Maksym Serbyn

List of Publications by Year
in descending order

58	6,257	136740	138251
papers	citations	32 h-index	58 g-index

59	59	59	3302
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Symmetry-allowed nonlinear orbital response across the topological phase transition in centrosymmetric materials. Physical Review B, 2022, 105, .	1.1	1
2	Detecting Induced <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mi>p</mml:mi><mml:mo>Â±</mml:mo><mml:mi>i</mml:mi><mml:mi>p</mml:mi></mml:mrow> Pairing at the Al-InAs Interface with a Quantum Microwave Circuit. Physical Review Letters, 2022, 128, 107701.	2.9	9
3	Spontaneous Gully-Polarized Quantum Hall States in ABA Trilayer Graphene. Nano Letters, 2022, 22, 3317-3322.	4.5	3
4	Entanglement and precession in two-dimensional dynamical quantum phase transitions. Physical Review B, 2022, 105, .	1.1	7
5	Localization of a mobile impurity interacting with an Anderson insulator. Physical Review B, 2022, 105, .	1.1	5
6	Propagation of many-body localization in an Anderson insulator. Physical Review B, 2022, 105, .	1.1	5
7	Avoiding Barren Plateaus Using Classical Shadows. PRX Quantum, 2022, 3, .	3.5	36
8	Entanglement View of Dynamical Quantum Phase Transitions. Physical Review Letters, 2021, 126, 040602.	2.9	36
9	Controlling quantum many-body dynamics in driven Rydberg atom arrays. Science, 2021, 371, 1355-1359.	6.0	186
10	Distinguishing localization from chaos: Challenges in finite-size systems. Annals of Physics, 2021, 427, 168415.	1.0	133
11	Quantum many-body scars and weak breaking of ergodicity. Nature Physics, 2021, 17, 675-685.	6.5	222
12	Discrete Time-Crystalline Order Enabled by Quantum Many-Body Scars: Entanglement Steering via Periodic Driving. Physical Review Letters, 2021, 127, 090602.	2.9	28
13	Thouless energy across the many-body localization transition in Floquet systems. Physical Review B, 2021, 104, .	1.1	9
14	Area-Law Entangled Eigenstates from Nullspaces of Local Hamiltonians. Physical Review Letters, 2021, 127, 060602.	2.9	15
15	Entanglement transitions from restricted Boltzmann machines. Physical Review B, 2021, 104, .	1.1	19
16	Half- and quarter-metals in rhombohedral trilayer graphene. Nature, 2021, 598, 429-433.	13.7	119
17	Unconventional Superconductivity in Systems with Annular Fermi Surfaces: Application to Rhombohedral Trilayer Graphene. Physical Review Letters, 2021, 127, 247001.	2.9	48
18	Duality approach to quantum annealing of the 3-variable exclusive-or satisfiability problem (3-XORSAT). Physical Review A, 2021, 104, .	1.0	1

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19	Stability of mobility edges in disordered interacting systems. Physical Review B, 2020, 102, .	1.1	9
20	Gully quantum Hall ferromagnetism in biased trilayer graphene. Physical Review B, 2020, 101, .	1.1	3
21	Slow Quantum Thermalization and Many-Body Revivals from Mixed Phase Space. Physical Review X, 2020, 10, .	2.8	66
22	Stabilizing two-dimensional quantum scars by deformation and synchronization. Physical Review Research, 2020, 2, .	1.3	49
23	Probing the many-body localization phase transition with superconducting circuits. Physical Review B, 2019, 100, .	1.1	38
24	Analytically Solvable Renormalization Group for the Many-Body Localization Transition. Physical Review Letters, 2019, 122, 040601.	2.9	98
25	Emergent SU(2) Dynamics and Perfect Quantum Many-Body Scars. Physical Review Letters, 2019, 122, 220603.	2.9	201
26	Colloquium : Many-body localization, thermalization, and entanglement. Reviews of Modern Physics, 2019, 91, .	16.4	1,005
27	Kosterlitz-Thouless scaling at many-body localization phase transitions. Physical Review B, 2019, 99, .	1.1	87
28	Revealing hidden spin-momentum locking in a high-temperature cuprate superconductor. Science, 2018, 362, 1271-1275.	6.0	82
29	Emergent Dirac Gullies and Gully-Symmetry-Breaking Quantum Hall States in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>A</mml:mi><mml:mi>B</mml:mi><mml:mi>A</mml:mi></mml:math> Trilayer Graphene. Physical Review Letters, 2018, 121, 167601.	2.9	30
30	Detection and characterization of many-body localization in central spin models. Physical Review B, 2018, 98, .	1.1	15
31	Quantum scarred eigenstates in a Rydberg atom chain: Entanglement, breakdown of thermalization, and stability to perturbations. Physical Review B, 2018, 98, .	1.1	260
32	Weak ergodicity breaking from quantum many-body scars. Nature Physics, 2018, 14, 745-749.	6.5	537
33	Patterns of genetic, phenotypic, and acoustic variation across a chiffchaff (Phylloscopus collybita) Tj ETQq1 1 0.784314 rgBT /Ove	0.8	21
34	Thouless energy and multifractality across the many-body localization transition. Physical Review B, 2017, 96, .	1.1	103
35	Noninteracting central site model: Localization and logarithmic entanglement growth. Physical Review B, 2017, 96, .	1.1	15
36	Loschmidt echo in many-body localized phases. Physical Review B, 2017, 96, .	1.1	21

