Claudio Chamon

List of Publications by Year
in descending order

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126	6,171	57758	71685
papers	citations	44 h-index	76 g-index

127	127	127	3680
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Field Theories for type-II fractons. SciPost Physics, 2022, 12, .	4.9	10
2	Lattice Clifford fractons and their Chern-Simons-like theory. SciPost Physics Core, 2021, 4, .	2.8	12
3	Z3 Quantum Double in a Superconducting Wire Array. PRX Quantum, 2021, 2, .	9.2	1
4	Experimental realization of classical <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> spin liquids in a programmable quantum device. Physical Review B, 2021, 104, .	3.2	10
5	<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> topological order and first-order quantum phase transitions in systems with combinatorial gauge symmetry. Physical Review B, 2021, 104, .	3.2	2
6	Superconducting Circuit Realization of Combinatorial Gauge Symmetry. PRX Quantum, 2021, 2, .	9.2	2
7	Constructing Quantum Spin Liquids Using Combinatorial Gauge Symmetry. Physical Review Letters, 2020, 125, 067203.	7.8	13
8	Braiding photonic topological zero modes. Nature Physics, 2020, 16, 989-993.	16.7	51
9	Nonuniversal entanglement level statistics in projection-driven quantum circuits. Physical Review B, 2020, 101, .	3.2	55
10	Catastrophe theory classification of Fermi surface topological transitions in two dimensions. Physical Review Research, 2020, 2, .	3.6	33
11	Single T gate in a Clifford circuit drives transition to universal entanglement spectrum statistics. SciPost Physics, 2020, 9, .	4.9	29
12	Experimental observation of braiding topological zero modes in a photonic waveguide array. , 2020, , .		0
13	Electron Fractionalization in Celebration of Roman Jackiwâ€™s 80th Birthday. , 2020, , 17-24.		0
14	Multicritical Fermi Surface Topological Transitions. Physical Review Letters, 2019, 123, 207202.	7.8	40
15	Scrambling via braiding of nonabelions. Physical Review B, 2019, 99, .	3.2	7
16	Ground-state degeneracy of non-Abelian topological phases from coupled wires. Physical Review B, 2019, 99, .	3.2	17
17	Model of spin liquids with and without time-reversal symmetry. Physical Review B, 2019, 99, .	3.2	4
18	Hierarchical Majoranas in a programmable nanowire network. Physical Review B, 2019, 99, .	3.2	11

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19	Obstacles to quantum annealing in a planar embedding of XORSAT. Physical Review B, 2019, 100, .	3.2	2
20	Topological many-body scar states in dimensions one, two, and three. Physical Review Research, 2019, 1, .	3.6	75
21	Ultraslow dynamics in a translationally invariant spin model for multiplication and factorization. Physical Review Research, 2019, 1, .	3.6	0
22	Dynamic scaling of topological ordering in classical systems. Physical Review B, 2018, 97, .	3.2	12
23	Tensor network method for reversible classical computation. Physical Review E, 2018, 97, 033303.	2.1	4
24	Quantum oscillations and criticality in a fermionic and bosonic dimer model for the cuprates. Physical Review B, 2018, 98, .	3.2	0
25	Coupled spin- <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mfrac><mml:mn>1</mml:mn><mml:mn>2</mml:mn></mml:mfrac></m ladders as microscopic models for non-Abelian chiral spin liquids. Physical Review B, 2017, 95, .	3.2	12
26	Entanglement complexity in quantum many-body dynamics, thermalization, and localization. Physical Review B, 2017, 96, .	3.2	43
27	d-wave superconductivity in boson+fermion dimer models. Physical Review B, 2017, 95, .	3.2	6
28	Model of chiral spin liquids with Abelian and non-Abelian topological phases. Physical Review B, 2017, 96, .	3.2	15
29	Optimizing Variational Quantum Algorithms Using Pontryaginâ€™s Minimum Principle. Physical Review X, 2017, 7, .	8.9	99
30	Dissipationless conductance in a topological coaxial cable. Physical Review B, 2016, 94, .	3.2	16
31	Non-Abelian Braiding of Light. Physical Review Letters, 2016, 117, 073901.	7.8	47
32	Wire constructions of Abelian topological phases in three or more dimensions. Physical Review B, 2016, 93, .	3.2	37
33	Non-Abelian topological spin liquids from arrays of quantum wires or spin chains. Physical Review B, 2016, 93, .	3.2	44
34	Stroboscopic symmetry-protected topological phases. Physical Review B, 2015, 92, .	3.2	37
35	Two-Component Structure in the Entanglement Spectrum of Highly Excited States. Physical Review Letters, 2015, 115, 267206.	7.8	68
36	Occupation of topological Floquet bands in open systems. Physical Review B, 2015, 91, .	3.2	86

