

# Julien Vidal

## List of Publications by Year in descending order

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70  
papers

4,829  
citations

81900

39  
h-index

91884

69  
g-index

70  
all docs

70  
docs citations

70  
times ranked

2140  
citing authors

#	ARTICLE	IF	CITATIONS
1	Aharonov-Bohm Cages in Two-Dimensional Structures. Physical Review Letters, 1998, 81, 5888-5891.	7.8	322
2	Entanglement in a second-order quantum phase transition. Physical Review A, 2004, 69, .	2.5	259
3	Continuous unitary transformations and finite-size scaling exponents in the Lipkin-Meshkov-Glick model. Physical Review B, 2005, 71, .	3.2	212
4	Finite-Size Scaling Exponents of the Lipkin-Meshkov-Glick Model. Physical Review Letters, 2004, 93, 237204.	7.8	206
5	Thermodynamical Limit of the Lipkin-Meshkov-Glick Model. Physical Review Letters, 2007, 99, 050402.	7.8	180
6	Exact spectrum of the Lipkin-Meshkov-Glick model in the thermodynamic limit and finite-size corrections. Physical Review E, 2008, 78, 021106.	2.1	179
7	Nonperturbative renormalization group approach to the Ising model: A derivative expansion at order $\hat{4}$ . Physical Review B, 2003, 68, .	3.2	154
8	Equivalence of Critical Scaling Laws for Many-Body Entanglement in the Lipkin-Meshkov-Glick Model. Physical Review Letters, 2008, 101, 025701.	7.8	154
9	Optimization of the derivative expansion in the nonperturbative renormalization group. Physical Review D, 2003, 67, .	4.7	151
10	Entanglement entropy in the Lipkin-Meshkov-Glick model. Physical Review A, 2005, 71, .	2.5	150
11	Finite-size scaling exponents in the Dicke model. Europhysics Letters, 2006, 74, 817-822.	2.0	145
12	Entanglement in a first-order quantum phase transition. Physical Review A, 2004, 69, .	2.5	137
13	Interaction Induced Delocalization for Two Particles in a Periodic Potential. Physical Review Letters, 2000, 85, 3906-3909.	7.8	136
14	Pairing of Cooper Pairs in a Fully Frustrated Josephson-Junction Chain. Physical Review Letters, 2002, 88, 227005.	7.8	135
15	Entanglement dynamics in the Lipkin-Meshkov-Glick model. Physical Review A, 2004, 70, .	2.5	124
16	Disorder and interactions in Aharonov-Bohm cages. Physical Review B, 2001, 64, .	3.2	116
17	Robustness of a Perturbed Topological Phase. Physical Review Letters, 2011, 106, 107203.	7.8	116
18	Low-energy effective theory of the toric code model in a parallel magnetic field. Physical Review B, 2009, 79, .	3.2	114

#	ARTICLE	IF	CITATIONS
19	Magnetic Field Induced Localization in a Two-Dimensional Superconducting Wire Network. Physical Review Letters, 1999, 83, 5102-5105.	7.8	103
20	Self-duality and bound states of the toric code model in a transverse field. Physical Review B, 2009, 80, .	3.2	90
21	Entanglement Entropy beyond the Free Case. Physical Review Letters, 2006, 97, 220402.	7.8	82
22	Correlated Fermions in a One-Dimensional Quasiperiodic Potential. Physical Review Letters, 1999, 83, 3908-3911.	7.8	77
23	Emergent Fermions and Anyons in the Kitaev Model. Physical Review Letters, 2008, 100, 057208.	7.8	77
24	Entanglement entropy in collective models. Journal of Statistical Mechanics: Theory and Experiment, 2007, 2007, P01015-P01015.	2.3	75
25	Quantum dynamics in two- and three-dimensional quasiperiodic tilings. Physical Review B, 2002, 65, .	3.2	74
26	Universality of the negativity in the Lipkin-Meshkov-Glick model. Physical Review A, 2010, 81, .	2.5	72
27	Discrete non-Abelian gauge theories in Josephson-junction arrays and quantum computation. Physical Review B, 2004, 69, .	3.2	71
28	Concurrence in collective models. Physical Review A, 2006, 73, .	2.5	70
29	Creation and Manipulation of Anyons in the Kitaev Model. Physical Review Letters, 2008, 100, 177204.	7.8	67
30	Finite-temperature mutual information in a simple phase transition. Journal of Statistical Mechanics: Theory and Experiment, 2012, 2012, P01023.	2.3	63
31	Breakdown of a perturbed $\mathbb{Z}_N$ topological phase. New Journal of Physics, 2012, 14, 025005.	2.9	62
32	Perturbative approach to an exactly solved problem: Kitaev honeycomb model. Physical Review B, 2008, 78, .	3.2	61
33	Interacting fermions in self-similar potentials. Physical Review B, 2001, 65, .	3.2	52
34	Transmission through quantum networks. Physical Review B, 2000, 62, R16294-R16297.	3.2	48
35	Perturbative study of the Kitaev model with spontaneous time-reversal symmetry breaking. Physical Review B, 2008, 78, .	3.2	48
36	Randomly dilute Ising model: a nonperturbative approach. Physical Review B, 2002, 65, .	3.2	42

