon Transport Experiments in Magnetically Ordered Insulators. Physica Status Solidi - Rapid Research Letters, 2021, 15, 2100130.	1.2	12
590	Topological insulators and semimetals in classical magnetic systems. Physics Reports, 2021, 915, 1-64.	10.3	56
591	Tunable microwave properties of a skyrmion in an isolated nanodisk. Journal of Magnetism and Magnetic Materials, 2021, 529, 167900.	1.0	12
592	Bessel function descriptions of magneto-chiral interactions (DMI)-magnetic and spin flexoelectric skyrmions. Physica B: Condensed Matter, 2021, 613, 412980.	1.3	0
593	Field-Dependent Energy Barriers of Magnetic NÃ©el Skyrmions in Ultrathin Circular Nanodots. Physical Review Applied, 2021, 16, .	1.5	4
594	Hierarchy of multi-order skyrmion phases in twisted magnetic bilayers. Physical Review B, 2021, 104, .	1.1	13
595	Nonvolatile and Volatile Skyrmion Generation Engineered by Ionic Liquid Gating in Ultrathin Films. Physical Review Applied, 2021, 16, .	1.5	6
596	Magnetic Skyrmions: Theory and Applications. , 0, , .		1
597	Multiple Coulomb phases with temperature-tunable ice rules in pyrochlore spin-crossover materials. Physical Review B, 2021, 104, .	1.1	4
598	Van der Waals heterostructures for spintronics and opto-spintronics. Nature Nanotechnology, 2021, 16, 856-868.	15.6	261
599	Control of NÃ©el-type Magnetic Kinks Confined in a Square Nanostructure by Spin-Polarized Currents. Frontiers in Physics, 2021, 9, .	1.0	1

#	Article	IF	Citations
600	Logic Gates Based on Synthetic Antiferromagnetic Bilayer Skyrmions. Physical Review Applied, 2021, 16, .	1.5	19
601	Interfacial Dzyaloshinskii-Moriya interaction and perpendicular magnetic anisotropy at cobalt/diamond interfaces. Journal of Magnetism and Magnetic Materials, 2021, 529, 167852.	1.0	4
602	Magnetization processes and magnetic domain structures in Ta/CoFeB/MgO stacks. Journal of Magnetism and Magnetic Materials, 2021, 529, 167699.	1.0	5
603	Magnetic domain wall dynamics in the precessional regime: Influence of the Dzyaloshinskii-Moriya interaction. Physical Review B, 2021, 104, .	1.1	11
604	Stabilization and topological transformation of magnetic bubbles in disks of a kagome magnet. Applied Physics Letters, 2021, 119, 012402.	1.5	6
605	Visualizing the strongly reshaped skyrmion Hall effect in multilayer wire devices. Nature Communications, 2021, 12, 4252.	5.8	21
606	Currentâ€Controlled Topological Magnetic Transformations in a Nanostructured Kagome Magnet. Advanced Materials, 2021, 33, e2101610.	11.1	20
607	Emergence of Nontrivial Spin Textures in Frustrated Van Der Waals Ferromagnets. Nanomaterials, 2021, 11, 1770.	1.9	9
608	Current-induced H-shaped-skyrmion creation and their dynamics in the helical phase. Journal Physics D: Applied Physics, 2021, 54, 404003.	1.3	3
609	Defectâ€Engineered Dzyaloshinskiiâ€"Moriya Interaction and Electricâ€Fieldâ€Switchable Topological Spin Texture in SrRuO₃. Advanced Materials, 2021, 33, e2102525.	11.1	34
610	Nonlinear Dynamics of Topological Ferromagnetic Textures for Frequency Multiplication. Physical Review Applied, 2021, 16, .	1.5	7
611	Interplay between Single-Ion and Two-Ion Anisotropies in Frustrated 2D Semiconductors and Tuning of Magnetic Structures Topology. Nanomaterials, 2021, 11, 1873.	1.9	25
612	Finsler geometry modeling and Monte Carlo study of skyrmion shape deformation by uniaxial stress. Physical Review B, 2021, 104, .	1.1	7
613	Stabilizing Zero-Field Skyrmions at Room-Temperature in Perpendicularly Magnetized Multilayers. , 0, , .		0
614	Defect-Induced Magnetic Skyrmion in a Two-Dimensional Chromium Triiodide Monolayer. Jacs Au, 2021, 1, 1362-1367.	3.6	10
615	Interplay between Spinâ€Orbit Torques and Dzyaloshinskiiâ€Moriya Interactions in Ferrimagnetic Amorphous Alloys. Advanced Science, 2021, 8, 2100481.	5.6	7
616	Periodically modulated skyrmion strings in Cu2OSeO3. Npj Quantum Materials, 2021, 6, .	1.8	6
617	Manipulation of Magnetic Skyrmion in a 2D van der Waals Heterostructure via Both Electric and Magnetic Fields. Advanced Functional Materials, 2021, 31, 2104452.	7.8	40

#	Article	IF	Citations
618	The geometric phase in nonlinear frequency conversion. Frontiers of Physics, 2022, 17, 1.	2.4	29
619	Skyrmion ratchet in funnel geometries. Physical Review B, 2021, 104, .	1.1	20
620	Influence of Material Parameters on the Stability of Artificial Skyrmion in Hard/Soft Magnetic Bilayers. Physica Status Solidi (B): Basic Research, 0, , 2100320.	0.7	0
621	Macroscopic, layered onion shell like magnetic domain structure generated in YIG films using ultrashort, megagauss magnetic pulses. New Journal of Physics, 2021, 23, 083027.	1.2	0
622	Manipulating density of magnetic skyrmions via multilayer repetition and thermal annealing. Physical Review B, 2021, 104, .	1.1	12
623	Current-Induced Magnetization Control in Insulating Ferrimagnetic Garnets. Journal of the Physical Society of Japan, 2021, 90, 081007.	0.7	9
624	Crystal Symmetry Engineering in Epitaxial Perovskite Superlattices. Advanced Functional Materials, 2021, 31, 2106466.	7.8	7
625	Photonic Spin Skyrmion with Dynamic Position Control. ACS Photonics, 2021, 8, 2567-2572.	3.2	11
626	Magnonics Based on Thin-Film Iron Garnets. Journal of the Physical Society of Japan, 2021, 90, 081005.	0.7	15
627	Review of Raman spectroscopy of two-dimensional magnetic van der Waals materials*. Chinese Physics B, 2021, 30, 117104.	0.7	10
628	Microdynamic Study of Spin-Lattice Coupling Effects on Skyrmion Transport. Physical Review Letters, 2021, 127, 097201.	2.9	12
629	Role of magnetic skyrmions for the solution of the shortest path problem. Journal of Magnetism and Magnetic Materials, 2021, 532, 167977.	1.0	6
630	Controlled Domain-Wall Pair to Skyrmion Conversion in Typical Junction Geometry Useful for Magnetic Memory Devices. ECS Journal of Solid State Science and Technology, 2021, 10, 081002.	0.9	5
631	Dynamics and nonmonotonic drag for individually driven skyrmions. Physical Review B, 2021, 104, .	1.1	5
632	Spontaneous Topological Magnetic Transitions in NdCo₅ Rareâ€Earth Magnets. Advanced Materials, 2021, 33, e2103751.	11.1	23
633	Topological magnetic textures in magnetic topological insulators. Physical Review Research, 2021, 3, .	1.3	7
634	Regular and in-plane skyrmions and antiskyrmions from boundary instabilities. Physical Review B, 2021, 104, .	1.1	3
635	Topological spin textures in a two-dimensional MnBi2(Se, Te)4 Janus material. Applied Physics Letters, 2021, 119, .	1.5	30

#	Article	IF	Citations
636	Imaging the spin chirality of ferrimagnetic NÃ©el skyrmions stabilized on topological antiferromagnetic <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>Mn</mml:mi><mml:mn>3</mml:mn></mml: Physical Review Materials, 2021, 5, .	0.9	16
637	Large Hall and Nernst responses from thermally induced spin chirality in a spin-trimer ferromagnet. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	7
638	A spin-wave driven skyrmion diode under transverse magnetic fields. Journal of Magnetism and Magnetic Materials, 2021, 532, 167975.	1.0	18
639	The Magnetoâ€Transport Properties of Cr 1/3 TaS 2 with Chiral Magnetic Solitons. Advanced Electronic Materials, 2021, 7, 2100424.	2.6	18
640	Spinâ€“Orbit Torque in Bilayers of Kagome Ferromagnet Fe₃Sn₂ and Pt. Nano Letters, 2021, 21, 6975-6982.	4.5	11
641	Skyrmion based magnonic crystals. Journal of Applied Physics, 2021, 130, .	1.1	18
642	Spontaneous fluctuations in a magnetic Fe/Gd skyrmion lattice. Physical Review Research, 2021, 3, .	1.3	9
643	Cryogenic Electron Microscopy on Strongly Correlated Quantum Materials. Accounts of Chemical Research, 2021, 54, 3518-3528.	7.6	10
644	B20â€“MnSi films grown on Si(100) substrates with magnetic skyrmion signature. Materials Today Physics, 2021, 21, 100541.	2.9	2
645	Dynamical switching of magnetic topology in microwave-driven itinerant magnet. Physical Review B, 2021, 104, .	1.1	17
646	Meron-antimeron crystals in noncentrosymmetric itinerant magnets on a triangular lattice. Physical Review B, 2021, 104, .	1.1	29
647	Nanoscale Near-Field Steering of Magnetic Vortices. Physical Review Applied, 2021, 16, .	1.5	5
648	Control of Stripe-Domain-Wall Magnetization in Multilayers Featuring Perpendicular Magnetic Anisotropy. Physical Review Applied, 2021, 16, .	1.5	5
649	Observation of Defect-Assisted Magnetic Vortex Core Reversal at Ultralow Critical Velocity. Physical Review Applied, 2021, 16, .	1.5	5
650	Electrical Generation and Deletion of Magnetic Skyrmionâ€Bubbles via Vertical Current Injection. Advanced Materials, 2021, 33, e2104406.	11.1	18
651	Thermally activated dynamics of current-driven skyrmions in random media. Europhysics Letters, 2021, 136, 10001.	0.7	0
652	Observation of Acoustic Skyrmions. Physical Review Letters, 2021, 127, 144502.	2.9	34
653	Spectroscopy of the frustrated quantum antiferromagnet Cs2CuCl4. Journal of Physics Condensed Matter, 2021, 33, 495603.	0.7	1

#	Article	IF	Citations
654	Circuits and excitations to enable Brownian token-based computing with skyrmions. Applied Physics Letters, 2021, 119, .	1.5	14
655	Robust formation of nanoscale magnetic skyrmions in easy-plane anisotropy thin film multilayers with low damping. Physical Review B, 2021, 104, .	1.1	8
656	Isolated skyrmion, skyrmion lattice and antiskyrmion lattice creation through magnetization reversal in Co/Pd nanostructure. Scientific Reports, 2021, 11, 18945.	1.6	3
657	Novel electronic structures and magnetic properties in twisted two-dimensional graphene/Janus 2Hâ€"VSeTe heterostructures. Physica E: Low-Dimensional Systems and Nanostructures, 2021, 134, 114854.	1.3	8
658	Universality of stripe domain width change by an in-plane magnetic field. Journal of Magnetism and Magnetic Materials, 2021, 539, 168381.	1.0	7
659	Magnetic imaging of various topological spin textures and their dynamics. Journal of Magnetism and Magnetic Materials, 2021, 539, 168332.	1.0	10
660	The lifetime of micron scale topological chiral magnetic states with atomic resolution. Computer Physics Communications, 2021, 269, 108136.	3.0	9
661	Breaking the topological protection of target skyrmions by the excitation of spin wave modes under microwave magnetic field. Journal of Magnetism and Magnetic Materials, 2022, 541, 168521.	1.0	4
662	Dipolar drift and collective instabilities of skyrmions in crossed nonuniform electric and magnetic fields in a chiral magnetic insulator. Europhysics Letters, 2020, 132, 56002.	0.7	1
663	Skyrmions in antiferromagnets. , 2021, , 333-345.		0
664	Conventional applications of skyrmions. , 2021, , 367-391.		0
665	Skyrmion Dynamics in Concentric and Eccentric Nano-Ring Structures. IEEE Transactions on Magnetics, 2022, 58, 1-6.	1.2	5
666	Impact of the interplay of piezoelectric strain and current-induced heating on the field-like spinâ€"orbit torque in perpendicularly magnetized Ta/Co20Fe60B20/Ta/MgO film. Applied Physics Letters, 2021, 118, 032401.	1.5	2
667	Field-induced topological Hall effect and double-fan spin structure with a <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi>c</mml:mi></mml:math> -axis component in the metallic kagome antiferromagnetic compound <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi mathvariant="normal">Y</mml:mi><mml:msub><mml:mi>Mn</mml:mi><mml:mn>6</mml:mn></mml:msub><mml:msub><mml:mi>Sn Physical Review B, 2021, 103, .	1.1	67
668	Current-Induced Dynamics of Chiral Magnetic Structures: Creation, Motion, and Applications. Topics in Applied Physics, 2021, , 147-181.	0.4	2
669	KKRnano: Quantum Description of Skyrmions in Chiral B20 Magnets. , 2021, , 191-205.		0
670	Robustness of the remanent magnetic domain pattern formation and associated stripe-bubble transitions in Co/Pt multilayers against field sequencing. AIP Advances, 2021, 11, 015339.	0.6	2
671	Static properties of magnetic skyrmions. , 2021, , 181-231.		2