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37	Band-edge superconductivity. Physical Review B, 2015, 92, .	3.2	7
38	Photoinduced superconductivity in semiconductors. Physical Review B, 2015, 91, .	3.2	19
39	Floquet systems coupled to particle reservoirs. Physical Review B, 2015, 91, .	3.2	34
40	Fractional (Chern and topological) insulators. Physica Scripta, 2015, T164, 014005.	2.5	46
41	Topological BF theory of the quantum hydrodynamics of incompressible polar fluids. Physical Review B, 2014, 90, .	3.2	6
42	Irreversibility and entanglement spectrum statistics in quantum circuits. Journal of Statistical Mechanics: Theory and Experiment, 2014, 2014, P12007.	2.3	27
43	Reply to â€œComment on â€˜Elementary formula for the Hall conductivity of interacting systems'Ââ€• Physical Review B, 2014, 89, .	3.2	0
44	Accessing topological order in fractionalized liquids with gapped edges. Physical Review B, 2014, 90, .	3.2	9
45	Fractional Chern Insulators with Strong Interactions that Far Exceed Band Gaps. Physical Review Letters, 2014, 112, 126806.	7.8	38
46	Topological gaps without masses in driven graphene-like systems. Physical Review B, 2014, 89, .	3.2	18
47	Wire deconstructionism of two-dimensional topological phases. Physical Review B, 2014, 90, .	3.2	109
48	Effective field theory for the bulk-edge correspondence in a two-dimensional<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>topological insulator with Rashba interactions. Physical Review B, 2014, 90, .	3.2	0
49	Emergent Irreversibility and Entanglement Spectrum Statistics. Physical Review Letters, 2014, 112, 240501.	7.8	55
50	Cooling through optimal control of quantum evolution. Physical Review A, 2013, 87, .	2.5	30
51	Materials Design from Nonequilibrium Steady States: Driven Graphene as a Tunable Semiconductor with Topological Properties. Physical Review Letters, 2013, 110, 176603.	7.8	63
52	RÃ©nyi entropies as a measure of the complexity of counting problems. Journal of Statistical Mechanics: Theory and Experiment, 2013, 2013, P04008.	2.3	2
53	Generalized energy and time-translation invariance in a driven dissipative system. Physical Review B, 2013, 88, .	3.2	16
54	Networks of quantum wire junctions: A system with quantized integer Hall resistance without vanishing longitudinal resistivity. Physical Review B, 2013, 87, .	3.2	6

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55	Measuring the quantum geometry of Bloch bands with current noise. Physical Review B, 2013, 87, .	3.2	69
56	Topological Hubbard Model and Its High-Temperature Quantum Hall Effect. Physical Review Letters, 2012, 108, 046806.	7.8	35
57	Magnetic translation algebra with or without magnetic field in the continuum or on arbitrary Bravais lattices in any dimension. Physical Review B, 2012, 86, .	3.2	11
58	Enhancing the stability of a fractional Chern insulator against competing phases. Physical Review B, 2012, 86, .	3.2	60
59	Microscopic model of a phononic refrigerator. Physical Review B, 2012, 86, .	3.2	37
60	Elementary formula for the Hall conductivity of interacting systems. Physical Review B, 2012, 86, .	3.2	14
61	Junctions of multiple quantum wires with different Luttinger parameters. Physical Review B, 2012, 86, .	3.2	32
62	Masses and Majorana fermions in graphene. Physica Scripta, 2012, T146, 014013.	2.5	17
63	General method for calculating the universal conductance of strongly correlated junctions of multiple quantum wires. Physical Review B, 2012, 85, .	3.2	30
64	Virtual Parallel Computing and a Search Algorithm Using Matrix Product States. Physical Review Letters, 2012, 109, 030503.	7.8	9
65	Noncommutative geometry for three-dimensional topological insulators. Physical Review B, 2012, 86, .	3.2	49
66	Topological quantum glassiness. Philosophical Magazine, 2012, 92, 304-323.	1.6	88
67	Heat Pumping in Nanomechanical Systems. Physical Review Letters, 2011, 106, 135504.	7.8	20
68	Optimal Control for Unitary Preparation of Many-Body States: Application to Luttinger Liquids. Physical Review Letters, 2011, 107, 016402.	7.8	33
69	Conformal quantum mechanics as the CFT1 dual to AdS2. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2011, 701, 503-507.	4.1	90
70	Fluctuations of two-time quantities and time-reparameterization invariance in spin glasses. Journal of Statistical Mechanics: Theory and Experiment, 2011, 2011, P08015.	2.3	11
71	Fractional topological liquids with time-reversal symmetry and their lattice realization. Physical Review B, 2011, 84, .	3.2	138
72	Time-reversal symmetric hierarchy of fractional incompressible liquids. Physical Review B, 2011, 84, .	3.2	46

