

Observation of Dirac monopoles in a synthetic magneti

Nature

505, 657-660

DOI: [10.1038/nature12954](https://doi.org/10.1038/nature12954)

Citation Report

#	ARTICLE	IF	CITATIONS
1	Universality and Bose-Einstein Condensation: Perspectives on Recent Work. , 0, , 3-21.		0
2	Quantum cloud simulates magnetic monopole. Nature, 2014, , .	13.7	3
3	Gauge field for neutral atoms near a current loop. Journal of the Korean Physical Society, 2014, 65, 2053-2057.	0.3	0
5	Dynamics of a vortex dipole across a magnetic phase boundary in a spinor Bose-Einstein condensate. Physical Review A, 2014, 90, .	1.0	12
6	Metastable spin textures and Nambu-Goldstone modes of a ferromagnetic spin-1 Bose-Einstein condensate confined in a ring trap. Physical Review A, 2014, 90, .	1.0	4
7	A Raman waveplate for spinor Bose-Einstein condensates. Optics Letters, 2014, 39, 4271.	1.7	20
8	Synthetic Lorentz force in classical atomic gases via Doppler effect and radiation pressure. Physical Review A, 2014, 89, .	1.0	4
9	Topological aspects in spinor Bose-Einstein condensates. Reports on Progress in Physics, 2014, 77, 122401.	8.1	38
10	Creation and dynamics of two-dimensional skyrmions in antiferromagnetic spin-1 Bose-Einstein condensates. Physical Review A, 2014, 89, .	1.0	9
11	Momentum-space dynamics of Dirac quasiparticles in correlated random potentials: Interplay between dynamical and Berry phases. Physical Review A, 2014, 89, .	1.0	2
12	The great example. Nature Physics, 2014, 10, 176-176.	6.5	0
13	Polar exploration. Nature, 2014, 505, 627-628.	13.7	0
14	On the Lorentz symmetry breaking effects on a Dirac neutral particle inside a two-dimensional quantum ring. European Physical Journal Plus, 2014, 129, 1.	1.2	38
15	Some quantum aspects of a particle with electric quadrupole moment interacting with an electric field subject to confining potentials. International Journal of Modern Physics A, 2014, 29, 1450117.	0.5	18
16	U(3) artificial gauge fields for cold atoms. Physical Review A, 2014, 90, .	1.0	11
17	Route to non-Abelian quantum turbulence in spinor Bose-Einstein condensates. Physical Review A, 2015, 91, .	1.0	17
18	Nonclassical polarization dynamics in classical-like states. Physical Review A, 2015, 92, .	1.0	3
19	Stabilization of ring dark solitons in Bose-Einstein condensates. Physical Review A, 2015, 92, .	1.0	19

#	ARTICLE	IF	CITATIONS
20	Half-skyrmion and vortex-antivortex pairs in spinor condensates. <i>Physical Review A</i> , 2015, 92, .	1.0	25
21	Bifurcation and stability of single and multiple vortex rings in three-dimensional Bose-Einstein condensates. <i>Physical Review A</i> , 2015, 92, .	1.0	15
22	Berry curvature of interacting bosons in a honeycomb lattice. <i>Physical Review A</i> , 2015, 92, .	1.0	11
23	When electric charge becomes also magnetic. <i>Physical Review D</i> , 2015, 92, .	1.6	7
24	Weyl Points in Three-Dimensional Optical Lattices: Synthetic Magnetic Monopoles in Momentum Space. <i>Physical Review Letters</i> , 2015, 114, 225301.	2.9	148
25	Hybrid Matter-Wave“Microwave Solitons Produced by the Local-Field Effect. <i>Physical Review Letters</i> , 2015, 115, 023901.	2.9	36
26	New Type of Stable Particlelike States in Chiral Magnets. <i>Physical Review Letters</i> , 2015, 115, 117201.	2.9	182
27	Spinor Condensates on a Cylindrical Surface in Synthetic Gauge Fields. <i>Physical Review Letters</i> , 2015, 115, 155304.	2.9	17
28	A Magnetic Wormhole. <i>Scientific Reports</i> , 2015, 5, 12488.	1.6	46
29	Stabilizing the false vacuum: Mott skyrmions. <i>Scientific Reports</i> , 2015, 5, 7692.	1.6	2
30	Experimental Demonstration of a Synthetic Lorentz Force by Using Radiation Pressure. <i>Scientific Reports</i> , 2015, 5, 13485.	1.6	2
31	Spontaneous \mathcal{PT} symmetry breaking of a ferromagnetic superfluid in a gradient field. <i>Europhysics Letters</i> , 2015, 111, 66001.	0.7	3
32	Quantum aspects of a moving magnetic quadrupole moment interacting with an electric field. <i>Journal of Mathematical Physics</i> , 2015, 56, .	0.5	26
33	Fractionalized topological defects in optical lattices. <i>New Journal of Physics</i> , 2015, 17, 103019.	1.2	2
34	Magnetic Field Sources. <i>Green Energy and Technology</i> , 2015, , 39-95.	0.4	0
35	For or against structural realism? A verdict from high energy physics. <i>Studies in History and Philosophy of Science Part B - Studies in History and Philosophy of Modern Physics</i> , 2015, 49, 84-101.	1.4	5
36	On a particle with electric quadrupole moment interacting with a magnetic field subject to a harmonic and a linear confining potentials. <i>European Physical Journal Plus</i> , 2015, 130, 1.	1.2	5
37	Spacetime algebra as a powerful tool for electromagnetism. <i>Physics Reports</i> , 2015, 589, 1-71.	10.3	32