#	Article	IF	Citations
672	X-ray techniques to characterize nanomagnetism. , 2021, , 199-303.		0
673	Synthesis of emerging 2D layered magnetic materials. Nanoscale, 2021, 13, 2157-2180.	2.8	35
674	New Dimension in Magnetism and Superconductivity: 3D and Curvilinear Nanoarchitectures. Advanced Materials, 2022, 34, e2101758.	11.1	65
675	Correlated gyrotropic modes of multi-skyrmion in elliptical ferromagnetic nanodisks. Journal of Magnetism and Magnetic Materials, 2020, 510, 166965.	1.0	2
676	Aberration corrected spin polarized low energy electron microscope. Ultramicroscopy, 2020, 216, 113017.	0.8	5
677	Chiral Symmetry Breaking for Deterministic Switching of Perpendicular Magnetization by Spinâ€"Orbit Torque. Nano Letters, 2021, 21, 515-521.	4.5	64
678	Impact of growth conditions on the domain nucleation and domain wall propagation in Pt/Co/Pt stacks. Journal Physics D: Applied Physics, 2021, 54, 015002.	1.3	8
679	High-sensitivity mapping of magnetic induction fields with nanometer-scale resolution: comparison of off-axis electron holography and pixelated differential phase contrast. Journal Physics D: Applied Physics, 2021, 54, 085001.	1.3	12
680	Skyrmionâ€"skyrmion interaction in a magnetic film. Journal of Physics Condensed Matter, 2020, 32, 415803.	0.7	33
681	Length-scale independent skyrmion and meron Hall angles. Journal of Physics Condensed Matter, 2020, 33, 115801.	0.7	3
682	Controlling the helicity of magnetic skyrmions by electrical field in frustrated magnets. New Journal of Physics, 2020, 22, 083032.	1.2	23
683	Multiple-scattering approach for multi-spin chiral magnetic interactions: application to the one- and two-dimensional Rashba electron gas. New Journal of Physics, 2020, 22, 103003.	1.2	14
684	Skyrmion pinball and directed motion on obstacle arrays. Journal of Physics Communications, 2020, 4, 085001.	0.5	8
685	Magnon valley Hall effect in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mrow><mml:mi>CrI</mml:mi></mml:mrow><mml:mn>3</ -based van der Waals heterostructures. Physical Review B, 2020, 101, .	1.1	26
686	Dynamics of ferromagnetic bimerons driven by spin currents and magnetic fields. Physical Review B, 2020, 102, .	1.1	19
687	Modeling spin waves in noncollinear antiferromagnets: Spin-flop states, spin spirals, skyrmions, and antiskyrmions. Physical Review B, 2020, 102, .	1.1	17
688	Solitary wave excitations of skyrmion strings in chiral magnets. Physical Review B, 2020, 102, .	1.1	12
689	Position-dependent stability and lifetime of the skyrmion state in nickel-substituted <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>Cu</mml:mi><mml:mn>2 Physical Review B, 2020, 102, .	1.1	4

#	Article	IF	Citations
690	Entropic signatures of the skyrmion lattice phase in MnSi1â€“xAlx and Fe1â€“yCoySi. Physical Review B, 2020, 102, .	1.1	4
691	Magnetic Chirality Controlled by the Interlayer Exchange Interaction. Physical Review Letters, 2020, 124, 207203.	2.9	18
692	Stacking-Dependent Spin Interactions in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>Pd</mml:mi><mml:mo>/</mml:mo><mml:mi>Fe</mml:mi></mml:math> Bilayers on Re(0001). Physical Review Letters, 2020, 125, 227205.	2.9	9
693	Room-temperature observation and current control of skyrmions in Pt/Co/Os/Pt thin films. Physical Review Materials, 2018, 2, .	0.9	43
694	Engineering Dzyaloshinskii-Moriya interaction in B20 thin-film chiral magnets. Physical Review Materials, 2018, 2, .	0.9	8
695	Boundary twists, instabilities, and creation of skyrmions and antiskyrmions. Physical Review Materials, 2018, 2, .	0.9	13
696	Single-spin sensing of domain-wall structure and dynamics in a thin-film skyrmion host. Physical Review Materials, 2019, 3, .	0.9	27
697	Itinerancy-dependent noncollinear spin textures in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>SrFeO</mml:mi><mml:mn>3</mml:mn></mml:msub><m , and <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>CaFeO</mml:mi><mml:mn>3</mml:mn></m Physical Review Materials, 2019, 3, .	0.9	19
698	Structural, magnetostatic, and magnetodynamic studies of Co/Mo-based uncompensated synthetic antiferromagnets. Physical Review Materials, 2019, 3, .	0.9	2
699	Ferromagnetism in van der Waals compounds <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>MnS</mml:mi><mml:msub><mml:mi mathvariant="normal">b</mml:mi><mml:mrow><mml:mn>1.8</mml:mn></mml:mrow></mml:msub><mml:mi mathvariant="normal">B</mml:mi><mml:msub><mml:mi mathvariant="normal">i</mml:mi><mml:mrow><mml:mn>0.2</mml:mn></mml:mrow></mml:msub><mml:mi mathvariant="normal">T</mml:mi><mml:msub><mml:mi mathvariant="normal">e</mml:mi><mml:mn>4<	0.9	21
700	Material systems for FM-/AFM-coupled skyrmions in Co/Pt-based multilayers. Physical Review Materials, 2020, 4, .	0.9	13
701	Energy-efficient generation of skyrmion phases in Co/Ni/Pt-based multilayers using Joule heating. Physical Review Materials, 2020, 4, .	0.9	8
702	Skyrmion generation from irreversible fission of stripes in chiral multilayer films. Physical Review Materials, 2020, 4, .	0.9	10
703	Interface phenomena in ferromagnet/ <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>Ta</mml:mi><mml:msub><mml:mi mathvariant="normal">O</mml:mi><mml:mi>x</mml:mi></mml:msub></mml:mrow></mml:math> -based systems: Damping, perpendicular magnetic anisotropy, and Dzyaloshinskii-Moriya interaction. Physical Review Materials, 2020, 4, .	0.9	5
704	Biskyrmion lattices in centrosymmetric magnetic films. Physical Review Research, 2019, 1, .	1.3	16
705	Multilayered vortices. Physical Review Research, 2019, 1, .	1.3	14
706	Theory of the skyrmion, meron, antiskyrmion, and antimeron in chiral magnets. Physical Review Research, 2019, 1, .	1.3	21
707	Tunable terahertz oscillation arising from Bloch-point dynamics in chiral magnets. Physical Review Research, 2020, 2, .	1.3	13

#	Article	IF	Citations
708	Prospecting chiral multisite interactions in prototypical magnetic systems. Physical Review Research, 2020, 2, .	1.3	25
709	Quantum damping of skyrmion crystal eigenmodes due to spontaneous quasiparticle decay. Physical Review Research, 2020, 2, .	1.3	14
710	Zero-point magnetic exchange interactions. Physical Review Research, 2020, 2, .	1.3	4
711	Direct observation of temperature dependent vortex dynamics in a La0.7Sr0.3MnO3 micromagnet. Physical Review Research, 2020, 2, .	1.3	3
712	Skyrmions in magnetic multilayers: chirality, electrical detection and current-induced motion. , 2017, , .		1
713	Magnetic-Field-Induced Optical Second-Harmonic Generation Study of Co/Pt and Co/Ta Interfaces. Journal of Experimental and Theoretical Physics, 2020, 130, 555-561.	0.2	4
714	Topological magnetic excitations. Europhysics Letters, 2020, 132, 20003.	0.7	25
715	Three-dimensional frequency- and phase-multiplexed magneto-optical microscopy. Optics Express, 2019, 27, 33942.	1.7	6
717	Skyrmions-based magnetic racetrack memory. Wuli Xuebao/Acta Physica Sinica, 2018, 67, 137510.	0.2	7
718	The effect of Dzyaloshinskiiâ€"Moriya interaction on direct and backward transition between magnetic states of Pt/Co/Ir/Co/Pr synthetic ferrimagnet. Journal of Advanced Materials and Technologies, 2021, 6, 167-178.	0.2	0
719	Ultrafast Dynamics of Domain Walls in Antiferromagnets and Ferrimagnets with Temperatures of Compensation of the Magnetic Moment and Angular Momentum (Brief Review). JETP Letters, 2021, 114, 215-226.	0.4	5
720	Visibility and Apparent Size of NÃ©el-Type Magnetic Skyrmions in Fresnel Defocus Images of Multilayer Films. Microscopy and Microanalysis, 0, , 1-10.	0.2	2
721	Torque field and skyrmion motion by spin transfer torque in a quasi-2D interface in presence of strong spinâ€"orbit interaction. Journal of Applied Physics, 2021, 130, 133903.	1.1	3
722	Supertoroidal light pulses as electromagnetic skyrmions propagating in free space. Nature Communications, 2021, 12, 5891.	5.8	71
723	Skyrmion Formation in Nanodisks Using Magnetic Force Microscopy Tip. Nanomaterials, 2021, 11, 2627.	1.9	3
724	Wigner solids of domain wall skyrmions. Nature Communications, 2021, 12, 6006.	5.8	10
725	Ferroelectric domain walls for nanotechnology. Nature Reviews Materials, 2022, 7, 157-173.	23.3	89
726	Magnetic Topological Insulator Heterostructures: A Review. Advanced Materials, 2023, 35, e2102427.	11.1	35

#	Article	IF	Citations
727	Ferroelectrically controlled topological magnetic phase in a Janus-magnet-based multiferroic heterostructure. Physical Review Research, 2021, 3, .	1.3	30
728	Hybridized magnon modes in the quenched skyrmion crystal. Physical Review B, 2021, 104, .	1.1	7
729	The rectilinear motion of the individual asymmetrical skyrmion driven by temperature gradients. Acta Materialia, 2021, 221, 117383.	3.8	14
730	Multi-field control on magnetic skyrmions. Wuli Xuebao/Acta Physica Sinica, 2018, 67, 137507.	0.2	0
731	Magnetoelastic phenomena and mechanisms of magnetic skyrmion crystal. Wuli Xuebao/Acta Physica Sinica, 2018, 67, 136201.	0.2	0
732	Dzyaloshinsky-Moriya interaction in -(Zn, Cr)S(111) surface: First principle calculations. Wuli Xuebao/Acta Physica Sinica, 2018, 67, 137101.	0.2	6
733	Skyrmions in magnetic thin film heterostructures. Wuli Xuebao/Acta Physica Sinica, 2018, 67, 131204.	0.2	2
734	Topological Hall effect in ferromagnetic/non-ferromagnetic metals heterojunctions. Wuli Xuebao/Acta Physica Sinica, 2018, 67, 131202.	0.2	0
735	Overview and advances in skyrmionics. Wuli Xuebao/Acta Physica Sinica, 2018, 67, 131205.	0.2	3
736	Magnetically ordered compounds of transition elements with nonmetals. Handbook of Magnetic Materials, 2019, 28, 47-85.	0.6	0
739	Magnetic Chiral Solitons Stabilized by Oersted Field at a Thin-Film Nanocontact with Electric Current. Ukrainian Journal of Physics, 2019, 64, 933.	0.1	0
740	Research progress of room temperature magnetic skyrmion and its application. Wuli Xuebao/Acta Physica Sinica, 2020, 69, 231201.	0.2	2
741	Featureless quantum paramagnet with frustrated criticality and competing spiral magnetism on spin-1 honeycomb lattice magnet. Physical Review Research, 2020, 2, .	1.3	9
742	Kerr effect anomaly in magnetic topological insulator superlattices. Nanotechnology, 2020, 31, 434001.	1.3	4
743	Strain modulation of magnonic frequency comb by magnonâ€skyrmion interaction in ferromagnetic materials. Advanced Engineering Materials, 0, , 2101245.	1.6	10
744	Dislocation-Driven Relaxation Processes at the Conical to Helical Phase Transition in FeGe. ACS Nano, 2021, , .	7.3	0
745	Magnetic Bloch-point hopping in multilayer skyrmions and associated emergent electromagnetic signatures. Physical Review B, 2021, 104, .	1.1	5
746	Giant Topological Hall Effect in the Noncollinear Phase of Two-Dimensional Antiferromagnetic Topological Insulator MnBi₄Te₇. Chemistry of Materials, 2021, 33, 8343-8350.	3.2	13

