

# Yasuhiro Hatsugai

## List of Publications by Year in descending order

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236  
papers

8,787  
citations

53660

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239  
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239  
docs citations

239  
times ranked

4284  
citing authors

#	ARTICLE	IF	CITATIONS
1	Chern number and edge states in the integer quantum Hall effect. <i>Physical Review Letters</i> , 1993, 71, 3697-3700.	2.9	1,068
2	Chern Numbers in Discretized Brillouin Zone: Efficient Method of Computing (Spin) Hall Conductances. <i>Journal of the Physical Society of Japan</i> , 2005, 74, 1674-1677.	0.7	939
3	Topological Origin of Zero-Energy Edge States in Particle-Hole Symmetric Systems. <i>Physical Review Letters</i> , 2002, 89, 077002.	2.9	555
4	Edge states in the integer quantum Hall effect and the Riemann surface of the Bloch function. <i>Physical Review B</i> , 1993, 48, 11851-11862.	1.1	311
5	Numerical Studies on the Hubbard Model and the J-Model in One- and Two-Dimensions. <i>Journal of the Physical Society of Japan</i> , 1989, 58, 3752-3780.	0.7	216
6	Quantum Spin Hall Effect in Three Dimensional Materials: Lattice Computation of Z <sub>2</sub> Topological Invariants and Its Application to Bi and Sb. <i>Journal of the Physical Society of Japan</i> , 2007, 76, 053702.	0.7	213
7	Symmetry-protected exceptional rings in two-dimensional correlated systems with chiral symmetry. <i>Physical Review B</i> , 2019, 99, .	1.1	205
8	Topological analysis of the quantum Hall effect in graphene: Dirac-Fermi transition across van Hove singularities and edge versus bulk quantum numbers. <i>Physical Review B</i> , 2006, 74, .	1.1	176
9	Energy spectrum and the quantum Hall effect on the square lattice with next-nearest-neighbor hopping. <i>Physical Review B</i> , 1990, 42, 8282-8294.	1.1	158
10	Entanglement entropy and the Berry phase in the solid state. <i>Physical Review B</i> , 2006, 73, .	1.1	135
11	Manipulation of Dirac Cones in Mechanical Graphene. <i>Scientific Reports</i> , 2016, 5, 18107.	1.6	133
12	Spin-liquid ground state of the half-filled Kondo lattice in one dimension. <i>Physical Review B</i> , 1992, 46, 3175-3178.	1.1	129
13	Quantized Berry Phases as a Local Order Parameter of a Quantum Liquid. <i>Journal of the Physical Society of Japan</i> , 2006, 75, 123601.	0.7	118
14	Optical Hall Conductivity in Ordinary and Graphene Quantum Hall Systems. <i>Physical Review Letters</i> , 2009, 103, 116803.	2.9	109
15	Topological aspects of the quantum spin-Hall effect in graphene: Z <sub>2</sub> topological order and spin Chern number. <i>Physical Review B</i> , 2007, 75, .	1.1	96
16	Stabilization of flux states on two-dimensional lattices. <i>Physical Review B</i> , 1990, 41, 9174-9182.	1.1	90
17	Exceptional rings protected by emergent symmetry for mechanical systems. <i>Physical Review B</i> , 2019, 100, .	1.1	90
18	Mirror skin effect and its electric circuit simulation. <i>Physical Review Research</i> , 2020, 2, .	1.3	86

