

Anatoli Polkovnikov

List of Publications by Year in descending order

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Version: 2024-02-01

49
papers

5,195
citations

147801

31
h-index

197818

49
g-index

49
all docs

49
docs citations

49
times ranked

3424
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 1 | Adiabatic landscape and optimal paths in ergodic systems. Physical Review Research, 2021, 3, . | 3.6 | 12 |
| 2 | Shortcuts to dynamic polarization. Physical Review B, 2021, 103, . | 3.2 | 15 |
| 3 | Observing Dynamical Quantum Phase Transitions through Quasilocal String Operators. Physical Review Letters, 2021, 126, 200602. | 7.8 | 16 |
| 4 | Fermi's golden rule for heating in strongly driven Floquet systems. Physical Review B, 2021, 104, . | 3.2 | 13 |
| 5 | Dynamical obstruction to localization in a disordered spin chain. Physical Review E, 2021, 104, 054105. | 2.1 | 90 |
| 6 | Universality in the onset of quantum chaos in many-body systems. Physical Review B, 2021, 104, . | 3.2 | 32 |
| 7 | Semiclassical dynamics of a disordered two-dimensional Hubbard model with long-range interactions. Physical Review A, 2020, 102, . | 2.5 | 6 |
| 8 | Adiabatic Eigenstate Deformations as a Sensitive Probe for Quantum Chaos. Physical Review X, 2020, 10, . | 8.9 | 60 |
| 9 | Persistent dark states in anisotropic central spin models. Scientific Reports, 2020, 10, 16080. | 3.3 | 18 |
| 10 | Quantum diffusion in spin chains with phase space methods. Physical Review E, 2020, 101, 052120. | 2.1 | 8 |
| 11 | Floquet-engineered quantum state manipulation in a noisy qubit. Physical Review A, 2019, 100, . | 2.5 | 20 |
| 12 | Floquet-Engineering Counterdiabatic Protocols in Quantum Many-Body Systems. Physical Review Letters, 2019, 123, 090602. | 7.8 | 93 |
| 13 | Semiclassical echo dynamics in the Sachdev-Ye-Kitaev model. Physical Review B, 2019, 99, . | 3.2 | 28 |
| 14 | Geometric Speed Limit of Accessible Many-Body State Preparation. Physical Review X, 2019, 9, . | 8.9 | 63 |
| 15 | Asymptotic Prethermalization in Periodically Driven Classical Spin Chains. Physical Review Letters, 2019, 122, 010602. | 7.8 | 54 |
| 16 | Reinforcement Learning in Different Phases of Quantum Control. Physical Review X, 2018, 8, . | 8.9 | 192 |
| 17 | Broken symmetry in a two-qubit quantum control landscape. Physical Review A, 2018, 97, . | 2.5 | 15 |
| 18 | Replica Resummation of the Baker-Campbell-Hausdorff Series. Physical Review Letters, 2018, 120, 200607. | 7.8 | 30 |