#	ARTICLE	IF	CITATIONS
38	Status of Searches for Magnetic Monopoles. Annual Review of Nuclear and Particle Science, 2015, 65, 279-302.	3.5	52
39	Hydrodynamic modes of partially condensed Bose mixtures. Physical Review A, 2015, 91, .	1.0	15
40	Observation of isolated monopoles in a quantum field. Science, 2015, 348, 544-547.	6.0	87
41	Modulational Instability of Spinor Condensates in an Optical Lattice*. Communications in Theoretical Physics, 2015, 63, 565-568.	1.1	1
42	Aharonovâ€™Anandan quantum phases and Landau quantization associated with a magnetic quadrupole moment. Annals of Physics, 2015, 363, 253-261.	1.0	26
43	Local Exact Controllability of a One-Dimensional Nonlinear SchrÃ¶dinger Equation. SIAM Journal on Control and Optimization, 2015, 53, 2781-2818.	1.1	6
44	The codes of matter and their applications. Science Bulletin, 2015, 60, 1661-1673.	4.3	3
45	Magnetocaloric Energy Conversion. Green Energy and Technology, 2015, , .	0.4	171
46	Precession and nutation dynamics of nonlinearly coupled non-coaxial three-dimensional matter wave vortices. Scientific Reports, 2016, 6, 22758.	1.6	8
47	Multidimensional solitons: Well-established results and novel findings. European Physical Journal: Special Topics, 2016, 225, 2507-2532.	1.2	100
48	Encoding Magnetic States in Monopoleâ€™Like Configurations Using Superconducting Dots. Advanced Science, 2016, 3, 1600207.	5.6	12
49	Core Structure and Non-Abelian Reconnection of Defects in a Biaxial Nematic Spin-2 Bose-Einstein Condensate. Physical Review Letters, 2016, 117, 275302.	2.9	26
50	DUPLICATE: Solitons in coupled nonlinear SchrÃ¶dinger models: A survey of recent developments. Reviews in Physics, 2016, , .	4.4	0
51	Vortex lines attached to dark solitons in Bose-Einstein condensates and boson-vortex duality in 3+1 dimensions. Physical Review A, 2016, 94, .	1.0	7
52	Twist of generalized skyrmions and spin vortices in a polariton superfluid. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 14926-14931.	3.3	56
53	The search for magnetic monopoles. Physics Today, 2016, 69, 40-46.	0.3	101
54	Heâ€™McKellarâ€™Wilkins-type effect, quantum holonomies and Aharonovâ€™Bohm-type effect for bound states from the Lorentz symmetry breaking effects. Reviews in Mathematical Physics, 2016, 28, 1650023.	0.7	4
55	Raman fingerprints on the Bloch sphere of a spinor Boseâ€™Einstein condensate. Journal of Modern Optics, 2016, 63, 1759-1767.	0.6	9