#	ARTICLE	IF	CITATIONS
37	Two-level interacting boson models beyond the mean field. <i>Physical Review C</i> , 2007, 75, .	2.9	41
38	Bound states in two-dimensional spin systems near the Ising limit: A quantum finite-lattice study. <i>Physical Review B</i> , 2010, 81, .	3.2	41
39	Quantum phase transitions in fully connected spin models: An entanglement perspective. <i>Physical Review A</i> , 2011, 83, .	2.5	39
40	Topological Phase Transitions in the Golden String-Net Model. <i>Physical Review Letters</i> , 2013, 110, 147203.	7.8	39
41	Continuous unitary transformations in two-level boson systems. <i>Physical Review C</i> , 2005, 72, .	2.9	38
42	Scalar two-level boson model to study the interacting boson model phase diagram in the Casten triangle. <i>Physical Review C</i> , 2006, 73, .	2.9	38
43	Hofstadter butterfly of a quasicrystal. <i>Physical Review B</i> , 2016, 94, .	3.2	36
44	Finite-size scaling exponents and entanglement in the two-level BCS model. <i>Physical Review A</i> , 2005, 71, .	2.5	32
45	Finite-size scaling exponents in the interacting boson model. <i>Physical Review C</i> , 2005, 72, .	2.9	31
46	Bridging Perturbative Expansions with Tensor Networks. <i>Physical Review Letters</i> , 2017, 119, 070401.	7.8	30
47	Ising anyons with a string tension. <i>Physical Review B</i> , 2014, 89, .	3.2	24
48	Phase Diagram of an Extended Quantum Dimer Model on the Hexagonal Lattice. <i>Physical Review Letters</i> , 2015, 115, 217202.	7.8	20
49	Kitaev model and dimer coverings on the honeycomb lattice. <i>Journal of Statistical Mechanics: Theory and Experiment</i> , 2010, 2010, P08010.	2.3	18
50	Tensor-network approach to phase transitions in string-net models. <i>Physical Review B</i> , 2019, 100, .	3.2	18
51	Mean-field ansatz for topological phases with string tension. <i>Physical Review B</i> , 2015, 92, .	3.2	17
52	Fate of Dirac points in a vortex superlattice. <i>Physical Review B</i> , 2011, 84, .	3.2	15
53	Generalized quasiperiodic Rauzy tilings. <i>Journal of Physics A</i> , 2001, 34, 3927-3938.	1.6	14
54	Landau levels in quasicrystals. <i>Physical Review B</i> , 2018, 98, .	3.2	14

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55	Strongly correlated hopping and many-body bound states. <i>Physical Review B</i> , 2001, 65, .	3.2	11
56	Quasiperiodic tilings in a magnetic field. <i>Journal of Non-Crystalline Solids</i> , 2004, 334-335, 130-136.	3.1	11
57	Quantum dynamics in high codimension tilings: From quasiperiodicity to disorder. <i>Physical Review B</i> , 2003, 68, .	3.2	10
58	Spectroscopy of a topological phase. <i>Physical Review B</i> , 2014, 89, .	3.2	10
59	Russian doll spectrum in a non-Abelian string-net ladder. <i>Physical Review B</i> , 2015, 91, .	3.2	9
60	Competing topological orders in three dimensions. <i>SciPost Physics</i> , 2022, 12, .	4.9	9
61	Parity of Chern numbers in the Kitaev honeycomb model and the sixteenfold way. <i>Physical Review B</i> , 2020, 102, .	3.2	8
62	Generalized Rauzy tilings: construction and electronic properties. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2000, 294-296, 572-575.	5.6	6
63	Bound states in string nets. <i>Physical Review B</i> , 2016, 94, .	3.2	6
64	Spectrum and diffusion for a class of tight-binding models on hypercubes. <i>Journal of Physics A</i> , 1999, 32, 2361-2367.	1.6	5
65	Landau level broadening, hyperuniformity, and discrete scale invariance. <i>Physical Review B</i> , 2019, 100, .	3.2	4
66	INTERACTIONS IN QUASICRYSTALS. <i>International Journal of Modern Physics B</i> , 2001, 15, 1329-1337.	2.0	3
67	Ising versus $SU(2)$ string-net ladder. <i>Physical Review B</i> , 2018, 97, .	3.2	3
68	Wegner-Wilson loops in string nets. <i>Physical Review B</i> , 2021, 103, .	3.2	3
69	Partition function of the Levin-Wen model. <i>Physical Review B</i> , 2022, 105, .	3.2	2
70	Anomalous quantum diffusion in two- and three-dimensional generalized Rauzy tilings. <i>Journal of Non-Crystalline Solids</i> , 2004, 334-335, 91-95.	3.1	0