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19	Symmetry-Protected Multifold Exceptional Points and Their Topological Characterization. <i>Physical Review Letters</i> , 2021, 127, 186602.	2.9	82
20	Localization problem of a two-dimensional lattice in a random magnetic field. <i>Physical Review B</i> , 1993, 47, 9561-9565.	1.1	80
21	Characterization of Topological Insulators: Chern Numbers for Ground State Multiplet. <i>Journal of the Physical Society of Japan</i> , 2005, 74, 1374-1377.	0.7	78
22	Non-Hermitian fractional quantum Hall states. <i>Scientific Reports</i> , 2019, 9, 16895.	1.6	77
23	Topological classification of gapped spin chains: Quantized Berry phase as a local order parameter. <i>Physical Review B</i> , 2008, 77, .	1.1	72
24	Topological aspects of the quantum Hall effect. <i>Journal of Physics Condensed Matter</i> , 1997, 9, 2507-2549.	0.7	69
25	$Z_{\text{Q}}$ topological invariants for Polyacetylene, Kagome and Pyrochlore lattices. <i>Europhysics Letters</i> , 2011, 95, 20003.	0.7	69
26	Explicit Gauge Fixing for Degenerate Multiplets: A Generic Setup for Topological Orders. <i>Journal of the Physical Society of Japan</i> , 2004, 73, 2604-2607.	0.7	68
27	Higher-Order Topological Mott Insulators. <i>Physical Review Letters</i> , 2019, 123, 196402.	2.9	68
28	Disordered critical wave functions in random-bond models in two dimensions: Random-lattice fermions at $E=0$ without doubling. <i>Physical Review B</i> , 1997, 56, 1061-1064.	1.1	65
29	Electron spectral function of an interacting two dimensional electron gas in a strong magnetic field. <i>Physical Review Letters</i> , 1993, 71, 424-427.	2.9	61
30	Phase diagram of a disordered higher-order topological insulator: A machine learning study. <i>Physical Review B</i> , 2019, 99, .	1.1	60
31	Cyclotron radiation and emission in graphene. <i>Physical Review B</i> , 2008, 78, .	1.1	59
32	Numerical study of the hidden antiferromagnetic order in the Haldane phase. <i>Physical Review B</i> , 1991, 44, 11789-11794.	1.1	57
33	Sum Rule of Hall Conductance in a Random Quantum Phase Transition. <i>Physical Review Letters</i> , 1999, 83, 2246-2249.	2.9	57
34	Spin Wave Theory of the Two-Dimensional Heisenberg Antiferromagnet Coupled with Localized Holes. <i>Journal of the Physical Society of Japan</i> , 1989, 58, 978-997.	0.7	54
35	Flat band quantum scar. <i>Physical Review B</i> , 2020, 102, .	1.1	53
36	Persistent currents and edge states in a magnetic field. <i>Physical Review B</i> , 1993, 47, 9501-9512.	1.1	52

#	ARTICLE	IF	CITATIONS
37	Bulk-edge correspondence in graphene with/without magnetic field: Chiral symmetry, Dirac fermions and edge states. Solid State Communications, 2009, 149, 1061-1067.	0.9	52
38	Half-integer contributions to the quantum Hall conductivity from single Dirac cones. Physical Review B, 2010, 82, .	1.1	52
39	Electronic Structure of HighTcSuperconducting Layered Perovskite La-Cu-O and Y-Ba-Cu-O by LMTO Method. Japanese Journal of Applied Physics, 1987, 26, L716-L718.	0.8	51
40	Exactly Solvable Model of Correlated Lattice Electrons in Any Dimensions. Journal of the Physical Society of Japan, 1992, 61, 2056-2069.	0.7	51
41	$\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"} \rangle \langle \text{mml:msub} \rangle \langle \text{mml:mi mathvariant="double-struck"} \rangle Z \langle \text{mml:mi} \rangle Q \langle \text{mml:mi} \rangle \langle \text{mml:msub} \rangle \langle \text{mml:math} \rangle$ Berry phase for higher-order symmetry-protected topological phases. Physical Review Research, 2020, 2, .	1.3	50
42	Chiral operator product algebra and edge excitations of a fractional quantum Hall droplet. Nuclear Physics B, 1994, 422, 476-494.	0.9	49
43	Higher-order topological phases in a spring-mass model on a breathing kagome lattice. Physical Review B, 2020, 101, .	1.1	48
44	Near Critical States of Random Dirac Fermions. Physical Review Letters, 1997, 79, 3728-3731.	2.9	47
45	Exact analysis of entanglement in gapped quantum spin chains. Physical Review B, 2007, 76, .	1.1	47
46	Phase diagram of the $S=1/2$ quantum spin chain with bond alternation. Physical Review B, 1993, 48, 9555-9563.	1.1	45
47	Square-root higher-order topological insulator on a decorated honeycomb lattice. Physical Review A, 2020, 102, .	1.0	45
48	Quantum fluctuation of tunneling current in individual Ge quantum dots induced by a single-electron transfer. Applied Physics Letters, 2007, 90, 153104.	1.5	44
49	Bulk-edge correspondence in topological pumping. Physical Review B, 2016, 94, .	1.1	42
50	Explicit Solutions of the Bethe Ansatz Equations for Bloch Electrons in a Magnetic Field. Physical Review Letters, 1994, 73, 1134-1137.	2.9	41
51	Symmetry-protected quantization and bulk-edge correspondence of massless Dirac fermions: Application to the fermionic Shastry-Sutherland model. Physical Review B, 2013, 88, .	1.1	39
52	Fate of fractional quantum Hall states in open quantum systems: Characterization of correlated topological states for the full Liouvillian. Physical Review Research, 2020, 2, .	1.3	39
53	Exceptional band touching for strongly correlated systems in equilibrium. Progress of Theoretical and Experimental Physics, 2020, 2020, .	1.8	38
54	Magnetic Mechanism of Superconductivity in Coupled Spin-Fermion Systems. Journal of the Physical Society of Japan, 1988, 57, 2901-2904.	0.7	37