#	Article	IF	Citations
748	Nonmagnetic impurities in skyrmion racetrack memory. Nanosystems: Physics, Chemistry, Mathematics, 2020, 11, 628-635.	0.2	1
749	Investigation of Shear-Driven and Pressure-Driven Liquid Crystal Flow at Microscale: A Quantitative Approach for the Flow Measurement. Micromachines, 2021, 12, 28.	1.4	1
750	Magnetic Field Mapping using Off-Axis Electron Holography in the Transmission Electron Microscope. Journal of Visualized Experiments, 2020, , .	0.2	0
751	Chiral Instability of the Homogeneous State of a Ferromagnetic Film on a Magnetic Substrate. Journal of Experimental and Theoretical Physics, 2020, 131, 963-969.	0.2	3
752	Operando control of skyrmion density in a Lorentz transmission electron microscope with current pulses. Journal of Applied Physics, 2020, 128, 233902.	1.1	2
753	Multifunctional oxides for topological magnetic textures by design. Journal Physics D: Applied Physics, 2021, 54, 093001.	1.3	3
754	Ultrahigh frequency spin-torque nano-oscillator based on bilayer-skyrmions. Journal of Magnetism and Magnetic Materials, 2022, 543, 168641.	1.0	5
755	ESpinS: A program for classical Monte-Carlo simulations of spin systems. Computational Materials Science, 2022, 202, 110947.	1.4	13
756	Tuning magnetism at the two-dimensional limit: a theoretical perspective. Nanoscale, 2021, 13, 19812-19827.	2.8	25
757	Geometric Finite Elements. , 2020, , 3-49.		1
758	Thermodynamical Properties of Nanoalloys. , 2020, , 193-223.		0
759	Tuning scalar spin chirality in ultrathin films of the kagome-lattice ferromagnet Fe3Sn. Communications Materials, 2021, 2, .	2.9	4
760	Temperature-driven transition from skyrmion to bubble crystals in centrosymmetric itinerant magnets. New Journal of Physics, 0, , .	1.2	20
761	Scalable computational measures for entropic detection of latent relations and their applications to magnetic imaging. Communications in Applied Mathematics and Computational Science, 2021, 16, 267-297.	0.7	1
762	Influence of variation of tungsten layer thickness on interfacial Dzyaloshinskiiâ€"Moriya interaction in W/CoFeB/SiO2 heterostructures. Bulletin of Materials Science, 2021, 44, 1.	0.8	0
763	Skyrmion racetrack memory with an antidot. Journal Physics D: Applied Physics, 2021, 54, 025001.	1.3	4
764	Magnetic skyrmion states in cobalt nanodisk. Journal of Magnetism and Magnetic Materials, 2020, 512, 167041.	1.0	2
765	Electrical control of topological spin textures in two-dimensional multiferroics. Nanoscale, 2021, 13, 20609-20614.	2.8	11

#	Article	IF	Citations
766	Formation, thermal stability and magnetic properties of new melt-spun Mn-Si-B glassy alloys. Journal of Non-Crystalline Solids, 2022, 576, 121253.	1.5	3
767	Velocity increase of skyrmion motion by constructing wedge nanotracks. Journal of Magnetism and Magnetic Materials, 2022, 546, 168877.	1.0	4
768	Direct visualization of the three-dimensional shape of skyrmion strings in a noncentrosymmetric magnet. Nature Materials, 2022, 21, 181-187.	13.3	37
769	Antiskyrmions and Bloch skyrmions in magnetic Dresselhaus metals. Physical Review B, 2021, 104, .	1.1	6
770	Imprint from ferromagnetic skyrmions in an antiferromagnet via exchange bias. Applied Physics Letters, 2021, 119, 192407.	1.5	4
771	Imaging antiferromagnetic domain fluctuations and the effect of atomic scale disorder in a doped spin-orbit Mott insulator. Science Advances, 2021, 7, eabi6468.	4.7	5
772	Fluctuations and Pinning for Individually Manipulated Skyrmions. Frontiers in Physics, 2021, 9, .	1.0	1
773	Distorted <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mn>3</mml:mn><mml:mi>Q</mml:mi></mml:mrow></mml: state driven by topological-chiral magnetic interactions. Physical Review B, 2021, 104, .	1.1	5
774	Weyl fermions promote collective magnetism. Nature Materials, 2021, 20, 1592-1593.	13.3	1
775	Elliptical skyrmion moving along a track without transverse speed. Physical Review B, 2021, 104, .	1.1	5
776	Tunable magnetic skyrmions in ferrimagnetic Mn4N. Applied Physics Letters, 2021, 119, .	1.5	18
777	Crafting a Next-Generation Device Using Iron Oxide Thin Film: A Review. Crystal Growth and Design, 2021, 21, 7326-7352.	1.4	11
778	Conformal Growth of Cr2Te3 on Bi2Te3 Nanodots with a Topological Hall Effect. Crystal Growth and Design, 0, , .	1.4	3
779	Dynamic transition of current-driven single-skyrmion motion in a room-temperature chiral-lattice magnet. Nature Communications, 2021, 12, 6797.	5.8	26
780	Skyrmion-size dependence of the topological Hall effect: A real-space calculation. Physical Review B, 2021, 104, .	1.1	10
781	Strain-mediated voltage-controlled magnetic double-vortex states in elliptical nanostructures. Journal of Magnetism and Magnetic Materials, 2021, 547, 168729.	1.0	1
782	Configurable pixelated skyrmions on nanoscale magnetic grids. Communications Physics, 2021, 4, .	2.0	14
783	Experimental evidence of a change of exchange anisotropy sign with temperature in Zn-substituted <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>Cu</mml:mi><mml:mn>2</mml:mn></mml: Physical Review Research, 2021, 3, .	1.3	4

#	Article	IF	Citations
784	Photonic Spin Lattices: Symmetry Constraints for Skyrmion and Meron Topologies. Physical Review Letters, 2021, 127, 237403.	2.9	49
785	Surface acoustic wave controlled skyrmion-based synapse devices. Nanotechnology, 2022, 33, 115205.	1.3	9
786	Topological Spin Textures and Their Applications. Magnetism, 2021, 1, 58-59.	0.6	2
787	From the Spin Eigenmodes of Isolated NÃ©el Skyrmions to the Magnonic Bands of Skyrmionic Crystals: A Micromagnetic Study as a Function of the Interfacial Dzyaloshinskii-Moriya Interaction and the Exchange Constants. IEEE Magnetics Letters, 2022, 13, 1-5.	0.6	2
789	Generation of Optical Skyrmions with Tunable Topological Textures. ACS Photonics, 2022, 9, 296-303.	3.2	49
790	Lifetime of skyrmions in discrete systems with infinitesimal lattice constant. Journal of Magnetism and Magnetic Materials, 2022, 549, 168974.	1.0	5
791	Effects of interlayer exchange on collapse mechanisms and stability of magnetic skyrmions. Physical Review B, 2022, 105, .	1.1	2
793	Quantitative behavior study of velocity, radius and topological charge on skyrmion/edge interaction dynamics on Co/Pt nanotrack. Quarks, 2020, 3, 50-65.	0.3	0
794	Observation of localized magnetic plasmon skyrmions. Nature Communications, 2022, 13, 8.	5.8	61
795	Skyrmionics in correlated oxides. MRS Bulletin, 2021, 46, 1053-1062.	1.7	5
796	Blue Phase III: Topological Fluid of Skyrmions. Physical Review X, 2022, 12, .	2.8	3
797	A review on magnetic and spintronic neurostimulation: challenges and prospects. Nanotechnology, 2022, 33, 182004.	1.3	12
798	Pinning and gyration dynamics of magnetic vortices revealed by correlative Lorentz and bright-field imaging. Physical Review Research, 2022, 4, .	1.3	1
799	The 20-nm Skyrmion Generated at Room Temperature by Spin-Orbit Torques. Chinese Physics Letters, 2022, 39, 017501.	1.3	12
800	Geometrically stabilized skyrmionic vortex in FeGe tetrahedral nanoparticles. Nature Materials, 2022, 21, 305-310.	13.3	11
801	Electric field effect on electron gas spins in two-dimensional magnets with strong spin-orbit coupling. Physical Review B, 2022, 105, .	1.1	0
802	Skyrmion Stabilization at the Domain Morphology Transition in Ferromagnet/Heavy Metal Heterostructures with Low Exchange Stiffness. Advanced Materials Interfaces, 0, , 2101708.	1.9	1
803	Assembling Diverse Skyrmionic Phases in Fe₃GeTe₂ Monolayers. Advanced Materials, 2022, 34, e2107779.	11.1	25

#	Article	IF	Citations
804	Skyrmion Dynamics in the Presence of Deformation. Physical Review Applied, 2022, 17, .	1.5	7
805	Ferroelectric Proximity Effect and Topological Hall Effect in SrRuO₃/BiFeO₃ Multilayers. ACS Applied Materials & Interfaces, 2022, 14, 6194-6202.	4.0	11
806	Experimental demonstration of skyrmionic magnetic tunnel junction at room temperature. Science Bulletin, 2022, 67, 691-699.	4.3	52
807	Defect modeling in skyrmionic ferromagnetic systems. APL Materials, 2022, 10, .	2.2	11
808	Nonreciprocal dynamics of ferrimagnetic bimerons. Physical Review B, 2022, 105, .	1.1	7
809	Generation and characterization of complex vector modes with digital micromirror devices: a tutorial. Journal of Optics (United Kingdom), 2022, 24, 034001.	1.0	11
810	Vector vorticity of skyrmionic texture: An internal degree of freedom tunable by magnetic field. Physical Review B, 2022, 105, .	1.1	5
811	Manipulation of Skyrmion Motion Dynamics for Logical Device Application Mediated by Inhomogeneous Magnetic Anisotropy. Nanomaterials, 2022, 12, 278.	1.9	7
812	Zoology of Multipleâ€Q Spin Textures in a Centrosymmetric Tetragonal Magnet with Itinerant Electrons. Advanced Science, 2022, 9, e2105452.	5.6	42
813	Spin order and fluctuations in the <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>EuAl</mml:mi><mml:mn>4</mml:mn></mml:msub></mm and <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi mathvariant="normal">EuGa</mml:mi><mml:mn>4</mml:mn></mml:msub></mml:math> topological antiferromagnets: A <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi>Ï¼</mml:mi><mml:mi>SR</mml:mi></mml:math>	1.1	25
814	Micromagnetic prediction strain and current co-mediated spindynamics in skyrmion-based spin-torque nano-oscillator. Journal Physics D: Applied Physics, 2022, 55, 175003.	1.3	3
815	Multiple Skyrmion Crystal Phases by Itinerant Frustration in Centrosymmetric Tetragonal Magnets. Journal of the Physical Society of Japan, 2022, 91, .	0.7	27
816	Engineering antiferromagnetic skyrmions and antiskyrmions at metallic interfaces. Physical Review B, 2022, 105, .	1.1	7
817	Generation and manipulation of skyrmions and other topological spin structures with rare metals. Rare Metals, 2022, 41, 2200-2216.	3.6	24
818	Optical topological lattices of Bloch-type skyrmion and meron topologies. Photonics Research, 2022, 10, 947.	3.4	15
819	Strong anisotropic Hall effect in single-crystalline <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi mathvariant="normal">CeMn</mml:mi><mml:mn>2</mml:mn></mml:msub><mml:msub><mml:mi mathvariant="normal">Ge</mml:mi><mml:mn>2</mml:mn></mml:msub></mml:math> with helical spin order. Physical Review B, 2022, 105, .	1.1	6
820	Observation of unconventional spin-polarization induced spinâ€“orbit torque in L1₂-ordered antiferromagnetic Mn₃Pt thin films. Applied Physics Express, 2022, 15, 033002.	1.1	2
821	Interfacial skyrmion in magnetic thin films and its applications. Journal of Magnetism and Magnetic Materials, 2022, 551, 169107.	1.0	6

