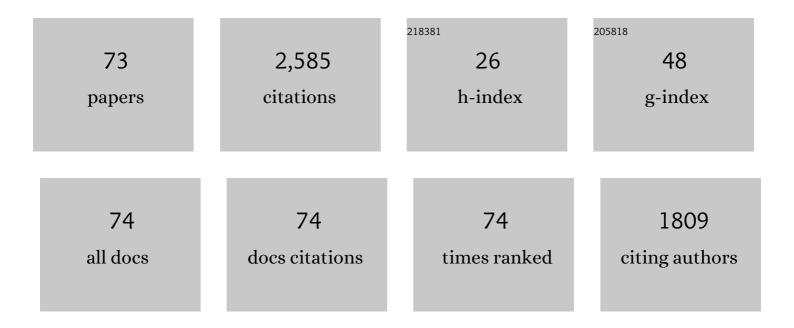
Jiannis K Pachos

List of Publications by Year in descending order

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LIANNIS K PACHOS

#	Article	IF	CITATIONS
1	Geometric Phases and Criticality in Spin-Chain Systems. Physical Review Letters, 2005, 95, 157203.	2.9	205
2	Three-Spin Interactions in Optical Lattices and Criticality in Cluster Hamiltonians. Physical Review Letters, 2004, 93, 056402.	2.9	190
3	Quantum Computation with Trapped Ions in an Optical Cavity. Physical Review Letters, 2002, 89, 187903.	2.9	189
4	A Short Introduction to Topological Quantum Computation. SciPost Physics, 2017, 3, .	1.5	142
5	Quantum memories at finite temperature. Reviews of Modern Physics, 2016, 88, .	16.4	131
6	Quantum Computation with a One-Dimensional Optical Lattice. Physical Review Letters, 2003, 91, 107902.	2.9	127
7	Cold Atom Simulation of Interacting Relativistic Quantum Field Theories. Physical Review Letters, 2010, 105, 190403.	2.9	110
8	QUANTUM HOLONOMIES FOR QUANTUM COMPUTING. International Journal of Modern Physics B, 2001, 15, 1257-1285.	1.0	100
9	Effective three-body interactions in triangular optical lattices. Physical Review A, 2004, 70, .	1.0	55
10	Why should anyone care about computing with anyons?. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2008, 464, 1-24.	1.0	54
11	Topological liquid nucleation induced by vortex-vortex interactions in Kitaev's honeycomb model. Physical Review B, 2012, 86, .	1.1	54
12	Bringing Order through Disorder: Localization of Errors in Topological Quantum Memories. Physical Review Letters, 2011, 107, 030503.	2.9	51
13	Spectrum of the non-abelian phase in Kitaev's honeycomb lattice model. Annals of Physics, 2008, 323, 2286-2310.	1.0	50
14	The wavefunction of an anyon. Annals of Physics, 2007, 322, 1254-1264.	1.0	49
15	Simulating the exchange of Majorana zero modes with a photonic system. Nature Communications, 2016, 7, 13194.	5.8	47
16	Manifestations of topological effects in graphene. Contemporary Physics, 2009, 50, 375-389.	0.8	43
17	Journeys from quantum optics to quantum technology. Progress in Quantum Electronics, 2017, 54, 19-45.	3.5	41
18	Decoherence-free dynamical and geometrical entangling phase gates. Physical Review A, 2004, 69, .	1.0	36

JIANNIS K PACHOS

#	Article	IF	CITATIONS
19	Graph-state preparation and quantum computation with global addressing of optical lattices. Physical Review A, 2006, 73, .	1.0	36
20	Topological Quantum Liquids with Long-Range Couplings. Physical Review Letters, 2017, 118, 267002.	2.9	36
21	Incoherent dynamics in the toric code subject to disorder. Physical Review A, 2012, 85, .	1.0	30
22	Quantum computation in optical lattices via global laser addressing. New Journal of Physics, 2004, 6, 126-126.	1.2	29
23	Non-Abelian statistics as a Berry phase in exactly solvable models. New Journal of Physics, 2009, 11, 093027.	1.2	27
24	Topological phase transitions driven by gauge fields in an exactly solvable model. Physical Review B, 2010, 81, .	1.1	27
25	Universal quantum computation by holonomic and nonlocal gates with imperfections. Physical Review A, 2001, 64, .	1.0	26
26	Chiral phase from three-spin interactions in an optical lattice. Physical Review A, 2005, 72, .	1.0	26
27	Geometric phases and criticality in spin systems. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2006, 364, 3463-3476.	1.6	25
28	Graphene with Geometrically Induced Vorticity. Physical Review Letters, 2008, 100, 156806.	2.9	23
29	QUANTUM COMPUTATION WITH ABELIAN ANYONS ON THE HONEYCOMB LATTICE. International Journal of Quantum Information, 2006, 04, 947-954.	0.6	22
30	Optimal free descriptions of many-body theories. Nature Communications, 2017, 8, 14926.	5.8	21
31	AN INDEX THEOREM FOR GRAPHENE. International Journal of Modern Physics B, 2007, 21, 5113-5120.	1.0	20
32	Chiral entanglement in triangular lattice models. Physical Review A, 2008, 77, .	1.0	19
33	Holographic correspondence in topological superconductors. Annals of Physics, 2016, 372, 175-181.	1.0	18
34	A constructive algorithm for the Cartan decomposition of SU(2N). Journal of Mathematical Physics, 2005, 46, 082108.	0.5	17
35	Entropic Barriers for Two-Dimensional Quantum Memories. Physical Review Letters, 2014, 112, 120503.	2.9	17
36	Free-fermion descriptions of parafermion chains and string-net models. Physical Review B, 2018, 97, .	1.1	17