#	ARTICLE	IF	CITATIONS
56	Topology of chiral superfluid: Skyrmions, Weyl fermions, and chiral anomaly. JETP Letters, 2016, 103, 140-146.	0.4	10
57	Creating full-Bloch Bose-Einstein condensates with Raman-coupled optical lattices. Journal of Optics (United Kingdom), 2016, 18, 110784314.	1.0	18
58	Singular atom optics with spinor Bose-Einstein condensates. Optica, 2016, 3, 355.	4.8	21
59	Synthetic gauge potentials for ultracold neutral atoms. Journal of Physics B: Atomic, Molecular and Optical Physics, 2016, 49, 183001.	0.6	17
60	Solitons in coupled nonlinear Schrödinger models: A survey of recent developments. Reviews in Physics, 2016, 1, 140-153.	4.4	134
61	Line of magnetic monopoles and an extension of the Aharonov-Bohm effect. Annals of Physics, 2016, 373, 87-95.	1.0	0
62	Evolution of an isolated monopole in a spin-1 Bose-Einstein condensate. Physical Review A, 2016, 94, .	1.0	4
63	Dynamics of dipoles and vortices in nonlinearly coupled three-dimensional field oscillators. Physical Review E, 2016, 94, 012207.	0.8	8
64	Fast control of topological vortex formation in Bose-Einstein condensates by counterdiabatic driving. Physical Review A, 2016, 93, .	1.0	13
65	Deterministic creation, pinning, and manipulation of quantized vortices in a Bose-Einstein condensate. Physical Review A, 2016, 93, .	1.0	33
66	Collision dynamics of skyrmions in a two-component Bose-Einstein condensate. Physical Review A, 2016, 93, .	1.0	6
67	Stability and internal structure of vortices in spin-1 Bose-Einstein condensates with conserved magnetization. Physical Review A, 2016, 93, .	1.0	23
68	Controlled polarization of two-dimensional quantum turbulence in atomic Bose-Einstein condensates. Physical Review A, 2016, 93, .	1.0	25
69	Stable Core Symmetries and Confined Textures for a Vortex Line in a Spinor Bose-Einstein Condensate. Physical Review Letters, 2016, 116, 085301.	2.9	15
70	Decay of an isolated monopole into a Dirac monopole configuration. Physical Review A, 2016, 93, .	1.0	12
71	Nonlinear waves in coherently coupled Bose-Einstein condensates. Physical Review A, 2016, 93, .	1.0	11
72	Superradiance Induced Particle Flow via Dynamical Gauge Coupling. Physical Review Letters, 2016, 117, 175302.	2.9	45
73	Some Differential Geometry. Lecture Notes in Physics, 2016, , 107-188.	0.3	0

#	ARTICLE	IF	CITATIONS
74	Berry's phase for displaced Landau-He-McKellar-Wilkens states. European Physical Journal Plus, 2016, 131, 1.	1.2	3
75	Geometric Hall Effect of ^{23}Na Condensate in a Time- and Space-Dependent Magnetic Field. Journal of Low Temperature Physics, 2016, 183, 23-30.	0.6	2
76	Topological Hall Effect of Spin-2 Condensate in a Time and Space-Dependent Magnetic Field. International Journal of Theoretical Physics, 2016, 55, 4633-4640.	0.5	0
77	Tying quantum knots. Nature Physics, 2016, 12, 478-483.	6.5	132
78	Summary and Perspective. SpringerBriefs in Physics, 2016, , 67-69.	0.2	0
79	Quantized vortices in interacting gauge theories. Journal of Physics B: Atomic, Molecular and Optical Physics, 2016, 49, 015304.	0.6	9
80	Generalized non-reciprocity in an optomechanical circuit via synthetic magnetism and reservoir engineering. Nature Physics, 2017, 13, 465-471.	6.5	360
81	Riemann surface and quantization. Annals of Physics, 2017, 376, 194-217.	1.0	7
82	Analysis of electromagnetic propagation in the magnetic plasma state in spin-ice systems. Journal of Applied Physics, 2017, 121, .	1.1	6
83	Spectral splits of neutrinos as a BCS-BEC crossover type phenomenon. Physical Review D, 2017, 95, .	1.6	12
84	Quantum simulation of Abelian Wu-Yang monopoles in spin-1/2 systems. Laser Physics Letters, 2017, 14, 045205.	0.6	1
85	Counterdiabatic vortex pump in spinor Bose-Einstein condensates. Physical Review A, 2017, 95, .	1.0	10
86	Minkowski Spacetime and QED from Ontology of Time. , 2017, , 225-331.		1
87	Observation of nanoscale magnetic fields using twisted electron beams. Nature Communications, 2017, 8, 689.	5.8	47
88	Simulating superluminal physics with superconducting circuit technology. Physical Review A, 2017, 96, .	1.0	11
89	Equation of state and self-bound droplet in Rabi-coupled Bose mixtures. Scientific Reports, 2017, 7, 13358.	1.6	58
90	Internal structure and stability of vortices in a dipolar spinor Bose-Einstein condensate. Physical Review A, 2017, 95, .	1.0	13
91	Influence of topological constraints and topological excitations: Decomposition formulas for calculating homotopy groups of symmetry-broken phases. Physical Review B, 2017, 95, .	1.1	3