#	Article	IF	Citations
822	Spin-Torque Oscillator Based on Magnetic Domain and Meron. Frontiers in Physics, 2022, 10, .	1.0	1
823	Cascadable direct current driven skyrmion logic inverter gate. Physical Review B, 2022, 105, .	1.1	5
824	Controlled Switching of the Number of Skyrmions in a Magnetic Nanodot by Electric Fields. Advanced Materials, 2022, 34, e2107908.	11.1	19
825	Hopfion dynamics in chiral magnets. Journal of Physics Condensed Matter, 2022, 34, 225805.	0.7	6
826	Atomic-scale visualization of topological spin textures in the chiral magnet MnGe. Science, 2021, 374, 1484-1487.	6.0	15
827	Topological spintronics and magnetoelectronics. Nature Materials, 2022, 21, 15-23.	13.3	101
828	Spin excitation spectra in helimagnetic states: Proper-screw, cycloid, vortex-crystal, and hedgehog lattices. Physical Review B, 2021, 104, .	1.1	25
829	Dynamic Rashba-Dresselhaus Effect. Physical Review Letters, 2021, 127, 237601.	2.9	15
830	Spin Wave Emission with Cone Shape in Magnetic Films with Strong Dzyaloshinskii-Moriya Interaction. SSRN Electronic Journal, 0, , .	0.4	0
831	Uncertainty Propagation in Quantitative Magnetic Force Microscopy Using a Monte-Carlo Method. IEEE Transactions on Magnetics, 2022, 58, 1-8.	1.2	2
832	Magnetic Frustration in a Chiral Compound Î'-Kcopo4. SSRN Electronic Journal, 0, , .	0.4	0
833	The Drift of Magnetic Vortices in a Random Field of Anchoring Centers. IEEE Transactions on Magnetics, 2022, 58, 1-10.	1.2	0
834	Spin Polarized Stm Imaging of Nanoscale NÃ©el Skyrmions in an Sriro3/Srruo3 Perovskite Bilayer. SSRN Electronic Journal, 0, , .	0.4	0
835	Designing light-element materials with large effective spin-orbit coupling. Nature Communications, 2022, 13, 919.	5.8	26
836	Dynamic properties of a ferromagnetic skyrmion in an in-plane magnetic field. Journal of Applied Physics, 2022, 131, .	1.1	1
837	Local control of magnetic interface effects in chiral <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi mathvariant="normal">Ir</mml:mi><mml:mo>|</mml:mo><mml:mi mathvariant="normal">Co</mml:mi><mml:mo>|</mml:mo><mml:mi mathvariant="normal">Pt</mml:mi></mml:math> multilayers using <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msup><mml:mi mathvariant="normal">Ga</	1.1	17
838	From Thermodynamics to Information: Landauerâ€™s Limit and Negentropy Principle Applied to Magnetic Skyrmions. Frontiers in Physics, 2022, 10, .	1.0	2
839	Ab initio calculation of the magnetic Gibbs free energy of materials using magnetically constrained supercells. Physical Review B, 2022, 105, .	1.1	2

#	Article	IF	Citations
840	Forecasting the outcome of spintronic experiments with Neural Ordinary Differential Equations. Nature Communications, 2022, 13, 1016.	5.8	17
841	Mean-field description of skyrmion lattice in hexagonal frustrated antiferromagnets. Physical Review B, 2022, 105, .	1.1	22
842	Critical behavior and strongly anisotropic interactions in PrMn₂Ge₂. Applied Physics Letters, 2022, 120, 092402.	1.5	9
843	Curvature-induced drift and deformation of magnetic skyrmions: Comparison of the ferromagnetic and antiferromagnetic cases. Physical Review B, 2022, 105, .	1.1	10
844	Skyrmions-based logic gates in one single nanotrack completely reconstructed via chirality barrier. National Science Review, 2022, 9, .	4.6	18
846	Discretized evolution of solitons in the achiral stripe phase of a Fe/Gd thin film. Physical Review B, 2022, 105, .	1.1	1
847	Square and rhombic lattices of magnetic skyrmions in a centrosymmetric binary compound. Nature Communications, 2022, 13, 1472.	5.8	65
848	Ultrafast time-evolution of chiral NÃ©el magnetic domain walls probed by circular dichroism in x-ray resonant magnetic scattering. Nature Communications, 2022, 13, 1412.	5.8	7
849	Tunable spin-wave nonreciprocity in synthetic antiferromagnetic domain walls. Physical Review B, 2022, 105, .	1.1	4
850	Electrical manipulation of skyrmions in a chiral magnet. Nature Communications, 2022, 13, 1593.	5.8	51
851	Topological Hall effect in SrRuO₃ thin films and heterostructures. Journal of Physics Condensed Matter, 2022, 34, 244001.	0.7	3
852	Spin-orbit enabled all-electrical readout of chiral spin-textures. Nature Communications, 2022, 13, 1576.	5.8	9
853	Anisotropic Dzyaloshinskiiâ€“Moriya Interaction and Topological Magnetism in Two-Dimensional Magnets Protected by P4Ì…m2 Crystal Symmetry. Nano Letters, 2022, 22, 2334-2341.	4.5	26
854	Building skyrmions through frustration. Nature Materials, 2022, 21, 265-266.	13.3	3
855	A Van der Waals Interface Hosting Two Groups of Magnetic Skyrmions. Advanced Materials, 2022, 34, e2110583.	11.1	37
856	Topological structures in chiral media: Effects of confined geometry. Physical Review E, 2022, 105, 034701.	0.8	4
857	Review on magnonics with engineered spin textures. Journal Physics D: Applied Physics, 2022, 55, 293003.	1.3	15
858	Microscopic theory of light-induced ultrafast skyrmion excitation in transition metal films. Npj Computational Materials, 2022, 8, .	3.5	8

#	Article	IF	Citations
859	Challenges in identifying chiral spin textures via the topological Hall effect. Communications Materials, 2022, 3, .	2.9	32
860	Magnetization statics and dynamics in (Ir/Co/Pt)6 multilayers with Dzyaloshinskiiâ€“Moriya interaction. AIP Advances, 2022, 12, .	0.6	2
861	Strain-Tunable Interfacial Dzyaloshinskiiâ€“Moriya Interaction and Spin-Hall Topological Hall Effect in Pt/Tm₃Fe₅O₁₂ Heterostructures. ACS Applied Materials & Interfaces, 2022, 14, 16791-16799.	4.0	8
862	Ferroelectric Control of Magnetic Skyrmions in Two-Dimensional van der Waals Heterostructures. Nano Letters, 2022, 22, 3349-3355.	4.5	35
863	Visualizing Emergent Magnetic Flux of Antiskyrmions in Mn_{1.4}PtSn Magnet. Advanced Functional Materials, 2022, 32, .	7.8	5
864	A room temperature polar magnetic metal. Physical Review Materials, 2022, 6, .	0.9	21
865	Field-free approaches for deterministic spinâ€“orbit torque switching of the perpendicular magnet. Materials Futures, 2022, 1, 022201.	3.1	20
866	Domain wall memory: Physics, materials, and devices. Physics Reports, 2022, 958, 1-35.	10.3	56
867	Spin-lattice dynamics simulation of the Einsteinâ€“de Haas effect. Computational Materials Science, 2022, 209, 111359.	1.4	5
868	Shock-wave-like emission of spin waves induced by the interfacial Dzyaloshinskii-Moriya interaction. Journal of Magnetism and Magnetic Materials, 2022, 553, 169264.	1.0	1
869	Writing skyrmion at a specific position in synthetic antiferromagnetic racetrack by voltage. Journal of Magnetism and Magnetic Materials, 2022, 554, 169144.	1.0	6
870	Perspective on skyrmion spintronics. Applied Physics Letters, 2021, 119, .	1.5	31
871	Defect-induced solitons in double Peierls chain model. Journal of the Korean Physical Society, 2021, 79, 1163-1170.	0.3	0
872	Creation and annihilation of mobile fractional solitons in atomic chains. Nature Nanotechnology, 2022, 17, 244-249.	15.6	12
873	Tuning magnetic antiskyrmion stability in tetragonal inverse Heusler alloys. Physical Review Materials, 2021, 5, .	0.9	2
874	Single-layer ScI2: A paradigm for valley-related multiple Hall effect. Applied Physics Letters, 2021, 119, .	1.5	17
875	Complex magnetic textures in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>Ni</mml:mi><mml:mo>/</mml:mo><mml:msub><mml:mi ultrathin films. Physical Review Materials, 2021, 5, .	0.9	1
876	Peripheral chiral spin textures and topological Hall effect in CoSi nanomagnets. Physical Review Materials, 2021, 5, .	0.9	2

#	Article	IF	Citations
877	Spin dynamics in the skyrmion-host lacunar spinel <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>GaV</mml:mi><mml:mn>4</mml:mn></mm mathvariant="normal">S</mml:mi><mml:mn>8</mml:mn></mml:msub></mml:mrow></mml:math>. Physical Review B, 2021, 104, .	1.1	3
878	Spinâ€"Orbit Coupling in 2D Semiconductors: A Theoretical Perspective. Journal of Physical Chemistry Letters, 2021, 12, 12256-12268.	2.1	22
879	Detection of Topological Spin Textures via Nonlinear Magnetic Responses. Nano Letters, 2022, 22, 14-21.	4.5	3
880	Anomalous Hall effect in spatially inhomogeneous SrRuO3 films. AIP Advances, 2021, 11, .	0.6	8
881	Ferrimagnetic spintronics. Nature Materials, 2022, 21, 24-34.	13.3	129
882	Dynamic transformation between a skyrmion string and a bimeron string in a layered frustrated system. Physical Review B, 2021, 104, .	1.1	7
883	Unveiling the three-dimensional magnetic texture of skyrmion tubes. Nature Nanotechnology, 2022, 17, 250-255.	15.6	45
884	Tuning the magnetic anisotropy of ferromagnetic <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>MnS</mml:mi><mml:mn>2</mml:mn></mml:msub></ monolayers via electron occupation of Mn <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi>d</mml:mi></mml:math> orbitals. Physical Review B, 2021, 104, .	1.1	6
885	Magnetic Force Microscopy in Physics and Biomedical Applications. Magnetochemistry, 2022, 8, 42.	1.0	12
886	Thermal Evolution of Skyrmion Formation Mechanism in Chiral Multilayer Films. Physical Review Applied, 2022, 17, .	1.5	6
887	Reconfigurable Logic Operations via Gate Controlled Skyrmion Motion in a Nanomagnetic Device. ACS Applied Electronic Materials, 2022, 4, 2290-2297.	2.0	13
888	Asymmetric transport in long-range interacting chiral spin chains. SciPost Physics Core, 2022, 5, .	0.9	1
889	Tuning of the Dzyaloshinskiiâ€"Moriya interaction by He+ ion irradiation. Journal of Applied Physics, 2022, 131, .	1.1	11
890	The Magnetic Genome of Two-Dimensional van der Waals Materials. ACS Nano, 2022, 16, 6960-7079.	7.3	149
891	Nano-engineering the evolution of skyrmion crystal in synthetic antiferromagnets. Applied Physics Reviews, 2022, 9, 021404.	5.5	3
893	Generalization of the Landauâ€"Lifshitzâ€"Gilbert equation by multi-body contributions to Gilbert damping for non-collinear magnets. Journal of Physics Condensed Matter, 2022, 34, 285802.	0.7	6
894	Topologically Nontrivial Spin Textures in Thin Magnetic Films. Physics of Metals and Metallography, 2022, 123, 238-260.	0.3	9
895	Micromagnetic Investigation of a Voltage-Controlled Skyrmionic Magnon Switch. Physical Review Applied, 2022, 17, .	1.5	4

