

Emil J Bergholtz

List of Publications by Year in descending order

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73
papers

5,517
citations

126708

33
h-index

82410

72
g-index

75
all docs

75
docs citations

75
times ranked

2859
citing authors

#	ARTICLE	IF	CITATIONS
1	Biorthogonal Bulk-Boundary Correspondence in Non-Hermitian Systems. <i>Physical Review Letters</i> , 2018, 121, 026808.	2.9	799
2	Exceptional topology of non-Hermitian systems. <i>Reviews of Modern Physics</i> , 2021, 93, .	16.4	680
3	TOPOLOGICAL FLAT BAND MODELS AND FRACTIONAL CHERN INSULATORS. <i>International Journal of Modern Physics B</i> , 2013, 27, 1330017.	1.0	340
4	Corner states of light in photonic waveguides. <i>Nature Photonics</i> , 2019, 13, 697-700.	15.6	304
5	Symmetry-protected nodal phases in non-Hermitian systems. <i>Physical Review B</i> , 2019, 99, .	1.1	183
6	Non-Hermitian extensions of higher-order topological phases and their biorthogonal bulk-boundary correspondence. <i>Physical Review B</i> , 2019, 99, .	1.1	181
7	Non-Hermitian Topological Sensors. <i>Physical Review Letters</i> , 2020, 125, 180403.	2.9	157
8	Quantum Transport of Disordered Weyl Semimetals at the Nodal Point. <i>Physical Review Letters</i> , 2014, 113, 026602.	2.9	151
9	Field-Selective Anomaly and Chiral Mode Reversal in Type-II Weyl Materials. <i>Physical Review Letters</i> , 2016, 117, 086401.	2.9	145
10	Fractional Chern Insulators in Topological Flat Bands with Higher Chern Number. <i>Physical Review Letters</i> , 2012, 109, 186805.	2.9	139
11	Exceptional links and twisted Fermi ribbons in non-Hermitian systems. <i>Physical Review A</i> , 2018, 98, .	1.0	120
12	Disentangling Entanglement Spectra of Fractional Quantum Hall States on Torus Geometries. <i>Physical Review Letters</i> , 2010, 104, 156404.	2.9	119
13	Lattice models with exactly solvable topological hinge and corner states. <i>Physical Review B</i> , 2018, 97, .	1.1	116
14	Quantum transport in Dirac materials: Signatures of tilted and anisotropic Dirac and Weyl cones. <i>Physical Review B</i> , 2015, 91, .	1.1	114
15	Half-Filled Lowest Landau Level on a Thin Torus. <i>Physical Review Letters</i> , 2005, 94, 026802.	2.9	102
16	Quantum Hall system in Tao-Thouless limit. <i>Physical Review B</i> , 2008, 77, .	1.1	101
17	Particle-Hole Duality, Emergent Fermi Liquids, and Fractional Chern Insulators in Moiré Flatbands. <i>Physical Review Letters</i> , 2020, 124, 106803.	2.9	99
18	Flat bands with higher Chern number in pyrochlore slabs. <i>Physical Review B</i> , 2012, 86, .	1.1	96

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19	Knotted non-Hermitian metals. Physical Review B, 2019, 99, .	1.1	93
20	Symmetry and Higher-Order Exceptional Points. Physical Review Letters, 2021, 127, 186601.	2.9	85
21	Non-Hermitian Weyl physics in topological insulator ferromagnet junctions. Physical Review Research, 2019, 1, .	1.3	76
22	One-dimensional theory of the quantum Hall system. Journal of Statistical Mechanics: Theory and Experiment, 2006, 2006, L04001-L04001.	0.9	70
23	Pfaffian quantum Hall state made simple: Multiple vacua and domain walls on a thin torus. Physical Review B, 2006, 74, .	1.1	70
24	Hierarchy of Fractional Chern Insulators and Competing Compressible States. Physical Review Letters, 2013, 111, 126802.	2.9	61
25	Topological equivalence of crystal and quasicrystal band structures. Physical Review B, 2013, 88, .	1.1	60
26	Topology and Interactions in a Frustrated Slab: Tuning from Weyl Semimetals to Fractional Chern Insulators. Physical Review Letters, 2015, 114, 016806.	2.9	60
27	Quantum critical exponents for a disordered three-dimensional Weyl node. Physical Review B, 2015, 92, .	1.1	57
28	Microscopic Theory of the Quantum Hall Hierarchy. Physical Review Letters, 2007, 99, 256803.	2.9	49
29	Degeneracy of non-Abelian quantum Hall states on the torus: domain walls and conformal field theory. Journal of Statistical Mechanics: Theory and Experiment, 2008, 2008, P04016.	0.9	47
30	Mixed Axial-Torsional Anomaly in Weyl Semimetals. Physical Review Letters, 2019, 122, 056601.	2.9	42
31	Exactly Solvable Fermion Chain Describing a Quantum Hall State. Physical Review Letters, 2012, 109, 016401.	2.9	39
32	From fractional Chern insulators to Abelian and non-Abelian fractional quantum Hall states: Adiabatic continuity and orbital entanglement spectrum. Physical Review B, 2013, 87, .	1.1	37
33	Symmetry Breaking on the Three-Dimensional Hyperkagome Lattice of Na_4O_8 . Physical Review Letters, 2010, 105, 237202.	1.1	34
34	Bulk-edge correspondence in fractional Chern insulators. Physical Review B, 2013, 88, .	1.1	33
35	Entanglement scaling of fractional quantum Hall states through geometric deformations. New Journal of Physics, 2010, 12, 075004.	1.2	31
36	Non-Abelian fractional Chern insulators from long-range interactions. Physical Review B, 2013, 88, .	1.1	30