#	ARTICLE	IF	CITATIONS
92	Quantum mechanical E \times B drift velocity in a weakly inhomogeneous electromagnetic field. <i>Physics of Plasmas</i> , 2017, 24, 072117.	0.7	0
93	Dynamics of Spinor Condensates Driven by an Inhomogeneous Magnetic Field. <i>Journal of Low Temperature Physics</i> , 2017, 189, 27-41.	0.6	0
94	Quantum knots in Bose-Einstein condensates created by counterdiabatic control. <i>Physical Review A</i> , 2017, 96, .	1.0	5
95	Emergence of Non-Abelian Magnetic Monopoles in a Quantum Impurity Problem. <i>Physical Review Letters</i> , 2017, 119, 235301.	2.9	21
96	Dirac monopoles with a polar-core vortex induced by spin-orbit coupling in spinor Bose-Einstein condensates. <i>Physical Review A</i> , 2017, 95, .	1.0	23
97	Vortex pairs in a spin-orbit-coupled Bose-Einstein condensate. <i>Physical Review A</i> , 2017, 95, .	1.0	16
98	Experimental Realization of a Dirac Monopole through the Decay of an Isolated Monopole. <i>Physical Review X</i> , 2017, 7, .	2.8	20
99	The dark components of the Universe are slowly clarified. <i>Journal of Experimental and Theoretical Physics</i> , 2017, 124, 358-368.	0.2	4
100	A Behavioural Model of the Solar Magnetic Cycle. <i>Proceedings of the International Astronomical Union</i> , 2017, 13, 94-97.	0.0	0
101	Skyrmions with arbitrary topological charges in spinor Bose-Einstein condensates. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2018, 51, 045301.	0.6	8
102	Synthetic electromagnetic knot in a three-dimensional skyrmion. <i>Science Advances</i> , 2018, 4, eaao3820.	4.7	47
103	Electrodynamics in cylindrical symmetry in the magnetic plasma state. <i>Journal Physics D: Applied Physics</i> , 2018, 51, 195004.	1.3	2
104	Damping-free collective oscillations of a driven two-component Bose gas in optical lattices. <i>Physical Review A</i> , 2018, 97, .	1.0	1
105	Spin-Orbit-Coupled Interferometry with Ring-Trapped Bose-Einstein Condensates. <i>Physical Review Letters</i> , 2018, 120, 063201.	2.9	24
106	Spinor dynamics in a mixture of spin-1 and spin-2 Bose-Einstein condensates. <i>Physical Review A</i> , 2018, 97, .	1.0	9
107	Ground-state phases of a mixture of spin-1 and spin-2 Bose-Einstein condensates. <i>Physical Review A</i> , 2018, 97, .	1.0	10
108	T-duality simplifies bulk-boundary correspondence: the noncommutative case. <i>Letters in Mathematical Physics</i> , 2018, 108, 1163-1201.	0.5	10
109	Dirac potential in the Doebner-Goldin equation. <i>Annals of Physics</i> , 2018, 388, 197-205.	1.0	1