#	Article	IF	Citations
896	Lithiumâ€Ion Battery Technology for Voltage Control of Perpendicular Magnetization. Advanced Functional Materials, 2022, 32, .	7.8	11
897	Spin transfer nano-oscillator based on synthetic antiferromagnetic skyrmion pair assisted by perpendicular fixed magnetic field. Chinese Physics B, 0, , .	0.7	0
898	An effective field theory of magneto-elasticity. SciPost Physics, 2022, 12, .	1.5	5
899	Controlled creation of quantum skyrmions. Physical Review Research, 2022, 4, .	1.3	14
900	Interplay between quantum anomalous Hall effect and magnetic skyrmions. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, e2122952119.	3.3	5
901	Structural transition of skyrmion quasiparticles under compression. Physical Review B, 2022, 105, .	1.1	5
902	Effect of interlayer Dzyaloshinskii-Moriya interaction on spin structure in synthetic antiferromagnetic multilayers. Physical Review B, 2022, 105, .	1.1	9
903	Magnetic skyrmion manipulation in CrTe2/WTe2 2D van der Waals heterostructure. Applied Physics Letters, 2022, 120, .	1.5	10
904	Magnetic fieldâ€“temperature phase diagrams for multiple- <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi>Q</mml:mi></mml:math> magnetic ordering: Exact steepest descent approach to long-range interacting spin systems. Physical Review B, 2022, 105, .	1.1	15
905	Tunable skyrmionâ€“edge interaction in magnetic multilayers by interlayer exchange coupling. AIP Advances, 2022, 12, .	0.6	5
906	Multiferroic materials based on transition-metal dichalcogenides: Potential platform for reversible control of Dzyaloshinskii-Moriya interaction and skyrmion via electric field. Physical Review B, 2022, 105, .	1.1	17
907	Spinâ€“orbit torque driven skyrmion motion under unconventional spin Hall effect. New Journal of Physics, 2022, 24, 053053.	1.2	2
908	How a skyrmion can appear both massive and massless. SciPost Physics, 2022, 12, .	1.5	2
909	Effects of silicon composition on glass formation, crystallization behavior, phase evolution and magnetic properties of the melt-spun Mn-Si-B ribbons. Journal of Alloys and Compounds, 2022, 912, 165270.	2.8	0
910	Dynamics of the collapse of a ferromagnetic skyrmion in a centrosymmetric lattice. Physical Review B, 2022, 105, .	1.1	1
911	Recent research advances in two-dimensional magnetic materials. Wuli Xuebao/Acta Physica Sinica, 2022, 71, 127504.	0.2	10
912	Goodenough-Kanamori-Anderson Rules in CrI₃/MoTe₂/CrI₃ Van der Waals Heterostructure. Journal of the Electrochemical Society, 2022, 169, 053507.	1.3	8
913	Deterministic Generation and Guided Motion of Magnetic Skyrmions by Focused He⁺-Ion Irradiation. Nano Letters, 2022, 22, 4028-4035.	4.5	24

#	Article	IF	Citations
914	Annihilation dynamics of magnetic skyrmion lattice state under in-plane magnetic field and spontaneous recovery after field removal. Physical Review B, 2022, 105, .	1.1	1
915	Emergent Multifunctional Magnetic Proximity in van der Waals Layered Heterostructures. Advanced Science, 2022, 9, .	5.6	17
916	XPEEM and MFM Imaging of Ferroic Materials. Advanced Electronic Materials, 2022, 8, .	2.6	3
917	Magnetic Properties of a Chiral Compound Î'-Kcopo4. SSRN Electronic Journal, 0, , .	0.4	0
918	Topological charges of fullerenes. Journal of Mathematical Chemistry, 2023, 61, 335-342.	0.7	2
919	A ferromagnetic spin source grown by atomic layer deposition. Applied Physics Letters, 2022, 120, .	1.5	3
920	Multifarious skyrmion phases on a trilayer triangular lattice. Physical Review B, 2022, 105, .	1.1	24
921	Interaction and co-assembly of optical and topological solitons. Nature Photonics, 2022, 16, 454-461.	15.6	18
922	Rectangular and square skyrmion crystals on a centrosymmetric square lattice with easy-axis anisotropy. Physical Review B, 2022, 105, .	1.1	21
923	Bifurcation of a topological skyrmion string. Physical Review B, 2022, 105, .	1.1	14
924	Spiral Spin Liquid on a Honeycomb Lattice. Physical Review Letters, 2022, 128, .	2.9	15
925	Topological hall transport: Materials, mechanisms and potential applications. Progress in Materials Science, 2022, 130, 100971.	16.0	27
926	Nanoscale skyrmions on a square atomic lattice. Physical Review B, 2022, 105, .	1.1	3
927	Progress and challenges in magnetic skyrmionics. Chinese Physics B, 2022, 31, 087507.	0.7	6
928	Domain wall velocity asymmetries driven by saturation magnetization gradients without a Dzyaloshinskii-Moriya interaction. Journal of Magnetism and Magnetic Materials, 2022, 558, 169500.	1.0	1
929	Uncovering the S=12 Kagome Ferromagnet within a Family of Metalâ€"Organic Frameworks. Chemistry of Materials, 2022, 34, 5409-5421.	3.2	4
930	Skyrmion crystal with integer and fractional skyrmion numbers in a nonsymmorphic lattice structure with the screw axis. Physical Review B, 2022, 105, .	1.1	5
931	The Mass-Lumped Midpoint Scheme for Computational Micromagnetics: Newton Linearization and Application to Magnetic Skyrmion Dynamics. Computational Methods in Applied Mathematics, 2023, 23, 145-175.	0.4	1

#	Article	IF	Citations
932	Skyrmion pinning energetics in thin film systems. Nature Communications, 2022, 13, .	5.8	25
933	Stabilizing magnetic skyrmions in constricted nanowires. Scientific Reports, 2022, 12, .	1.6	5
934	Collective skyrmion motion under the influence of an additional interfacial spin-transfer torque. Scientific Reports, 2022, 12, .	1.6	8
935	Topological Hall effect associated with spin reorientation transition in tetragonal Mn1.9Co0.1Sb ferrimagnet. Journal of Alloys and Compounds, 2022, , 165919.	2.8	3
936	Site-specific electronic and magnetic excitations of the skyrmion material Cu2OSeO3. Communications Physics, 2022, 5, .	2.0	4
937	Programmable Skyrmion Logic Gates Based on Skyrmion Tunneling. Physical Review Applied, 2022, 17, .	1.5	8
938	Soliton motion in skyrmion chains: Stabilization and guidance by nanoengineered pinning. Physical Review B, 2022, 105, .	1.1	9
939	Machine learning techniques to construct detailed phase diagrams for skyrmion systems. Physical Review B, 2022, 105, .	1.1	3
940	Flexoresponses of Synthetic Antiferromagnetic Systems Hosting Skyrmions. Physical Review Letters, 2022, 128, .	2.9	7
941	Anisotropic Dzyaloshinskii-Moriya interaction protected by D2d crystal symmetry in two-dimensional ternary compounds. Npj Computational Materials, 2022, 8, .	3.5	17
942	Band filling effects on the emergence of magnetic skyrmions: Pd/Fe and Pd/Co bilayers on Ir(111). Physical Review B, 2022, 105, .	1.1	5
943	Observation of Localized Magnetic Plasmon Skyrmion Utilizing Stability and Interference Effect. Plasmonics, 0, , .	1.8	0
944	Tuning magnetic anisotropy and Dzyaloshinskii-Moriya interaction via interface engineering in nonisostructural <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>SrCuO</mml:mi><mml:mn>2</mml:mn></m heterostructures. Physical Review B, 2022, 105, .	1.1	2
945	Spin polarized STM imaging of nanoscale NÃ©el skyrmions in an SrIrO3/SrRuO3 perovskite bilayer. Applied Surface Science, 2022, 599, 153766.	3.1	2
946	Topological Phase Transitions and Critical Phenomena Associated with Unwinding of Spin Crystals by High Magnetic Fields. Journal of the Physical Society of Japan, 2022, 91, .	0.7	3
947	Commensuration effects on skyrmion Hall angle and drag for manipulation of skyrmions on two-dimensional periodic substrates. Physical Review B, 2022, 105, .	1.1	5
948	Design of a Radial Vortex-Based Spin-Torque Nano-Oscillator in a Strain-Mediated Multiferroic Nanostructure for BFSK/BASK Applications. Micromachines, 2022, 13, 1056.	1.4	2
949	Emergent Phenomena in Magnetic Two-Dimensional Materials and van der Waals Heterostructures. ACS Applied Electronic Materials, 2022, 4, 3278-3302.	2.0	26

#	Article	IF	Citations
950	Positional Stability of Skyrmions in a Racetrack Memory with Notched Geometry. Physical Review Applied, 2022, 17, .	1.5	13
951	Experimental observation of the interlayer perpendicular standing spin wave mode with low damping in skyrmion-hosting [Pt/Co/Ta]₁₀ multilayer. Chinese Physics B, 0, , .	0.7	0
952	Nonzero Skyrmion Hall Effect in Topologically Trivial Structures. Physical Review Applied, 2022, 17, .	1.5	6
953	Voltage-Controlled Skyrmionic Interconnect with Multiple Magnetic Information Carriers. ACS Applied Materials & Interfaces, 2022, 14, 30420-30434.	4.0	3
954	Origin of circular dichroism in resonant elastic x-ray scattering from magnetic and polar chiral structures. Physical Review B, 2022, 106, .	1.1	2
955	Incommensurate magnetic orders and topological Hall effect in the square-net centrosymmetric <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mrow><mml:mi>EuGa</mml:mi></mml:mrow><mml:mn>2</ system. Physical Review Materials, 2022, 6, .	0.9	12
956	Interfacial potential gradient modulates Dzyaloshinskii-Moriya interaction in Pt/Co/metal multilayers. Physical Review Materials, 2022, 6, .	0.9	11
957	High power density soft x-ray GaAs photodiodes with tailored spectral response. Semiconductor Science and Technology, 2022, 37, 085024.	1.0	0
958	Magnetic Vortex Core String Gyrotropic Oscillations in Thick Cylindrical Dots. Magnetism, 2022, 2, 239-250.	0.6	3
959	Bloch point dynamics in exchange-spring heterostructures. APL Materials, 2022, 10, 071103.	2.2	1
960	Current-driven dynamics and ratchet effect of skyrmion bubbles in a ferrimagnetic insulator. Nature Nanotechnology, 2022, 17, 834-841.	15.6	39
961	A micromagnetic theory of skyrmion lifetime in ultrathin ferromagnetic films. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, .	3.3	5
962	Spin canting of Ni/CoO/Fe films grown on curved MgO(0 0 1) substrate. Journal of Magnetism and Magnetic Materials, 2022, 561, 169668.	1.0	0
964	Realization of the skyrmionic logic gates and diodes in the same racetrack with enhanced and modified edges. Applied Physics Letters, 2022, 121, .	1.5	22
965	Mechanical Acceleration and Control of the Thermal Motion of a Magnetic Skyrmion. Physical Review Applied, 2022, 18, .	1.5	7
966	Evolution of Skyrmion Lattice Order in the van der Waals Ferromagnet Fe₃GeTe₂. Microscopy and Microanalysis, 2022, 28, 2326-2327.	0.2	0
967	Electric current and magnetization distributionsâ€™ self-organization features in a magnetoresistive film nanoelement under the influence of an external magnetic field. International Journal of Modern Physics B, 0, , .	1.0	0
968	Simulation-Trained Machine Learning Models for Lorentz Microscopy. Microscopy and Microanalysis, 2022, 28, 2980-2982.	0.2	0

