

Entanglement and the foundations of statistical mechanics

Nature Physics

2, 754-758

DOI: [10.1038/nphys444](https://doi.org/10.1038/nphys444)

Citation Report

| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 1 | Discharge Positive Column with Elliptical Cross Section. Japanese Journal of Applied Physics, 1995, 34, 4230-4231. | 0.8 | 0 |
| 2 | Excuse our ignorance. Nature Physics, 2006, 2, 727-728. | 6.5 | 15 |
| 3 | On the Distribution of the Wave Function for Systems in Thermal Equilibrium. Journal of Statistical Physics, 2006, 125, 1193-1221. | 0.5 | 43 |
| 4 | Semiclassical treatments for small-molecule dynamics in low-temperature crystals using fixed and adiabatic vibrational bases. Journal of Chemical Physics, 2007, 127, 114502. | 1.2 | 13 |
| 5 | The emergence of typical entanglement in two-party random processes. Journal of Physics A: Mathematical and Theoretical, 2007, 40, 8081-8108. | 0.7 | 56 |
| 6 | Canonical and micro-canonical typical entanglement of continuous variable systems. Journal of Physics A: Mathematical and Theoretical, 2007, 40, 9551-9576. | 0.7 | 16 |
| 7 | Evolution of a quantum spin system to its ground state: Role of entanglement and interaction symmetry. Physical Review A, 2007, 75, . | 1.0 | 14 |
| 8 | Quantum thermalization with couplings. Physical Review A, 2007, 76, . | 1.0 | 26 |
| 9 | Teleportation Fidelities of Squeezed States from Thermodynamical State Space Measures. Physical Review Letters, 2007, 98, . | 2.9 | 17 |
| 10 | Factorization of the dephasing process in a quantum open system. Physical Review E, 2007, 75, 011105. | 0.8 | 9 |
| 11 | Multiqubit systems: highly entangled states and entanglement distribution. Journal of Physics A: Mathematical and Theoretical, 2007, 40, 13407-13421. | 0.7 | 131 |
| 12 | Unitarity, ergodicity and quantum thermodynamics. Journal of Physics A: Mathematical and Theoretical, 2007, 40, F503-F509. | 0.7 | 17 |
| 13 | Quantum probabilities as degrees of belief. Studies in History and Philosophy of Science Part B - Studies in History and Philosophy of Modern Physics, 2007, 38, 232-254. | 1.4 | 41 |
| 14 | Entanglement and irreversibility in the approach to thermal equilibrium. European Physical Journal: Special Topics, 2007, 151, 41-49. | 1.2 | 3 |
| 15 | Work and work fluctuations in quantum systems. European Physical Journal: Special Topics, 2007, 151, 181-188. | 1.2 | 8 |
| 16 | Asymptotics of Random Density Matrices. Annales Henri Poincare, 2007, 8, 1521-1538. | 0.8 | 38 |
| 17 | Typicality of Pure States Randomly Sampled According to the Gaussian Adjusted Projected Measure. Journal of Statistical Physics, 2008, 132, 921-935. | 0.5 | 24 |
| 18 | Wave-Packet Interferometry and Molecular State Reconstruction: Spectroscopic Adventures on the Left-Hand Side of the Schrödinger Equation. Annual Review of Physical Chemistry, 2008, 59, 319-342. | 4.8 | 51 |

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 19 | Nonadditive entropy reconciles the area law in quantum systems with classical thermodynamics. Physical Review E, 2008, 78, 021102. | 0.8 | 112 |
| 20 | Foundation of Statistical Mechanics under Experimentally Realistic Conditions. Physical Review Letters, 2008, 101, 190403. | 2.9 | 384 |
| 21 | Localization by entanglement. Europhysics Letters, 2008, 83, 40002. | 0.7 | 3 |
| 22 | Classical typicality of the canonical distribution. Europhysics Letters, 2008, 84, 30006. | 0.7 | 3 |
| 23 | Thermal entanglement in fully connected spin systems and its random-phase-approximation description. Physical Review A, 2008, 78, . | 1.0 | 13 |
| 24 | Reimann replies:. Physical Review Letters, 2008, 100, . | 2.9 | 2 |
| 25 | Exploring Local Quantum Many-Body Relaxation by Atoms in Optical Superlattices. Physical Review Letters, 2008, 101, 063001. | 2.9 | 114 |
| 26 | Entanglement-induced decoherence and energy eigenstates. Physical Review A, 2008, 77, . | 1.0 | 27 |
| 27 | Probing local relaxation of cold atoms in optical superlattices. Physical Review A, 2008, 78, . | 1.0 | 88 |
| 28 | Random circuits by measurements on weighted graph states. Physical Review A, 2008, 78, . | 1.0 | 13 |
| 29 | Quantum Parallelism as a Tool for Ensemble Spin Dynamics Calculations. Physical Review Letters, 2008, 101, 120503. | 2.9 | 37 |
| 30 | Long-time electron spin storage via dynamical suppression of hyperfine-induced decoherence in a quantum dot. Physical Review B, 2008, 77, . | 1.1 | 52 |
| 31 | Exact Relaxation in a Class of Nonequilibrium Quantum Lattice Systems. Physical Review Letters, 2008, 100, 030602. | 2.9 | 363 |
| 32 | Using wave-packet interferometry to monitor the external vibrational control of electronic excitation transfer. Journal of Chemical Physics, 2009, 131, 224101. | 1.2 | 19 |
| 33 | Local temperature in quantum thermal states. Physical Review A, 2009, 79, . | 1.0 | 21 |
| 34 | Dynamical Typicality of Quantum Expectation Values. Physical Review Letters, 2009, 102, 110403. | 2.9 | 122 |
| 35 | Robustness of highly entangled multiqubit states under decoherence. Physical Review A, 2009, 79, . | 1.0 | 63 |
| 36 | Typical state of an isolated quantum system with fixed energy and unrestricted participation of eigenstates. Physical Review E, 2009, 80, 051130. | 0.8 | 36 |

| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 37 | MONSTERS, BLACK HOLES AND THE STATISTICAL MECHANICS OF GRAVITY. Modern Physics Letters A, 2009, 24, 1875-1887. | 0.5 | 22 |
| 38 | Total correlations as multi-additive entanglement monotones. Journal of Physics A: Mathematical and Theoretical, 2009, 42, 055306. | 0.7 | 2 |
| 39 | Origin of the Canonical Ensemble: Thermalization with Decoherence. Journal of the Physical Society of Japan, 2009, 78, 094003. | 0.7 | 28 |
| 40 | Density dynamics from current auto-correlations at finite time- and length-scales. Europhysics Letters, 2009, 88, 10004. | 0.7 | 33 |
| 41 | Large deviation bounds for k -designs. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2009, 465, 3289-3308. | 1.0 | 31 |
| 42 | Entanglement in Weisskopf-Wigner theory of atomic decay in free space. Optics Communications, 2009, 282, 4736-4740. | 1.0 | 6 |
| 43 | Black holes, information, and decoherence. Physical Review D, 2009, 79, . | 1.6 | 13 |
| 44 | Density dynamics in translationally invariant spin- $\frac{1}{2}$ chains at high temperatures: A current-autocorrelation approach to finite time and length scales. Physical Review B, 2009, 80, . | 1.1 | 57 |
| 45 | Entropy production and the arrow of time. New Journal of Physics, 2009, 11, 073008. | 1.2 | 173 |
| 46 | Entropy of Entanglement. , 2009, , 205-209. | | 8 |
| 47 | Probing Planck's Law with Incandescent Light Emission from a Single Carbon Nanotube. Physical Review Letters, 2009, 102, 187402. | 2.9 | 39 |
| 48 | Quantum Solution to the Arrow-of-Time Dilemma. Physical Review Letters, 2009, 103, 080401. | 2.9 | 57 |
| 49 | Quantum mechanical evolution towards thermal equilibrium. Physical Review E, 2009, 79, 061103. | 0.8 | 420 |
| 50 | Active Fault-Tolerant Quantum Error Correction: The Curse of the Open System*. Philosophy of Science, 2009, 76, 506-535. | 0.5 | 1 |
| 51 | The black hole information paradox and macroscopic superpositions. Journal of Physics: Conference Series, 2010, 222, 012037. | 0.3 | 4 |
| 52 | Long-time behavior of macroscopic quantum systems. European Physical Journal H, 2010, 35, 173-200. | 0.5 | 134 |
| 53 | Energy equilibration between two weakly coupled quantum systems. Chemical Physics, 2010, 375, 195-199. | 0.9 | 2 |
| 54 | Physics at the FMQ 2008 conference. Physica E: Low-Dimensional Systems and Nanostructures, 2010, 42, 207-227. | 1.3 | 1 |

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 55 | A complex vector space model of single neuronal coding and experience. <i>BioSystems</i> , 2010, 102, 124-133. | 0.9 | 2 |
| 56 | Finite-time thermodynamics for a single-level quantum dot. <i>Europhysics Letters</i> , 2010, 89, 20003. | 0.7 | 82 |
| 57 | Normal typicality and von Neumann's quantum ergodic theorem. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , 2010, 466, 3203-3224. | 1.0 | 93 |
| 58 | Approach to Equilibrium in Nano-scale Systems at Finite Temperature. <i>Journal of the Physical Society of Japan</i> , 2010, 79, 124005. | 0.7 | 25 |
| 59 | Cooling Classical Particles with a Microcanonical Szilard Engine. <i>Physical Review Letters</i> , 2010, 104, 245704. | 2.9 | 23 |
| 60 | Spin echo decay at low magnetic fields in a nuclear spin bath. <i>Physical Review B</i> , 2010, 82, . | 1.1 | 28 |
| 61 | Statistical properties of random matrix product states. <i>Physical Review A</i> , 2010, 82, . | 1.0 | 24 |
| 62 | Local quenches in frustrated quantum spin chains: Global versus subsystem equilibration. <i>Physical Review A</i> , 2010, 82, . | 1.0 | 11 |
| 63 | Bound on quantum computation time: Quantum error correction in a critical environment. <i>Physical Review A</i> , 2010, 82, . | 1.0 | 6 |
| 64 | Finite-size analysis of a continuous-variable quantum key distribution. <i>Physical Review A</i> , 2010, 81, . | 1.0 | 293 |
| 65 | Single-particle machine for quantum thermalization. <i>Physical Review A</i> , 2010, 81, . | 1.0 | 42 |
| 66 | Unitary equilibrations: Probability distribution of the Loschmidt echo. <i>Physical Review A</i> , 2010, 81, . | 1.0 | 94 |
| 67 | Dynamical typicality: Convergence of time evolved macro-observables to their mean values in random matrix models. <i>Journal of Mathematical Physics</i> , 2010, 51, 082107. | 0.5 | 1 |
| 68 | Lasing process in a closed bipartite quantum system: A thermodynamical analysis. <i>Physical Review E</i> , 2010, 81, 061122. | 0.8 | 1 |
| 69 | Entanglement and the thermodynamic arrow of time. <i>Physical Review E</i> , 2010, 81, 061130. | 0.8 | 84 |
| 70 | Violation of the Fluctuation-Dissipation Theorem in Time-Dependent Mesoscopic Heat Transport. <i>Physical Review Letters</i> , 2010, 104, 220601. | 2.9 | 48 |
| 71 | Work exchange between quantum systems: The spin-oscillator model. <i>Physical Review E</i> , 2010, 81, 021118. | 0.8 | 12 |
| 72 | Environment-induced super selection without pointer states. <i>Physical Review E</i> , 2010, 81, 051127. | 0.8 | 20 |

| # | ARTICLE | IF | CITATIONS |
|----|---|------|-----------|
| 73 | Canonical thermalization. <i>New Journal of Physics</i> , 2010, 12, 055027. | 1.2 | 82 |
| 74 | STATISTICAL QUANTUM OPERATION. <i>Modern Physics Letters B</i> , 2010, 24, 2015-2020. | 1.0 | 2 |
| 75 | Quantum thermodynamics under observation: The influence of periodic quantum measurements. <i>Europhysics Letters</i> , 2010, 90, 50008. | 0.7 | 14 |
| 76 | Transport in the three-dimensional Anderson model: an analysis of the dynamics at scales below the localization length. <i>New Journal of Physics</i> , 2010, 12, 113001. | 1.2 | 7 |
| 77 | A quantum central limit theorem for non-equilibrium systems: exact local relaxation of correlated states. <i>New Journal of Physics</i> , 2010, 12, 055020. | 1.2 | 144 |
| 78 | On the speed of fluctuations around thermodynamic equilibrium. <i>New Journal of Physics</i> , 2010, 12, 055021. | 1.2 | 41 |
| 79 | The trilinear Hamiltonian: a zero-dimensional model of Hawking radiation from a quantized source. <i>New Journal of Physics</i> , 2010, 12, 095013. | 1.2 | 27 |
| 80 | Quantum Bose-Hubbard model with an evolving graph as a toy model for emergent spacetime. <i>Physical Review D</i> , 2010, 81, . | 1.6 | 47 |
| 81 | Quantum computing by optical control of electron spins. <i>Advances in Physics</i> , 2010, 59, 703-802. | 35.9 | 102 |
| 82 | Necessary condition for the thermalization of a quantum system coupled to a quantum bath. <i>Physical Review E</i> , 2010, 82, 011123. | 0.8 | 19 |
| 83 | Thermalization and ergodicity in one-dimensional many-body open quantum systems. <i>Physical Review E</i> , 2010, 81, 051135. | 0.8 | 53 |
| 84 | Dynamics of Thermalization in Small Hubbard-Model Systems. <i>Physical Review Letters</i> , 2010, 105, 260402. | 2.9 | 27 |
| 85 | Emergence of Canonical Ensembles from Pure Quantum States. <i>Physical Review Letters</i> , 2010, 104, 170402. | 2.9 | 24 |
| 86 | Equivalence condition for the canonical and microcanonical ensembles in coupled spin systems. <i>Physical Review E</i> , 2010, 82, 041127. | 0.8 | 13 |
| 87 | Typicality in random matrix product states. <i>Physical Review A</i> , 2010, 81, . | 1.0 | 35 |
| 88 | Thermodynamic entropy of a many-body energy eigenstate. <i>New Journal of Physics</i> , 2010, 12, 075021. | 1.2 | 64 |