#	ARTICLE	IF	CITATIONS
110	One-dimensional sections of exotic spacetimes with superconducting circuits. <i>New Journal of Physics</i> , 2018, 20, 053028.	1.2	9
111	Synthetic Landau Levels and Spinor Vortex Matter on a Haldane Spherical Surface with a Magnetic Monopole. <i>Physical Review Letters</i> , 2018, 120, 130402.	2.9	11
112	Topological quantum matter with cold atoms. <i>Advances in Physics</i> , 2018, 67, 253-402.	35.9	198
113	Two fluid model in low energy excited states within spin-ice systems. <i>Scientific Reports</i> , 2018, 8, 16303.	1.6	1
114	Rotating Atomic Quantum Gases with Light-Induced Azimuthal Gauge Potentials and the Observation of the Hess-Fairbank Effect. <i>Physical Review Letters</i> , 2018, 121, 250401.	2.9	31
115	Magnetic Monopoles and Dark Matter. <i>Journal of Experimental and Theoretical Physics</i> , 2018, 127, 638-646.	0.2	4
116	SU(3) topological insulators in the honeycomb lattice. <i>Physical Review A</i> , 2018, 98, .	1.0	5
117	Capture and chaotic scattering of a charged particle by a magnetic monopole under a uniform electric field. <i>Physical Review E</i> , 2018, 98, .	0.8	2
118	Mapping between charge-monopole and position-dependent mass systems. <i>Journal of Mathematical Physics</i> , 2018, 59, .	0.5	11
119	Revealing Tensor Monopoles through Quantum-Metric Measurements. <i>Physical Review Letters</i> , 2018, 121, 170401.	2.9	46
120	Spin-Orbital-Angular-Momentum Coupled Bose-Einstein Condensates. <i>Physical Review Letters</i> , 2018, 121, 113204.	2.9	56
121	Multi-second magnetic coherence in a single domain spinor Bose-Einstein condensate. <i>New Journal of Physics</i> , 2018, 20, 053008.	1.2	15
122	Second Chern number of a quantum-simulated non-Abelian Yang monopole. <i>Science</i> , 2018, 360, 1429-1434.	6.0	96
123	Spin-1 topological monopoles in the parameter space of ultracold atoms. <i>Physical Review A</i> , 2018, 98, .	1.0	14
124	Weyl type spin-orbit coupled ferromagnetic Bose-Einstein condensates under rotation. <i>Annals of Physics</i> , 2018, 396, 87-95.	1.0	7
125	Absence of Landau damping in driven three-component Bose-Einstein condensate in optical lattices. <i>Scientific Reports</i> , 2018, 8, 11523.	1.6	2
126	Three-dimensional splitting dynamics of giant vortices in Bose-Einstein condensates. <i>Physical Review A</i> , 2018, 98, .	1.0	12
127	Three-dimensional skyrmions in spin-2 Bose-Einstein condensates. <i>New Journal of Physics</i> , 2018, 20, 055011.	1.2	17

#	ARTICLE	IF	CITATIONS
128	Ground-state phases of spin-orbit coupled spin-1 Bose-Einstein condensate in a plane quadrupole field. <i>Journal of Physics Condensed Matter</i> , 2018, 30, 295404.	0.7	6
129	Corrections to thermodynamics of the system of magnetically charged anyons. <i>Low Temperature Physics</i> , 2019, 45, 880-884.	0.2	0
130	Controlled creation of a singular spinor vortex by circumventing the Dirac belt trick. <i>Nature Communications</i> , 2019, 10, 4772.	5.8	12
131	Hunting down magnetic monopoles in two-dimensional topological insulators and superconductors. <i>Physical Review B</i> , 2019, 100, .	1.1	4
132	Decay of a Quantum Knot. <i>Physical Review Letters</i> , 2019, 123, 163003.	2.9	15
133	Maxwell duality and semiclassical analysis of the interaction of the magnetic quadrupole moment of a neutral particle with external fields. <i>Journal of Mathematical Physics</i> , 2019, 60, 102104.	0.5	4
134	Machine learning techniques for detecting topological avatars of new physics. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2019, 377, 20190392.	1.6	1
135	Interferometric measurement of interhyperfine scattering lengths in Rb87. <i>Physical Review A</i> , 2019, 100, .	1.0	3
136	Tensor Berry connections and their topological invariants. <i>Physical Review B</i> , 2019, 99, .	1.1	23
137	The contribution of magnetic monopoles to the ponderomotive force. <i>Journal of Physics A: Mathematical and Theoretical</i> , 2019, 52, 255501.	0.7	0
138	Ground-state properties of spin-orbit-coupled dipolar Bose-Einstein condensates with in-plane gradient magnetic field. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2019, 52, 155302.	0.6	7
139	Geometric phase from Aharonov-Bohm to Pancharatnam-Berry and beyond. <i>Nature Reviews Physics</i> , 2019, 1, 437-449.	11.9	167
140	Dirac particle dynamics of a superconducting circuit. <i>Physical Review A</i> , 2019, 99, .	1.0	1
141	Frontiers in multidimensional self-trapping of nonlinear fields and matter. <i>Nature Reviews Physics</i> , 2019, 1, 185-197.	11.9	255
142	Dirac potential in a rotational dissipative quantum system. <i>Scientific Reports</i> , 2019, 9, 1540.	1.6	0
143	Solution for Pauli equation in a toroidal surface with uniform magnetic field. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2019, 110, 88-94.	1.3	8
144	Creation of a Dirac monopole-antimonopole pair in a spin-1 Bose-Einstein condensate. <i>Physical Review A</i> , 2019, 99, .	1.0	5
145	Defect QED: dielectric without a dielectric, monopole without a monopole. <i>Journal of High Energy Physics</i> , 2019, 2019, 1.	1.6	4