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55	Quantum Hall Plateau Transition in Graphene with Spatially Correlated Random Hopping. Physical Review Letters, 2009, 103, 156804.	2.9	37
56	Numerical study of localization of Dirac fermions on a lattice in two dimensions. Physical Review B, 1993, 48, 4204-4207.	1.1	36
57	Entanglement polarization for the topological quadrupole phase. Physical Review B, 2018, 98, .	1.1	34
58	Many-Body Chern Number without Integration. Physical Review Letters, 2019, 122, 146601.	2.9	34
59	Symmetry-protected $\mathbb{Z}_2$ -quantization and quaternionic Berry connection with Kramers degeneracy. New Journal of Physics, 2010, 12, 065004.	1.2	33
60	Pairing of Fermions Coupled with Spin-1/2 Heisenberg System –Exact Diagonalization Study for Mechanism of High-Tc Superconductivity–. Journal of the Physical Society of Japan, 1989, 58, 1347-1371.	0.7	32
61	Zero modes in the random hopping model. Physical Review B, 2002, 66, .	1.1	32
62	Degeneracy and consistency condition for Berry phases: Gap closing under a local gauge twist. Physical Review B, 2008, 78, .	1.1	32
63	Quantized Berry phases for a local characterization of spin liquids in frustrated spin systems. Journal of Physics Condensed Matter, 2007, 19, 145209.	0.7	31
64	ZN Berry Phases in Symmetry Protected Topological Phases. Physical Review Letters, 2018, 120, 247202.	2.9	31
65	Gauge invariance of fractionally charged quasiparticles and hidden topological symmetry. Physical Review Letters, 1991, 66, 659-662.	2.9	30
66	String correlation functions in the anisotropic spin-1 Heisenberg chain. Physical Review B, 1992, 46, 13914-13918.	1.1	30
67	Generalized chiral symmetry and stability of zero modes for tilted Dirac cones. Physical Review B, 2011, 83, .	1.1	30
68	Higher-Order Topological Phase in a Honeycomb-Lattice Model with Anti-Kekulé Distortion. Journal of the Physical Society of Japan, 2019, 88, 104703.	0.7	30
69	Braid group and anyons on a cylinder. Physical Review B, 1991, 43, 2661-2677.	1.1	29
70	Topological aspects of graphene. European Physical Journal: Special Topics, 2007, 148, 133-141.	1.2	28
71	Square-root topological semimetals. Physical Review B, 2021, 103, .	1.1	28
72	Ab initio bond self-interaction correction calculation of tetrahedrally bonded semiconductors and its application to superlattices by the most localized linear muffin-tin orbital method. Physical Review B, 1988, 37, 1280-1286.	1.1	27

