

# Bei Lok Hu

## List of Publications by Year in descending order

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204  
papers

9,784  
citations

30070

54  
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43889

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213  
all docs

213  
docs citations

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times ranked

2414  
citing authors

#	ARTICLE	IF	CITATIONS
1	Quantum Brownian motion in a general environment: Exact master equation with nonlocal dissipation and colored noise. <i>Physical Review D</i> , 1992, 45, 2843-2861.	4.7	825
2	Nonequilibrium quantum fields: Closed-time-path effective action, Wigner function, and Boltzmann equation. <i>Physical Review D</i> , 1988, 37, 2878-2900.	4.7	447
3	Closed-time-path functional formalism in curved spacetime: Application to cosmological back-reaction problems. <i>Physical Review D</i> , 1987, 35, 495-509.	4.7	415
4	Quantum effects in the early universe. I. Influence of trace anomalies on homogeneous, isotropic, classical geometries. <i>Physical Review D</i> , 1979, 20, 1757-1771.	4.7	256
5	Quantum Brownian motion in a general environment. II. Nonlinear coupling and perturbative approach. <i>Physical Review D</i> , 1993, 47, 1576-1594.	4.7	243
6	Conformal energy-momentum tensor in curved spacetime: Adiabatic regularization and renormalization. <i>Physical Review D</i> , 1974, 10, 3905-3924.	4.7	237
7	Anisotropy damping through quantum effects in the early universe. <i>Physical Review D</i> , 1978, 17, 933-945.	4.7	207
8	Noise and fluctuations in semiclassical gravity. <i>Physical Review D</i> , 1994, 49, 6636-6655.	4.7	177
9	Quantum fluctuations, decoherence of the mean field, and structure formation in the early Universe. <i>Physical Review D</i> , 1995, 52, 6770-6788.	4.7	168
10	Quantum effects in the early universe. II. Effective action for scalar fields in homogeneous cosmologies with small anisotropy. <i>Physical Review D</i> , 1979, 20, 1772-1782.	4.7	155
11	Quantum Brownian motion in a bath of parametric oscillators: A model for system-field interactions. <i>Physical Review D</i> , 1994, 49, 6612-6635.	4.7	129
12	Quantum effects in the early universe. III. Dissipation of anisotropy by scalar particle production. <i>Physical Review D</i> , 1980, 21, 2756-2769.	4.7	120
13	Stochastic theory of relativistic particles moving in a quantum field: Scalar Abraham-Lorentz-Dirac-Langevin equation, radiation reaction, and vacuum fluctuations. <i>Physical Review D</i> , 2002, 65, .	4.7	116
14	Exact master equation and quantum decoherence of two coupled harmonic oscillators in a general environment. <i>Physical Review E</i> , 2008, 77, 011112.	2.1	116
15	Vacuum viscosity description of quantum processes in the early universe. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 1982, 90, 375-380.	2.1	109
16	Effective Lagrangian for $\mathcal{N}=4$ theory in curved spacetime with varying background fields: Quasilocal approximation. <i>Physical Review D</i> , 1984, 30, 743-755.	4.7	106
17	Stochastic Gravity: Theory and Applications. <i>Living Reviews in Relativity</i> , 2008, 11, 1.	26.7	106
18	Fluctuation-dissipation relation for semiclassical cosmology. <i>Physical Review D</i> , 1995, 51, 1587-1606.	4.7	104