#	ARTICLE	IF	CITATIONS
146	Exact mapping between charge-monopole and position-dependent effective mass systems via Pauli equation. <i>Journal of Mathematical Physics</i> , 2019, 60, .	0.5	5
147	Mapping Between Charge-Dyon and Position-Dependent Mass Systems*. <i>Communications in Theoretical Physics</i> , 2019, 71, 1261.	1.1	1
148	Topological Superfluids. <i>Journal of Experimental and Theoretical Physics</i> , 2019, 129, 618-641.	0.2	6
149	Three-Dimensional Skyrmions with Arbitrary Topological Number in a Ferromagnetic Spin-1 Bose-Einstein Condensate. <i>Scientific Reports</i> , 2019, 9, 18804.	1.6	7
150	Fifty years of research at the Landau Institute for Theoretical Physics (on the 100th anniversary of the) Tj ETQq0 0 0 rgBT /Overlock 10 T	0.8	2
151	Ferromagnetic-Core Spin Vortex of Quasi-2D Spin-1 Condensate in a Harmonic Trap. <i>Journal of Low Temperature Physics</i> , 2019, 194, 76-87.	0.6	1
152	Half-quantum vortices and walls bounded by strings in the polar-distorted phases of topological superfluid ^3He . <i>Nature Communications</i> , 2019, 10, 237.	5.8	53
153	Spin-2 Bose-Einstein condensates in an annular trap with spin-orbit coupling. <i>Results in Physics</i> , 2020, 19, 103437.	2.0	0
154	The Electric Origin of Magnetic Forces Theory: General Framework. <i>IEEE Access</i> , 2020, 8, 73756-73766.	2.6	3
155	Vortex patterns of atomic Bose-Einstein condensates in a density-dependent gauge potential. <i>Physical Review A</i> , 2020, 102, .	1.0	10
156	Characterized helical modulation of three-dimensional Skyrmions in the spin-orbit coupled condensate. <i>International Journal of Modern Physics B</i> , 2020, 34, 2050181.	1.0	0
157	Non-Abelian generalizations of the Hofstadter model: spin-orbit-coupled butterfly pairs. <i>Light: Science and Applications</i> , 2020, 9, 177.	7.7	15
158	Direct Observation of the Statics and Dynamics of Emergent Magnetic Monopoles in a Chiral Magnet. <i>Physical Review Letters</i> , 2020, 125, 137202.	2.9	34
159	Topological structure of a Nambu monopole in two-Higgs-doublet models: Fiber bundle, Dirac's quantization, and a dyon. <i>Physical Review D</i> , 2020, 102, .	1.6	12
160	Monopole and instanton effects in QCD. <i>Journal of High Energy Physics</i> , 2020, 2020, 1.	1.6	3
161	Stripe and supersolid phases of spin-orbit coupled spin-2 Bose-Einstein condensates in an optical lattice. <i>Journal of Physics Condensed Matter</i> , 2020, 32, 035401.	0.7	2
162	Semiclassical Analysis of the Interaction of the Magnetic Quadrupole Moment of a Neutral Particle with Axial Electric Fields in a Uniformly Rotating Frame. <i>Foundations of Physics</i> , 2020, 50, 735-748.	0.6	5
163	Direct Observation of Topological Defects in Striped Block Copolymer Discs and Polymersomes. <i>ACS Nano</i> , 2020, 14, 4829-4838.	7.3	11