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73	Quantum group, Bethe ansatz equations, and Bloch wave functions in magnetic fields. Physical Review B, 1996, 53, 9697-9712.	1.1	27
74	Mutual-exclusion statistics in exactly solvable models in one and higher dimensions at low temperatures. Physical Review B, 1996, 54, 5358-5367.	1.1	26
75	Electronic structure of charge and spin stripe order in $\text{La}_2\text{xSr}_x\text{NiO}_4$ ( $x=13,12$ ). Physical Review B, 2007, 76, .	1.1	26
76	String Correlation of Quantum Antiferromagnetic Spin Chains with $S=1$ and 2. Journal of the Physical Society of Japan, 1992, 61, 3856-3860.	0.7	24
77	Topological identification of a spin- $\frac{1}{2}$ ladder with four-spin ring exchange. Physical Review B, 2009, 79, .	1.1	24
78	Edge states in graphene in magnetic fields: A specialty of the edge mode embedded in the Landau band. Physical Review B, 2008, 78, .	1.1	23
79	Bulk-edge correspondence of classical diffusion phenomena. Scientific Reports, 2021, 11, 888.	1.6	23
80	Hidden massive Dirac fermions in effective field theory for integral quantum Hall transitions. Physical Review B, 1996, 54, 4898-4906.	1.1	22
81	Edge states of hydrogen terminated monolayer materials: silicene, germanene and stanene ribbons. Journal of Physics Condensed Matter, 2017, 29, 115302.	0.7	22
82	Topological Meaning of Z2 Numbers in Time Reversal Invariant Systems. Journal of the Physical Society of Japan, 2008, 77, 123705.	0.7	21
83	Peierls stabilization of magnetic-flux states of two-dimensional lattice electrons. Physical Review B, 1990, 41, 9527-9529.	1.1	20
84	Entanglement Chern Number for an Extensive Partition of a Topological Ground State. Journal of the Physical Society of Japan, 2014, 83, 113705.	0.7	20
85	Molecular-orbital representation of generic flat-band models. Europhysics Letters, 2019, 127, 47001.	0.7	20
86	Flat bands and higher-order topology in polymerized triptycene: Tight-binding analysis on decorated star lattices. Physical Review Materials, 2019, 3, .	0.9	20
87	Interaction-induced topological charge pump. Physical Review Research, 2020, 2, .	1.3	20
88	Simple exactly solvable models of non-Fermi-liquids. Physical Review B, 1998, 57, 1340-1343.	1.1	19
89	Singular density of states of disordered Dirac fermions in chiral models. Physical Review B, 2001, 65, .	1.1	19
90	Entanglement Entropy of One-dimensional Gapped Spin Chains. Journal of the Physical Society of Japan, 2007, 76, 074603.	0.7	19

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91	Edge states of a spin- $\frac{1}{2}$ ladder with four-spin ring exchange. Physical Review B, 2009, 79, .	1.1	19
92	Flat bands in the Weaire-Thorpe model and silicene. New Journal of Physics, 2015, 17, 025009.	1.2	19
93	Anyons on a torus: Braid group, Aharonov-Bohm period, and numerical study. Physical Review B, 1991, 43, 10761-10768.	1.1	18
94	Collapse of the charge gap in random Mott insulators. Physical Review B, 1998, 58, 15314-15316.	1.1	18
95	Scaling near random criticality in two-dimensional Dirac fermions. Physical Review B, 1998, 58, 6680-6683.	1.1	18
96	Duality in the Azbel-Hofstadter Problem and Two-Dimensional d-Wave Superconductivity with a Magnetic Field. Physical Review Letters, 2001, 86, 151-154.	2.9	18
97	Topological aspect of graphene physics. Journal of Physics: Conference Series, 2011, 334, 012004.	0.3	18
98	Systematic construction of topological flat-band models by molecular-orbital representation. Physical Review B, 2020, 101, .	1.1	18
99	Mott transition in the two-dimensional flux phase. Physical Review B, 2002, 65, .	1.1	17
100	Manipulation of the Dirac cones and the anomaly in the graphene related quantum Hall effect. Journal of Physics: Conference Series, 2011, 334, 012044.	0.3	17
101	Chiral symmetry and its manifestation in optical responses in graphene: interaction and multilayers. New Journal of Physics, 2013, 15, 035023.	1.2	17
102	Characterizing weak topological properties: Berry phase point of view. Physical Review B, 2014, 90, .	1.1	17
103	Interaction-induced doublons and embedded topological subspace in a complete flat-band system. Physical Review A, 2020, 102, .	1.0	17
104	Thermal activation of quasiparticles and thermodynamics of fractional quantum Hall liquids. Physical Review B, 1998, 57, 9907-9919.	1.1	16
105	Fractionally quantized Berry phase, adiabatic continuation, and edge states. Physical Review B, 2014, 90, .	1.1	16
106	Edge states of mechanical diamond and its topological origin. New Journal of Physics, 2017, 19, 035003.	1.2	16
107	Square-root topological phase with time-reversal and particle-hole symmetry. Physical Review B, 2021, 103, .	1.1	16
108	Numerical study of the effects of disorder on the three-dimensional Hubbard model. Journal of Physics Condensed Matter, 2000, 12, 9317-9322.	0.7	15