| 89 | Decoherence and the nature of system-environment correlations. <i>Physical Review A</i> , 2011, 84, . | 1.0 | 38 |
| 90 | Decoherence, entanglement decay, and equilibration produced by chaotic environments. <i>Physical Review E</i> , 2011, 84, 016220. | 0.8 | 9 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|------|-----------|
| 91 | Generalized Thermalization in an Integrable Lattice System. <i>Physical Review Letters</i> , 2011, 106, 140405. | 2.9 | 264 |
| 92 | The Decoherence of the Electron Spin and Meta-Stability of ¹³ C Nuclear Spins in Diamond. <i>Entropy</i> , 2011, 13, 949-965. | 1.1 | 1 |
| 93 | Transient fluctuation theorem in closed quantum systems. <i>Europhysics Letters</i> , 2011, 96, 60008. | 0.7 | 13 |
| 94 | Relaxation to equilibrium of the expectation values in macroscopic quantum systems. <i>Physical Review E</i> , 2011, 84, 011126. | 0.8 | 6 |
| 95 | Absence of Thermalization in Nonintegrable Systems. <i>Physical Review Letters</i> , 2011, 106, 040401. | 2.9 | 188 |
| 96 | <i>Colloquium</i> : Nonequilibrium dynamics of closed interacting quantum systems. <i>Reviews of Modern Physics</i> , 2011, 83, 863-883. | 16.4 | 2,081 |
| 97 | Effective thermodynamics of strongly coupled qubits. <i>Journal of Physics A: Mathematical and Theoretical</i> , 2011, 44, 385003. | 0.7 | 17 |
| 98 | The Aharonov Approach to Equilibrium. <i>Philosophy of Science</i> , 2011, 78, 976-988. | 0.5 | 3 |
| 99 | One dimensional bosons: From condensed matter systems to ultracold gases. <i>Reviews of Modern Physics</i> , 2011, 83, 1405-1466. | 16.4 | 816 |
| 100 | Thermal Equilibration between Two Quantum Systems. <i>Physical Review Letters</i> , 2011, 106, 010405. | 2.9 | 57 |
| 101 | Entanglement and relaxation in exactly solvable models. <i>Optics and Spectroscopy (English)</i> Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 342 Tc | 0.2 | 6 |
| 102 | Concentration of Measure for Quantum States with a Fixed Expectation Value. <i>Communications in Mathematical Physics</i> , 2011, 303, 785-824. | 1.0 | 30 |
| 103 | The Thermodynamic Arrow-of-time and Quantum Mechanics. <i>Electronic Notes in Theoretical Computer Science</i> , 2011, 270, 75-79. | 0.9 | 0 |
| 104 | Equilibration of quantum systems and subsystems. <i>New Journal of Physics</i> , 2011, 13, 053009. | 1.2 | 149 |
| 105 | Beyond quantum microcanonical statistics. <i>Journal of Chemical Physics</i> , 2011, 134, 054510. | 1.2 | 9 |
| 106 | Evolution of entanglement entropy in the D1-D5 brane system. <i>Physical Review D</i> , 2011, 84, . | 1.6 | 14 |
| 107 | Simulating typical entanglement with many-body Hamiltonian dynamics. <i>Physical Review A</i> , 2011, 84, . | 1.0 | 1 |
| 108 | Assessing thermalization and estimating the Hamiltonian with output data only. <i>Physical Review A</i> , 2011, 84, . | 1.0 | 2 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|-----|-----------|
| 109 | Localization effects induced by decoherence in superpositions of many-spin quantum states. Physical Review A, 2011, 84, . | 1.0 | 26 |
| 110 | Quantum quench dynamics of the Bose-Hubbard model at finite temperatures. Physical Review A, 2011, 83, . | 1.0 | 15 |
| 111 | Quantum thermalization of two coupled two-level systems in eigenstate and bare-state representations. Physical Review A, 2011, 83, . | 1.0 | 29 |
| 112 | Autonomous modular quantum systems: Contextual Jarzynski relations. Physical Review E, 2011, 83, 041131. | 0.8 | 9 |
| 113 | Decay of currents for strong interactions. Physical Review E, 2011, 84, 011136. | 0.8 | 29 |
| 114 | Eigenstate randomization hypothesis: Why does the long-time average equal the microcanonical average?. Physical Review E, 2011, 84, 021130. | 0.8 | 43 |
| 115 | Generalized Gibbs ensemble prediction of prethermalization plateaus and their relation to nonthermal steady states in integrable systems. Physical Review B, 2011, 84, . | 1.1 | 221 |
| 116 | Increasing complexity with quantum physics. Chaos, 2011, 21, 037102. | 1.0 | 5 |
| 117 | Quantum Theory, Namely the Pure and Reversible Theory of Information. Entropy, 2012, 14, 1877-1893. | 1.1 | 36 |
| 118 | Role of correlations in the thermalization of quantum systems. New Journal of Physics, 2012, 14, 113034. | 1.2 | 4 |
| 119 | Equilibration of isolated macroscopic quantum systems. New Journal of Physics, 2012, 14, 043020. | 1.2 | 90 |
| 120 | Microscopic reversibility of quantum open systems. Journal of Physics A: Mathematical and Theoretical, 2012, 45, 125001. | 0.7 | 7 |
| 121 | Quantum equilibration in finite time. New Journal of Physics, 2012, 14, 013063. | 1.2 | 157 |
| 122 | Rindler quantum gravity. Classical and Quantum Gravity, 2012, 29, 235025. | 1.5 | 69 |
| 123 | Weak and strong typicality in quantum systems. Physical Review E, 2012, 86, 010102. | 0.8 | 70 |
| 124 | Operational Framework for Nonlocality. Physical Review Letters, 2012, 109, 070401. | 2.9 | 128 |
| 125 | Phase diagram and quench dynamics of the cluster- $\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"> \langle \text{mml:mrow}> \langle \text{mml:mi}> X </\text{mml:mi}> \langle \text{mml:mi}> Y </\text{mml:mi}> </\text{mml:mrow}> </\text{mml:math}>$ spin chain. Physical Review E, 2012, 86, 021101. | 0.8 | 49 |
| 126 | Thermalization of local observables in small Hubbard lattices. Physical Review A, 2012, 86, . | 1.0 | 35 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|-----|-----------|
| 127 | Small violations of full-correlation Bell inequalities for multipartite pure random states. Physical Review A, 2012, 86, . | 1.0 | 3 |
| 128 | Universality and robustness of revivals in the transverse field $\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"} \langle \text{mml:mrow} \langle \text{mml:mi} \rangle X \langle \text{mml:mi} \rangle \langle \text{mml:mi} \rangle Y \langle \text{mml:mi} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:math} \rangle \text{model.}$ Physical Review A, 2012, 85, . | 1.0 | 55 |
| 129 | Approach to typicality in many-body quantum systems. Physical Review E, 2012, 85, 011141. | 0.8 | 14 |
| 130 | Convergence to equilibrium under a random Hamiltonian. Physical Review E, 2012, 86, 031101. | 0.8 | 53 |
| 131 | Physics at the FQMT'11 conference. Physica Scripta, 2012, T151, 014001. | 1.2 | 1 |
| 132 | Deviation from equilibrium in macroscopic quantum systems. Physica Scripta, 2012, T151, 014043. | 1.2 | 0 |
| 133 | Ensembles of physical states and random quantum circuits on graphs. Physical Review A, 2012, 86, . | 1.0 | 21 |
| 134 | 127, 1-56. | 2.0 | 74 |
| 135 | Statistical description of small quantum systems beyond the weak-coupling limit. Physical Review E, 2012, 86, 011115. | 0.8 | 11 |
| 136 | Equilibrium states of open quantum systems in the strong coupling regime. Physical Review E, 2012, 86, 061132. | 0.8 | 57 |
| 137 | Thermalization in Nature and on a Quantum Computer. Physical Review Letters, 2012, 108, 080402. | 2.9 | 136 |
| 138 | Unifying Typical Entanglement and Coin Tossing: on Randomization in Probabilistic Theories. Communications in Mathematical Physics, 2012, 316, 441-487. | 1.0 | 24 |
| 139 | Entanglement renormalization and holography. Physical Review D, 2012, 86, . | 1.6 | 472 |
| 140 | Intensive temperature and quantum correlations for refined quantum measurements. Europhysics Letters, 2012, 98, 10009. | 0.7 | 25 |
| 141 | Statistical mechanics of entanglement mediated by a thermal reservoir. Physical Review A, 2012, 85, . | 1.0 | 12 |
| 142 | Current and entanglement in a three-site Bose-Hubbard ring. Physical Review A, 2012, 86, . | 1.0 | 12 |
| 144 | Everything is entangled. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2012, 718, 233-236. | 1.5 | 10 |
| 145 | Quantum Entanglement in Random Physical States. Physical Review Letters, 2012, 109, 040502. | 2.9 | 57 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|------|-----------|
| 146 | Thermalization of a Strongly Interacting Closed Spin System: From Coherent Many-Body Dynamics to a Fokker-Planck Equation. <i>Physical Review Letters</i> , 2012, 108, 110603. | 2.9 | 47 |
| 147 | An alternative to the conventional micro-canonical ensemble. <i>Physica Scripta</i> , 2012, T151, 014078. | 1.2 | 5 |
| 148 | Equilibration of isolated macroscopic quantum systems under experimentally realistic conditions. <i>Physica Scripta</i> , 2012, 86, 058512. | 1.2 | 25 |
| 149 | Quantum mutual information along unitary orbits. <i>Physical Review A</i> , 2012, 85, . | 1.0 | 18 |
| 150 | Almost All Quantum States Have Low Entropy Rates for Any Coupling to the Environment. <i>Physical Review Letters</i> , 2012, 108, 070501. | 2.9 | 15 |
| 151 | Thermal Pure Quantum States at Finite Temperature. <i>Physical Review Letters</i> , 2012, 108, 240401. | 2.9 | 166 |
| 152 | Phase-random states: Ensembles of states with fixed amplitudes and uniformly distributed phases in a fixed basis. <i>Physical Review A</i> , 2012, 86, . | 1.0 | 18 |
| 153 | Weak Decoupling Duality and Quantum Identification. <i>IEEE Transactions on Information Theory</i> , 2012, 58, 4914-4929. | 1.5 | 19 |
| 154 | Frustration, entanglement, and correlations in quantum many-body systems. <i>Physical Review A</i> , 2013, 88, . | 1.0 | 36 |
| 155 | Towards the fast scrambling conjecture. <i>Journal of High Energy Physics</i> , 2013, 2013, 1. | 1.6 | 266 |
| 156 | Matrix Product States, Random Matrix Theory and the Principle of Maximum Entropy. <i>Communications in Mathematical Physics</i> , 2013, 320, 663-677. | 1.0 | 16 |
| 157 | Information-Theoretic Equilibration: The Appearance of Irreversibility under Complex Quantum Dynamics. <i>Physical Review Letters</i> , 2013, 111, 080403. | 2.9 | 18 |
| 158 | Probability density of quantum expectation values. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 2013, 377, 1854-1861. | 0.9 | 6 |
| 159 | Time Scales in the Approach to Equilibrium of Macroscopic Quantum Systems. <i>Physical Review Letters</i> , 2013, 111, 140401. | 2.9 | 66 |
| 160 | Equilibration of quantum chaotic systems. <i>Physical Review E</i> , 2013, 88, 062147. | 0.8 | 13 |
| 161 | Random quantum states: recent developments and applications. <i>Advances in Physics</i> , 2013, 62, 363-452. | 35.9 | 10 |
| 162 | Gravity from quantum information. <i>Journal of the Korean Physical Society</i> , 2013, 63, 1094-1098. | 0.3 | 16 |
| 163 | Quantum decoherence scaling with bath size: Importance of dynamics, connectivity, and randomness. <i>Physical Review A</i> , 2013, 87, . | 1.0 | 14 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|-----|-----------|
| 164 | Regression Relation for Pure Quantum States and Its Implications for Efficient Computing. Physical Review Letters, 2013, 110, 070404. | 2.9 | 67 |
| 165 | Incoherent excitation of thermally equilibrated open quantum systems. Physical Review A, 2013, 87, . | 1.0 | 44 |
| 166 | Multipartite entanglement in conditional states. Physical Review A, 2013, 87, . | 1.0 | 3 |
| 167 | Dependence of decoherence-assisted classicality on the way a system is partitioned into subsystems. Physical Review A, 2013, 87, . | 1.0 | 17 |
| 168 | Fundamental limitations for quantum and nanoscale thermodynamics. Nature Communications, 2013, 4, 2059. | 5.8 | 550 |
| 169 | Canonical Thermal Pure Quantum State. Physical Review Letters, 2013, 111, 010401. | 2.9 | 167 |
| 170 | Typical response of quantum pure states. European Physical Journal B, 2013, 86, 1. | 0.6 | 10 |
| 171 | Area law violations in a supersymmetric model. Physical Review B, 2013, 87, . | 1.1 | 13 |
| 172 | Generic features of the dynamics of complex open quantum systems: Statistical approach based on averages over the unitary group. Physical Review E, 2013, 87, 042128. | 0.8 | 13 |
| 173 | On the law of increasing entropy and the cause of the dynamics irreversibility of quantum systems. JETP Letters, 2013, 98, 184-189. | 0.4 | 3 |
| 174 | Time dependent quantum thermodynamics of a coupled quantum oscillator system in a small thermal environment. Journal of Chemical Physics, 2013, 139, 214108. | 1.2 | 6 |
| 175 | Decoupling with unitary approximate two-designs. New Journal of Physics, 2013, 15, 053022. | 1.2 | 34 |
| 176 | Quantum irreversible decoherence behaviour in open quantum systems with few degrees of freedom: Application to ¹ H NMR reversion experiments in nematic liquid crystals. Journal of Chemical Physics, 2013, 139, 154901. | 1.2 | 3 |
| 177 | Quantum fluctuation relations for ensembles of wave functions. New Journal of Physics, 2013, 15, 115008. | 1.2 | 15 |