#	ARTICLE	IF	CITATIONS
164	Many-body effects on second-order phase transitions in spinor Bose-Einstein condensates and breathing dynamics. <i>Physical Review A</i> , 2020, 102, .	1.0	8
165	Topological Nambu monopole in two Higgs doublet models. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2020, 802, 135220.	1.5	15
166	Closed timelike curves and chronology protection in quantum and classical simulators. <i>Classical and Quantum Gravity</i> , 2020, 37, 045013.	1.5	4
167	A new form of liquid matter: Quantum droplets. <i>Frontiers of Physics</i> , 2021, 16, 1.	2.4	105
168	Experimental Observation of Tensor Monopoles with a Superconducting Qudit. <i>Physical Review Letters</i> , 2021, 126, 017702.	2.9	32
169	On the gauge transformation for the rotation of the singular string in the Dirac monopole theory. <i>International Journal of Modern Physics A</i> , 2021, 36, 2150019.	0.5	0
170	Torsional Magnetic Angle for Magnetospirillum gryphiswaldense. <i>Series in Bioengineering</i> , 2021, , 47-59.	0.3	0
171	Damped point-vortex model for polar-core spin vortices in a ferromagnetic spin-1 Bose-Einstein condensate. <i>Physical Review Research</i> , 2021, 3, .	1.3	7
172	Artificial magnetic field for synthetic quantum matter without dynamical modulation. <i>Physical Review A</i> , 2021, 103, .	1.0	5
173	Adjustable half-skyrmion chains induced by SU(3) spin-orbit coupling in rotating Bose-Einstein condensates. <i>Chinese Physics B</i> , 0, , .	0.7	2
174	Synthetic superfluid chemistry with vortex-trapped quantum impurities. <i>Physical Review Research</i> , 2021, 3, .	1.3	8
175	Controlled creation and annihilation of isolated robust emergent magnetic monopole like charged vertices in square artificial spin ice. <i>Scientific Reports</i> , 2021, 11, 13593.	1.6	2
176	Local field-interaction approach to the Dirac monopole. <i>Journal of Physics Communications</i> , 0, , .	0.5	0
177	Spinor $F = 1$ Bose-Einstein condensates loaded in two types of radially-periodic potentials with spin-orbit coupling. <i>Chinese Physics B</i> , 0, , .	0.7	2
178	Geometric Phase in Optics: From Wavefront Manipulation to Waveguiding. <i>Laser and Photonics Reviews</i> , 2021, 15, 2100003.	4.4	44
179	Hidden symmetries, spin and charge of artificial magnetic monopoles. <i>Quantum Studies: Mathematics and Foundations</i> , 0, , 1.	0.4	0
180	Coulomb-type interaction in the electric quadrupole moment system under the influence of a cut-off point. <i>Europhysics Letters</i> , 0, , .	0.7	0
181	A Model of Two Quantum Fluids for the Low Energy Excited States of the Systems with Entities That Mimic the Magnetic Monopoles. <i>Fluids</i> , 2021, 6, 324.	0.8	0

#	ARTICLE	IF	CITATIONS
182	Wilson loop and Wilczek-Zee phase from a non-Abelian gauge field. Npj Quantum Information, 2021, 7, .	2.8	10
184	Isolated Dirac string induced by interaction between positive and negative monopoles. Wuli Xuebao/Acta Physica Sinica, 2021, 70, 071401.	0.2	0
185	Dynamics of Nambu monopole in two Higgs doublet models. Cosmological Monopole Collider. Journal of High Energy Physics, 2020, 2020, 1.	1.6	16
186	A synthetic macroscopic magnetic unipole. Physica Scripta, 2020, 95, 095811.	1.2	5
187	Composite Topological Objects in Topological Superfluids. Journal of Experimental and Theoretical Physics, 2020, 131, 11-17.	0.2	9
188	Quantum Bubble Polarization in Curved Spacetime. Journal of High Energy Physics Gravitation and Cosmology, 2016, 02, 244-252.	0.3	2
189	Ground state of a rotating Bose-Einstein condensate with in-plane quadrupole field. Wuli Xuebao/Acta Physica Sinica, 2017, 66, 130305.	0.2	7
190	Ground state of spin-orbit coupled rotating two-component Bose-Einstein condensate in gradient magnetic field. Wuli Xuebao/Acta Physica Sinica, 2018, 67, 110302.	0.2	12
191	The research progress of topological properties in spinor Bose-Einstein condensates. Wuli Xuebao/Acta Physica Sinica, 2020, 69, 010303.	0.2	1
192	Vortex formation in a spin-orbit-coupled Bose-Einstein condensates with static quadrupole magnetic field. Journal of Physics B: Atomic, Molecular and Optical Physics, 2021, 54, 195302.	0.6	1
193	The Cosmos, The Sun and The Earth. The Frontiers Collection, 2016, , 55-119.	0.1	0
195	Rotating spin-1/2 Bose-Einstein condensates in a gradient magnetic field with spin-orbit coupling. Communications in Theoretical Physics, 2020, 72, 095701.	1.1	1
196	SU(3) Spin-Orbit Coupled Rotating Bose-Einstein Condensate Subject to a Gradient Magnetic Field. Frontiers in Physics, 2021, 9, .	1.0	1
197	COMPOSITE TOPOLOGICAL OBJECTS IN TOPOLOGICAL SUPERFLUIDS. Journal of Experimental and Theoretical Physics, 2020, 158, 17-23.	0.0	0
198	Solitons and soliton interactions in repulsive spinor Bose-Einstein condensates with nonzero background. European Physical Journal Plus, 2021, 136, 1.	1.2	4
199	Recent Progresses on Experimental Investigations of Topological and Dissipative Solitons in Liquid Crystals. Crystals, 2022, 12, 94.	1.0	9
200	Phase separation of spin-1 spin-orbital-angular-momentum coupled Bose-Einstein condensates. Modern Physics Letters B, 2022, 36, .	1.0	0
201	Ultrafast microscopy of a twisted plasmonic spin skyrmion. Applied Physics Reviews, 2022, 9, .	5.5	33