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37	Thermoelectric Transport Signatures of Dirac Composite Fermions in the Half-Filled Landau Level. Physical Review X, 2016, 6, .	2.8	37
38	Power-Law Entanglement Spectrum in Many-Body Localized Phases. Physical Review Letters, 2016, 117, 160601.	2.9	92
39	Landau Level Splittings, Phase Transitions, and Nonuniform Charge Distribution in Trilayer Graphene. Physical Review Letters, 2016, 117, 066601.	2.9	28
40	Spectral statistics across the many-body localization transition. Physical Review B, 2016, 93, .	1.1	156
41	Superconductivity and nematic fluctuations in a model of doped FeSe monolayers: Determinant quantum Monte Carlo study. Physical Review B, 2016, 94, .	1.1	32
42	Criterion for Many-Body Localization-Delocalization Phase Transition. Physical Review X, 2015, 5, .	2.8	206
43	Dirac mass generation from crystal symmetry breaking on the surfaces of topological crystallineÂinsulators. Nature Materials, 2015, 14, 318-324.	13.3	113
44	Quantum quenches in the many-body localized phase. Physical Review B, 2014, 90, .	1.1	146
45	Interferometric Probes of Many-Body Localization. Physical Review Letters, 2014, 113, 147204.	2.9	153
46	Symmetry breaking and Landau quantization in topological crystalline insulators. Physical Review B, 2014, 90, .	1.1	88
47	Mapping the unconventional orbital texture in topological crystalline insulators. Nature Physics, 2014, 10, 572-577.	6.5	79
48	Observation of Dirac Node Formation and Mass Acquisition in a Topological Crystalline Insulator. Science, 2013, 341, 1496-1499.	6.0	252
49	Local Conservation Laws and the Structure of the Many-Body Localized States. Physical Review Letters, 2013, 111, 127201.	2.9	687
50	Onset of superconductivity in a voltage-biased normal-superconducting-normal microbridge. Physical Review B, 2013, 87, .	1.1	13
51	Overscreened Kondo fixed point inS=1spin liquid. Physical Review B, 2013, 88, .	1.1	3
52	Spinon-phonon interaction in algebraic spin liquids. Physical Review B, 2013, 87, .	1.1	12
53	Universal Slow Growth of Entanglement in Interacting Strongly Disordered Systems. Physical Review Letters, 2013, 110, 260601.	2.9	459
54	New Dirac points and multiple Landau level crossings in biased trilayer graphene. Physical Review B, 2013, 87, .	1.1	31

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55	Paired chiral spin liquid with a Fermi surface in<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mi>S</mml:mi><mml:mo>=</mml:mo><mml:mn>1</mml:mn></mml:mrow></mml:math>model on the triangular lattice. Physical Review B, 2012, 86, .	1.1	54
56	Exotic<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mi>S</mml:mi><mml:mo>=</mml:mo><mml:mn>1</mml:mn></mml:mrow></mml:math>spin-liquid state with fermionic excitations on the triangular lattice. Physical Review B, 2011, 84, .	1.1	44
57	Isotope effect on the superfluid density in conventional and high-temperature superconductors. Physical Review B, 2011, 83, .	1.1	3
58	Quantum annealing initialization of the quantum approximate optimization algorithm. Quantum - the Open Journal for Quantum Science, 0, 5, 491.	0.0	46