#	ARTICLE	IF	CITATIONS
19	Dissipation of quantum fields from particle creation. <i>Physical Review D</i> , 1989, 40, 656-659.	4.7	101
20	Back reaction in semiclassical gravity: The Einstein-Langevin equation. <i>Physical Review D</i> , 1995, 51, 1577-1586.	4.7	100
21	A master equation for gravitational decoherence: probing the textures of spacetime. <i>Classical and Quantum Gravity</i> , 2013, 30, 165007.	4.0	99
22	Stochastic Gravity: Theory and Applications. <i>Living Reviews in Relativity</i> , 2004, 7, 3.	26.7	90
23	Dissipation in quantum fields and semiclassical gravity. <i>Physica A: Statistical Mechanics and Its Applications</i> , 1989, 158, 399-424.	2.6	86
24	Exact analytical solutions to the master equation of quantum Brownian motion for a general environment. <i>Annals of Physics</i> , 2011, 326, 1207-1258.	2.8	86
25	Two-level atom-field interaction: Exact master equations for non-Markovian dynamics, decoherence, and relaxation. <i>Physical Review A</i> , 2000, 62, .	2.5	83
26	Nonequilibrium inflaton dynamics and reheating: Back reaction of parametric particle creation and curved spacetime effects. <i>Physical Review D</i> , 1997, 56, 678-705.	4.7	80
27	$O(N)$ quantum fields in curved spacetime. <i>Physical Review D</i> , 1997, 56, 661-677.	4.7	80
28	Stochastic dynamics of correlations in quantum field theory: From the Schwinger-Dyson to Boltzmann-Langevin equation. <i>Physical Review D</i> , 1999, 61, .	4.7	80
29	Nonequilibrium dynamics of optical-lattice-loaded Bose-Einstein-condensate atoms: Beyond the Hartree-Fock-Bogoliubov approximation. <i>Physical Review A</i> , 2004, 69, .	2.5	80
30	Stochastic theory of accelerated detectors in a quantum field. <i>Physical Review D</i> , 1996, 53, 7003-7019.	4.7	77
31	Problems with the Newtonian Schrödinger equations. <i>New Journal of Physics</i> , 2014, 16, 085007.	2.9	77
32	Backreaction and the Unruh effect: New insights from exact solutions of uniformly accelerated detectors. <i>Physical Review D</i> , 2007, 76, .	4.7	73
33	Fluctuations of the vacuum energy density of quantum fields in curved spacetime via generalized $\eta$ functions. <i>Physical Review D</i> , 1997, 55, 6123-6134.	4.7	72
34	Relativistic quantum information in detectors' field interactions. <i>Classical and Quantum Gravity</i> , 2012, 29, 224005.	4.0	71
35	SQUEEZED VACUA AND THE QUANTUM STATISTICS OF COSMOLOGICAL PARTICLE CREATION. <i>International Journal of Modern Physics A</i> , 1994, 09, 991-1007.	1.5	70
36	Wave propagation in stochastic spacetimes: Localization, amplification, and particle creation. <i>Physical Review D</i> , 1998, 57, 3474-3483.	4.7	69

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37	Accelerated detector-quantum field correlations: From vacuum fluctuations to radiation flux. <i>Physical Review D</i> , 2006, 73, .	4.7	69
38	Induced quantum metric fluctuations and the validity of semiclassical gravity. <i>Physical Review D</i> , 2004, 70, .	4.7	68
39	Can Spacetime be a Condensate?. <i>International Journal of Theoretical Physics</i> , 2005, 44, 1785-1806.	1.2	68
40	Bose-Einstein condensate collapse and dynamical squeezing of vacuum fluctuations. <i>Physical Review A</i> , 2003, 68, .	2.5	67
41	The rotating-wave approximation: consistency and applicability from an open quantum system analysis. <i>Journal of Physics A: Mathematical and Theoretical</i> , 2010, 43, 405304.	2.1	66
42	Near-thermal radiation in detectors, mirrors, and black holes: A stochastic approach. <i>Physical Review D</i> , 1997, 55, 4795-4812.	4.7	65
43	Nonequilibrium dynamics of a thermal plasma in a gravitational field. <i>Physical Review D</i> , 1998, 58, .	4.7	65
44	Entropy generation in cosmological particle creation and interactions: A statistical subdynamics analysis. <i>Physical Review D</i> , 1987, 35, 1776-1792.	4.7	64
45	Stochastic Gravity. <i>International Journal of Theoretical Physics</i> , 1999, 38, 2987-3037.	1.2	64
46	Stochastic gravity: a primer with applications. <i>Classical and Quantum Gravity</i> , 2003, 20, R1-R42.	4.0	63
47	Entanglement creation between two causally disconnected objects. <i>Physical Review D</i> , 2010, 81, .	4.7	63
48	Probing a gravitational cat state. <i>Classical and Quantum Gravity</i> , 2015, 32, 165022.	4.0	63
49	Symmetry behavior in curved spacetime: Finite-size effect and dimensional reduction. <i>Physical Review D</i> , 1987, 36, 1701-1715.	4.7	62
50	Symmetry behavior of the static Taub universe: Effect of curvature anisotropy. <i>Physical Review D</i> , 1985, 31, 2401-2423.	4.7	60
51	Scalar waves in the mixmaster universe. II. Particle creation. <i>Physical Review D</i> , 1974, 9, 3263-3281.	4.7	58
52	Quantum kinetic field theory in curved spacetime: Covariant Wigner function and Liouville-Vlasov equations. <i>Physical Review D</i> , 1988, 37, 2901-2919.	4.7	57
53	Equilibrium states of open quantum systems in the strong coupling regime. <i>Physical Review E</i> , 2012, 86, 061132.	2.1	57
54	Validity of the minisuperspace approximation: An example from interacting quantum field theory. <i>Physical Review D</i> , 1991, 44, 1028-1037.	4.7	56