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37	Exceptional Spin Liquids from Couplings to the Environment. <i>Physical Review Letters</i> , 2021, 126, 077201.	2.9	30
38	Josephson effect in a Weyl SNS junction. <i>Physical Review B</i> , 2017, 95, .	1.1	29
39	Gate-Tunable Fractional Chern Insulators in Twisted Double Bilayer Graphene. <i>Physical Review Letters</i> , 2021, 126, 026801.	2.9	29
40	Phase transitions and generalized biorthogonal polarization in non-Hermitian systems. <i>Physical Review Research</i> , 2020, 2, .	1.3	29
41	Quantum Hall wave functions on the torus. <i>Physical Review B</i> , 2008, 77, .	1.1	27
42	Anatomy of topological surface states: Exact solutions from destructive interference on frustrated lattices. <i>Physical Review B</i> , 2017, 96, .	1.1	27
43	Black and white holes at material junctions. <i>Physical Review Research</i> , 2020, 2, .	1.3	27
44	Edge-mode combinations in the entanglement spectra of non-Abelian fractional quantum Hall states on the torus. <i>Physical Review B</i> , 2012, 85, .	1.1	25
45	Tilted disordered Weyl semimetals. <i>Physical Review B</i> , 2017, 95, .	1.1	25
46	Quantum Hall hierarchy wave functions: From conformal correlators to Tao-Thouless states. <i>Physical Review B</i> , 2008, 77, .	1.1	24
47	Disordered double Weyl node: Comparison of transport and density of states calculations. <i>Physical Review B</i> , 2017, 95, .	1.1	24
48	Classification of exceptional nodal topologies protected by $\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"} \rangle \langle \text{mml:mi mathvariant="script"} \rangle \text{PT} \langle \text{mml:mi} \rangle \langle \text{mml:math} \rangle$ symmetry. <i>Physical Review B</i> , 2021, 104, .	1.1	24
49	Extended Bloch theorem for topological lattice models with open boundaries. <i>Physical Review B</i> , 2019, 99, .	1.1	22
50	Liouvillian skin effect in an exactly solvable model. <i>Physical Review Research</i> , 2022, 4, .	1.3	22
51	Boundaries of boundaries: A systematic approach to lattice models with solvable boundary states of arbitrary codimension. <i>Physical Review B</i> , 2019, 99, .	1.1	21
52	Model Fractional Chern Insulators. <i>Physical Review Letters</i> , 2016, 116, 216802.	2.9	20
53	Covid-19: An urgent call for global "vaccines-plus" action. <i>BMJ, The</i> , 2022, 376, o1.	3.0	19
54	Charge density wave instabilities of type-II Weyl semimetals in a strong magnetic field. <i>Physical Review B</i> , 2017, 96, .	1.1	16

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55	Effective spin chains for fractional quantum Hall states. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2011, 43, 755-760.	1.3	14
56	Search for localized Wannier functions of topological band structures via compressed sensing. <i>Physical Review B</i> , 2014, 90, .	1.1	14
57	Correlations and entanglement in flat band models with variable Chern numbers. <i>Journal of Statistical Mechanics: Theory and Experiment</i> , 2014, 2014, P10012.	0.9	14
58	Strongly interacting Weyl semimetals: Stability of the semimetallic phase and emergence of almost free fermions. <i>Physical Review B</i> , 2018, 98, .	1.1	13
59	Exotic Non-Abelian Topological Defects in Lattice Fractional Quantum Hall States. <i>Physical Review Letters</i> , 2017, 119, 106801.	2.9	11
60	Link between the hierarchy of fractional quantum Hall states and Haldane's conjecture for quantum spin chains. <i>Physical Review B</i> , 2010, 81, .	1.1	10
61	Fractional domain walls from on-site softening in dipolar bosons. <i>Physical Review A</i> , 2012, 85, .	1.0	10
62	Spin chain description of rotating bosons at $\hat{\nu} = 1$. <i>Journal of Statistical Mechanics: Theory and Experiment</i> , 2009, 2009, P07038.	0.9	9
63	Symmetry-enforced stability of interacting Weyl and Dirac semimetals. <i>Physical Review B</i> , 2018, 97, .	1.1	9
64	Magneto-optical conductivity in generic Weyl semimetals. <i>Physical Review B</i> , 2020, 102, .	1.1	9
65	Dissipative preparation of fractional Chern insulators. <i>Physical Review Research</i> , 2021, 3, .	1.3	9
66	Beyond the Tao-Thouless limit of the fractional quantum Hall effect: spin chains and Fermi surface deformation. <i>Journal of Physics: Conference Series</i> , 2011, 302, 012020.	0.3	7
67	Topological insulators with arbitrarily tunable entanglement. <i>Physical Review B</i> , 2014, 89, .	1.1	7
68	Quantum oscillations and magnetoresistance in type-II Weyl semimetals: Effect of a field-induced charge density wave. <i>Physical Review B</i> , 2018, 98, .	1.1	7
69	Quantum Hall Circle. <i>Journal of Statistical Mechanics: Theory and Experiment</i> , 2009, 2009, P04015.	0.9	6
70	Interacting Majorana chain: Transport properties and signatures of an emergent two-dimensional weak topological phase. <i>Physical Review B</i> , 2017, 96, .	1.1	3
71	Composite symmetry-protected topological order and effective models. <i>Physical Review B</i> , 2017, 96, .	1.1	3
72	Fractional quantum Hall states with gapped boundaries in an extreme lattice limit. <i>Physical Review B</i> , 2019, 99, .	1.1	2

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73	Synchronization in epidemic growth and the impossibility of selective containment. <i>Mathematical Medicine and Biology</i> , 2021, 38, 467-473.	0.8	0