| 178 | DIAGONAL-UNITARY 2-DESIGN AND THEIR IMPLEMENTATIONS BY QUANTUM CIRCUITS. International Journal of Quantum Information, 2013, 11, 1350062. | 0.6 | 12 |
| 179 | Equilibration of quantum hard rods in one dimension. Journal of Statistical Mechanics: Theory and Experiment, 2013, 2013, P02005. | 0.9 | 12 |
| 180 | Pure state thermodynamics with matrix product states. Physical Review B, 2013, 88, . | 1.1 | 8 |
| 181 | Observing controlled state collapse in a single mechanical oscillator via a direct probe of energy variance. Physical Review A, 2013, 88, . | 1.0 | 2 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|-----|-----------|
| 182 | Thermodynamic cost of acquiring information. <i>Physical Review E</i> , 2013, 88, 062123. | 0.8 | 6 |
| 183 | Performance bound for quantum absorption refrigerators. <i>Physical Review E</i> , 2013, 87, 042131. | 0.8 | 147 |
| 184 | Dynamics of Thermalization and Decoherence of a Nanoscale System. <i>Physical Review Letters</i> , 2013, 111, 130408. | 2.9 | 21 |
| 185 | Non-Markovian equilibration controlled by symmetry breaking. <i>Physical Review B</i> , 2013, 87, . | 1.1 | 5 |
| 186 | Quantum simulations of localization effects with dipolar interactions. <i>Annalen Der Physik</i> , 2013, 525, 833-844. | 0.9 | 17 |
| 187 | Quantum versus classical foundation of statistical mechanics under experimentally realistic conditions. <i>Physical Review E</i> , 2013, 88, 052114. | 0.8 | 6 |
| 188 | Interaction quenches in the one-dimensional Bose gas. <i>Physical Review B</i> , 2013, 88, . | 1.1 | 105 |
| 189 | Magnetic quantum diesel engine in Ni ₂ . <i>Physical Review B</i> , 2013, 88, . | 1.1 | 23 |
| 190 | Interaction-disorder competition in a spin system evaluated through the Loschmidt echo. <i>Physical Review B</i> , 2013, 88, . | 1.1 | 17 |
| 191 | Finite-size scaling analysis of the eigenstate thermalization hypothesis in a one-dimensional interacting Bose gas. <i>Physical Review E</i> , 2013, 87, 012125. | 0.8 | 76 |
| 192 | Generalized quantum microcanonical ensemble from random matrix product states. <i>Physical Review B</i> , 2013, 87, . | 1.1 | 10 |
| 193 | Generic Evaluation of Relaxation Time for Quantum Many-Body Systems: Analysis of the System Size Dependence. <i>Journal of the Physical Society of Japan</i> , 2013, 82, 044006. | 0.7 | 13 |
| 194 | Quantum entanglement and thermal reduced density matrices in fermion and spin systems on ladders. <i>Journal of Statistical Mechanics: Theory and Experiment</i> , 2013, 2013, P08013. | 0.9 | 31 |
| 195 | Some Trends in Quantum Thermodynamics. <i>Entropy</i> , 2014, 16, 3434-3470. | 1.1 | 30 |
| 196 | A New Second Law of Information Thermodynamics Using Entanglement Measure. , 2014, , . | | 1 |
| 197 | On the architecture of spacetime geometry. <i>Classical and Quantum Gravity</i> , 2014, 31, 214002. | 1.5 | 143 |
| 198 | Appearance of Gibbs states in quantum-state tomography. <i>Physical Review A</i> , 2014, 90, . | 1.0 | 1 |
| 199 | Entanglement of phase-random states. , 2014, , . | | 0 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|-----|-----------|
| 200 | Local random quantum circuits: Ensemble completely positive maps and swap algebras. Journal of Mathematical Physics, 2014, 55, 082204. | 0.5 | 6 |
| 201 | Irreversibility and entanglement spectrum statistics in quantum circuits. Journal of Statistical Mechanics: Theory and Experiment, 2014, 2014, P12007. | 0.9 | 27 |
| 202 | Thermal purification and thermal entanglement of the two-resonant-coupled-oscillator system at finite temperature. Journal of Physics A: Mathematical and Theoretical, 2014, 47, 375301. | 0.7 | 0 |
| 203 | Statistically preferred basis of an open quantum system: Its relation to the eigenbasis of a renormalized self-Hamiltonian. Physical Review E, 2014, 89, 022125. | 0.8 | 8 |
| 204 | Reconstructing Quantum States from Local Data. Physical Review Letters, 2014, 113, 260501. | 2.9 | 22 |
| 205 | Variational mixed quantum/semiclassical simulation of dihalogen guest and rare-gas solid host dynamics. Journal of Chemical Physics, 2014, 141, 034113. | 1.2 | 9 |
| 206 | Typical, finite baths as a means of exact simulation of open quantum systems. Physical Review E, 2014, 89, 042131. | 0.8 | 7 |
| 207 | Thermal pure quantum states of many-particle systems. Physical Review B, 2014, 90, . | 1.1 | 24 |
| 208 | Entropy increase in K -step Markovian and consistent dynamics of closed quantum systems. Physical Review E, 2014, 89, 042113. | 0.8 | 17 |
| 209 | Hilbert-Glass Transition: New Universality of Temperature-Tuned Many-Body Dynamical Quantum Criticality. Physical Review X, 2014, 4, . | 2.8 | 197 |
| 210 | Thermalization in closed quantum systems: Semiclassical approach. Physical Review A, 2014, 90, . | 1.0 | 13 |
| 211 | Spin-dependent Otto quantum heat engine based on a molecular substance. Physical Review B, 2014, 90, . | 1.1 | 32 |
| 212 | Interference in a two-mode Bose system as a typical phenomenon. Physical Review A, 2014, 89, . | 1.0 | 4 |
| 213 | Macroscopic features of quantum fluctuations in large- N qubit systems. Physical Review A, 2014, 89, . | 1.0 | 10 |
| 214 | Spin-Current Autocorrelations from Single Pure-State Propagation. Physical Review Letters, 2014, 112, 120601. | 2.9 | 94 |
| 215 | Equilibrium states of generic quantum systems subject to periodic driving. Physical Review E, 2014, 90, 012110. | 0.8 | 383 |
| 216 | Pushing the Limits of the Eigenstate Thermalization Hypothesis towards Mesoscopic Quantum Systems. Physical Review Letters, 2014, 112, 130403. | 2.9 | 123 |
| 217 | Macroscopically deterministic Markovian thermalization in finite quantum spin systems. Physical Review E, 2014, 89, 012131. | 0.8 | 13 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|-----|-----------|
| 218 | Noncanonical statistics of a finite quantum system with non-negligible system-bath coupling. <i>Physical Review E</i> , 2014, 90, 062125. | 0.8 | 16 |
| 219 | Evaporating firewalls. <i>Journal of High Energy Physics</i> , 2014, 2014, 1. | 1.6 | 32 |
| 220 | Note on invariant properties of a quantum system placed into thermodynamic environment. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2014, 398, 65-75. | 1.2 | 7 |
| 221 | Special coupled quantum Otto cycles. <i>European Physical Journal Plus</i> , 2014, 129, 1. | 1.2 | 28 |
| 222 | Spin and the Thermal Equilibrium Distribution of Wave Functions. <i>Journal of Statistical Physics</i> , 2014, 154, 491-502. | 0.5 | 2 |
| 223 | Periodic Thermodynamics of Isolated Quantum Systems. <i>Physical Review Letters</i> , 2014, 112, 150401. | 2.9 | 181 |
| 224 | The emergent Copenhagen interpretation of quantum mechanics. <i>Journal of Physics A: Mathematical and Theoretical</i> , 2014, 47, 185301. | 0.7 | 4 |
| 225 | Sufficient Condition for Entanglement Area Laws in Thermodynamically Gapped Spin Systems. <i>Physical Review Letters</i> , 2014, 113, 197204. | 2.9 | 13 |
| 226 | Thermal states of random quantum many-body systems. <i>Physical Review A</i> , 2014, 90, . | 1.0 | 2 |
| 227 | Diagonal quantum circuits: Their computational power and applications. <i>European Physical Journal Plus</i> , 2014, 129, 1. | 1.2 | 15 |
| 228 | Heat due to system-reservoir correlations in thermal equilibrium. <i>Physical Review B</i> , 2014, 90, . | 1.1 | 30 |
| 229 | Canonical versus noncanonical equilibration dynamics of open quantum systems. <i>Physical Review E</i> , 2014, 90, 022122. | 0.8 | 28 |
| 230 | Splitting a critical spin chain. <i>Journal of Statistical Mechanics: Theory and Experiment</i> , 2014, 2014, P09035. | 0.9 | 7 |
| 231 | Quantum reservoirs with ion chains. <i>Physical Review A</i> , 2014, 90, . | 1.0 | 12 |
| 232 | Typical pure nonequilibrium steady states. <i>Europhysics Letters</i> , 2014, 107, 40006. | 0.7 | 6 |
| 233 | General Relaxation Time of the Fidelity for Isolated Quantum Thermodynamic Systems. <i>Journal of the Physical Society of Japan</i> , 2014, 83, 064001. | 0.7 | 13 |
| 234 | Fluctuation theorems and the generalized Gibbs ensemble in integrable systems. <i>Physical Review E</i> , 2014, 90, 022107. | 0.8 | 9 |
| 235 | Entanglement typicality. <i>Journal of Physics A: Mathematical and Theoretical</i> , 2014, 47, 363001. | 0.7 | 26 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|-----|-----------|
| 236 | From state distinguishability to effective bulk locality. <i>Journal of High Energy Physics</i> , 2014, 2014, 1. | 1.6 | 9 |
| 237 | Eigenvalue Distributions of Reduced Density Matrices. <i>Communications in Mathematical Physics</i> , 2014, 332, 1-52. | 1.0 | 34 |
| 238 | Principle of Maximum Entanglement Entropy and Local Physics of Strongly Correlated Materials. <i>Physical Review Letters</i> , 2014, 113, 036402. | 2.9 | 9 |
| 239 | Quantum thermalization and equilibrium state with multiple temperatures. <i>Laser Physics Letters</i> , 2014, 11, 085501. | 0.6 | 7 |
| 240 | Work extraction and thermodynamics for individual quantum systems. <i>Nature Communications</i> , 2014, 5, 4185. | 5.8 | 297 |
| 241 | Emergent Irreversibility and Entanglement Spectrum Statistics. <i>Physical Review Letters</i> , 2014, 112, 240501. | 2.9 | 55 |
| 242 | Typical Pure States and Nonequilibrium Processes in Quantum Many-Body Systems. <i>Journal of the Physical Society of Japan</i> , 2014, 83, 094001. | 0.7 | 24 |
| 243 | Generation of stable entanglement between two cavity mirrors by squeezed-reservoir engineering. <i>Physical Review A</i> , 2015, 92, . | 1.0 | 40 |
| 244 | Eigenstate thermalization hypothesis and integrability in quantum spin chains. <i>Physical Review B</i> , 2015, 91, . | 1.1 | 102 |
| 245 | Scaling of the entanglement spectrum in driven critical dynamics. <i>Physical Review B</i> , 2015, 91, . | 1.1 | 19 |
| 246 | How two spins can thermalize a third spin. <i>Physical Review E</i> , 2015, 91, 052101. | 0.8 | 3 |
| 247 | Thermalization away from integrability and the role of operator off-diagonal elements. <i>Physical Review E</i> , 2015, 91, 052111. | 0.8 | 10 |
| 248 | Entropy for quantum pure states and quantum Htheorem. <i>Physical Review E</i> , 2015, 91, 062106. | 0.8 | 20 |
| 249 | How accurately can the microcanonical ensemble describe small isolated quantum systems?. <i>Physical Review E</i> , 2015, 92, 020102. | 0.8 | 13 |
| 250 | Stationary ensemble approximations of dynamic quantum states: Optimizing the generalized Gibbs ensemble. <i>Physical Review E</i> , 2015, 92, 022123. | 0.8 | 11 |
| 251 | Exchange fluctuation theorem for correlated quantum systems. <i>Physical Review E</i> , 2015, 92, 042113. | 0.8 | 26 |
| 252 | Thermal Equilibrium of a Macroscopic Quantum System in a Pure State. <i>Physical Review Letters</i> , 2015, 115, 100402. | 2.9 | 39 |
| 253 | Nonequilibrium dynamics of spin-orbit-coupled lattice bosons. <i>Physical Review A</i> , 2015, 92, . | 1.0 | 6 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|-----|-----------|
| 254 | Finite-temperature charge transport in the one-dimensional Hubbard model. <i>Physical Review B</i> , 2015, 92, . | 1.1 | 21 |
| 255 | Quantum heat baths satisfying the eigenstate thermalization hypothesis. <i>Physical Review E</i> , 2015, 92, 022104. | 0.8 | 6 |
| 256 | Necessity of Eigenstate Thermalization. <i>Physical Review Letters</i> , 2015, 115, 220401. | 2.9 | 38 |
| 257 | Operational derivation of Boltzmann distribution with Maxwell's demon model. <i>Scientific Reports</i> , 2015, 5, 17011. | 1.6 | 4 |
| 258 | From single-shot towards general work extraction in a quantum thermodynamic framework. <i>New Journal of Physics</i> , 2015, 17, 085006. | 1.2 | 34 |
| 259 | Locality of temperature in spin chains. <i>New Journal of Physics</i> , 2015, 17, 085007. | 1.2 | 20 |
| 260 | Entanglement and thermodynamics in general probabilistic theories. <i>New Journal of Physics</i> , 2015, 17, 103027. | 1.2 | 34 |
| 261 | Non-equilibrium Dynamics of One-Dimensional Bose Gases. <i>Springer Theses</i> , 2015, , . | 0.0 | 6 |
| 262 | Introduction to One-Dimensional Bose Gases. <i>Springer Theses</i> , 2015, , 1-37. | 0.0 | 0 |
| 263 | Detailed balance and entanglement. <i>Journal of Physics A: Mathematical and Theoretical</i> , 2015, 48, 155303. | 0.7 | 5 |
| 264 | Quench of non-Markovian coherence in the deep sub-Ohmic spin-boson model: A unitary equilibration scheme. <i>Annals of Physics</i> , 2015, 360, 140-149. | 1.0 | 1 |
| 265 | The fall of the black hole firewall: natural nonmaximal entanglement for the Page curve. <i>Progress of Theoretical and Experimental Physics</i> , 2015, 2015, 123B04. | 1.8 | 14 |