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55	Noise kernel in stochastic gravity and stress energy bitensor of quantum fields in curved spacetimes. Physical Review D, 2001, 63, .	4.7	56
56	Vacuum energy density fluctuations in Minkowski and Casimir states via smeared quantum fields and point separation. Physical Review D, 2000, 62, .	4.7	55
57	Stochastic behavior of effective field theories across the threshold. Physical Review D, 1997, 55, 3536-3551.	4.7	54
58	Entropy and uncertainty of squeezed quantum open systems. Physical Review D, 1997, 55, 5917-5935.	4.7	52
59	Infrared Behavior and Finite-Size Effects in Inflationary Cosmology. Physical Review Letters, 1986, 56, 1613-1616.	7.8	51
60	Perturbations on the Mixmaster Universe. Physical Review Letters, 1972, 29, 1616-1620.	7.8	50
61	Non-Markovian qubit dynamics in a thermal field bath: Relaxation, decoherence, and entanglement. Physical Review A, 2005, 71, .	2.5	50
62	Disentanglement of two harmonic oscillators in relativistic motion. Physical Review D, 2008, 78, .	4.7	50
63	Nonequilibrium inflaton dynamics and reheating. II. Fermion production, noise, and stochasticity. Physical Review D, 1998, 57, 6003-6021.	4.7	49
64	Non-Markovian dynamics of open quantum systems: Stochastic equations and their perturbative solutions. Annals of Physics, 2012, 327, 1238-1276.	2.8	49
65	Separation of tensor equations in a homogeneous space by group theoretical methods. Journal of Mathematical Physics, 1974, 15, 1748-1755.	1.1	47
66	Scalar Waves in the Mixmaster Universe. I. The Helmholtz Equation in a Fixed Background. Physical Review D, 1973, 8, 1048-1060.	4.7	46
67	Metric fluctuations of an evaporating black hole from backreaction of stress tensor fluctuations. Physical Review D, 2007, 76, .	4.7	46
68	Uniformly Accelerated Charge in a Quantum Field: From Radiation Reaction to Unruh Effect. Foundations of Physics, 2005, 35, 1117-1147.	1.3	45
69	Calculation of the trace anomaly of the conformal energy-momentum tensor in Kasner spacetime by adiabatic regularization. Physical Review D, 1978, 18, 4460-4470.	4.7	44
70	Defect formation and critical dynamics in the early Universe. Physical Review D, 1999, 59, .	4.7	44
71	Noise kernel and the stress energy bitensor of quantum fields in hot flat space and the Schwarzschild black hole under the Gaussian approximation. Physical Review D, 2003, 67, .	4.7	44
72	Temporal and spatial dependence of quantum entanglement from a field theory perspective. Physical Review D, 2009, 79, .	4.7	44