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109	Quantum Hall effects of graphene with multiorbitals: Topological numbers, Boltzmann conductance, and semiclassical quantization. <i>Physical Review B</i> , 2009, 79, .	1.1	15
110	Circularly Polarized Topological Edge States Derived from Optical Weyl Points in Semiconductor-Based Chiral Woodpile Photonic Crystals. <i>Journal of the Physical Society of Japan</i> , 2018, 87, 123401.	0.7	15
111	Flat band, spin-1 Dirac cone, and Hofstadter diagram in the fermionic square kagome model. <i>Physical Review B</i> , 2021, 104, .	1.1	15
112	Plateau transitions in the pairing model: Topology and selection rule. <i>Physical Review B</i> , 2000, 62, 99-102.	1.1	14
113	Topological order parameters of the spin- $\frac{1}{2}$ Heisenberg ladder in magnetic field. <i>Physical Review B</i> , 2015, 91, .	1.4	14
114	Section Chern number for a three-dimensional photonic crystal and the bulk-edge correspondence. <i>Physical Review B</i> , 2016, 94, .	1.1	14
115	Weyl points of mechanical diamond. <i>Physical Review B</i> , 2019, 99, .	1.1	14
116	Chiral edge modes in evolutionary game theory: A kagome network of rock-paper-scissors cycles. <i>Physical Review E</i> , 2021, 104, 025003.	0.8	14
117	Topological quantum phase transitions in superconductivity on lattices. <i>Physical Review B</i> , 2002, 65, .	1.1	13
118	Symmetry Protected Weak Topological Phases in a Superlattice. <i>Journal of the Physical Society of Japan</i> , 2013, 82, 073708.	0.7	13
119	NUMERICAL ANALYSIS OF COUPLED SPIN-FERMION MODEL $\hat{c}$ PAIRING MECHANISM THROUGH EXTENDED KONDO SINGLET. <i>International Journal of Modern Physics B</i> , 1988, 02, 959-973.	1.0	12
120	Gap-opening transition and fractal ground-state phase diagram in one-dimensional fermions with long-range interaction: $\hat{c}$ Mott transition as a quantum phase transition of infinite order. <i>Physical Review B</i> , 1997, 56, 12183-12189.	1.1	12
121	Transitions from the quantum Hall state to the Anderson insulator: Fate of delocalized states. <i>Physical Review B</i> , 2000, 61, 15952-15958.	1.1	12
122	Superconductivity and Abelian chiral anomalies. <i>Physical Review B</i> , 2004, 70, .	1.1	12
123	Zero-energy edge states and chiral symmetry breaking at edges of graphite sheets. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2004, 22, 679-683.	1.3	12
124	Nontrivial Quantized Berry Phases for Itinerant Spin Liquids. <i>Journal of the Physical Society of Japan</i> , 2007, 76, 113601.	0.7	12
125	Cyclotron radiation and emission in graphene $\hat{c}$ a possibility of Landau-level laser. <i>Journal of Physics: Conference Series</i> , 2009, 150, 022059.	0.3	11
126	Chiral condensate with topological degeneracy in graphene and its manifestation in edge states. <i>Physical Review B</i> , 2012, 86, .	1.1	11