| 266 | Thermalization and Canonical Typicality in Translation-Invariant Quantum Lattice Systems. <i>Communications in Mathematical Physics</i> , 2015, 340, 499-561. | 1.0 | 72 |
| 267 | Ultracold Atoms Out of Equilibrium. <i>Annual Review of Condensed Matter Physics</i> , 2015, 6, 201-217. | 5.2 | 228 |
| 268 | Steepest-entropy-ascent quantum thermodynamic modeling of decoherence in two different microscopic composite systems. <i>Physical Review A</i> , 2015, 91, . | 1.0 | 33 |
| 269 | The second law of thermodynamics under unitary evolution and external operations. <i>Annals of Physics</i> , 2015, 354, 338-352. | 1.0 | 33 |
| 270 | Quantum many-body systems out of equilibrium. <i>Nature Physics</i> , 2015, 11, 124-130. | 6.5 | 880 |
| 271 | Entanglement Sampling and Applications. <i>IEEE Transactions on Information Theory</i> , 2015, 61, 1093-1112. | 1.5 | 68 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|-----|-----------|
| 272 | Entanglement entropy scaling laws and eigenstate typicality in free fermion systems. <i>Physical Review B</i> , 2015, 91, . | 1.1 | 55 |
| 273 | Generalization of von Neumann's Approach to Thermalization. <i>Physical Review Letters</i> , 2015, 115, 010403. | 2.9 | 51 |
| 274 | Theory of temporal fluctuations in isolated quantum systems. <i>International Journal of Modern Physics B</i> , 2015, 29, 1530008. | 1.0 | 7 |
| 275 | Typical observables in a two-mode Bose system. <i>Physical Review A</i> , 2015, 91, . | 1.0 | 2 |
| 276 | Isolated Quantum Systems Out of Equilibrium. <i>Springer Theses</i> , 2015, , 67-74. | 0.0 | 0 |
| 277 | The minimal work cost of information processing. <i>Nature Communications</i> , 2015, 6, 7669. | 5.8 | 110 |
| 278 | Quantum typicality and initial conditions. <i>Physica Scripta</i> , 2015, 90, 074057. | 1.2 | 3 |
| 279 | Eigenstate thermalization: Deutsch's approach and beyond. <i>New Journal of Physics</i> , 2015, 17, 055025. | 1.2 | 69 |
| 280 | Gibbs-preserving maps outperform thermal operations in the quantum regime. <i>New Journal of Physics</i> , 2015, 17, 043003. | 1.2 | 81 |
| 281 | Extremely quick thermalization in a macroscopic quantum system for a typical nonequilibrium subspace. <i>New Journal of Physics</i> , 2015, 17, 045002. | 1.2 | 64 |
| 282 | Universal Superreplication of Unitary Gates. <i>Physical Review Letters</i> , 2015, 114, 120504. | 2.9 | 19 |
| 283 | Parametric down conversion with a depleted pump as a model for classical information transmission capacity of quantum black holes. <i>Classical and Quantum Gravity</i> , 2015, 32, 075010. | 1.5 | 8 |
| 284 | On the equilibrium state of a small system with random matrix coupling to its environment. <i>Journal of Physics A: Mathematical and Theoretical</i> , 2015, 48, 265201. | 0.7 | 7 |
| 285 | Description of quantum coherence in thermodynamic processes requires constraints beyond free energy. <i>Nature Communications</i> , 2015, 6, 6383. | 5.8 | 529 |
| 286 | From spooky foundations. <i>Nature Physics</i> , 2015, 11, 383-384. | 6.5 | 6 |
| 287 | Entanglement pre-thermalization in a one-dimensional Bose gas. <i>Nature Physics</i> , 2015, 11, 1050-1056. | 6.5 | 29 |
| 288 | Spin and energy currents in integrable and nonintegrable spin-1/2 chains: A typicality approach to real-time autocorrelations. <i>Physical Review B</i> , 2015, 91, . | 1.1 | 48 |
| 289 | Typicality and statewise entropy for classical field systems. <i>Europhysics Letters</i> , 2015, 110, 60001. | 0.7 | 1 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|-----|-----------|
| 290 | Nonequilibrium steady state in open quantum systems: Influence action, stochastic equation and power balance. <i>Annals of Physics</i> , 2015, 362, 139-169. | 1.0 | 31 |
| 291 | Quantum states of dark solitons in the 1D Bose gas. <i>New Journal of Physics</i> , 2016, 18, 075008. | 1.2 | 30 |
| 292 | Thermality and excited state Rényi entropy in two-dimensional CFT. <i>Journal of High Energy Physics</i> , 2016, 2016, 1. | 1.6 | 22 |
| 293 | Random Bosonic States for Robust Quantum Metrology. <i>Physical Review X</i> , 2016, 6, . | 2.8 | 62 |
| 294 | Coherence-breaking channels and coherence sudden death. <i>Physical Review A</i> , 2016, 94, . | 1.0 | 25 |
| 295 | Typical fast thermalization processes in closed many-body systems. <i>Nature Communications</i> , 2016, 7, 10821. | 5.8 | 94 |
| 296 | Observation of quantum equilibration in dilute Bose gases. <i>Physical Review A</i> , 2016, 94, . | 1.0 | 5 |
| 297 | Statistical entropy of open quantum systems. <i>Physical Review E</i> , 2016, 94, 062147. | 0.8 | 4 |
| 298 | Quantum entanglement in coupled harmonic oscillator systems: from micro to macro. <i>New Journal of Physics</i> , 2016, 18, 073001. | 1.2 | 6 |
| 299 | Foundations of statistical mechanics from symmetries of entanglement. <i>New Journal of Physics</i> , 2016, 18, 063013. | 1.2 | 19 |
| 300 | Stability of quantum statistical ensembles with respect to local measurements. <i>Physical Review E</i> , 2016, 94, 062106. | 0.8 | 6 |
| 301 | Ultrafast transient absorption revisited: Phase-flips, spectral fingers, and other dynamical features. <i>Journal of Chemical Physics</i> , 2016, 144, 175102. | 1.2 | 49 |
| 302 | Microcanonical and resource-theoretic derivations of the thermal state of a quantum system with noncommuting charges. <i>Nature Communications</i> , 2016, 7, 12051. | 5.8 | 87 |
| 303 | Typical pure states and the analysis of nonequilibrium processes of mesoscopic systems. <i>Journal of Statistical Mechanics: Theory and Experiment</i> , 2016, 2016, 054004. | 0.9 | 2 |
| 304 | Equilibration, thermalisation, and the emergence of statistical mechanics in closed quantum systems. <i>Reports on Progress in Physics</i> , 2016, 79, 056001. | 8.1 | 633 |
| 305 | Rigorous Bound on Energy Absorption and Generic Relaxation in Periodically Driven Quantum Systems. <i>Physical Review Letters</i> , 2016, 116, 120401. | 2.9 | 251 |
| 306 | Quantum Statistical Ensemble Resilient to Thermalization. <i>Journal of Physical Chemistry A</i> , 2016, 120, 5071-5082. | 1.1 | 1 |
| 307 | Typicality of Thermal Equilibrium and Thermalization in Isolated Macroscopic Quantum Systems. <i>Journal of Statistical Physics</i> , 2016, 163, 937-997. | 0.5 | 60 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|------|-----------|
| 308 | Thermalization of topological entropy after a quantum quench. Physical Review B, 2016, 94, . | 1.1 | 6 |
| 309 | Thermodynamics of quantum heat bath. Journal of Physics A: Mathematical and Theoretical, 2016, 49, 425302. | 0.7 | 15 |
| 310 | From quantum chaos and eigenstate thermalization to statistical mechanics and thermodynamics. Advances in Physics, 2016, 65, 239-362. | 35.9 | 1,385 |
| 311 | Typical pure nonequilibrium steady states and irreversibility for quantum transport. Physical Review E, 2016, 94, 012146. | 0.8 | 4 |
| 312 | Relative thermalization. Physical Review E, 2016, 94, 022104. | 0.8 | 14 |
| 313 | Thermodynamic Lower Bounds of Deviation from Instantaneous Canonical State. Journal of the Physical Society of Japan, 2016, 85, 044003. | 0.7 | 0 |
| 314 | Diffusive lossless energy and coherence transfer by noisy coupling. Physical Review A, 2016, 94, . | 1.0 | 3 |
| 315 | Entropy, chaos, and excited-state quantum phase transitions in the Dicke model. Physical Review E, 2016, 94, 012140. | 0.8 | 35 |
| 316 | Quantum thermodynamics. Contemporary Physics, 2016, 57, 545-579. | 0.8 | 602 |
| 317 | Irreversible adiabatic decoherence of dipole-interacting nuclear-spin pairs coupled with a phonon bath. Physical Review A, 2016, 93, . | 1.0 | 5 |
| 318 | Photon distribution at the output of a beam splitter for imbalanced input states. Physical Review A, 2016, 93, . | 1.0 | 6 |
| 319 | Quantum decoherence and thermalization at finite temperature within the canonical-thermal-state ensemble. Physical Review A, 2016, 93, . | 1.0 | 11 |
| 320 | Average coherence and its typicality for random pure states. Physical Review A, 2016, 93, . | 1.0 | 36 |
| 321 | Generalized Gibbs ensemble in a nonintegrable system with an extensive number of local symmetries. Physical Review E, 2016, 93, 032116. | 0.8 | 21 |
| 322 | Initial-state-independent equilibration at the breakdown of the eigenstate thermalization hypothesis. Physical Review E, 2016, 93, 042101. | 0.8 | 4 |
| 323 | Characterizing eigenstate thermalization via measures in the Fock space of operators. Physical Review E, 2016, 93, 042138. | 0.8 | 12 |
| 324 | Quantum statistical ensemble for emissive correlated systems. Physical Review E, 2016, 93, 062122. | 0.8 | 0 |
| 325 | Heat Conductivity of the Heisenberg Spin- 1 Ladder: From Weak to Strong Breaking of Integrability. Physical Review Letters, 2016, 116, 017202. | 2.9 | 34 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|-----|-----------|
| 326 | Fundamental Asymmetry in Quenches Between Integrable and Nonintegrable Systems. Physical Review Letters, 2016, 116, 100601. | 2.9 | 52 |
| 327 | Universal Property of Quantum Measurements of Equilibrium Fluctuations and Violation of the Fluctuation-Dissipation Theorem. Physical Review Letters, 2016, 117, 010402. | 2.9 | 7 |
| 328 | Eigenstate thermalization hypothesis and quantum Jarzynski relation for pure initial states. Physical Review E, 2016, 94, 012125. | 0.8 | 14 |
| 329 | Time-Resolved Observation of Thermalization in an Isolated Quantum System. Physical Review Letters, 2016, 117, 170401. | 2.9 | 81 |
| 330 | Typicality in spin-network states of quantum geometry. Physical Review D, 2016, 94, . | 1.6 | 16 |
| 331 | Prethermalization and universal dynamics in near-integrable quantum systems. Journal of Statistical Mechanics: Theory and Experiment, 2016, 2016, 064009. | 0.9 | 162 |
| 332 | Entanglement and fast quantum thermalization in heavy ion collisions. Modern Physics Letters A, 2016, 31, 1650110. | 0.5 | 13 |
| 333 | Work and entropy production in generalised Gibbs ensembles. New Journal of Physics, 2016, 18, 123035. | 1.2 | 33 |
| 334 | Typicality approach to the optical conductivity in thermal and many-body localized phases. Physical Review B, 2016, 94, . | 1.1 | 62 |
| 335 | Eigenstate Gibbs ensemble in integrable quantum systems. Physical Review B, 2016, 94, . | 1.1 | 29 |
| 336 | Spontaneous parametric down conversion with a depleted pump as an analogue for black hole evaporation/particle production. , 2016, , . | | 0 |
| 337 | Quantum thermodynamics for a model of an expanding Universe. Classical and Quantum Gravity, 2016, 33, 035003. | 1.5 | 6 |
| 338 | Copenhagen quantum mechanics. Contemporary Physics, 2016, 57, 289-308. | 0.8 | 3 |
| 339 | The role of quantum information in thermodynamics—a topical review. Journal of Physics A: Mathematical and Theoretical, 2016, 49, 143001. | 0.7 | 640 |
| 340 | Pilot-Wave Quantum Theory with a Single Bohm's Trajectory. Foundations of Physics, 2016, 46, 575-605. | 0.6 | 4 |
| 341 | An investigation of equilibration in small quantum systems: the example of a particle in a 1D random potential. Journal of Physics A: Mathematical and Theoretical, 2016, 49, 115303. | 0.7 | 10 |
| 342 | Quantum ergodicity for a class of non-generic systems. Journal of Physics A: Mathematical and Theoretical, 2016, 49, 055301. | 0.7 | 5 |
| 343 | Universal Probability Distribution for the Wave Function of a Quantum System Entangled with its Environment. Communications in Mathematical Physics, 2016, 342, 965-988. | 1.0 | 10 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|-----|-----------|
| 344 | Average subentropy, coherence and entanglement of random mixed quantum states. Annals of Physics, 2017, 377, 125-146. | 1.0 | 21 |
| 345 | Noise suppression by quantum control before and after the noise. Physical Review A, 2017, 95, . | 1.0 | 6 |
| 346 | Macroscopic and microscopic thermal equilibrium. Annalen Der Physik, 2017, 529, 1600301. | 0.9 | 22 |
| 347 | Quantum violation of fluctuation-dissipation theorem. Journal of Statistical Mechanics: Theory and Experiment, 2017, 2017, 024004. | 0.9 | 11 |
| 348 | Ten reasons why a thermalized system cannot be described by a many-particle wave function. Studies in History and Philosophy of Science Part B - Studies in History and Philosophy of Modern Physics, 2017, 58, 12-21. | 1.4 | 9 |
| 349 | The Second Law of Thermodynamics at the Microscopic Scale. Foundations of Physics, 2017, 47, 1185-1190. | 0.6 | 1 |