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73	Self-force on extreme mass ratio inspirals via curved spacetime effective field theory. <i>Physical Review D</i> , 2009, 79, .	4.7	44
74	Entanglement dynamics between inertial and non-uniformly accelerated detectors. <i>Journal of High Energy Physics</i> , 2012, 2012, 1.	4.7	44
75	Fluctuations of Energy Density and Validity of Semiclassical Gravity. <i>International Journal of Theoretical Physics</i> , 2000, 39, 1817-1830.	1.2	43
76	Hydrodynamic transport functions from quantum kinetic field theory. <i>Physical Review D</i> , 2000, 61, .	4.7	41
77	Unruh effect under non-equilibrium conditions: oscillatory motion of an Unruh-DeWitt detector. <i>Journal of High Energy Physics</i> , 2013, 2013, 1.	4.7	41
78	Gravitational wave detectors based on matter wave interferometers (MIGO) are no better than laser interferometers (LIGO). <i>Physical Review D</i> , 2006, 73, .	4.7	40
79	A Kinetic Theory Approach to Quantum Gravity. <i>International Journal of Theoretical Physics</i> , 2002, 41, 2091-2119.	1.2	39
80	Black Hole Fluctuations and Backreaction in Stochastic Gravity. <i>Foundations of Physics</i> , 2003, 33, 37-64.	1.3	39
81	Quantized Scalar Fields in a Closed Anisotropic Universe. <i>Physical Review D</i> , 1973, 8, 2377-2385.	4.7	38
82	Decoherence, delocalization, and irreversibility in quantum chaotic systems. <i>Physical Review E</i> , 1995, 52, 2497-2509.	2.1	38
83	Fluctuations in a Thermal Field and Dissipation of a Black Hole Spacetime: Far-Field Limit. <i>International Journal of Theoretical Physics</i> , 1999, 38, 1253-1271.	1.2	38
84	Early Universe Quantum Processes in BEC Collapse Experiments. <i>International Journal of Theoretical Physics</i> , 2005, 44, 1691-1704.	1.2	38
85	Emergent/quantum gravity: macro/micro structures of spacetime. <i>Journal of Physics: Conference Series</i> , 2009, 174, 012015.	0.4	38
86	Quantum thermodynamics from the nonequilibrium dynamics of open systems: Energy, heat capacity, and the third law. <i>Physical Review E</i> , 2018, 97, 012135.	2.1	38
87	The Quantum Mechanics of Closed Systems. , 1993, , 104-124.		36
88	Noise kernel for a quantum field in Schwarzschild spacetime under the Gaussian approximation. <i>Physical Review D</i> , 2012, 85, .	4.7	35
89	Probing a gravitational cat state: Experimental Possibilities. <i>Journal of Physics: Conference Series</i> , 2016, 701, 012015.	0.4	35
90	GRAVITY AND NONEQUILIBRIUM THERMODYNAMICS OF CLASSICAL MATTER. <i>International Journal of Modern Physics D</i> , 2011, 20, 697-716.	2.1	34

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91	Quantum superposition of two gravitational cat states. <i>Classical and Quantum Gravity</i> , 2020, 37, 235012.	4.0	34
92	Finite-temperature quantum field theory in curved spacetime: Quasilocal effective Lagrangians. <i>Physical Review D</i> , 1987, 35, 510-527.	4.7	33
93	Comment on "Enhancing Acceleration Radiation from Ground-State Atoms via Cavity Quantum Electrodynamics". <i>Physical Review Letters</i> , 2004, 93, 129301; author reply 129302.	7.8	33
94	Electromagnetic and gravitational self-force on a relativistic particle from quantum fields in curved space. <i>Physical Review D</i> , 2006, 74, .	4.7	33
95	Intrinsic and fundamental decoherence: issues and problems. <i>Classical and Quantum Gravity</i> , 2008, 25, 154003.	4.0	33
96	Nonequilibrium forces between atoms and dielectrics mediated by a quantum field. <i>Physical Review A</i> , 2011, 84, .	2.5	33
97	Equivalence principle for quantum systems: dephasing and phase shift of free-falling particles. <i>Classical and Quantum Gravity</i> , 2018, 35, 035011.	4.0	31
98	Critical dynamics in the early universe. <i>Classical and Quantum Gravity</i> , 1993, 10, S93-S100.	4.0	30
99	Quantum effects of interacting fields in the early Universe. <i>Physical Review D</i> , 1988, 37, 2151-2164.	4.7	29
100	Stability of Semiclassical Gravity Solutions with Respect to Quantum Metric Fluctuations. <i>International Journal of Theoretical Physics</i> , 2004, 43, 749-766.	1.2	29
101	Self-force with a stochastic component from radiation reaction of a scalar charge moving in curved spacetime. <i>Physical Review D</i> , 2005, 72, .	4.7	29
102	Mixmaster inflation. <i>Physical Review D</i> , 1986, 34, 2535-2538.	4.7	28
103	Fluctuations of an Evaporating Black Hole from Back Reaction of Its Hawking Radiation: Questioning a Premise in Earlier Work. <i>International Journal of Theoretical Physics</i> , 2007, 46, 2204-2217.	1.2	28
104	Non-Markovian entanglement dynamics of two qubits interacting with a common electromagnetic field. <i>Quantum Information Processing</i> , 2009, 8, 549-563.	2.2	28
105	Stress-energy tensor correlators of a quantum field in Euclidean and AdS spaces via the generalized zeta-function method. <i>Physical Review D</i> , 2011, 84, .	4.7	28
106	Noise kernels of stochastic gravity in conformally-flat spacetimes. <i>Classical and Quantum Gravity</i> , 2015, 32, 055006.	4.0	26
107	Wigner distribution function and phase-space formulation of quantum cosmology. <i>Physical Review D</i> , 1989, 40, 380-389.	4.7	25
108	Notes on Black Hole Phase Transitions. <i>International Journal of Theoretical Physics</i> , 2001, 40, 2183-2200.	1.2	25