| # | ARTICLE | IF | CITATIONS |
|----|--|------|-----------|
| 19 | Cluster truncated Wigner approximation in strongly interacting systems. <i>Annals of Physics</i> , 2018, 395, 341-365. | 2.8 | 39 |
| 20 | Minimizing irreversible losses in quantum systems by local counterdiabatic driving. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017, 114, E3909-E3916. | 7.1 | 151 |
| 21 | Adiabatic perturbation theory and geometry of periodically-driven systems. <i>Physics Reports</i> , 2017, 688, 1-35. | 25.6 | 82 |
| 22 | Geometry and non-adiabatic response in quantum and classical systems. <i>Physics Reports</i> , 2017, 697, 1-87. | 25.6 | 178 |
| 23 | Integrable Floquet dynamics. <i>SciPost Physics</i> , 2017, 2, . | 4.9 | 72 |
| 24 | Enabling adiabatic passages between disjoint regions in parameter space through topological transitions. <i>Physical Review B</i> , 2016, 94, . | 3.2 | 3 |
| 25 | From quantum chaos and eigenstate thermalization to statistical mechanics and thermodynamics. <i>Advances in Physics</i> , 2016, 65, 239-362. | 14.4 | 1,385 |
| 26 | Thermalization in small quantum systems. <i>Science</i> , 2016, 353, 752-753. | 12.6 | 8 |
| 27 | Slow quenches in a quantum Ising chain: Dynamical phase transitions and topology. <i>Physical Review B</i> , 2016, 93, . | 3.2 | 100 |
| 28 | Heating and many-body resonances in a periodically driven two-band system. <i>Physical Review B</i> , 2016, 93, . | 3.2 | 80 |
| 29 | Schrieffer-Wolff Transformation for Periodically Driven Systems: Strongly Correlated Systems with Artificial Gauge Fields. <i>Physical Review Letters</i> , 2016, 116, 125301. | 7.8 | 149 |
| 30 | Universal dynamic scaling in three-dimensional Ising spin glasses. <i>Physical Review E</i> , 2015, 92, 022128. | 2.1 | 20 |
| 31 | $S^z U$ Dynamics of Interacting Spins. <i>Physical Review Letters</i> , 2015, 114, 045701. | | |
| 32 | Universal high-frequency behavior of periodically driven systems: from dynamical stabilization to Floquet engineering. <i>Advances in Physics</i> , 2015, 64, 139-226. | 14.4 | 831 |
| 33 | Quantum versus Classical Annealing: Insights from Scaling Theory and Results for Spin Glasses on 3-Regular Graphs. <i>Physical Review Letters</i> , 2015, 114, 147203. | 7.8 | 39 |
| 34 | Dynamical stability of a many-body Kapitza pendulum. <i>Annals of Physics</i> , 2015, 360, 694-710. | 2.8 | 75 |
| 35 | Measuring a Topological Transition in an Artificial Spin- $\frac{1}{2}$ System. <i>Physical Review Letters</i> , 2014, 113, 050402. | 7.8 | 118 |
| 36 | Classifying and measuring geometry of a quantum ground state manifold. <i>Physical Review B</i> , 2013, 88, . | 3.2 | 100 |

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|----|---|------|-----------|
| 37 | Many-body energy localization transition in periodically driven systems. <i>Annals of Physics</i> , 2013, 333, 19-33. | 2.8 | 214 |
| 38 | Quantum phase slips in one-dimensional superfluids in a periodic potential. <i>Physical Review A</i> , 2012, 85, . | 2.5 | 24 |
| 39 | Superfluid-to-Mott-insulator transition in the one-dimensional Bose-Hubbard model for arbitrary integer filling factors. <i>Physical Review A</i> , 2011, 84, . | 2.5 | 28 |
| 40 | Prethermalization in quenched spinor condensates. <i>Physical Review A</i> , 2011, 84, . | 2.5 | 72 |
| 41 | Oscillating fidelity susceptibility near a quantum multicritical point. <i>Physical Review B</i> , 2011, 83, . | 3.2 | 36 |
| 42 | Universal energy fluctuations in thermally isolated driven systems. <i>Nature Physics</i> , 2011, 7, 913-917. | 16.7 | 52 |
| 43 | Accurate numerical verification of the instanton method for macroscopic quantum tunneling: Dynamics of phase slips. <i>Physical Review B</i> , 2010, 82, . | 3.2 | 13 |
| 44 | Superfluid-insulator transition of disordered bosons in one dimension. <i>Physical Review B</i> , 2010, 81, . | 3.2 | 70 |
| 45 | Breakdown of the adiabatic limit in low-dimensional gapless systems. <i>Nature Physics</i> , 2008, 4, 477-481. | 16.7 | 195 |
| 46 | Microscopic Expression for Heat in the Adiabatic Basis. <i>Physical Review Letters</i> , 2008, 101, 220402. | 7.8 | 43 |
| 47 | Linear response theory for a pair of coupled one-dimensional condensates of interacting atoms. <i>Physical Review B</i> , 2007, 75, . | 3.2 | 92 |
| 48 | Unzipping vortices in type-II superconductors. <i>Physical Review B</i> , 2007, 76, . | 3.2 | 10 |
| 49 | Full quantum distribution of contrast in interference experiments between interacting one-dimensional Bose liquids. <i>Nature Physics</i> , 2006, 2, 705-709. | 16.7 | 115 |