| 350 | The ergodic side of the many-body localization transition. Annalen Der Physik, 2017, 529, 1600350. | 0.9 | 216 |
| 351 | Unitary 2-designs from random X - and Z -diagonal unitaries. Journal of Mathematical Physics, 2017, 58, . | 0.5 | 28 |
| 352 | Total correlations of the diagonal ensemble as a generic indicator for ergodicity breaking in quantum systems. Physical Review B, 2017, 95, . | 1.1 | 8 |
| 353 | Optimal length of decomposition sequences composed of imperfect gates. Quantum Information Processing, 2017, 16, 1. | 1.0 | 1 |
| 354 | A general derivation and quantification of the third law of thermodynamics. Nature Communications, 2017, 8, 14538. | 5.8 | 114 |
| 355 | The difference between two random mixed quantum states: exact and asymptotic spectral analysis. Journal of Physics A: Mathematical and Theoretical, 2017, 50, 025301. | 0.7 | 14 |
| 356 | Reflections on the information paradigm in quantum and gravitational physics. Journal of Physics: Conference Series, 2017, 880, 012014. | 0.3 | 18 |
| 357 | Hilbert-Schmidt quantum coherence in multi-qudit systems. Quantum Information Processing, 2017, 16, 1. | 1.0 | 12 |
| 358 | Second law of thermodynamics with quantum memory. Physical Review A, 2017, 96, . | 1.0 | 5 |
| 359 | Generic appearance of objective results in quantum measurements. Physical Review A, 2017, 96, . | 1.0 | 21 |
| 360 | Roles of energy eigenstates and eigenvalues in equilibration of isolated quantum systems. Physical Review E, 2017, 96, 042124. | 0.8 | 0 |
| 361 | Real-time broadening of nonequilibrium density profiles and the role of the specific initial-state realization. Physical Review B, 2017, 95, . | 1.1 | 34 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|-----|-----------|
| 362 | Thermality of eigenstates in conformal field theories. <i>Physical Review E</i> , 2017, 96, 022149. | 0.8 | 33 |
| 363 | Aperiodically Driven Integrable Systems and Their Emergent Steady States. <i>Physical Review X</i> , 2017, 7, . | 2.8 | 45 |
| 364 | Thermalization without eigenstate thermalization hypothesis after a quantum quench. <i>Physical Review E</i> , 2017, 96, 022153. | 0.8 | 25 |
| 365 | Ab initio relaxation times and time-dependent Hamiltonians within the steepest-entropy-ascent quantum thermodynamic framework. <i>Physical Review E</i> , 2017, 96, 022129. | 0.8 | 3 |
| 366 | Internal temperature of quantum chaotic systems at the nanoscale. <i>Physical Review E</i> , 2017, 96, 032207. | 0.8 | 3 |
| 367 | Thermal Pure States for Finite and Isolated Quantum Systems. <i>Journal of Physical Chemistry A</i> , 2017, 121, 7261-7272. | 1.1 | 1 |
| 368 | Charge diffusion in the one-dimensional Hubbard model. <i>Physical Review E</i> , 2017, 96, 020105. | 0.8 | 15 |
| 369 | Fluctuation Theorem for Many-Body Pure Quantum States. <i>Physical Review Letters</i> , 2017, 119, 100601. | 2.9 | 67 |
| 370 | Systematic Construction of Counterexamples to the Eigenstate Thermalization Hypothesis. <i>Physical Review Letters</i> , 2017, 119, 030601. | 2.9 | 200 |
| 371 | Entanglement complexity in quantum many-body dynamics, thermalization, and localization. <i>Physical Review B</i> , 2017, 96, . | 1.1 | 43 |
| 372 | Production rate of the system-bath mutual information. <i>Physical Review E</i> , 2017, 96, 012139. | 0.8 | 15 |
| 373 | Renormalization group flow of entanglement entropy to thermal entropy. <i>Physical Review D</i> , 2017, 95, . | 1.6 | 17 |
| 374 | Universal locality of quantum thermal susceptibility. <i>Physical Review A</i> , 2017, 95, . | 1.0 | 21 |
| 375 | Information-theoretic equilibrium and observable thermalization. <i>Scientific Reports</i> , 2017, 7, 44066. | 1.6 | 18 |
| 376 | Information propagation in isolated quantum systems. <i>Physical Review B</i> , 2017, 96, . | 1.1 | 120 |
| 377 | Quench of a symmetry-broken ground state. <i>Physical Review A</i> , 2017, 95, . | 1.0 | 2 |
| 378 | Necessity of eigenstate thermalisation for equilibration towards unique expectation values when starting from generic initial states. <i>Europhysics Letters</i> , 2017, 118, 10006. | 0.7 | 13 |
| 379 | Black holes in loop quantum gravity. <i>Reports on Progress in Physics</i> , 2017, 80, 126901. | 8.1 | 81 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|-----|-----------|
| 380 | Typical equilibrium state of an embedded quantum system. <i>Physical Review E</i> , 2017, 96, 060102. | 0.8 | 3 |
| 381 | Fate of the Hoop Conjecture in Quantum Gravity. <i>Physical Review Letters</i> , 2017, 119, 231301. | 2.9 | 15 |
| 382 | Demonstration of entanglement assisted invariance on IBM's quantum experience. <i>Heliyon</i> , 2017, 3, e00444. | 1.4 | 26 |
| 383 | Relaxation, thermalization, and Markovian dynamics of two spins coupled to a spin bath. <i>Physical Review E</i> , 2017, 96, 053306. | 0.8 | 17 |
| 384 | Quantum Molecular Trajectory and Its Statistical Properties. <i>Journal of Physical Chemistry A</i> , 2017, 121, 5352-5360. | 1.1 | 7 |
| 385 | Entanglement Entropy of Eigenstates of Quadratic Fermionic Hamiltonians. <i>Physical Review Letters</i> , 2017, 119, 020601. | 2.9 | 86 |
| 386 | Dynamical typicality of embedded quantum systems. <i>Physical Review A</i> , 2017, 96, . | 1.0 | 9 |
| 387 | Typical Relaxation of Isolated Many-Body Systems Which Do Not Thermalize. <i>Physical Review Letters</i> , 2017, 118, 190601. | 2.9 | 17 |
| 388 | Thermodynamics and the structure of quantum theory. <i>New Journal of Physics</i> , 2017, 19, 043025. | 1.2 | 28 |
| 389 | Quantum thermodynamics and canonical typicality. <i>International Journal of Geometric Methods in Modern Physics</i> , 2017, 14, 1740001. | 0.8 | 7 |
| 390 | Any orthonormal basis in high dimension is uniformly distributed over the sphere. <i>Annales De L'institut Henri Poincare (B) Probability and Statistics</i> , 2017, 53, . | 0.7 | 2 |
| 391 | Saturation of entropy production in quantum many-body systems. <i>Physical Review E</i> , 2017, 96, 062148. | 0.8 | 7 |
| 392 | Phase retrieval using unitary 2-designs. , 2017, , . | | 6 |
| 393 | Fermi's golden rule, the origin and breakdown of Markovian master equations, and the relationship between oscillator baths and the random matrix model. <i>Journal of Physics A: Mathematical and Theoretical</i> , 2017, 50, 415302. | 0.7 | 5 |
| 394 | On Quantum Collapse as a Basis for the Second Law of Thermodynamics. <i>Entropy</i> , 2017, 19, 106. | 1.1 | 10 |
| 395 | Quantum statistical gravity: time dilation due to local information in many-body quantum systems. <i>Journal of Physics: Conference Series</i> , 2017, 880, 012047. | 0.3 | 1 |
| 396 | Kinetics of Interactions of Matter, Antimatter and Radiation Consistent with Antisymmetric (CPT-Invariant) Thermodynamics. <i>Entropy</i> , 2017, 19, 202. | 1.1 | 5 |
| 397 | Entropic bounds between two thermal equilibrium states. <i>Physical Review E</i> , 2018, 97, 022128. | 0.8 | 3 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|------|-----------|
| 398 | Signatures of Anderson localization and delocalized random quantum states. <i>Chemical Physics</i> , 2018, 514, 141-149. | 0.9 | 1 |
| 399 | Atypicality of Most Few-Body Observables. <i>Physical Review Letters</i> , 2018, 120, 080603. | 2.9 | 29 |
| 400 | Generic pure quantum states as steady states of quasi-local dissipative dynamics. <i>Journal of Physics A: Mathematical and Theoretical</i> , 2018, 51, 145304. | 0.7 | 3 |
| 401 | The interplay between frustration and entanglement in many-body systems. <i>Journal of Statistical Mechanics: Theory and Experiment</i> , 2018, 2018, 023101. | 0.9 | 2 |
| 402 | Derivation of Bose-Einstein and Fermi-Dirac statistics from quantum mechanics: gauge-theoretical structure. <i>Journal of Statistical Mechanics: Theory and Experiment</i> , 2018, 2018, 023112. | 0.9 | 2 |
| 403 | Entanglement prethermalization in the Tomonaga-Luttinger model. <i>Physical Review A</i> , 2018, 97, . | 1.0 | 9 |
| 404 | The Matter-Gravity Entanglement Hypothesis. <i>Foundations of Physics</i> , 2018, 48, 542-557. | 0.6 | 15 |
| 405 | Equilibration time scales in closed many-body quantum systems. <i>New Journal of Physics</i> , 2018, 20, 033032. | 1.2 | 43 |
| 406 | We are not walking wave functions. A response to "Quantum Mind and Social Science" by Alexander Wendt. <i>Journal for the Theory of Social Behaviour</i> , 2018, 48, 157-161. | 0.8 | 6 |
| 407 | Fundamental Work Cost of Quantum Processes. <i>Physical Review X</i> , 2018, 8, . | 2.8 | 40 |
| 408 | Eigenstate Thermalization for Degenerate Observables. <i>Physical Review Letters</i> , 2018, 120, 150603. | 2.9 | 25 |
| 409 | Fully Quantum Fluctuation Theorems. <i>Physical Review X</i> , 2018, 8, . | 2.8 | 71 |
| 410 | Generalized eigenstate typicality in translation-invariant quasifree fermionic models. <i>Physical Review B</i> , 2018, 97, . | 1.1 | 9 |
| 411 | Periodic and quasiperiodic revivals in periodically driven interacting quantum systems. <i>Physical Review B</i> , 2018, 97, . | 1.1 | 24 |
| 412 | Quantum thermodynamics from the nonequilibrium dynamics of open systems: Energy, heat capacity, and the third law. <i>Physical Review E</i> , 2018, 97, 012135. | 0.8 | 38 |
| 413 | Subsystem eigenstate thermalization hypothesis. <i>Physical Review E</i> , 2018, 97, 012140. | 0.8 | 100 |
| 414 | Eliminating ensembles from equilibrium statistical physics: Maxwell's demon, Szilard's engine, and thermodynamics via entanglement. <i>Physics Reports</i> , 2018, 755, 1-21. | 10.3 | 17 |
| 415 | Does a Single Eigenstate Encode the Full Hamiltonian?. <i>Physical Review X</i> , 2018, 8, . | 2.8 | 149 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|-----|-----------|
| 416 | Generalized Entanglement Entropies of Quantum Designs. Physical Review Letters, 2018, 120, 130502. | 2.9 | 25 |
| 417 | Statistical ensembles without typicality. Nature Communications, 2018, 9, 1022. | 5.8 | 5 |
| 418 | Equilibration and thermalization in the measurement space. Journal of Physics A: Mathematical and Theoretical, 2018, 51, 115303. | 0.7 | 1 |
| 419 | Quantum entanglement analysis of an optically excited coupling of two nuclear spins via a mediator: Combining the quantum concurrence and negativity. Physica E: Low-Dimensional Systems and Nanostructures, 2018, 97, 45-51. | 1.3 | 1 |
| 420 | Single-shot work extraction in quantum thermodynamics revisited. Journal of Physics A: Mathematical and Theoretical, 2018, 51, 035305. | 0.7 | 1 |
| 421 | Quantum stochastic trajectories: the Smoluchowski-Bohm equation. Physical Chemistry Chemical Physics, 2018, 20, 165-179. | 1.3 | 1 |
| 422 | The Coherent Crooks Equality. Fundamental Theories of Physics, 2018, , 301-316. | 0.1 | 1 |
| 423 | Eigenstate thermalization hypothesis, time operator, and extremely quick relaxation of fidelity. Journal of Physics Communications, 2018, 2, 075008. | 0.5 | 2 |
| 424 | Thermodynamics from Information. Fundamental Theories of Physics, 2018, , 799-820. | 0.1 | 2 |
| 425 | Dynamical Typicality for Initial States with a Preset Measurement Statistics of Several Commuting Observables. Fundamental Theories of Physics, 2018, , 413-433. | 0.1 | 2 |
| 426 | Quantum Thermodynamics with Multiple Conserved Quantities. Fundamental Theories of Physics, 2018, , 751-771. | 0.1 | 2 |
| 427 | Barren plateaus in quantum neural network training landscapes. Nature Communications, 2018, 9, 4812. | 5.8 | 845 |
| 428 | From Linear to Nonlinear Responses of Thermal Pure Quantum States. Physical Review Letters, 2018, 121, 220601. | 2.9 | 20 |
| 429 | Hidden thermal structure in Fock space. Physical Review E, 2018, 98, . | 0.8 | 6 |
| 430 | Non-ergodic states induced by impurity levels in quantum spin chains. European Physical Journal: Special Topics, 2018, 227, 301-311. | 1.2 | 2 |
| 431 | Hybrid quantum-classical method for simulating high-temperature dynamics of nuclear spins in solids. Physical Review B, 2018, 98, . | 1.1 | 8 |
| 432 | Magnetism of the N lattice antiferromagnet. Physical Review B, 2018, 98, . | 1.1 | 42 |
| 433 | Sudden removal of a static force in a disordered system: Induced dynamics, thermalization, and transport. Physical Review B, 2018, 98, . | 1.1 | 9 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|-----|-----------|
| 434 | Concentration-of-Measure Theory for Structures and Fluctuations of Waves. Physical Review Letters, 2018, 121, 140603. | 2.9 | 5 |
| 435 | Thermalization and Heating Dynamics in Open Generic Many-Body Systems. Physical Review Letters, 2018, 121, 170402. | 2.9 | 30 |
| 436 | Machine-Learning-Assisted Many-Body Entanglement Measurement. Physical Review Letters, 2018, 121, 150503. | 2.9 | 69 |