JIANNIS K PACHOS

#	Article	IF	CITATIONS
37	Photonic implementation of Majorana-based Berry phases. Science Advances, 2018, 4, eaat6533.	4.7	17
38	Non-Abelian statistics from an Abelian model. Physical Review B, 2008, 78, .	1.1	16
39	Abelian Chern-Simons-Maxwell Theory from a Tight-Binding Model of Spinless Fermions. Physical Review Letters, 2013, 110, 211603.	2.9	16
40	<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mo>(</mml:mo><mml:mrow><mml:mn>3topological quantum field theory from a tight-binding model of interacting spinless fermions. Physical Review B, 2014, 90, .</mml:mn></mml:mrow></mml:math 	1.1	mo>+16
41	Seeing Majorana fermions in time-of-flight images of staggered spinless fermions coupled bys-wave pairing. Physical Review A, 2013, 88, .	1.0	15
42	Non-Abelian Chern-Simons theory from a Hubbard-like model. Physical Review D, 2014, 90, .	1.6	13
43	Universal features of dimensional reduction schemes from general covariance breaking. Annals of Physics, 2008, 323, 2044-2072.	1.0	12
44	Thermally induced metallic phase in a gapped quantum spin liquid: Monte Carlo study of the Kitaev model with parity projection. Physical Review B, 2019, 99, .	1.1	12
45	Yang–Mills gauge theories from simple fermionic lattice models. Physics Letters, Section A: General, Atomic and Solid State Physics, 2009, 373, 2542-2545.	0.9	11
46	Quantum Walks with Non-Abelian Anyons. Physical Review Letters, 2011, 106, 230404.	2.9	10
47	Single atom quantum walk with 1D optical superlattices§. Journal of Modern Optics, 2007, 54, 1627-1638.	0.6	9
48	Lifetime of topological quantum memories in thermal environment. New Journal of Physics, 2013, 15, 025027.	1.2	9
49	Entropic manifestations of topological order in three dimensions. Physical Review B, 2016, 93, .	1.1	9
50	Quantifying the effect of interactions in quantum many-body systems. , 0, , .		9
51	Anyonic quantum walks. Annals of Physics, 2010, 325, 664-681.	1.0	8
52	Geometric description of the Kitaev honeycomb lattice model. Physical Review B, 2020, 101, .	1.1	8
53	Topological Contextuality and Anyonic Statistics of Photonic-Encoded Parafermions. PRX Quantum, 2021, 2, .	3.5	8
54	Geometrical phases for the G(4,2) Grassmannian manifold. Journal of Mathematical Physics, 2003, 44, 2463.	0.5	5

JIANNIS K PACHOS

#	Article	lF	CITATIONS
55	Interaction distance in the extended XXZ model. Physical Review B, 2019, 100, .	1.1	5
56	Specific heat of 2D interacting Majorana fermions from holography. Scientific Reports, 2019, 9, 17308.	1.6	5
57	THREE-SPIN INTERACTIONS AND ENTANGLEMENT IN OPTICAL LATTICES. International Journal of Quantum Information, 2006, 04, 541-549.	0.6	3
58	Centrifugal deformations of the gravitational kink. Physics Letters, Section A: General, Atomic and Solid State Physics, 2009, 373, 2616-2619.	0.9	3
59	Induced Topological Phases at the Boundary of 3D Topological Superconductors. Physical Review Letters, 2015, 114, 016801.	2.9	3
60	Nested defects on the boundary of topological superconductors. Physical Review B, 2016, 94, .	1.1	3
61	Conformal energy currents on the edge of a topological superconductor. Physical Review B, 2017, 95, .	1.1	3
62	Topological bulk states and their currents. Physical Review B, 2020, 102, .	1.1	3
63	Topological Quantum Computation. Lecture Notes in Computer Science, 2013, , 150-179.	1.0	3
64	Emergence of gaussianity in the thermodynamic limit of interacting fermions. Physical Review B, 2021, 104, .	1.1	3
65	Conformally flat Kaluza–Klein spaces, pseudo-/para-complex space forms and generalized gravitational kinks. Journal of Geometry and Physics, 2009, 59, 1314-1325.	0.7	2
66	Equivalence between vortices, twists, and chiral gauge fields in the Kitaev honeycomb lattice model. Physical Review B, 2020, 102, .	1.1	2
67	Efficiency of free auxiliary models in describing interacting fermions: From the Kohn-Sham model to the optimal entanglement model. Physical Review B, 2019, 100, .	1.1	1
68	Seeing topological edge and bulk currents in time-of-flight images. Physical Review B, 2020, 102, .	1.1	1
69	Effective field theories for interacting boundaries of 3D topological crystalline insulators through bosonisation. Scientific Reports, 2020, 10, 21998.	1.6	1
70	Conformal flatness, non-Abelian Kaluza–Klein reduction and quaternions. Journal of Geometry and Physics, 2012, 62, 344-351.	0.7	0
71	Quantum Computation and Information: Multi-Particle Aspects. Entropy, 2016, 18, 339.	1.1	0
72	Topological aspects of quantum information processing. Texts and Readings in Physical Sciences, 2017, , 471-500.	0.2	0

#	Article	IF	CITATIONS
73	Edge density of bulk states due to relativity. Physical Review B, 2021, 104, .	1.1	0