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127	Disentangled Topological Numbers by a Purification of Entangled Mixed States for Non-Interacting Fermion Systems. Journal of the Physical Society of Japan, 2015, 84, 043703.	0.7	11
128	Flat-band solutions in $D$ -dimensional decorated diamond and pyrochlore lattices: Reduction to molecular problem. Physical Review B, 2021, 104, .	1.1	11
129	Multiple quantum scar states and emergent slow thermalization in a flat-band system. Physical Review B, 2021, 104, .	1.1	11
130	Topological quantum phase transition in the BEC-BCS crossover. Physical Review B, 2010, 82, .	1.1	10
131	Correlation effects on non-Hermitian point-gap topology in zero dimension: Reduction of topological classification. Physical Review B, 2021, 104, .	1.1	10
132	Non-Hermitian topology in rock-paper-scissors games. Scientific Reports, 2022, 12, 560.	1.6	10
133	Universal behavior of correlations between eigenvalues of random matrices. Physical Review E, 1995, 51, 5365-5370.	0.8	9
134	Numerical replica limit for the density correlation of the random Dirac fermion. Physical Review B, 2001, 63, .	1.1	9
135	Topological low-energy modes in Landau levels of graphene: A possibility of a quantum-liquid ground state. Physica E: Low-Dimensional Systems and Nanostructures, 2008, 40, 1530-1532.	1.3	9
136	Optical Hall conductivity in 2DEG and graphene QHE systems. Physica E: Low-Dimensional Systems and Nanostructures, 2010, 42, 751-754.	1.3	9
137	Lattice realization of the generalized chiral symmetry in two dimensions. Physical Review B, 2016, 94, .	1.1	9
138	Type-III Dirac Cones from Degenerate Directionally Flat Bands: Viewpoint from Molecular-Orbital Representation. Journal of the Physical Society of Japan, 2020, 89, 103704.	0.7	9
139	Revisiting Flat bands and localization. Annals of Physics, 2021, 435, 168453.	1.0	9
140	Higher-order topological Mott insulator on the pyrochlore lattice. Scientific Reports, 2021, 11, 20270.	1.6	9
141	Phase diagram of the Ashkin-Teller quantum spin chain. Physical Review B, 1994, 50, 559-562.	1.1	8
142	Correlation effects of carbon nanotubes at boundaries: Spin polarization induced by zero-energy boundary states. Physical Review B, 2003, 67, .	1.1	8
143	Anomalous criticality at the $\nu=0$ quantum Hall transition in graphene: The role of disorder preserving chiral symmetry. Physical Review B, 2010, 82, .	1.1	8
144	Topologically protected Landau levels in bilayer graphene in finite electric fields. Physical Review B, 2012, 85, .	1.1	8

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145	GENERALIZATION OF CHIRAL SYMMETRY FOR TILTED DIRAC CONES. International Journal of Modern Physics Conference Series, 2012, 11, 145-150.	0.7	8
146	Edge states of a diffusion equation in one dimension: Rapid heat conduction to the heat bath. Physical Review E, 2022, 105, 024137.	0.8	8
147	Observation of bulk-edge correspondence in topological pumping based on a tunable electric circuit. Communications Physics, 2022, 5, .	2.0	8
148	Universal correlations in random matrices and one-dimensional particles with long-range interactions in a confinement potential. Physical Review B, 1995, 52, 4716-4719.	1.1	7
149	Landau levels from the Bethe Ansatz equations. Physical Review B, 2000, 61, 4409-4412.	1.1	7
150	Anisotropy on the Fermi surface of the two-dimensional Hubbard model. Physical Review B, 2002, 66, .	1.1	7
151	Topological description of (spin) Hall conductances on Brillouin zone lattices: quantum phase transitions and topological changes. Physica E: Low-Dimensional Systems and Nanostructures, 2006, 34, 336-339.	1.3	7
152	Levitation and percolation in quantum Hall systems with correlated disorder. Physical Review B, 2007, 76, .	1.1	7
153	Edge states for the $n = 0$ Landau level in graphene. Journal of Physics: Conference Series, 2009, 150, 022003.	0.3	7
154	Survival of sharp $n=0$ Landau levels in massive tilted Dirac fermions: Role of the generalized chiral operator. Physical Review B, 2015, 91, .	1.1	7
155	Hannay Angle: Yet Another Symmetry-Protected Topological Order Parameter in Classical Mechanics. Journal of the Physical Society of Japan, 2016, 85, 043001.	0.7	7
156	Adiabatic heuristic principle on a torus and generalized Streda formula. Physical Review B, 2020, 102, .	1.1	7
157	Detecting Bulk Topology of Quadrupolar Phase from Quench Dynamics. Physical Review Letters, 2021, 126, 016802.	2.9	7
158	Competition of first-order and second-order topology on the honeycomb lattice. Physical Review B, 2022, 105, .	1.1	7
159	Spin polarized electron energy band of orthorhombic $(\text{La}_2\text{CuO}_4)_2$ . Solid State Communications, 1988, 65, 1271-1274.	0.9	6
160	Exactly solvable model for correlated lattice fermions in any dimensions. Physica C: Superconductivity and Its Applications, 1991, 185-189, 1539-1540.	0.6	6
161	EFFECTS OF INTERACTION FOR THE QUANTUM DIFFUSION IN COUPLED CHAINS. International Journal of Modern Physics B, 2001, 15, 2045-2052.	1.0	6
162	Zero-energy edge states and their origin in particle-hole symmetric systems: symmetry and topology. Physica C: Superconductivity and Its Applications, 2003, 388-389, 90-91.	0.6	6