| 437 | Pseudorandom Quantum States. Lecture Notes in Computer Science, 2018, , 126-152. | 1.0 | 30 |
| 438 | Initial-state-dependent thermalization in open qubits. Physical Review A, 2018, 98, . | 1.0 | 4 |
| 439 | Applications of neural networks to the simulation of dynamics of open quantum systems. Chemical Physics, 2018, 515, 272-278. | 0.9 | 22 |
| 440 | Real-time dynamics of typical and untypical states in nonintegrable systems. Physical Review B, 2018, 97, . | 1.1 | 24 |
| 441 | Irreversibility at zero temperature from the perspective of the environment. Physical Review A, 2018, 97, . | 1.0 | 10 |
| 442 | Numerical Large Deviation Analysis of the Eigenstate Thermalization Hypothesis. Physical Review Letters, 2018, 120, 200604. | 2.9 | 51 |
| 443 | Thermalization and prethermalization in isolated quantum systems: a theoretical overview. Journal of Physics B: Atomic, Molecular and Optical Physics, 2018, 51, 112001. | 0.6 | 283 |
| 444 | Spacetime from unentanglement. Physical Review D, 2018, 97, . | 1.6 | 27 |
| 445 | Small violations of Bell inequalities for multipartite pure random states. Journal of Mathematical Physics, 2018, 59, 052202. | 0.5 | 2 |
| 446 | Heating in Integrable Time-Periodic Systems. Physical Review Letters, 2018, 120, 220602. | 2.9 | 13 |
| 447 | Correlations in local measurements and entanglement in many-body systems. Physical Review A, 2018, 98, . | 1.0 | 1 |
| 448 | Quantum Thermodynamics. Springer Theses, 2018, , 115-176. | 0.0 | 0 |
| 449 | Measuring the temperature of cold many-body quantum systems. Physical Review B, 2018, 98, . | 1.1 | 50 |
| 450 | Dynamical typicality of isolated many-body quantum systems. Physical Review E, 2018, 97, 062129. | 0.8 | 27 |
| 451 | Confounder Detection in High-Dimensional Linear Models Using First Moments of Spectral Measures. Neural Computation, 2018, 30, 2284-2318. | 1.3 | 2 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|-----|-----------|
| 452 | Quantum Thermodynamics at Strong Coupling: Operator Thermodynamic Functions and Relations. <i>Entropy</i> , 2018, 20, 423. | 1.1 | 23 |
| 453 | Causal Asymmetry in a Quantum World. <i>Physical Review X</i> , 2018, 8, . | 2.8 | 26 |
| 454 | Periodically driven integrable systems with long-range pair potentials. <i>Journal of Physics A: Mathematical and Theoretical</i> , 2018, 51, 334002. | 0.7 | 25 |
| 455 | Stiffness of probability distributions of work and Jarzynski relation for non-Gibbsian initial states. <i>Physical Review E</i> , 2018, 98, 012123. | 0.8 | 11 |
| 456 | Universality in volume-law entanglement of scrambled pure quantum states. <i>Nature Communications</i> , 2018, 9, 1635. | 5.8 | 65 |
| 457 | Emergence of a fluctuation relation for heat in nonequilibrium Landauer processes. <i>Physical Review E</i> , 2018, 97, 052111. | 0.8 | 4 |
| 458 | The Boltzmann distribution and the quantum-classical correspondence. <i>Journal of Physics A: Mathematical and Theoretical</i> , 2018, 51, 345301. | 0.7 | 3 |
| 459 | Entanglement production by the magnetic dipolar interaction dynamics. <i>Quantum Information Processing</i> , 2018, 17, 1. | 1.0 | 3 |
| 460 | Eigenstate thermalization hypothesis. <i>Reports on Progress in Physics</i> , 2018, 81, 082001. | 8.1 | 318 |
| 461 | Nonequilibrium quantum absorption refrigerator. <i>New Journal of Physics</i> , 2018, 20, 063005. | 1.2 | 21 |
| 462 | Study of open systems with molecules in isotropic liquids. <i>Modern Physics Letters B</i> , 2018, 32, 1830002. | 1.0 | 3 |
| 463 | Non-thermal radiation of black holes off canonical typicality. <i>Europhysics Letters</i> , 2018, 122, 30001. | 0.7 | 7 |
| 464 | Transportless equilibration in isolated many-body quantum systems. <i>New Journal of Physics</i> , 2019, 21, 053014. | 1.2 | 13 |
| 465 | Nongeometric states in a holographic conformal field theory. <i>Physical Review D</i> , 2019, 99, . | 1.6 | 7 |
| 466 | Allowed and forbidden bipartite correlations from thermal states. <i>Physical Review E</i> , 2019, 100, 012147. | 0.8 | 3 |
| 467 | Quantum spin liquid at finite temperature: Proximate dynamics and persistent typicality. <i>Physical Review B</i> , 2019, 100, . | 1.1 | 44 |
| 468 | Maximum advantage of quantum illumination. <i>Physical Review A</i> , 2019, 100, . | 1.0 | 10 |
| 469 | Strong coupling and non-Markovian effects in the statistical notion of temperature. <i>Physical Review E</i> , 2019, 99, 062135. | 0.8 | 7 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|-----|-----------|
| 470 | On thermalization of two-level quantum systems. Europhysics Letters, 2019, 126, 40003. | 0.7 | 4 |
| 471 | Chaos and high temperature pure state thermalization. Journal of High Energy Physics, 2019, 2019, 1. | 1.6 | 13 |
| 472 | Quantum Lyapunov exponents beyond continuous measurements. Chaos, 2019, 29, 063130. | 1.0 | 10 |
| 473 | Magnetization dynamics in clean and disordered spin-1 XXZ chains. Physical Review B, 2019, 100, . | 1.1 | 16 |
| 474 | Relation between far-from-equilibrium dynamics and equilibrium correlation functions for binary operators. Physical Review E, 2019, 99, 012114. | 0.8 | 8 |
| 475 | Microscopic Reversibility and Macroscopic Irreversibility: From the Viewpoint of Algorithmic Randomness. Journal of Statistical Physics, 2019, 177, 727-751. | 0.5 | 3 |
| 476 | Relaxation of dynamically prepared out-of-equilibrium initial states within and beyond linear response theory. Physical Review E, 2019, 100, 032124. | 0.8 | 4 |
| 477 | Simple scheme for extracting work with a single bath. Physical Review E, 2019, 100, 032143. | 0.8 | 5 |
| 478 | Detection of Quantum Phases via Out-of-Time-Order Correlators. Physical Review Letters, 2019, 123, 140602. | 2.9 | 48 |
| 479 | Simulating quantum thermodynamics of a finite system and bath with variable temperature. Physical Review E, 2019, 100, 042105. | 0.8 | 4 |
| 480 | Theorems on Entanglement Typicality in Non-equilibrium Dynamics. Journal of the Physical Society of Japan, 2019, 88, 064002. | 0.7 | 1 |
| 481 | Influence of non-Markovian dynamics in equilibrium uncertainty-relations. Journal of Chemical Physics, 2019, 150, 034105. | 1.2 | 10 |
| 482 | Full expectation-value statistics for randomly sampled pure states in high-dimensional quantum systems. Physical Review E, 2019, 99, 012126. | 0.8 | 4 |
| 483 | Impact of eigenstate thermalization on the route to equilibrium. Physical Review E, 2019, 99, 050104. | 0.8 | 18 |
| 484 | Mechanism of macroscopic equilibration of isolated quantum systems. Physical Review B, 2019, 99, . | 1.1 | 14 |
| 485 | Clausius inequality versus quantum coherence. European Physical Journal Plus, 2019, 134, 1. | 1.2 | 7 |
| 486 | Ultra-cold single-atom quantum heat engines. New Journal of Physics, 2019, 21, 063019. | 1.2 | 22 |
| 487 | Quantum chaotic fluctuation-dissipation theorem: Effective Brownian motion in closed quantum systems. Physical Review E, 2019, 99, 052139. | 0.8 | 21 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|-----|-----------|
| 488 | Phase transition in a noisy Kitaev toric code model. <i>Physical Review A</i> , 2019, 99, . | 1.0 | 7 |
| 489 | Axioms for the Boltzmann Distribution. <i>Foundations of Physics</i> , 2019, 49, 444-456. | 0.6 | 3 |
| 490 | Detection of out-of-time-order correlators and information scrambling in cold atoms: Ladder- $\langle \mathit{XX} \rangle$ model. <i>Physical Review A</i> , 2019, 99, . | 1.0 | 19 |
| 491 | Generalized Wigner-von Neumann entropy and its typicality. <i>Physical Review E</i> , 2019, 99, 052117. | 0.8 | 10 |
| 492 | Magnetization and energy dynamics in spin ladders: Evidence of diffusion in time, frequency, position, and momentum. <i>Physical Review B</i> , 2019, 99, . | 1.1 | 18 |
| 493 | Squeezed ensemble for systems with first-order phase transitions. <i>Physical Review B</i> , 2019, 99, . | 1.1 | 8 |
| 494 | Demonstration of the no-hiding theorem on the 5-Qubit IBM quantum computer in a category-theoretic framework. <i>Quantum Information Processing</i> , 2019, 18, 1. | 1.0 | 15 |
| 495 | Non-equilibrium dynamics: quantum systems and foundations of quantum mechanics. <i>European Physical Journal: Special Topics</i> , 2019, 227, 1837-1848. | 1.2 | 4 |
| 496 | Rényi entropy of chaotic eigenstates. <i>Physical Review E</i> , 2019, 99, 032111. | 0.8 | 57 |
| 497 | Entropy production in the quantum walk. <i>Physical Review A</i> , 2019, 99, . | 1.0 | 1 |
| 498 | Combining dynamical quantum typicality and numerical linked cluster expansions. <i>Physical Review B</i> , 2019, 99, . | 1.1 | 30 |
| 499 | Thermodynamical path integral and emergent symmetry. <i>Physical Review E</i> , 2019, 99, 022109. | 0.8 | 6 |
| 500 | Strong subadditivity of the Rényi entropies for bosonic and fermionic Gaussian states. <i>Physical Review B</i> , 2019, 99, . | 1.1 | 7 |
| 501 | Equilibration in Quantum Systems. <i>Physics Magazine</i> , 2019, 12, . | 0.1 | 1 |
| 502 | Variational estimation of entanglement entropy for bipartite many-body systems. <i>Journal of Statistical Mechanics: Theory and Experiment</i> , 2019, 2019, 113105. | 0.9 | 0 |
| 503 | Learning the Alpha-bits of black holes. <i>Journal of High Energy Physics</i> , 2019, 2019, 1. | 1.6 | 64 |
| 504 | Typical entanglement entropy in the presence of a center: Page curve and its variance. <i>Physical Review D</i> , 2019, 100, . | 1.6 | 34 |
| 505 | Holographic entanglement entropy and generalized entanglement temperature. <i>Physical Review D</i> , 2019, 100, . | 1.6 | 9 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|------|-----------|
| 506 | Typical entanglement for Gaussian states. <i>Journal of Mathematical Physics</i> , 2019, 60, . | 0.5 | 6 |
| 507 | Fermionic entanglement in the Lipkin model. <i>Physical Review A</i> , 2019, 100, . | 1.0 | 16 |
| 508 | Quantum Microcanonical Entropy, Boltzmann's Equation, and the Second Law. <i>Journal of Physical Chemistry A</i> , 2019, 123, 831-840. | 1.1 | 3 |
| 509 | New characteristic of quantum many-body chaotic systems. <i>Physical Review E</i> , 2019, 99, 010102. | 0.8 | 19 |
| 510 | Uniaxial Dynamical Decoupling for an Open Quantum System. <i>Physical Review Letters</i> , 2019, 122, 010408. | 2.9 | 6 |
| 511 | Interacting quantum walk on a graph. <i>Physical Review E</i> , 2019, 99, 012127. | 0.8 | 6 |
| 512 | Prethermalization in the transverse-field Ising chain with long-range interactions. <i>Journal of Physics A: Mathematical and Theoretical</i> , 2019, 52, 054001. | 0.7 | 20 |
| 513 | Why are macroscopic experiments reproducible? Imitating the behavior of an ensemble by single pure states. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2020, 552, 121840. | 1.2 | 12 |
| 514 | What condensed matter physics and statistical physics teach us about the limits of unitary time evolution. <i>Quantum Studies: Mathematics and Foundations</i> , 2020, 7, 217-231. | 0.4 | 13 |
| 515 | Strong chaos of fast scrambling yields order: Emergence of decoupled quantum information capsules. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 2020, 384, 126078. | 0.9 | 1 |
| 516 | Equilibration on average in quantum processes with finite temporal resolution. <i>Physical Review E</i> , 2020, 102, 032144. | 0.8 | 5 |
| 517 | Quantum equilibration, thermalization and prethermalization in ultracold atoms. <i>Nature Reviews Physics</i> , 2020, 2, 669-681. | 11.9 | 70 |
| 518 | Closeness of the reduced density matrix of an interacting small system to the Gibbs state. <i>Physical Review E</i> , 2020, 102, 012127. | 0.8 | 4 |
| 519 | Exponential damping induced by random and realistic perturbations. <i>Physical Review E</i> , 2020, 101, 062133. | 0.8 | 15 |
| 520 | Entanglement and its relation to energy variance for local one-dimensional Hamiltonians. <i>Physical Review B</i> , 2020, 101, . | 1.1 | 10 |
| 521 | Pyrochlore $S=1$ Heisenberg antiferromagnet at finite temperature. <i>Physical Review B</i> , 2020, 102, . | 1.1 | 2 |
| 522 | Second law of thermodynamics for relativistic fluids formulated with relative entropy. <i>Physical Review D</i> , 2020, 102, . | 1.6 | 9 |
| 523 | Continuous Symmetries and Approximate Quantum Error Correction. <i>Physical Review X</i> , 2020, 10, . | 2.8 | 34 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|-----|-----------|
| 524 | Dynamical Entanglement. Physical Review Letters, 2020, 125, 180505. | 2.9 | 31 |
| 525 | Bosonic representation of a Lipkin-Meshkov-Glick model with Markovian dissipation. Physical Review B, 2020, 102, . | 1.1 | 0 |