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109	Vacuum fluctuations and moving atoms/detectors: from the Casimir-Polder to the Unruh-Davies-DeWitt-Fulling effect. <i>Journal of Optics B: Quantum and Semiclassical Optics</i> , 2004, 6, S698-S705.	1.4	25
110	Gravitational waves in a Bianchi type-I universe. <i>Physical Review D</i> , 1978, 18, 969-982.	4.7	24
111	Noise kernel near the horizon of de Sitter space. <i>Classical and Quantum Gravity</i> , 2014, 31, 025015.	4.0	24
112	Quantum Origin of Noise and Fluctuations in Cosmology. , 1993, , 227-251.		24
113	Quantum and classical fluctuation theorems from a decoherent histories, open-system analysis. <i>Physical Review E</i> , 2012, 85, 011112.	2.1	23
114	Quantum Thermodynamics at Strong Coupling: Operator Thermodynamic Functions and Relations. <i>Entropy</i> , 2018, 20, 423.	2.2	23
115	Nonequilibrium thermodynamics of quantum friction. <i>Physical Review A</i> , 2020, 102, .	2.5	23
116	Radiation reaction in Schwarzschild spacetime: Retarded Green's function via Hadamard-WKB expansion. <i>Physical Review D</i> , 2004, 69, .	4.7	22
117	Qubit decoherence and non-Markovian dynamics at low temperatures via an effective spin-boson model. <i>Physical Review A</i> , 2004, 70, .	2.5	22
118	Stress-energy tensor correlators in N-dimensional hot flat spaces via the generalized zeta-function method. <i>Journal of Physics A: Mathematical and Theoretical</i> , 2012, 45, 374013.	2.1	22
119	Black hole fluctuations and dynamics from back-reaction of Hawking radiation: Current work and further studies based on stochastic gravity. , 2006, , .		22
120	Quantum entanglement and entropy in particle creation. <i>Physical Review D</i> , 2010, 81, .	4.7	21
121	Oscillator-field model of moving mirrors in quantum optomechanics. <i>Physical Review A</i> , 2013, 87, .	2.5	21
122	Quantum teleportation between moving detectors. <i>Physical Review D</i> , 2015, 91, .	4.7	21
123	Moving atom-field interaction: Correction to the Casimir-Polder effect from coherent backaction. <i>Physical Review A</i> , 2003, 68, .	2.5	20
124	Nonequilibrium forces between neutral atoms mediated by a quantum field. <i>Physical Review A</i> , 2010, 82, .	2.5	20
125	Quantum dissipative processes and gravitational entropy of the universe. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 1983, 97, 368-374.	2.1	19
126	Quantum Brownian motion of a macroscopic object in a general environment. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2008, 387, 432-444.	2.6	19