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163	Magnetism in the two-dimensional $t\text{-}t'$ -Hubbard model: From low- to over-doping. Physical Review B, 2005, 71, .	1.1	6
164	$U < \sum_{\mathbf{k}} \epsilon_{\mathbf{k}} \left( \sum_{\mathbf{l}} \epsilon_{\mathbf{l}} \right)^{-1}$ breaking in one-dimensional Mott insulators studied by the density matrix renormalization group method. Physical Review B, 2007, 76, .	1.1	6
165	Landau level broadening in graphene with long-range disorder: Robustness of the level. Physica E: Low-Dimensional Systems and Nanostructures, 2010, 42, 759-762.	1.3	6
166	Many-Body Chern Numbers of $\hat{1}/2 = 1/3$ and $1/2$ States on Various Lattices. Journal of the Physical Society of Japan, 2017, 86, 103701.	0.7	6
167	Sequential quantum phase transitions in Heisenberg chains with integer spins: Quantized Berry phase. Physical Review B, 2019, 100, .	1.1	6
168	Fractionally Quantized Berry's Phase in an Anisotropic Magnet on the Kagome Lattice. Journal of the Physical Society of Japan, 2019, 88, 045001.	0.7	6
169	Plateau transitions of a spin pump and bulk-edge correspondence. Physical Review B, 2021, 104, .	1.1	6
170	Single-particle states on a sphere with a magnetic field and disorder. Physical Review B, 1995, 51, 13419-13431.	1.1	5
171	Conductivity of 2D Lattice Electrons in an Incommensurate Magnetic Field. Journal of the Physical Society of Japan, 1996, 65, 529-537.	0.7	5
172	Exact ground-state correlation functions of one-dimensional strongly correlated electron models with resonating-valence-bond ground state. Journal of Statistical Physics, 1996, 84, 1133-1208.	0.5	5
173	Entanglement Chern Number of the Kane-Mele Model with Ferromagnetism. Journal of the Physical Society of Japan, 2016, 85, 043706.	0.7	5
174	Entanglement Chern number for three-dimensional topological insulators: Characterization by Weyl points of entanglement Hamiltonians. Physical Review B, 2017, 96, .	1.1	5
175	Topological Modes Protected by Chiral and Two-Fold Rotational Symmetry in a Spring-Mass Model with a Lieb Lattice Structure. Journal of the Physical Society of Japan, 2020, 89, 083702.	0.7	5
176	Topological pump and bulk-edge-correspondence in an extended Bose-Hubbard model. Physical Review B, 2021, 104, .	1.1	5
177	Topological band theory of a generalized eigenvalue problem with Hermitian matrices: Symmetry-protected exceptional rings with emergent symmetry. Physical Review B, 2021, 104, .	1.1	5
178	Discriminant indicators with generalized inversion symmetry. Physical Review B, 2022, 105, .	1.1	5
179	Bulk-edge correspondence in topological transport and pumping. Journal of Physics: Conference Series, 2018, 969, 012133.	0.3	4
180	Bulk-edge correspondence with generalized chiral symmetry. Physical Review B, 2021, 103, .	1.1	4

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181	Machine Learning of Mirror Skin Effects in the Presence of Disorder. Journal of the Physical Society of Japan, 2021, 90, 053703.	0.7	4
182	Construction of interacting flat-band models by molecular-orbital representation: Correlation functions, energy gap, and entanglement. Progress of Theoretical and Experimental Physics, 2022, 2022, .	1.8	4
183	Machine Learning Study on the Flat-Band States Constructed by Molecular-Orbital Representation with Randomness. Journal of the Physical Society of Japan, 2022, 91, .	0.7	4
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