| 526 | Quantum equilibration of the double-proton transfer in a model system porphine. Physical Chemistry Chemical Physics, 2020, 22, 22332-22341. | 1.3 | 0 |
| 527 | Enhancing the effect of quantum many-body scars on dynamics by minimizing the effective dimension. Physical Review B, 2020, 102, . | 1.1 | 9 |
| 528 | Taking snapshots of a quantum thermalization process: Emergent classicality in quantum jump trajectories. Physical Review E, 2020, 102, 042115. | 0.8 | 5 |
| 529 | Thermodynamics from relative entropy. Physical Review E, 2020, 102, 052117. | 0.8 | 8 |
| 530 | Entanglement transitions as a probe of quasiparticles and quantum thermalization. Physical Review B, 2020, 102, . | 1.1 | 14 |
| 531 | Ergodic Tendencies in Sub-Systems Coupled to Finite Reservoirsâ€”Classical and Quantal. Symmetry, 2020, 12, 1642. | 1.1 | 0 |
| 532 | Density dynamics in the mass-imbalanced Hubbard chain. Physical Review B, 2020, 102, . | 1.1 | 6 |
| 533 | Typical and extreme entropies of long-lived isolated quantum systems. Physical Review A, 2020, 101, . | 1.0 | 12 |
| 534 | Clustering of Conditional Mutual Information for Quantum Gibbs States above a Threshold Temperature. Physical Review Letters, 2020, 124, 220601. | 2.9 | 33 |
| 535 | Eigenstate Thermalization from the Clustering Property of Correlation. Physical Review Letters, 2020, 124, 200604. | 2.9 | 13 |
| 536 | Modern concepts of quantum equilibration do not rule out strange relaxation dynamics. Physical Review E, 2020, 101, 062205. | 0.8 | 5 |
| 537 | Can Thermodynamic Behavior of Aliceâ€™s Particle Affect Bobâ€™s Particle?. Scientific Reports, 2020, 10, 9045. | 1.6 | 4 |
| 538 | Entanglement production by interaction quenches of quantum chaotic subsystems. Physical Review E, 2020, 101, 032212. | 0.8 | 9 |
| 539 | Trends of information backflow in disordered spin chains. Europhysics Letters, 2020, 129, 30005. | 0.7 | 1 |
| 540 | Many-Body Quantum Dynamics of Initially Trapped Systems due to a Stark Potential: Thermalization versus Bloch Oscillations. Physical Review Letters, 2020, 124, 110603. | 2.9 | 13 |
| 541 | Boltzmann entropy for quantum field systems. Physical Review A, 2020, 101, . | 1.0 | 2 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|-----|-----------|
| 542 | Bounds on Mixed State Entanglement. Entropy, 2020, 22, 62. | 1.1 | 4 |
| 543 | Approximate Quantum Error Correction Revisited: Introducing the Alpha-Bit. Communications in Mathematical Physics, 2020, 374, 369-432. | 1.0 | 15 |
| 544 | Topologically induced prescrambling and dynamical detection of topological phase transitions at infinite temperature. Physical Review B, 2020, 101, . | 1.1 | 18 |
| 545 | Temporal relaxation of gapped many-body quantum systems. Physical Review B, 2020, 101, . | 1.1 | 4 |
| 546 | Generic Entanglement Entropy for Quantum States with Symmetry. Entropy, 2020, 22, 684. | 1.1 | 1 |
| 547 | Eigenstate thermalization and ensemble equivalence in few-body fermionic systems. Physical Review E, 2020, 101, 062141. | 0.8 | 0 |
| 548 | Wishart and random density matrices: Analytical results for the mean-square Hilbert-Schmidt distance. Physical Review A, 2020, 102, . | 1.0 | 7 |
| 549 | Universal Entanglement of Typical States in Constrained Systems. Physical Review Letters, 2020, 124, 050602. | 2.9 | 16 |
| 550 | No-go results in quantum thermodynamics. Physical Review A, 2020, 101, . | 1.0 | 3 |
| 551 | Universal fluctuations around typicality for quantum ergodic systems. Physical Review E, 2020, 101, 012115. | 0.8 | 4 |
| 552 | Out-of-equilibrium quantum thermodynamics in the Bloch sphere: Temperature and internal entropy production. Physical Review E, 2020, 101, 042132. | 0.8 | 3 |
| 553 | Characterizing complexity of many-body quantum dynamics by higher-order eigenstate thermalization. Physical Review A, 2020, 101, . | 1.0 | 14 |
| 554 | Quantum entanglement in the t - J chain: From charge-spin separation to recombination. Physical Review B, 2020, 101, . | 1.0 | 14 |
| 555 | Noncommuting conserved charges in quantum many-body thermalization. Physical Review E, 2020, 101, 042117. | 0.8 | 23 |
| 556 | Quantum control in open and periodically driven systems. Advances in Physics: X, 2021, 6, 1870559. | 1.5 | 3 |
| 557 | Absence of Fast Scrambling in Thermodynamically Stable Long-Range Interacting Systems. Physical Review Letters, 2021, 126, 030604. | 2.9 | 28 |
| 558 | Attraction induced by mutual quantum measurements of velocity. AIP Conference Proceedings, 2021, , . | 0.3 | 0 |
| 560 | Random State Technology. Journal of the Physical Society of Japan, 2021, 90, 012001. | 0.7 | 27 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|------|-----------|
| 561 | Bounding the resources for thermalizing many-body localized systems. Communications Physics, 2021, 4, . | 2.0 | 5 |
| 562 | Many-body scar state intrinsic to periodically driven system. Physical Review Research, 2021, 3, . | 1.3 | 34 |
| 563 | Typicality of Heisenberg scaling precision in multimode quantum metrology. Physical Review Research, 2021, 3, . | 1.3 | 11 |
| 564 | Generic aspects of the resource theory of quantum coherence. Physical Review A, 2021, 103, . | 1.0 | 3 |
| 565 | A Mechanism of the Increase of Entropy in an Isolated Macroscopic System. Journal of the Physical Society of Japan, 2021, 90, 024003. | 0.7 | 1 |
| 566 | Primordial Fluctuations From Quantum Gravity. Frontiers in Astronomy and Space Sciences, 2021, 7, . | 1.1 | 9 |
| 567 | Random matrix theory of the isospectral twirling. SciPost Physics, 2021, 10, . | 1.5 | 21 |
| 568 | In Search of the Holy Grail: How to Reduce the Second Law of Thermodynamics. British Journal for the Philosophy of Science, 2022, 73, 987-1020. | 1.4 | 5 |
| 569 | Robust in practice: Adversarial attacks on quantum machine learning. Physical Review A, 2021, 103, . | 1.0 | 12 |
| 570 | Finite-temperature transport in one-dimensional quantum lattice models. Reviews of Modern Physics, 2021, 93, . | 16.4 | 170 |
| 571 | Postquench entropy growth in a chiral clock model. Physical Review B, 2021, 103, . | 1.1 | 3 |
| 572 | Can Quantum Correlations Lead to Violation of the Second Law of Thermodynamics?. Entropy, 2021, 23, 573. | 1.1 | 2 |
| 573 | Thermal pure quantum matrix product states recovering a volume law entanglement. Physical Review Research, 2021, 3, . | 1.3 | 10 |
| 574 | Polynomial-time algorithm for studying physical observables in chaotic eigenstates. Physical Review B, 2021, 103, . | 1.1 | 0 |
| 575 | Localizable quantum coherence. Physics Letters, Section A: General, Atomic and Solid State Physics, 2021, 397, 127264. | 0.9 | 2 |
| 576 | Modeling and mitigation of cross-talk effects in readout noise with applications to the Quantum Approximate Optimization Algorithm. Quantum - the Open Journal for Quantum Science, 0, 5, 464. | 0.0 | 20 |
| 577 | On the effect of decoherence on quantum tunnelling. SN Applied Sciences, 2021, 3, 1. | 1.5 | 3 |
| 578 | Markovianization with approximate unitary designs. Communications Physics, 2021, 4, . | 2.0 | 10 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|------|-----------|
| 579 | Eigenstate thermalization hypothesis through the lens of autocorrelation functions. Physical Review B, 2021, 103, . | 1.1 | 26 |
| 580 | Page curve for fermionic Gaussian states. Physical Review B, 2021, 103, . | 1.1 | 27 |
| 581 | Entanglement dualities in supersymmetry. Physical Review Research, 2021, 3, . | 1.3 | 8 |
| 582 | Simulating Hydrodynamics on Noisy Intermediate-Scale Quantum Devices with Random Circuits. Physical Review Letters, 2021, 126, 230501. | 2.9 | 29 |
| 583 | Stiffness of probability distributions of work and Jarzynski relation for initial microcanonical and energy eigenstates. Physical Review E, 2021, 103, 062139. | 0.8 | 1 |
| 584 | Direct Construction of Thermodynamic Laws from Quantum Mechanics. Journal of the Physical Society of Japan, 2021, 90, 064002. | 0.7 | 0 |
| 585 | Observation of Strong and Weak Thermalization in a Superconducting Quantum Processor. Physical Review Letters, 2021, 127, 020602. | 2.9 | 16 |
| 586 | Quantum Stochastic Processes and Quantum non-Markovian Phenomena. PRX Quantum, 2021, 2, . | 3.5 | 63 |
| 587 | Dynamics of quantum entanglement in a zigzag graphene nanoribbon. Journal of Physics Condensed Matter, 2021, 33, 345404. | 0.7 | 1 |
| 588 | Macroscopic Superposition States in Isolated Quantum Systems. Foundations of Physics, 2021, 51, 1. | 0.6 | 3 |
| 589 | Undecidability in quantum thermalization. Nature Communications, 2021, 12, 5084. | 5.8 | 12 |
| 590 | Scaling functions for eigenstate entanglement crossovers in harmonic lattices. Physical Review A, 2021, 104, . | 1.0 | 3 |
| 591 | Isospectral Twirling and Quantum Chaos. Entropy, 2021, 23, 1073. | 1.1 | 13 |
| 592 | Eigenstate thermalization on average. Physical Review E, 2021, 104, 024135. | 0.8 | 1 |
| 593 | Hidden Dynamical Symmetry and Quantum Thermodynamics from the First Principles: Quantized Small Environment. Symmetry, 2021, 13, 1546. | 1.1 | 3 |
| 594 | Quantum Circuits for Exact Unitary $\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" overflow="scroll" \rangle \langle \text{mml:mi} \rangle \text{t} \langle \text{mml:mi} \rangle \langle \text{mml:math} \rangle$ -Designs and Applications to Higher-Order Randomized Benchmarking. PRX Quantum, 2021, 2, . | 3.5 | 15 |
| 595 | Out-of-time-order correlations and the fine structure of eigenstate thermalization. Physical Review E, 2021, 104, 034120. | 0.8 | 22 |
| 596 | Coherent and dissipative dynamics at quantum phase transitions. Physics Reports, 2021, 936, 1-110. | 10.3 | 50 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|------|-----------|
| 597 | Benchmarking Quantum Computers and the Impact of Quantum Noise. ACM Computing Surveys, 2022, 54, 1-35. | 16.1 | 17 |
| 598 | Ballistic propagation of a local impact in the one-dimensional XY model. Journal of Statistical Mechanics: Theory and Experiment, 2021, 2021, 013103. | 0.9 | 1 |
| 599 | (Pseudo) Random Quantum States with Binary Phase. Lecture Notes in Computer Science, 2019, , 229-250. | 1.0 | 13 |
| 600 | Second Law, Entropy Production, and Reversibility in Thermodynamics of Information. , 2019, , 101-139. | | 4 |
| 601 | Decay of spin-spin correlations in disordered quantum and classical spin chains. Physical Review Research, 2020, 2, . | 1.3 | 17 |
| 602 | Entanglement preserving local thermalization. Physical Review Research, 2020, 2, . | 1.3 | 4 |
| 603 | Energy bounds for entangled states. Physical Review Research, 2020, 2, . | 1.3 | 1 |
| 604 | Random quantum batteries. Physical Review Research, 2020, 2, . | 1.3 | 53 |
| 605 | Quantum half-orphans in kagome antiferromagnets. Physical Review Research, 2020, 2, . | 1.3 | 7 |
| 606 | Efficient Quantum Pseudorandomness with Nearly Time-Independent Hamiltonian Dynamics. Physical Review X, 2017, 7, . | 2.8 | 52 |
| 607 | On the Relation Between Quantum Computational Speedup and Retrocausality. Quanta, 2016, 5, 34. | 0.2 | 6 |
| 608 | Selected applications of typicality to real-time dynamics of quantum many-body systems. Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences, 2020, 75, 421-432. | 0.7 | 19 |
| 609 | Toolbox for reconstructing quantum theory from rules on information acquisition. Quantum - the Open Journal for Quantum Science, 0, 1, 38. | 0.0 | 33 |
| 610 | Thermodynamics as a Consequence of Information Conservation. Quantum - the Open Journal for Quantum Science, 0, 3, 121. | 0.0 | 43 |
| 611 | Coherent fluctuation relations: from the abstract to the concrete. Quantum - the Open Journal for Quantum Science, 0, 3, 124. | 0.0 | 24 |
| 612 | Almost Markovian processes from closed dynamics. Quantum - the Open Journal for Quantum Science, 0, 3, 136. | 0.0 | 23 |
| 615 | Operational axioms for diagonalizing states. Electronic Proceedings in Theoretical Computer Science, EPTCS, 0, 195, 96-115. | 0.8 | 19 |
| 616 | Role of energy uncertainties in ergodicity breaking induced by competing interactions and disorder. A dynamical assessment through the Loschmidt echo.. Papers in Physics, 2015, 7, . | 0.2 | 4 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|-----|-----------|
| 617 | Typicality-Based Variational Cluster Approach to Thermodynamic Properties of the Hubbard Model. Journal of the Physical Society of Japan, 2020, 89, 023702. | 0.7 | 7 |
| 618 | Entanglement-Induced Barren Plateaus. PRX Quantum, 2021, 2, . | 3.5 | 87 |