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127	Non-Markovian dynamics and entanglement of two-level atoms in a common field. <i>Journal of Physics A: Mathematical and Theoretical</i> , 2012, 45, 065301.	2.1	19
128	Gravitational decoherence, alternative quantum theories and semiclassical gravity. <i>Journal of Physics: Conference Series</i> , 2014, 504, 012021.	0.4	19
129	Quantum kinetic theory of a Bose-Einstein gas confined in a lattice. <i>Physical Review A</i> , 2005, 72, .	2.5	17
130	Distance and coupling dependence of entanglement in the presence of a quantum field. <i>Physical Review D</i> , 2015, 92, .	4.7	17
131	Symmetry behavior in cosmological spacetimes: Effect of slowly varying background fields. <i>Physical Review D</i> , 1988, 38, 2423-2433.	4.7	16
132	Correlation entropy of an interacting quantum field and Htheorem for the O(N) model. <i>Physical Review D</i> , 2003, 68, .	4.7	16
133	Entanglement, recoherence and information flow in an accelerated detector's quantum field system: implications for the black hole information issue. <i>Classical and Quantum Gravity</i> , 2008, 25, 154004.	4.0	16
134	Nonequilibrium Casimir's Polder force in non-stationary systems. <i>Journal of Physics A: Mathematical and Theoretical</i> , 2010, 43, 012001.	2.1	16
135	Mirror-field entanglement in a microscopic model for quantum optomechanics. <i>Physical Review A</i> , 2015, 92, .	2.5	15
136	Entanglement dynamics of detectors in an Einstein cylinder. <i>Journal of High Energy Physics</i> , 2016, 2016, 1.	4.7	15
137	Fluctuation-dissipation relation from the nonequilibrium dynamics of a nonlinear open quantum system. <i>Physical Review D</i> , 2020, 101, .	4.7	15
138	The influence of cosmological gravitational waves on a Newtonian binary system. <i>Astrophysical Journal</i> , 1981, 246, 569.	4.5	15
139	A study of finite size systems. <i>Annals of Physics</i> , 1989, 190, 310-353.	2.8	14
140	Bose-Einstein-condensate superfluid's Mott-insulator transition in an optical lattice. <i>Physical Review A</i> , 2006, 73, .	2.5	14
141	Decoherence in quantum gravity: issues and critiques. <i>Journal of Physics: Conference Series</i> , 2007, 67, 012012.	0.4	14
142	Dynamics of atom-field entanglement: Towards strong-coupling and non-Markovian regimes. <i>Physical Review A</i> , 2008, 77, .	2.5	14
143	Fluctuation-dissipation and correlation-propagation relations from the nonequilibrium dynamics of detector-quantum field systems. <i>Physical Review D</i> , 2019, 100, .	4.7	14
144	Initial-state preparation with dynamically generated system-environment correlations. <i>Physical Review E</i> , 2011, 84, 021106.	2.1	13

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145	Influence action and decoherence of hydrodynamic modes. Physical Review D, 1999, 59, .	4.7	12
146	The classical and commutative limits of noncommutative quantum mechanics: a superstar * Wigner-Moyal equation. Brazilian Journal of Physics, 2005, 35, 333.	1.4	12
147	Self-force on a scalar charge in radial infall from rest using the Hadamard-WKB expansion. Physical Review D, 2006, 73, .	4.7	12
148	Atom-Field Interaction: From Vacuum Fluctuations to Quantum Radiation and Quantum Dissipation or Radiation Reaction. Physics, 2019, 1, 430-444.	1.4	12
149	Finite number and finite size effects in relativistic Bose-Einstein condensation. Physical Review D, 1999, 60, .	4.7	11
150	“Hot entanglement” – A nonequilibrium quantum field theory scrutiny. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2015, 750, 396-400.	4.1	11
151	Quantum entanglement at high temperatures? Bosonic systems in nonequilibrium steady state. Journal of High Energy Physics, 2015, 2015, 1.	4.7	11
152	Fluctuation-dissipation and correlation-propagation relations in $(1+\epsilon^3)D$ moving detector-quantum field systems. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2019, 795, 694-699.	4.1	11
153	Nonequilibrium quantum free energy and effective temperature, generating functional, and influence action. Physical Review D, 2021, 103, .	4.7	11
154	No Intrinsic Decoherence of Inflationary Cosmological Perturbations. Universe, 2022, 8, 27.	2.5	10
155	Thermal particle creation in cosmological spacetimes: A stochastic approach. Physical Review D, 1997, 56, 4905-4915.	4.7	9
156	STOCHASTIC GROSS-PITAEVSKY EQUATION FOR BEC VIA COARSE-GRAINED EFFECTIVE ACTION. International Journal of Modern Physics B, 2007, 21, 4239-4247.	2.0	9
157	Nonequilibrium nonlinear open quantum systems: Functional perturbative analysis of a weakly anharmonic oscillator. Physical Review D, 2020, 101, .	4.7	9
158	Fluctuation-dissipation relation for a quantum Brownian oscillator in a parametrically squeezed thermal field. Annals of Physics, 2021, 433, 168594.	2.8	9
159	Quantum noise of gravitons and stochastic force on geodesic separation. Physical Review D, 2022, 105, .	4.7	9
160	Numerical examples from perturbation analysis of the mixmaster universe. Physical Review D, 1975, 12, 1551-1562.	4.7	8
161	Moving atom-field interaction: Quantum motional decoherence and relaxation. Physical Review A, 2003, 68, .	2.5	8
162	Macroscopic quantum phenomena from the large N perspective. Journal of Physics: Conference Series, 2011, 306, 012002.	0.4	8