#	Article	IF	Citations
969	Artificial skyrmion in magnetic multilayers. Journal of Applied Physics, 2022, 132, .	1.1	2
970	Large Dzyaloshinskii-Moriya interaction and field-free topological chiral spin states in two-dimensional alkali-based chromium chalcogenides. Physical Review B, 2022, 106, .	1.1	13
971	Spherical model with Dzyaloshinskiiâ€“Moriya interactions. Journal of Statistical Mechanics: Theory and Experiment, 2022, 2022, 073106.	0.9	0
972	Advances in Imaging Magnetic Domains in Functional Materials using Lorentz microscopy. Microscopy and Microanalysis, 2022, 28, 2570-2571.	0.2	0
973	Inhibition of Skyrmion Hall Effect by a Stripe Domain Wall. Physical Review Applied, 2022, 18, .	1.5	10
974	Nature of interfacial Dzyaloshinskii-Moriya interactions in graphene/Co/Pt(111) multilayer heterostructures. Physical Review B, 2022, 106, .	1.1	2
975	Spin-momentum locking and quantum anomalous Hall effect in d+id-density wave ordered pseudo gap phase of Bi2212. Chinese Journal of Physics, 2022, , .	2.0	0
976	Mechanism of Topology Change of Flat Magnetic Structures. Entropy, 2022, 24, 1104.	1.1	7
977	Synergy of Spinâ€Orbit Torque and Builtâ€In Field in Magnetic Tunnel Junctions with Tilted Magnetic Anisotropy: Toward Tunable and Reliable Spintronic Neurons. Advanced Science, 2022, 9, .	5.6	8
978	Magnetic Skyrmionic Bubbles at Room Temperature and Sign Reversal of the Topological Hall Effect in a Layered Ferromagnet Cr_{0.87}Te. ACS Nano, 2022, 16, 13911-13918.	7.3	11
979	Magnetic Skyrmions with Unconventional Helicity Polarization in a Van Der Waals Ferromagnet. Advanced Materials, 2022, 34, .	11.1	19
980	Skyrmions in synthetic antiferromagnets and their nucleation via electrical current and ultra-fast laser illumination. Nature Communications, 2022, 13, .	5.8	31
981	Antiperovskite Magnetic Materials with 2p Light Elements for Future Practical Applications. Advanced Electronic Materials, 2023, 9, .	2.6	8
982	Formation and Control of Zeroâ€Field Antiskyrmions in Confining Geometries. Advanced Science, 2022, 9, .	5.6	6
983	Magnetic properties of phases with Au4Al-type structure in the Crâ€“{Cu, Fe, Pd}â€“Niâ€“Si quaternary systems. Journal of Solid State Chemistry, 2022, , 123511.	1.4	0
984	Elliptical skyrmions: Theory and nucleation by a magnetic tip in an antiskyrmion-hosting material. Journal of Magnetism and Magnetic Materials, 2022, , 169866.	1.0	0
985	Interfacial phase frustration stabilizes unconventional skyrmion crystals. Npj Quantum Materials, 2022, 7, .	1.8	4
986	Magnetic properties of Î±-KCoPO4 compound with a chiral polar crystal structure. Journal of Magnetism and Magnetic Materials, 2022, 562, 169794.	1.0	1

#	Article	IF	Citations
987	Electrical Observation of Soft-magnetic Skyrmions in the Sandwich Structure Including Topological Insulator with Self-assembled Ferromagnetic Atomic Layers. Vacuum and Surface Science, 2022, 65, 405-410.	0.0	0
988	Fundamental physics and applications of skyrmions: A review. Journal of Magnetism and Magnetic Materials, 2022, 563, 169905.	1.0	10
989	Magnetic and Crystal Structure of the Antiferromagnetic Skyrmion Candidate Gdsb1-Xte1+X. SSRN Electronic Journal, 0, , .	0.4	0
990	Ultrafast time-evolution and recovery of chiral NÃ©el magnetic domain walls probed by x-ray resonant scattering.. , 2022, , .		0
991	Non-equilibrium heating path for the laser-induced nucleation of metastable skyrmion lattices. Nanoscale, 0, , .	2.8	0
992	Emergent Electromagnetic Fields Induced by Magnon Current in Skyrmion. SSRN Electronic Journal, 0, , .	0.4	0
993	Boundary-free spin torque nano-oscillators based on ferrimagnetic skyrmions. Applied Physics Letters, 2022, 121, .	1.5	6
994	Nucleation and manipulation of single skyrmions using spin-polarized currents in antiferromagnetic skyrmion-based racetrack memories. Scientific Reports, 2022, 12, .	1.6	4
995	Magnetic-Field-Assisted Diffusion Motion of Magnetic Skyrmions. ACS Nano, 2022, 16, 15927-15934.	7.3	2
996	Circular stripe domains and cone state vortices in disk-shaped exchange coupled magnetic heterostructures. Journal Physics D: Applied Physics, 2022, 55, 445003.	1.3	1
997	Skyrmion Dynamics in a Double-Disk Geometry under an Electric Current. Nanomaterials, 2022, 12, 3086.	1.9	3
998	Modified Spin Textures in a 3D Magnetic Lattice. Physica Status Solidi - Rapid Research Letters, 0, , 2200213.	1.2	0
999	Origin of metamagnetism in skyrmion host Cu$$_2$$OSeO$$_3$$. Scientific Reports, 2022, 12, .	1.6	2
1000	Electrical Detection of Magnetic Skyrmions in a Magnetic Tunnel Junction. Advanced Electronic Materials, 2023, 9, .	2.6	13
1001	Topological Melting of the Metastable Skyrmion Lattice in the Chiral Magnet Co₉Zn₉Mn₂. Advanced Quantum Technologies, 2022, 5, .	1.8	1
1002	Strain-Driven Zero-Field Near-10 nm Skyrmions in Two-Dimensional van der Waals Heterostructures. Nano Letters, 2022, 22, 7706-7713.	4.5	23
1003	Statics and dynamics of skyrmions interacting with disorder and nanostructures. Reviews of Modern Physics, 2022, 94, .	16.4	61
1004	Skyrmion helicity: Quantization and quantum tunneling effects. Physical Review B, 2022, 106, .	1.1	6

#	Article	IF	Citations
1005	Particle-like skyrmions interacting with a funnel obstacle. Physical Review B, 2022, 106, .	1.1	10
1006	Magnetic Interactions of the Centrosymmetric Skyrmion Material<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mi>Gd</mml:mi></mml:mrow><mml:mrow><mml:mn>2</mml:mn></ Physical Review Letters, 2022, 129, .	2.9	17
1007	Magnetic Scattering with Polarised Soft X-rays. , 0, , .		0
1008	Distinguishing the Two-Component Anomalous Hall Effect from the Topological Hall Effect. ACS Nano, 2022, 16, 17336-17346.	7.3	19
1009	Characteristics and Applications of Current-Driven Magnetic Skyrmion Strings. Chinese Physics Letters, 2022, 39, 108502.	1.3	1
1010	Higher-order modulations in the skyrmion lattice phase of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi mathvariant="normal">Cu</mml:mi><mml:mn>2</mml:mn></mml:msub><mml:msub><mml:mi mathvariant="normal">OSeO</mml:mi><mml:mn>3</mml:mn></mml:msub></mml:math>. Physical Review B, 2022, 106, .	1.1	0
1011	High-Power-Density Energy-Harvesting Devices Based on the Anomalous Nernst Effect of Co/Pt Magnetic Multilayers. ACS Applied Energy Materials, 2022, 5, 11835-11843.	2.5	6
1012	Tuning the interfacial Dzyaloshinskiiâ€“Moriya interaction in perpendicularly magnetized CoFeB system. Journal Physics D: Applied Physics, 2022, 55, 445004.	1.3	1
1013	Solution to a Two-Dimensional Electrostatic Problem for an Oblique Magnetoresistive Element. Bulletin of the Russian Academy of Sciences: Physics, 2022, 86, 1070-1073.	0.1	0
1014	Observation of robust zero-energy state and enhanced superconducting gap in a trilayer heterostructure of MnTe/Bi ₂ Te ₃ /Fe(Te, Se). Science Advances, 2022, 8, .	4.7	3
1015	Thermal Hysteresis and Ordering Behavior of Magnetic Skyrmion Lattices. Nano Letters, 2022, 22, 7804-7810.	4.5	9
1016	Clogging, diode and collective effects of skyrmions in funnel geometries. New Journal of Physics, 2022, 24, 103030.	1.2	10
1017	Real-space determination of the isolated magnetic skyrmion deformation under electric current flow. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, .	3.3	2
1018	Emergence of Ferromagnetic Metal Surface State in a Nonmagnetic Semiconductor FeSi and Its Spin-orbitronic Functionality. Materia Japan, 2022, 61, 671-678.	0.1	0
1019	Chiral surface spin textures in Cu₂OSeO₃ unveiled by soft X-ray scattering in specular reflection geometry. Science and Technology of Advanced Materials, 2022, 23, 682-690.	2.8	3
1020	Skyrmion motion and partitioning of domain wall velocity driven by repulsive interactions. Communications Physics, 2022, 5, .	2.0	3
1021	Compositional gradient induced enhancement of Dzyaloshinskiiâ€“Moriya interaction in Pt/Co/Ta heterostructures modulated by Ptâ€“Co alloy intralayers. Acta Materialia, 2022, 241, 118383.	3.8	8
1022	High-temperature magnetic skyrmions in BiCrX₃ (X = Se and Te) monolayers. Physical Chemistry Chemical Physics, 2022, 24, 26477-26484.	1.3	1

#	Article	IF	Citations
1023	Curvilinear Magnetic Shells. Topics in Applied Physics, 2022, , 83-161.	0.4	0
1024	Synthesis of stable Î³-phase MnS_{1-x}Se_x nanoflakes with inversion symmetry breaking. Nanoscale, 0, , .	2.8	0
1025	Spin dynamics in patterned magnetic multilayers with perpendicular magnetic anisotropy. Solid State Physics, 2022, , 1-51.	1.3	0
1026	Activation Energy and Mechanisms for Skyrmion Collapse in Synthetic Antiferromagnets. JETP Letters, 2022, 116, 240-245.	0.4	5
1027	An alternative understanding of the skyrmion Hall effect based on one-dimensional domain wall motion. Applied Physics Express, 2022, 15, 123001.	1.1	2
1028	Near-room temperature topological Hall effect at spin reorientations in sputtered NdCo_{5â^'}_xCu_x thin film. Applied Physics Letters, 2022, 121, 182404.	1.5	0
1029	Magnetic phase diagram and vanishing topological Hall effect in the chiral antiferromagnet Co_{2â^'x}Pd_xMo₃N. Japanese Journal of Applied Physics, 2022, 61, 120901.	0.8	2
1030	Reversal of Anomalous Hall Effect and Octahedral Tilting in SrRuO₃ Thin Films via Hydrogen Spillover. Advanced Materials, 2023, 35, .	11.1	6
1031	Roomâ€Temperature Magnetic Skyrmions and Large Topological Hall Effect in Chromium Telluride Engineered by Selfâ€Intercalation. Advanced Materials, 2023, 35, .	11.1	20
1032	Skyrmions Under Controlâ€"FIB Irradiation as a Versatile Tool for Skyrmion Circuits. Advanced Materials, 2023, 35, .	11.1	5
1033	Skyrmionic spin structures in layered Fe5GeTe2 up to room temperature. Communications Physics, 2022, 5, .	2.0	24
1034	Hybrid Bloch-NÃ©el spiral states in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>Mn</mml:mi><mml:mrow><mml:mn>1.4 probed by resonant soft x-ray scattering. Physical Review B, 2022, 106, .	0.1	1
1035	Magnetic Field Magnitudes Needed for Skyrmion Generation in a General Perpendicularly Magnetized Film. Nano Letters, 2022, 22, 8430-8436.	4.5	2
1036	Magnus induced diode effect for skyrmions in channels with periodic potentials. Journal of Physics Condensed Matter, 2023, 35, 015804.	0.7	3
1037	Topological phase transitions and Berry-phase hysteresis in exchange-coupled nanomagnets. Physical Review B, 2022, 106, .	1.1	1
1038	Chiral Spin Textures for Next-Generation Memory and Unconventional Computing. ACS Applied Electronic Materials, 2022, 4, 5088-5097.	2.0	4
1039	Flexible engineering of circular dichroism enabled by chiral surface lattice resonances. APL Photonics, 2022, 7, .	3.0	7
1040	Two-channel anomalous Hall effect originating from the intermixing in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi mathvariant="normal">Mn</mml:mi><mml:mn>2</mml:mn></mml:msub><mml:mi mathvariant="normal">CoAl</mml:mi><mml:mtext>/</mml:mtext><mml:mi mathvariant="normal">Pd</mml:mi></mml:math> thin films. Physical Review B, 2022, 106, .	1.1	5