#	ARTICLE	IF	CITATIONS
202	A synthetic monopole source of Kalb-Ramond field in diamond. <i>Science</i> , 2022, 375, 1017-1020.	6.0	15
203	Missing Heâ€“McKellarâ€“Wilkins geometric quantum phase. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , 2022, 478, .	1.0	1
204	Electrically tunable collective motion of dissipative solitons in chiral nematic films. <i>Nature Communications</i> , 2022, 13, 2122.	5.8	7
205	Imprinting a Three-Dimensional Skyrmion in a Boseâ€“Einstein Condensate Via a Raman Process. <i>Journal of Low Temperature Physics</i> , 0, , 1.	0.6	0
206	Interaction effects of pseudospin-based magnetic monopoles and kinks in a doped dipolar superlattice gas. <i>Physical Review A</i> , 2022, 105, .	1.0	1
207	Direct observation of topological magnetic monopoles using soft x-ray vector ptychography at 10 nm resolution. , 2022, , .		0
208	Momentum: QFT, Quantum Black Holes, and Some Cosmological Implications. <i>Nonlinear Phenomena in Complex Systems</i> , 2022, 25, 136-158.	0.1	0
209	Topological excitations in rotating spin-orbit-coupled spin-1 Bose-Einstein condensates with in-plane gradient magnetic field. <i>Communications in Theoretical Physics</i> , 0, , .	1.1	0
210	Annealing and melting of active two-dimensional soliton lattices in chiral nematic films. <i>Soft Matter</i> , 2022, 18, 7045-7050.	1.2	1
211	Measuring Quantum Geometric Tensor of Non-Abelian System in Superconducting Circuits. <i>Chinese Physics Letters</i> , 2022, 39, 100202.	1.3	4
212	Topological spin defects of light. <i>Optica</i> , 2022, 9, 1417.	4.8	4
213	Color confinement, chiral symmetry breaking, and catalytic effect induced by monopole and instanton creations. <i>European Physical Journal C</i> , 2022, 82, .	1.4	2
214	Observation of Spin-Tensor Induced Topological Phase Transitions of Triply Degenerate Points with a Trapped Ion. <i>Physical Review Letters</i> , 2022, 129, .	2.9	2
215	Wave manipulation via delay-engineered periodic potentials. <i>Physical Review Research</i> , 2022, 4, .	1.3	2
216	Three-dimensional topological magnetic monopoles and their interactions in a ferromagnetic meta-lattice. <i>Nature Nanotechnology</i> , 2023, 18, 227-232.	15.6	9
217	Magnetic-monopole-induced polarons in atomic superlattices. <i>Physical Review A</i> , 2023, 107, .	1.0	0
218	Dirac magnetic monopoles potential in the nonlinear double-soliton interference. <i>Wuli Xuebao/Acta Physica Sinica</i> , 2023, 72, 100501.	0.2	1