| 620 | Matrix rearrangement approach for the entangling power with hybrid qudit systems. Quantum Information and Computation, 2008, 8, 671-680. | 0.1 | 2 |
| 621 | Outline of the Present Approach. Lecture Notes in Physics, 2009, , 69-76. | 0.3 | 0 |
| 622 | The Typical Reduced State of the System. Lecture Notes in Physics, 2009, , 107-117. | 0.3 | 0 |
| 623 | The Complexity of Noise: A Philosophical Outlook on Quantum Error Correction. Synthesis Lectures on Quantum Computing, 2010, 2, 1-83. | 0.1 | 0 |
| 624 | Depolarizing behavior of quantum channels in higher dimensions. Quantum Information and Computation, 2011, 11, 466-484. | 0.1 | 4 |
| 625 | Monsters, Black Holes and Entropy. Fundamental Theories of Physics, 2015, , 115-128. | 0.1 | 1 |
| 626 | Introduction to Thermal Pure Quantum State Formulation of Statistical Mechanics. Springer Theses, 2017, , 1-3. | 0.0 | 0 |
| 628 | Properties of Thermal Quantum States: Locality of Temperature, Decay of Correlations, and More. Fundamental Theories of Physics, 2018, , 481-502. | 0.1 | 2 |
| 629 | Formation and suppression of nonthermal statistics in periodically driven quantum Ising models. Wuli Xuebao/Acta Physica Sinica, 2020, 69, 140501. | 0.2 | 0 |
| 630 | The demons haunting thermodynamics. Physics Today, 2021, 74, 44-50. | 0.3 | 7 |
| 631 | Asymmetric temperature equilibration with heat flow from cold to hot in a quantum thermodynamic system. Physical Review E, 2021, 104, 054101. | 0.8 | 1 |
| 632 | Quantum quenches in the Dicke model: Thermalization and failure of the generalized Gibbs ensemble. Chinese Physics B, 2020, 29, 120506. | 0.7 | 1 |
| 633 | Scalable Pseudorandom Quantum States. Lecture Notes in Computer Science, 2020, , 417-440. | 1.0 | 6 |
| 634 | Out-of-Equilibrium Quantum Dynamics. Springer Theses, 2020, , 87-143. | 0.0 | 0 |
| 635 | Entanglement Content of Many-Body States via Concurrence, Negativity and Schmidt Gap. Springer Proceedings in Physics, 2020, , 91-107. | 0.1 | 0 |
| 636 | Emergence of a thermal equilibrium in a subsystem of a pure ground state by quantum entanglement. Physical Review Research, 2020, 2, . | 1.3 | 3 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|------|-----------|
| 637 | First Principles of the Classical Mechanics and the Foundations of Statistical Mechanics on the Example of a Disordered Spin System. <i>Journal of Contemporary Physics</i> , 2020, 55, 265-274. | 0.1 | 2 |
| 638 | Breakdown of quantum-classical correspondence and dynamical generation of entanglement. <i>Physical Review B</i> , 2021, 104, . | 1.1 | 3 |
| 639 | Nontrivial damping of quantum many-body dynamics. <i>Physical Review E</i> , 2021, 104, 054145. | 0.8 | 2 |
| 640 | Time-crystalline eigenstate order on a quantum processor. <i>Nature</i> , 2022, 601, 531-536. | 13.7 | 138 |
| 641 | Thermality versus Objectivity: Can They Peacefully Coexist?. <i>Entropy</i> , 2021, 23, 1506. | 1.1 | 4 |
| 642 | Thermalization of locally perturbed many-body quantum systems. <i>Physical Review B</i> , 2022, 105, . | 1.1 | 3 |
| 643 | Bath-Induced Correlations Enhance Thermometry Precision at Low Temperatures. <i>Physical Review Letters</i> , 2022, 128, 040502. | 2.9 | 12 |
| 644 | Entanglement of midspectrum eigenstates of chaotic many-body systems: Reasons for deviation from random ensembles. <i>Physical Review E</i> , 2022, 105, 014109. | 0.8 | 20 |
| 645 | Spin and quadrupole correlations by three-spin interaction in the frustrated pyrochlore magnet $Tb_{2+x}Ti_{2-y}O_{7+y}$. <i>Physical Review B</i> , 2022, 105, . | 1.1 | 2 |
| 646 | Thermalization of small quantum systems: from the zeroth law of thermodynamics. <i>Journal of Physics A: Mathematical and Theoretical</i> , 2022, 55, 055002. | 0.7 | 0 |
| 647 | Dark Information in Black Hole with \hat{L} † Fluid. <i>Symmetry</i> , 2022, 14, 118. | 1.1 | 0 |
| 648 | Probing Many-Body Quantum Chaos with Quantum Simulators. <i>Physical Review X</i> , 2022, 12, . | 2.8 | 20 |
| 649 | Eigenstate entanglement scaling for critical interacting spin chains. <i>Quantum - the Open Journal for Quantum Science</i> , 0, 6, 642. | 0.0 | 7 |
| 650 | Stabilizer Rényi Entropy. <i>Physical Review Letters</i> , 2022, 128, 050402. | 2.9 | 33 |
| 651 | Recent advances for quantum classifiers. <i>Science China: Physics, Mechanics and Astronomy</i> , 2022, 65, 1. | 2.0 | 40 |
| 653 | Fluctuations of subsystem entropies at late times. <i>Physical Review A</i> , 2022, 105, . | 1.0 | 3 |
| 654 | Equilibration and “Thermalization” in the Adapted Caldeira–Leggett Model. <i>Entropy</i> , 2022, 24, 316. | 1.1 | 2 |
| 655 | Open quantum system dynamics and the mean force Gibbs state. <i>AVS Quantum Science</i> , 2022, 4, . | 1.8 | 32 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|-----|-----------|
| 656 | Thermal pure quantum matrix product states: a simple numerical protocol for finite temperature. Journal of Physics: Conference Series, 2022, 2207, 012031. | 0.3 | 0 |
| 657 | Taking the temperature of a pure quantum state. Physical Review A, 2022, 105, . | 1.0 | 12 |
| 658 | Observation of time-crystalline eigenstate order on a quantum processor. , 2022, , . | | 2 |
| 659 | Quantum hair and black hole information. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2022, 827, 136995. | 1.5 | 14 |
| 660 | Quantum computing for classical problems: variational quantum eigensolver for activated processes. New Journal of Physics, 2021, 23, 123045. | 1.2 | 5 |
| 661 | Transport in Stark many-body localized systems. Physical Review B, 2022, 105, . | 1.1 | 10 |
| 662 | Entanglement, Complexity, and Causal Asymmetry in Quantum Theories. Foundations of Physics, 2022, 52, 1. | 0.6 | 1 |
| 663 | Entropy production and fluctuation theorems in a continuously monitored optical cavity at zero temperature. Quantum - the Open Journal for Quantum Science, 0, 6, 685. | 0.0 | 6 |
| 664 | RG flows and thermofield-double states in holography. Journal of High Energy Physics, 2022, 2022, 1. | 1.6 | 4 |
| 665 | Typicality of nonequilibrium quasi-steady currents. Physical Review A, 2022, 105, . | 1.0 | 7 |
| 666 | Quantum minimal surfaces from quantum error correction. SciPost Physics, 2022, 12, . | 1.5 | 23 |
| 667 | Open quantum systems coupled to finite baths: A hierarchy of master equations. Physical Review E, 2022, 105, . | 0.8 | 8 |
| 668 | The Role of Auxiliary Stages in Gaussian Quantum Metrology. Photonics, 2022, 9, 345. | 0.9 | 0 |
| 669 | Emergent decoherence induced by quantum chaos in a many-body system: A Loschmidt echo observation through NMR. Physical Review A, 2022, 105, . | 1.0 | 10 |
| 670 | Heat diffusion blurs photothermal images with increasing depth. Journal of Applied Physics, 2022, 131, . | 1.1 | 4 |
| 671 | Integral fluctuation theorem and generalized Clausius inequality for microcanonical and pure states. Physical Review E, 2022, 105, . | 0.8 | 1 |
| 672 | Entanglement and thermalization in the extended Bose-Hubbard model after a quantum quench: A correlation analysis. Chinese Physics B, 2023, 32, 020506. | 0.7 | 1 |
| 673 | Avoiding Barren Plateaus Using Classical Shadows. PRX Quantum, 2022, 3, . | 3.5 | 36 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|-----|-----------|
| 674 | Extensive Multipartite Entanglement from $su(2)$ Quantum Many-Body Scars. <i>Physical Review Letters</i> , 2022, 129, . | 2.9 | 20 |
| 675 | Quantum hydrodynamics from local thermal pure states. <i>Physical Review Research</i> , 2022, 4, . | 1.3 | 0 |
| 676 | Emergence of Hilbert Space Fragmentation in Ising Models with a Weak Transverse Field. <i>Physical Review Letters</i> , 2022, 129, . | 2.9 | 20 |
| 677 | On Quantum Entropy. <i>Entropy</i> , 2022, 24, 1341. | 1.1 | 3 |
| 678 | Machine Learning-Assisted Entanglement Measurement in Quantum Many-Body Systems. <i>Quantum Science and Technology</i> , 2022, , 127-149. | 1.5 | 0 |
| 679 | Quantum Simulation Using Noisy Unitary Circuits and Measurements. <i>Quantum Science and Technology</i> , 2022, , 251-284. | 1.5 | 3 |
| 680 | Quantum photo-thermodynamics on a programmable photonic quantum processor. , 2022, , . | | 0 |
| 681 | Symmetry-resolved Page curves. <i>Physical Review D</i> , 2022, 106, . | 1.6 | 25 |
| 682 | Emergent second law for non-equilibrium steady states. <i>Nature Communications</i> , 2022, 13, . | 5.8 | 7 |
| 683 | Scalable Spin Squeezing from Spontaneous Breaking of a Continuous Symmetry. <i>Physical Review Letters</i> , 2022, 129, . | 2.9 | 5 |
| 684 | Spin Entropy. <i>Entropy</i> , 2022, 24, 1292. | 1.1 | 3 |
| 685 | Purity of thermal mixed quantum states. <i>Physical Review B</i> , 2022, 106, . | 1.1 | 3 |
| 686 | Mana and thermalization: Probing the feasibility of near-Clifford Hamiltonian simulation. <i>Physical Review B</i> , 2022, 106, . | 1.1 | 5 |
| 687 | Magic-state resource theory for the ground state of the transverse-field Ising model. <i>Physical Review A</i> , 2022, 106, . | 1.0 | 11 |
| 688 | Pure-state certification by undoing Hamiltonian evolution leading to local thermalization. , 2022, , . | | 0 |
| 689 | Quantum dynamics in a single excitation subspace: deviations from eigenstate thermalization via long time correlations. <i>Journal of Physics A: Mathematical and Theoretical</i> , 0, , . | 0.7 | 0 |
| 690 | General Observables. <i>Lecture Notes in Physics</i> , 2022, , 179-255. | 0.3 | 0 |
| 691 | Canonical Density Matrices from Eigenstates of Mixed Systems. <i>Entropy</i> , 2022, 24, 1740. | 1.1 | 5 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|------|-----------|
| 692 | Retrieving information from a black hole using quantum machine learning. <i>Physical Review A</i> , 2022, 106, . | 1.0 | 9 |
| 693 | Many-body localization in the infinite-interaction limit and the discontinuous eigenstate phase transition. <i>Npj Quantum Information</i> , 2022, 8, . | 2.8 | 2 |
| 694 | Eigenstate thermalization and disappearance of quantum many-body scar states in weakly interacting fermion systems. <i>Physical Review B</i> , 2022, 106, . | 1.1 | 1 |
| 695 | Predicting Gibbs-State Expectation Values with Pure Thermal Shadows. <i>PRX Quantum</i> , 2023, 4, . | 3.5 | 8 |
| 696 | Preparing random states and benchmarking with many-body quantum chaos. <i>Nature</i> , 2023, 613, 468-473. | 13.7 | 25 |
| 697 | A Review of Recent Trends in Quantum Thermodynamics and a System's Behavioural Analysis of the Universe Originating as a Quantum Energy System. <i>Journal of Modern Physics</i> , 2023, 14, 60-71. | 0.3 | 0 |
| 698 | Black hole and de Sitter microstructures from a semiclassical perspective. <i>Physical Review D</i> , 2023, 107, . | 1.6 | 5 |
| 699 | No second law of entanglement manipulation after all. <i>Nature Physics</i> , 0, , . | 6.5 | 10 |
| 700 | Deep Reinforcement Learning for Preparation of Thermal and Prethermal Quantum States. <i>Physical Review Applied</i> , 2023, 19, . | 1.5 | 2 |
| 701 | Emergent Quantum State Designs from Individual Many-Body Wave Functions. <i>PRX Quantum</i> , 2023, 4, . | 3.5 | 14 |
| 702 | Quantum sensing tools to characterize physical, chemical and biological processes with magnetic resonance. <i>Journal of Magnetic Resonance Open</i> , 2023, 16-17, 100113. | 0.5 | 1 |
| 703 | Free-fermion Page curve: Canonical typicality and dynamical emergence. <i>Physical Review Research</i> , 2023, 5, . | 1.3 | 1 |
| 704 | Assigning temperatures to eigenstates. <i>Physical Review E</i> , 2023, 107, . | 0.8 | 2 |
| 705 | Emergence of steady currents due to strong prethermalization. <i>Physical Review A</i> , 2023, 107, . | 1.0 | 3 |
| 706 | Time Evolution of Typical Pure States from a Macroscopic Hilbert Subspace. <i>Journal of Statistical Physics</i> , 2023, 190, . | 0.5 | 0 |
| 707 | Wormholes from averaging over states. <i>SciPost Physics</i> , 2023, 14, . | 1.5 | 4 |
| 708 | Some speculations about local thermalization of nonequilibrium extended quantum systems. <i>Condensed Matter Physics</i> , 2023, 26, 13502. | 0.3 | 1 |
| 709 | A Unified Explanation of Some Quantum Phenomena. <i>International Journal of Theoretical Physics</i> , 2023, 62, . | 0.5 | 0 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|-----|-----------|
| 710 | Spin-based quantum Otto engines and majorization. Physical Review A, 2023, 107, . | 1.0 | 0 |
| 711 | Entanglement complexity of the Rokhsar-Kivelson-sign wavefunctions. Physical Review B, 2023, 107, . | 1.1 | 2 |
| 758 | Page and Wootters Theory. Springer Theses, 2024, , 13-32. | 0.0 | 0 |
| 760 | Thermal Equilibrium and Emergence of Time. Springer Theses, 2024, , 69-88. | 0.0 | 0 |