#	Article	IF	Citations
1041	Tuning of topological properties in the strongly correlated antiferromagnet <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>Mn</mml:mi><mml:mn>3</mml:mn><mml:mn> via Fe doping. Physical Review B, 2022, 106, .	1.3	5
1042	Exponential Temperature Effects on Skyrmion-Skyrmion Interaction. Physical Review Applied, 2022, 18, .	1.5	6
1043	Skyrmion Dynamics in a Double-Disk Geometry under an Electric Current: Part Two. Nanomaterials, 2022, 12, 3793.	1.9	0
1044	Reviewâ€"Magnetic Skyrmions in Chiral Ferromagnets: Electrical Transport Properties and Device Applications. ECS Journal of Solid State Science and Technology, 2022, 11, 115003.	0.9	3
1045	Reversible Transformation between Isolated Skyrmions and Bimerons. Nano Letters, 2022, 22, 8559-8566.	4.5	17
1046	Designing strong and tunable magnetoelectric coupling in 2D trilayer heterostructures. 2D Materials, 2023, 10, 015007.	2.0	5
1047	Elimination of the skyrmion Hall effect by tuning perpendicular magnetic anisotropy and spin polarization angle. Physics Letters, Section A: General, Atomic and Solid State Physics, 2022, 456, 128497.	0.9	5
1048	Ultralow effective Gilbert damping and induced orbital moment in strain-engineered FeGe films with Curie temperature exceeding room temperature. Journal of Magnetism and Magnetic Materials, 2022, 564, 170053.	1.0	1
1049	Brownian reservoir computing realized using geometrically confined skyrmion dynamics. Nature Communications, 2022, 13, .	5.8	30
1050	Small-angle neutron scattering in the fully polarized phase of noncollinear magnets with interfacial-like Dzyaloshinskii-Moriya interaction. Physical Review B, 2022, 106, .	1.1	1
1051	Three-dimensional skyrmionic cocoons in magnetic multilayers. Nature Communications, 2022, 13, .	5.8	8
1052	Phase field modeling of topological magnetic structures in ferromagnetic materials: domain wall, vortex, and skyrmion. Acta Mechanica, 0, , .	1.1	3
1053	Progress on elliptical magnetic skyrmions. Rare Metals, 2023, 42, 359-367.	3.6	1
1054	Micromagnetic study of the effect of Dzyaloshinskii-Moriya interaction on magnetization reversal in magnetic nanodots of different shape. Journal of Magnetism and Magnetic Materials, 2022, 564, 170195.	1.0	1
1055	Double magnetic tunnel junction two bit memory and nonvolatile logic for in situ computing. Microelectronics Journal, 2023, 131, 105635.	1.1	1
1056	Room temperature skyrmions in symmetric multilayers. Applied Physics Letters, 2022, 121, .	1.5	3
1057	Magnetic field-induced nontrivial spin chirality and large topological Hall effect in kagome magnet ScMn6Sn6. Applied Physics Letters, 2022, 121, .	1.5	4
1058	Skyrmion nucleation on the surface of a topological insulator. Physical Review Research, 2022, 4, .	1.3	1

#	Article	IF	Citations
1059	Dynamics of entangled domain walls in the PXP model under driving: Crossover from prethermalization to localization. Physical Review B, 2022, 106, .	1.1	0
1060	Impact of curvature-induced Dzyaloshinskiiâ€"Moriya interaction on magnetic vortex texture in spherical caps. Low Temperature Physics, 2022, 48, 956-961.	0.2	0
1061	Manipulation of Magnetic Skyrmion Density in Continuous Ir/Co/Pt Multilayers. Micromachines, 2022, 13, 1911.	1.4	1
1062	A Nobleâ€Metalâ€Free Spintronic System with Proximityâ€Enhanced Ferromagnetic Topological Surface State of FeSi above Room Temperature. Advanced Materials, 2023, 35, .	11.1	2
1063	Oxide magnonics: Spin waves in functional magnetic oxides. Applied Physics Reviews, 2022, 9, 041312.	5.5	2
1064	Single Skyrmion Generation via a Vertical Nanocontact in a 2D Magnet-Based Heterostructure. Nano Letters, 2022, 22, 9236-9243.	4.5	2
1065	Combined Magnetic Imaging and Anisotropic Magnetoresistance Detection of Dipolar Skyrmions. Advanced Functional Materials, 2023, 33, .	7.8	7
1066	Spontaneous Topological States and Their Mutual Transformations in a Rareâ€Earth Ferrimagnet. Advanced Science, 2023, 10, .	5.6	2
1067	Photonic Pseudospin Skyrmion in Momentum Space. IEEE Photonics Journal, 2023, 15, 1-6.	1.0	0
1068	Two-dimensional magnetic Janus monolayers and their van der Waals heterostructures: a review on recent progress. Materials Horizons, 2023, 10, 788-807.	6.4	7
1069	Antiferromagnetic skyrmion-based high speed diode. Nanoscale Advances, 2023, 5, 450-458.	2.2	5
1070	Magnetic and crystal structure of the antiferromagnetic skyrmion candidate GdSb0.71Te1.22. Journal of Alloys and Compounds, 2023, 936, 168348.	2.8	2
1071	Skyrmion-Magnetic Tunnel Junction Synapse With Long-Term and Short-Term Plasticity for Neuromorphic Computing. IEEE Transactions on Electron Devices, 2023, 70, 371-378.	1.6	4
1072	Influence of Dzyaloshinskiiâ€"Moriya and Dipoleâ€"Dipole Interactions on Spontaneous Magnetization Reversal Time of Finite-Length Co Chains on Pt(664) Surfaces. IEEE Magnetics Letters, 2022, 13, 1-5.	0.6	1
1073	Current-Induced Helicity Switching of Frustrated Skyrmions on a Square-Grid Obstacle Pattern. Journal of the Magnetics Society of Japan, 2022, , .	0.5	1
1074	Single-domain stripe order in a high-temperature superconductor. Communications Physics, 2022, 5, .	2.0	5
1075	Emergence of zero-field non-synthetic single and interchained antiferromagnetic skyrmions in thin films. Nature Communications, 2022, 13, .	5.8	6
1076	Magnetic Skyrmion Lattices in a Novel 2Dâ€Twisted Bilayer Magnet. Advanced Functional Materials, 2023, 33, .	7.8	15

#	Article	IF	Citations
1077	Mixed-Type Skyrmions in Symmetric Pt/Co/Pt Multilayers at Room Temperature. Materials, 2022, 15, 8272.	1.3	2
1078	Magnetic anisotropy, exchange coupling and Dzyaloshinskiiâ€"Moriya interaction of two-dimensional magnets. Frontiers of Physics, 2023, 18, .	2.4	9
1079	Magnetic triangular bubble lattices in bismuth-doped yttrium iron garnet. Chinese Physics B, 2023, 32, 027505.	0.7	2
1080	Anisotropic Vortex Squeezing in Synthetic Rashba Superconductors: A Manifestation of Lifshitz Invariants. Physical Review X, 2022, 12, .	2.8	1
1081	Controllable Itinerant Ferromagnetism in Weakly Correlated 5d SrIrO₃. Journal of Physical Chemistry Letters, 2022, 13, 11946-11954.	2.1	3
1082	A skyrmion helicity-based multistate memory in synthetic antiferromagnets. Journal of Applied Physics, 2022, 132, .	1.1	2
1083	Structural Chirality of Polar Skyrmions Probed by Resonant Elastic X-Ray Scattering. Physical Review Letters, 2022, 129, .	2.9	3
1084	Thermally activated transitions between micromagnetic states. Physica D: Nonlinear Phenomena, 2022, , 133617.	1.3	0
1085	Spin-orbit proximity effect in Bi/Co multilayer: The role of interface scattering. Journal of Magnetism and Magnetic Materials, 2022, , 170312.	1.0	0
1086	Intrinsic anomalous Hall conductivity and real space Berry curvature induced topological Hall effect in Ni₂MnGa magnetic shape memory alloy. Journal Physics D: Applied Physics, 2023, 56, 044004.	1.3	5
1087	Designer meron lattice on the surface of a topological insulator. Physical Review B, 2022, 106, .	1.1	10
1088	Imaging current control of magnetization in Fe₃GeTe₂ with a widefield nitrogen-vacancy microscope. 2D Materials, 2023, 10, 015023.	2.0	4
1089	Science and technology of 3D magnetic nanostructures. APL Materials, 2022, 10, .	2.2	2
1090	Spin structure and dynamics of the topological semimetal Co3Sn2-xInxS2. Npj Quantum Materials, 2022, 7, .	1.8	4
1091	Manipulation of ferromagnetism in intrinsic two-dimensional magnetic and nonmagnetic materials. Matter, 2022, 5, 4212-4273.	5.0	7
1092	Topological metasurface: from passive toward active and beyond. Photonics Research, 2023, 11, B65.	3.4	16
1093	Formation of the skyrmionic polaron by Rashba and Dresselhaus spin-orbit coupling. Physical Review B, 2022, 106, .	1.1	0
1094	Disorder-Induced Topological State Transition in the Optical Skyrmion Family. Physical Review Letters, 2022, 129, .	2.9	7

#	Article	IF	Citations
1095	Emergent Magnetomultipoles and Nonlinear Responses of a Magnetic Hopfion. Physical Review Letters, 2022, 129, .	2.9	9
1096	Interaction between magnon and skyrmion: Toward quantum magnonics. Journal of Applied Physics, 2022, 132, .	1.1	7
1097	Motion of a magnetic skyrmionium driven by acoustic wave. Applied Physics Letters, 2022, 121, .	1.5	4
1098	Unusual Magnetic Hysteresis and Transition between Vortex and Double Pole States Arising from Interlayer Coupling in Diamond-Shaped Nanostructures. ACS Applied Materials & Interfaces, 2022, 14, 54961-54968.	4.0	1
1099	Strain-Enabled Control of Chiral Magnetic Structures in MnSeTe Monolayer. Chinese Physics Letters, 2023, 40, 017501.	1.3	3
1100	Observation of localized acoustic skyrmions. Applied Physics Letters, 2023, 122, .	1.5	1
1101	Topological transformation and free-space transport of photonic hopfions. Advanced Photonics, 2023, 5, .	6.2	30
1102	Skyrmion state stabilized by short-range interactions in centrosymmetric materials. Physica Scripta, 0, , .	1.2	0
1103	Rich topological spin textures in single-phase and core-shell magnetic nanodisks. Physical Review B, 2023, 107, .	1.1	2
1104	Skyrmion-based reconfigurable logic gates and diodes in a racetrack with hard magnetic material and a notch. Journal of Magnetism and Magnetic Materials, 2023, 568, 170387.	1.0	2
1105	Structuralâ€functional unit ordering for highâ€performance electronâ€correlated materials. , 2023, 2, 30-52.		2
1106	Metastability of photonic spin meron lattices in the presence of perturbed spin-orbit coupling. Optics Express, 2023, 31, 2225.	1.7	3
1107	Generation of magnetic skyrmions in two-dimensional magnets via interfacial proximity. Physical Review B, 2023, 107, .	1.1	3
1108	Ferrimagnets for spintronic devices: From materials to applications. Applied Physics Reviews, 2023, 10, .	5.5	20
1109	Multiple Topological Magnetism in van der Waals Heterostructure of MnTe₂/ZrS₂. Nano Letters, 2023, 23, 312-318.	4.5	9
1110	Optical Creation of Skyrmions by Spin Reorientation Transition in Ferrimagnetic CoHo Alloys. ACS Applied Materials & Interfaces, 2023, 15, 5608-5619.	4.0	1
1111	Thicknessâ€Dependent Topological Hall Effect in 2D Cr₅Si₃ Nanosheets with Noncollinear Magnetic Phase. Advanced Materials, 2023, 35, .	11.1	2
1112	Low-field magnetic anomalies in single crystals of the A-type square-lattice antiferromagnet <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi mathvariant="normal">EuGa</mml:mi><mml:mn>4</mml:mn></mml:msub></mml:math>. Physical Review B, 2023, 107, .	1.1	4

#	Article	IF	Citations
1113	A perspective on physical reservoir computing with nanomagnetic devices. Applied Physics Letters, 2023, 122, .	1.5	18
1114	Three-dimensional topological magnetic monopoles and their interactions in a ferromagnetic meta-lattice. Nature Nanotechnology, 2023, 18, 227-232.	15.6	9
1115	Skyrmion based 3D low complex runtime reconfigurable architecture design methodology of universal logic gate. Nanotechnology, 2023, 34, 13LT01.	1.3	2
1116	Polyhexatic and polycrystalline states of skyrmion lattices. Physical Review B, 2023, 107, .	1.1	2
1117	Device geometry dependent deterministic skyrmion generation from a skyrmionium. Nanotechnology, 0, , .	1.3	0
1118	Currentâ€Induced Reversible Split of Elliptically Distorted Skyrmions in Geometrically Confined Fe₃Sn₂ Nanotrack. Advanced Science, 2023, 10, .	5.6	4
1119	Towards two-dimensional van der Waals ferroelectrics. Nature Materials, 2023, 22, 542-552.	13.3	66
1120	Triple-meron crystal in high-spin Kitaev magnets. New Journal of Physics, 2023, 25, 023006.	1.2	3
1121	Magnetic and transport properties of chiral antiferromagnetic Co_{2â^'x}Pd_xMo₃N thin films. AIP Advances, 2023, 13, 025138.	0.6	0
1122	Observation of phononic skyrmions based on hybrid spin of elastic waves. Science Advances, 2023, 9, .	4.7	9
1123	Emergence of Sizeable Interfacial Dzyaloshinskii-Moriya Interaction at Cobalt/Fullerene Interface. Physical Review Applied, 2023, 19, .	1.5	2
1124	Surface state mediated ferromagnetism in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>Mn</mml:mi><mml:mrow><mml:mn>0.1 thin films. Physical Review Materials, 2023, 7, .	0.9	0
1125			