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163	Notes on Black Hole Fluctuations and Back-Reaction. , 1999, , 103-120.		8
164	Gravitational decoherence: A thematic overview. AVS Quantum Science, 2022, 4, .	4.9	8
165	New Insights into Uniformly Accelerated Detector in a Quantum Field. Foundations of Physics, 2007, 37, 480-490.	1.3	7
166	Nonequilibrium fluctuation-dissipation inequality and nonequilibrium uncertainty principle. Physical Review E, 2013, 88, 012102.	2.1	7
167	Boundary effects on quantum entanglement and its dynamics in a detector-field system. Journal of High Energy Physics, 2013, 2013, 1.	4.7	7
168	Fluctuation-dissipation relation for open quantum systems in a nonequilibrium steady state. Physical Review D, 2020, 102, .	4.7	7
169	Intrinsic Entropy of Squeezed Quantum Fields and Nonequilibrium Quantum Dynamics of Cosmological Perturbations. Entropy, 2021, 23, 1544.	2.2	7
170	Non-Markovian Quantum Error Deterrence by Dynamical Decoupling in a General Environment. Quantum Information Processing, 2007, 6, 55-79.	2.2	6
171	Gravity, Quantum Fields and Quantum Information: Problems with Classical Channel and Stochastic Theories. Entropy, 2022, 24, 490.	2.2	6
172	Nonequilibrium dynamics of charged particles in a quantized electromagnetic field: causal, stable and self-consistent dynamics from 1/cexpansion. Journal of Physics A: Mathematical and Theoretical, 2012, 45, 255002.	2.1	5
173	Nonequilibrium steady state and heat transport in nonlinear open quantum systems: Stochastic influence action and functional perturbative analysis. Annals of Physics, 2020, 421, 168289.	2.8	5
174	Weyl Curvature Hypothesis in Light of Quantum Backreaction at Cosmological Singularities or Bounces. Universe, 2021, 7, 424.	2.5	5
175	Quantum-parametric-oscillator heat engines in squeezed thermal baths: Foundational theoretical issues. Physical Review E, 2022, 105, 014108.	2.1	5
176	Ground state excitation of an atom strongly coupled to a free quantum field. Physical Review D, 2019, 100, .	4.7	4
177	Goals and feasibility of the deep space quantum link. , 2021, , .		4
178	Recent Advances in Stochastic Gravity: Theory and Issues. , 2002, , 133-218.		4
179	Infrared behavior of quasilocal systems at finite temperature. Physical Review D, 1989, 39, 3647-3653.	4.7	3
180	Macroscopic Quantum Phenomena from the Correlation, Coupling and Criticality Perspectives. Journal of Physics: Conference Series, 2011, 330, 012003.	0.4	3

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181	Emergence: Key physical issues for deeper philosophical inquiries. Journal of Physics: Conference Series, 2012, 361, 012003.	0.4	3
182	Quantum teleportation and entanglement swapping with long baseline in outer space. Classical and Quantum Gravity, 2021, 38, 165002.	4.0	3
183	NonMarkovianity in cosmology: Memories kept in a quantum field. Annals of Physics, 2021, 434, 168656.	2.8	3
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