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73	Fractional Quantum Hall States at Zero Magnetic Field. Physical Review Letters, 2011, 106, 236804.	7.8	712
74	Counting Majorana zero modes in superconductors. Physical Review B, 2011, 83, .	3.2	23
75	Spanning trees for the geometry and dynamics of compact polymers. Journal of Statistical Mechanics: Theory and Experiment, 2010, 2010, L03004.	2.3	0
76	Superconductivity on the surface of topological insulators and in two-dimensional noncentrosymmetric materials. Physical Review B, 2010, 81, .	3.2	52
77	Quantum mechanical and information theoretic view on classical glass transitions. Physical Review B, 2010, 81, .	3.2	62
78	How to Find Conductance Tensors of Quantum Multiwire Junctions through Static Calculations: Application to an InteractingYJunction. Physical Review Letters, 2010, 105, 226803.	7.8	22
79	Isolated flat bands and spin-1 conical bands in two-dimensional lattices. Physical Review B, 2010, 82, .	3.2	131
80	Topological superconductors as nonrelativistic limits of Jackiw-Rossi and Jackiw-Rebbi models. Physical Review B, 2010, 82, .	3.2	25
81	Topological qubits in graphenelike systems. Physical Review B, 2010, 82, .	3.2	15
82	Deconfined fractional electric charges in graphene at high magnetic fields. Physical Review B, 2010, 81, .	3.2	55
83	Long tunneling contact as a probe of fractional quantum Hall neutral edge modes. Physical Review B, 2009, 80, .	3.2	18
84	Toric-boson model: Toward a topological quantum memory at finite temperature. Physical Review B, 2009, 79, .	3.2	52
85	Masses in graphenelike two-dimensional electronic systems: Topological defects in order parameters and their fractional exchange statistics. Physical Review B, 2009, 80, .	3.2	165
86	Electron fractionalization for two-dimensional Dirac fermions. Physical Review B, 2008, 77, .	3.2	75
87	From particles to spins: Eulerian formulation of supercooled liquids and glasses. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 15263-15268.	7.1	3
88	Irrational Versus Rational Charge and Statistics in Two-Dimensional Quantum Systems. Physical Review Letters, 2008, 100, 110405.	7.8	60
89	Junctions of three quantum wires for spin-<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mstyle scriptlevel="1"><mml:mfrac bevelled="false"><mml:mn>1</mml:mn><mml:mn>2</mml:mn></mml:mfrac></mml:mstyle></mml:mrow></mml:math>electrons. Physical Review B, 2008, 77, .	3.2	46
90	Quantum topological phase transition at the microscopic level. Physical Review B, 2008, 77, .	3.2	75