#	Article	IF	Citations
1131	Manipulation of topological spin textures in centrosymmetric rare-earth magnets. Journal of Materials Science and Technology, 2023, 156, 254-260.	5.6	0
1132	Testing the data framework for an AI algorithm in preparation for high data rate X-ray facilities. , 2022, , .		1
1133	Chiral broken symmetry descendants of the kagome lattice chiral spin liquid. Physical Review B, 2023, 107, .	1.1	3
1134	A Material View on Extrinsic Magnetic Domain Wall Pinning in Cylindrical CoNi Nanowires. Journal of Physical Chemistry C, 2023, 127, 2387-2397.	1.5	1
1135	Magnetic skyrmions in FePt square-based nanoparticles around room-temperature. Journal Physics D: Applied Physics, 2023, 56, 085002.	1.3	0
1136	Driving skyrmions with low threshold current density in Pt/CoFeB thin film. Physica Scripta, 2023, 98, 035819.	1.2	3
1137	Voltage-Controlled Dzyaloshinskii-Moriya Interaction Torque Switching of Perpendicular Magnetization. Physical Review Letters, 2023, 130, .	2.9	9
1138	Constructing coarse-grained skyrmion potentials from experimental data with Iterative Boltzmann Inversion. Communications Physics, 2023, 6, .	2.0	11
1139	Brillouin light scattering from quantized spin waves in nanowires with antisymmetric exchange interactions. Physical Review B, 2023, 107, .	1.1	0
1140	Topological spin textures in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mn>1</mml:mn><mml:mi>T</mml:mi></mml:mrow></mm -phase Janus magnets: Interplay between Dzyaloshinskii-Moriya interaction, magnetic frustration, and isotropic higher-order interactions. Physical Review B, 2023, 107, .	1.1	9
1141	Magnetic skyrmions: Basic properties and potential applications. , 2023, 2, 260-289.		1
1142	Multiple Nonvolatile Skyrmion States in Nanostructured Synthetic Antiferromagnetic Multilayers. Physical Review Applied, 2023, 19, .	1.5	0
1143	Topological phenomena at the oxide interfaces. Materials for Quantum Technology, 2023, 3, 012002.	1.2	0
1144	Non-Hermitian control of confined optical skyrmions in microcavities formed by photonic spinâ€“orbit coupling. Photonics Research, 2023, 11, 610.	3.4	4
1145	Aging in the transport on the corrugated ratchet potential. Journal of Statistical Mechanics: Theory and Experiment, 2023, 2023, 023301.	0.9	0
1146	Widely-sweeping magnetic fieldâ€“temperature phase diagrams for skyrmion-hosting centrosymmetric tetragonal magnets. Journal of Magnetism and Magnetic Materials, 2023, 571, 170547.	1.0	6
1147	Atomically constructing a van der Waals heterostructure of CrTe₂/Bi₂Te₃ by molecular beam epitaxy. Materials Futures, 2023, 2, 021001.	3.1	7
1148	Antiferromagnetic topological magnetism in synthetic van der Waals antiferromagnets. Physical Review B, 2023, 107, .	1.1	6

#	Article	IF	Citations
1149	First principles study of the electronic structure of the <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>Ni</mml:mi><mml:mn>2</mml:mn></mml:r and <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>Ti</mml:mi><mml:mn>2</mml:mn></mml:m Physical Review Materials, 2023, 7, .	0.9	0
1150	Structure-property relationship of reversible magnetic chirality tuning. Physical Review B, 2023, 107, .	1.1	1
1151	Control of Skyrmion Chirality in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" overflow="scroll"><mml:mi>Ta</mml:mi><mml:mo>/</mml:mo><mml:mi>Fe</mml:mi><mml:mstyle displaystyle="false" scriptlevel="0"><mml:mtext>âˆ’</mml:mtext></mml:mstyle><mml:mi>Co</mml:mi><mml:mstyle displaystyle="false" scriptlevel="0"><mml:mtext>âˆ’</mml:mtext></mml:mstyle><mml:mrow><mml:mrow	1.5	0
1152	Spintronic leaky-integrate-fire spiking neurons with self-reset and winner-takes-all for neuromorphic computing. Nature Communications, 2023, 14, .	5.8	18
1153	Skyrmion based majority logic gate by voltage controlled magnetic anisotropy in a nanomagnetic device. Nanotechnology, 2023, 34, 225202.	1.3	7
1154	Spinâ€Manipulated Photonic Skyrmionâ€Pair for Picoâ€Metric Displacement Sensing. Advanced Science, 2023, 10, .	5.6	9
1155	Programmable skyrmion-based logic gates in a single nanotrack. Physical Review B, 2023, 107, .	1.1	7
1156	Topological skyrmion phases of matter. Journal of Physics Condensed Matter, 2023, 35, 184001.	0.7	2
1157	Synthetic spin dynamics with Bessel-Gaussian optical skyrmions. Optics Express, 2023, 31, 15289.	1.7	4
1159	Modulation of skyrmionic magnetic textures in two-dimensional vdW materials and their heterostructures. IScience, 2023, 26, 106311.	1.9	3
1160	Hole doping induced ferromagnetism and Dzyaloshinskiiâ€"Moriya interaction in the two-dimensional group-IVA oxides. Journal of Physics Condensed Matter, 2023, 35, 204003.	0.7	0
1161	Anomalous electrical transport and magnetic skyrmions in Mn-tuned <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>Co</mml:mi><mml:mn>9</mml:mn></mml single crystals. Physical Review B, 2023, 107, .	1.1	0
1162	Lifetime, collapse, and escape paths for hopfions in bulk magnets with competing exchange interactions. Physical Review B, 2023, 107, .	1.1	3
1163	Universal Quantum Computation Based on Nanoscale Skyrmion Helicity Qubits in Frustrated Magnets. Physical Review Letters, 2023, 130, .	2.9	19
1164	Quantifying symmetric exchange in ultrathin ferromagnetic films with chirality. Physical Review B, 2023, 107, .	1.1	1
1165	Local Manipulation of Skyrmion Nucleation in Microscale Areas of a Thin Film with Nitrogen-Ion Implantation. ACS Applied Materials & Interfaces, 0, , .	4.0	2
1166	A spectroscopic-imaging scanning tunneling microscope in vector magnetic field. Review of Scientific Instruments, 2023, 94, .	0.6	2
1167	Coexistence and coupling of ferroelectricity and magnetism in an oxide two-dimensional electron gas. Nature Physics, 2023, 19, 823-829.	6.5	4

#	Article	IF	Citations
1168	Visualizing the Effect of Oxidation on Magnetic Domain Behavior of Nanoscale Fe₃GeTe₂ for Applications in Spintronics. ACS Applied Nano Materials, 2023, 6, 4390-4397.	2.4	3
1169	Strain-tunable skyrmions in two-dimensional monolayer Janus magnets. Nanoscale, 2023, 15, 6830-6837.	2.8	17
1170	Chip-Integrated Vortex Manipulation. Nano Letters, 0, , .	4.5	1
1171	Magnetization dynamics with time-dependent spin-density functional theory: Significance of exchange-correlation torques. Physical Review B, 2023, 107, .	1.1	3
1172	Chirality coupling in topological magnetic textures with multiple magnetochiral parameters. Nature Communications, 2023, 14, .	5.8	7
1173	Carrier and thickness mediated ferromagnetism in chiral magnet Mn1/3TaS2 nanoflakes. Journal of Applied Physics, 2023, 133, .	1.1	1
1174	Correlated gyrotropic motion of skyrmion clusters in ultrathin ferromagnetic nanodisks. Journal of Magnetism and Magnetic Materials, 2023, 572, 170649.	1.0	1
1175	Magnetic nanostructures. , 2024, , 112-131.		385
1176	Topological Spin Textures in a Nonâ€Collinear Antiferromagnet System. Advanced Materials, 2023, 35, .	11.1	12
1177	Controlling magnetic skyrmion nucleation with <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msup><mml:mrow><mml:mi>Ga</mml:mi></mml:mrow><mml:mo>+</ ion irradiation. Physical Review B, 2023, 107, .	1.1	1
1178	Quantum oscillations in the centrosymmetric skyrmion-hosting magnet<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>GdRu</mml:mi><mml:mn>2</mml:mn></ Physical Review B, 2023, 107, .	1.1	5
1179	Driven magnetic skyrmions in a narrow channel. European Physical Journal: Special Topics, 0, , .	1.2	1
1180	Non-Hermitian dynamics for a two-spin system with <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi mathvariant="script">PT</mml:mi></mml:math> symmetry. Physical Review B, 2023, 107, .	1.1	3
1181	Introduction of [Co/Pt]_n multilayers in Co/Ni/Co/Pt/Ru/Co/Ni/Co/Pt/Ru/Co/Ni/Co/Pt/Ru/

#	Article	IF	Citations
1186	Systematic Control of Ferrimagnetic Skyrmions via Composition Modulation in Pt/Fe_{1â€“x}Tb_x/Ta Multilayers. ACS Nano, 0, , .	7.3	0
1187	Spin Orbit Torque Based Devices: Concepts, Progress, and Perspectives. , 2023, , 650-665.		0
1188	Magnetic field induced deformation of the spin density wave microphases in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>Ca</mml:mi><mml:mn>3</mml:mn></mml:msub><mml:mi mathvariant="normal">O</mml:mi><mml:mn>6</mml:mn></mml:msub></mml:mrow></mml:math>. Physical Review B, 2023, 107, .	1.1	1
1189	Nature of magnetic transitions and evidence for magnetoelastic coupling in the biskyrmion-host hexagonal compound MnNiGa. Journal of Alloys and Compounds, 2023, 954, 170082.	2.8	0
1190	Current-driven magnetic skyrmion diodes controlled by voltage gates in synthetic antiferromagnets. Applied Physics Letters, 2023, 122, .	1.5	2
1191	Evidence of Strong Dzyaloshinskiiâ€“Moriya Interaction at the Cobalt/Hexagonal Boron Nitride Interface. Nano Letters, 2023, 23, 3202-3208.	4.5	3
1192	Ab initio exploration of short-pitch skyrmion materials: Role of orbital frustration. Journal of Applied Physics, 2023, 133, .	1.1	5
1193	Interfacial quantum interference effect and dual magnetoresistance in La0.7Sr0.3MnO3 thin films grown on (001) Si. Journal of Applied Physics, 2023, 133, .	1.1	1
1194	Creating Skyrmions in Thin CoPt Films with an Atomic Force Microscope Probe. Bulletin of the Russian Academy of Sciences: Physics, 2023, 87, 318-321.	0.1	0
1195	Dynamics of orbital skyrmions in a circular nanodisk. Physical Chemistry Chemical Physics, 2023, 25, 12050-12056.	1.3	1
1196	Giant tunability of microwave responses for current-driven skyrmions in a tapered nanostructure with notches. Journal Physics D: Applied Physics, 0, , .	1.3	0
1212	Manipulation of Skyrmion by Magnetic Field Gradients: A Sternâ€“Gerlach-Like Experiment. Nano Letters, 2023, 23, 4931-4937.	4.5	3
1240	Exotic rare earth-based materials for emerging spintronic technology. Fundamental Theories of Physics, 2023, , 99-140.	0.1	3
1268	Spintronic materials. , 2024, , 159-176.		0
1287	Bloch-type magnetic skyrmions in two-dimensional lattices. Materials Horizons, 2023, 10, 5071-5078.	6.4	1
1298	Skyrmionium-Based Leaky Integrate and Fire Neuron. , 2023, , .		1
1308	Current-induced nonreciprocal dynamics and nonlinear Hall effect of a magnetic hopfion. , 2023, , .		0
1310	Large interfacial Rashba interaction and resultant dominating field- like torque in atomically thin metallic heterostructures. , 2023, , .		1

#	Article	IF	Citations
1311	Non-Conventional Computing using thermal and driven Skyrmion Dynamics. , 2023, , .		0
1312	Demonstration of weighted sum using electrical manipulation and detection of magnetic skyrmions. , 2023, , .		0
1313	Experimental demonstration of skyrmionic magnetic tunnel junction and its on-chip learning application. , 2023, , .		0
1347	Magnetic hopfion rings in new era for topology. Nature, 2023, 623, 702-703.	13.7	0
1385	Optical skyrmions and other topological quasiparticles of light. Nature Photonics, 2024, 18, 15-25.	15.6	6