Anatoli Polkovnikov

List of Publications by Year
in descending order

49	5,195	147801 31	197818 49
papers	citations	h-index	g-index

49	49	49	3424
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	From quantum chaos and eigenstate thermalization to statistical mechanics and thermodynamics. Advances in Physics, 2016, 65, 239-362.	14.4	1,385
2	Universal high-frequency behavior of periodically driven systems: from dynamical stabilization to Floquet engineering. Advances in Physics, 2015, 64, 139-226.	14.4	831
3	Many-body energy localization transition in periodically driven systems. Annals of Physics, 2013, 333, 19-33.	2.8	214
4	Breakdown of the adiabatic limit in low-dimensional gapless systems. Nature Physics, 2008, 4, 477-481.	16.7	195
5	Reinforcement Learning in Different Phases of Quantum Control. Physical Review X, 2018, 8, .	8.9	192
6	Geometry and non-adiabatic response in quantum and classical systems. Physics Reports, 2017, 697, 1-87.	25.6	178
7	Minimizing irreversible losses in quantum systems by local counterdiabatic driving. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, E3909-E3916.	7.1	151
8	Schrieffer-Wolff Transformation for Periodically Driven Systems: Strongly Correlated Systems with Artificial Gauge Fields. Physical Review Letters, 2016, 116, 125301.	7.8	149
9	Measuring a Topological Transition in an Artificial Spin-<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mn>1</mml:mn><mml:mo>/</mml:mo><mml:mn>2</mml:mn></mml:mrow></mml:math>System. Physical Review Letters, 2014, 113, 050402.	7.8	118
10	Full quantum distribution of contrast in interference experiments between interacting one-dimensional Bose liquids. Nature Physics, 2006, 2, 705-709.	16.7	115
11	Classifying and measuring geometry of a quantum ground state manifold. Physical Review B, 2013, 88, .	3.2	100
12	Slow quenches in a quantum Ising chain: Dynamical phase transitions and topology. Physical Review B, 2016, 93, .	3.2	100
13	Floquet-Engineering Counterdiabatic Protocols in Quantum Many-Body Systems. Physical Review Letters, 2019, 123, 090602.	7.8	93
14	Linear response theory for a pair of coupled one-dimensional condensates of interacting atoms. Physical Review B, 2007, 75, .	3.2	92
15	Dynamical obstruction to localization in a disordered spin chain. Physical Review E, 2021, 104, 054105.	2.1	90
16	Adiabatic perturbation theory and geometry of periodically-driven systems. Physics Reports, 2017, 688, 1-35.	25.6	82
17	Heating and many-body resonances in a periodically driven two-band system. Physical Review B, 2016, 93, .	3.2	80
18	Dynamical stability of a many-body Kapitza pendulum. Annals of Physics, 2015, 360, 694-710.	2.8	75

#	Article	IF	Citations
19	Prethermalization in quenched spinor condensates. Physical Review A, 2011, 84, .	2.5	72
20	Integrable Floquet dynamics. SciPost Physics, 2017, 2, .	4.9	72
21	Superfluid-insulator transition of disordered bosons in one dimension. Physical Review B, 2010, 81, .	3.2	70
22	Geometric Speed Limit of Accessible Many-Body State Preparation. Physical Review X, 2019, 9, .	8.9	63
23	Adiabatic Eigenstate Deformations as a Sensitive Probe for Quantum Chaos. Physical Review X, 2020, 10, .	8.9	60
24	Asymptotic Prethermalization in Periodically Driven Classical Spin Chains. Physical Review Letters, 2019, 122, 010602.	7.8	54
25	Universal energy fluctuations in thermally isolated driven systems. Nature Physics, 2011, 7, 913-917.	16.7	52
26	Microscopic Expression for Heat in the Adiabatic Basis. Physical Review Letters, 2008, 101, 220402.	7.8	43
27	Quantum versus Classical Annealing: Insights from Scaling Theory and Results for Spin Glasses on 3-Regular Graphs. Physical Review Letters, 2015, 114, 147203.	7.8	39
28	Cluster truncated Wigner approximation in strongly interacting systems. Annals of Physics, 2018, 395, 341-365.	2.8	39
29	Oscillating fidelity susceptibility near a quantum multicritical point. Physical Review B, 2011, 83, .	3.2	36
30	<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mi>S</mml:mi><mml:mi>U</mml:mi><mml:mo stretchy="false">(</mml:mo><mml:mn>3</mml:mn><mml:mo) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 297 Td (stretchy="false">)</mml:m Dynamics of Interacting Spins. Physical Review Letters, 2015, 114, 045701.	7.8	36
31	Universality in the onset of quantum chaos in many-body systems. Physical Review B, 2021, 104, .	3.2	32
32	Replica Resummation of the Baker-Campbell-Hausdorff Series. Physical Review Letters, 2018, 120, 200607.	7.8	30
33	Superfluid-to-Mott-insulator transition in the one-dimensional Bose-Hubbard model for arbitrary integer filling factors. Physical Review A, 2011, 84, .	2.5	28
34	Semiclassical echo dynamics in the Sachdev-Ye-Kitaev model. Physical Review B, 2019, 99, .	3.2	28
35	Quantum phase slips in one-dimensional superfluids in a periodic potential. Physical Review A, 2012, 85, .	2.5	24
36	Universal dynamic scaling in three-dimensional Ising spin glasses. Physical Review E, 2015, 92, 022128.	2.1	20

#	Article	IF	Citations
37	Floquet-engineered quantum state manipulation in a noisy qubit. Physical Review A, 2019, 100, .	2.5	20
38	Persistent dark states in anisotropic central spin models. Scientific Reports, 2020, 10, 16080.	3.3	18
39	Observing Dynamical Quantum Phase Transitions through Quasilocal String Operators. Physical Review Letters, 2021, 126, 200602.	7.8	16
40	Broken symmetry in a two-qubit quantum control landscape. Physical Review A, 2018, 97, .	2.5	15
41	Shortcuts to dynamic polarization. Physical Review B, 2021, 103, .	3.2	15
42	Accurate numerical verification of the instanton method for macroscopic quantum tunneling: Dynamics of phase slips. Physical Review B, 2010, 82, .	3.2	13
43	Fermi's golden rule for heating in strongly driven Floquet systems. Physical Review B, 2021, 104, .	3.2	13
44	Adiabatic landscape and optimal paths in ergodic systems. Physical Review Research, 2021, 3, .	3.6	12
45	Unzipping vortices in type-II superconductors. Physical Review B, 2007, 76, .	3.2	10
46	Thermalization in small quantum systems. Science, 2016, 353, 752-753.	12.6	8
47	Quantum diffusion in spin chains with phase space methods. Physical Review E, 2020, 101, 052120.	2.1	8
48	Semiclassical dynamics of a disordered two-dimensional Hubbard model with long-range interactions. Physical Review A, 2020, 102, .	2.5	6
49	Enabling adiabatic passages between disjoint regions in parameter space through topological transitions. Physical Review B, 2016, 94, .	3.2	3