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91	Topological order in a three-dimensional toric code at finite temperature. Physical Review B, 2008, 78, .	3.2	111
92	Theory of the superglass phase. Physical Review B, 2008, 78, .	3.2	47
93	Dynamics of single polymers under extreme confinement. Journal of Statistical Mechanics: Theory and Experiment, 2007, 2007, P09022-P09022.	2.3	3
94	Growing dynamical length, scaling, and heterogeneities in the 3D Edwardsâ€“Anderson model. Journal of Statistical Mechanics: Theory and Experiment, 2007, 2007, P05001-P05001.	2.3	20
95	Topological order and topological entropy in classical systems. Physical Review B, 2007, 76, .	3.2	43
96	Fractional Statistics and Duality: Strong Tunneling Behavior of Edge States of Quantum Hall Liquids in the Jain Sequence. Physical Review Letters, 2007, 98, .	7.8	5
97	Electron Fractionalization in Two-Dimensional Graphenelike Structures. Physical Review Letters, 2007, 98, 186809.	7.8	378
98	Entanglement and topological entropy of the toric code at finite temperature. Physical Review B, 2007, 76, .	3.2	121
99	Fluctuations in glassy systems. Journal of Statistical Mechanics: Theory and Experiment, 2007, 2007, P07022-P07022.	2.3	36
100	Fluctuations in the coarsening dynamics of the O(N) model withNâ†' âˆž: are they similar to those in glassy systems?. Journal of Statistical Mechanics: Theory and Experiment, 2006, 2006, P01006-P01006.	2.3	30
101	Junctions of three quantum wires. Journal of Statistical Mechanics: Theory and Experiment, 2006, 2006, P02008-P02008.	2.3	114
102	High-temperature criticality in strongly constrained quantum systems. Physical Review B, 2006, 73, .	3.2	13
103	From quantum mechanics to classical statistical physics: Generalized Rokhsarâ€“Kivelson Hamiltonians and the â€œStochastic Matrix Formâ€•decomposition. Annals of Physics, 2005, 318, 316-344.	2.8	97
104	A sigma-model approach to glassy dynamics. Pramana - Journal of Physics, 2005, 64, 1075-1085.	1.8	1
105	Heterogeneous slow dynamics in a two dimensional doped classical antiferromagnet. Physical Review B, 2005, 72, .	3.2	9
106	Quantum three-coloring dimer model and the disruptive effect of quantum glassiness on its line of critical points. Physical Review B, 2005, 72, .	3.2	18
107	Quantum Glassiness in Strongly Correlated Clean Systems: An Example of Topological Overprotection. Physical Review Letters, 2005, 94, 040402.	7.8	344
108	Excitations and quantum fluctuations in site-diluted two-dimensional antiferromagnets. Physical Review B, 2004, 69, .	3.2	30

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109	Dynamical obstruction in a constrained system and its realization in lattices of superconducting devices. Physical Review B, 2004, 69, .	3.2	17
110	Spatially heterogeneous ages in glassy systems. Physical Review B, 2003, 68, .	3.2	74
111	Junctions of Three Quantum Wires and the Dissipative Hofstadter Model. Physical Review Letters, 2003, 91, 206403.	7.8	123
112	Adiabatic Quantum Pump of Spin-Polarized Current. Physical Review Letters, 2002, 89, 146802.	7.8	182
113	Heterogeneous Aging in Spin Glasses. Physical Review Letters, 2002, 88, 237201.	7.8	93
114	Separation of Time Scales and Reparametrization Invariance for Aging Systems. Physical Review Letters, 2002, 89, 217201.	7.8	57
115	Anomalous quantum diffusion at the superfluid-insulator transition. Physical Review B, 2002, 66, .	3.2	13
116	Geometric frustration and magnetization plateaus in quantum spin and Bose-Hubbard models on tubes. Physical Review B, 2002, 65, .	3.2	2
117	Time Reparametrization Group and the Long Time Behavior in Quantum Glassy Systems. Physical Review Letters, 2001, 86, 1622-1625.	7.8	26
118	Density of states for dirtyd-wave superconductors: A unified and dual approach for different types of disorder. Physical Review B, 2001, 63, .	3.2	20
119	P-wave pairing and ferromagnetism in the metal-insulator transition in two dimensions. Physical Review B, 2001, 64, .	3.2	11
120	Aging dynamics of quantum spin glasses of rotors. Physical Review B, 2001, 64, .	3.2	35
121	Quantum Pump for Spin and Charge Transport in a Luttinger Liquid. Physical Review Letters, 2001, 87, 096401.	7.8	121
122	Nonequilibrium tunneling into general quantum Hall edge states. Physical Review B, 2000, 62, 7298-7302.	3.2	11
123	Nonperturbative Saddle Point for the Effective Action of Disordered and Interacting Electrons in 2D. Physical Review Letters, 2000, 85, 5607-5610.	7.8	18
124	Solitons in carbon nanotubes. Physical Review B, 2000, 62, 2806-2812.	3.2	112
125	Adsorption on Carbon Nanotubes: Quantum Spin Tubes, Magnetization Plateaus, and Conformal Symmetry. Physical Review Letters, 2000, 85, 4128-4131.	7.8	9
126	Schwinger-Keldysh approach to disordered and interacting electron systems: Derivation of Finkelsteinâ€™s renormalization-group equations. Physical Review B, 1999, 60, 2239-2254.	3.2	61