Dynamics of non-Markovian open quantum systems

Reviews of Modern Physics 89,

DOI: 10.1103/revmodphys.89.015001

Citation Report

#	Article	IF	CITATIONS
1	Finite speed heat transport in a quantum spin chain after quenched local cooling. Journal of Physics A: Mathematical and Theoretical, 2017, 50, 145302.	0.7	0
2	Exact non-Markovian master equation for the spin-boson and Jaynes-Cummings models. Physical Review A, 2017, 95, .	1.0	26
3	Detecting Non-Markovianity of Quantum Evolution via Spectra of Dynamical Maps. Physical Review Letters, 2017, 118, 080404.	2.9	49
4	Advanced-Retarded Differential Equations in Quantum Photonic Systems. Scientific Reports, 2017, 7, 42933.	1.6	10
5	Towards laser control of open quantum systems: memory effects. Molecular Physics, 2017, 115, 1944-1954.	0.8	6
6	Quantum non-Markovianity induced by Anderson localization. Scientific Reports, 2017, 7, 42729.	1.6	22
7	Driving-induced amplification of non-Markovianity in open quantum systems evolution. Europhysics Letters, 2017, 118, 20005.	0.7	21
8	Coarse-grained representation of the quasi adiabatic propagator path integral for the treatment of non-Markovian long-time bath memory. Journal of Chemical Physics, 2017, 146, 214101.	1.2	37
9	Simulating the control of molecular reactions via modulated light fields: from gas phase to solution. Journal of Physics B: Atomic, Molecular and Optical Physics, 2017, 50, 082001.	0.6	12
10	Effects of counter-rotating-wave terms on the non-Markovianity in quantum open systems. Physical Review A, 2017, 96, .	1.0	11
11	Quantum correlations and coherence dynamics in qutrit–qutrit systems under mixed classical environmental noises. International Journal of Quantum Information, 2017, 15, 1750047.	0.6	18
12	Entropy production and non-Markovian dynamical maps. Scientific Reports, 2017, 7, 12447.	1.6	41
13	Stochastic Feshbach Projection for the Dynamics of Open Quantum Systems. Physical Review Letters, 2017, 119, 180401.	2.9	14
14	Markovian and non-Markovian dynamics of quantum emitters coupled to two-dimensional structured reservoirs. Physical Review A, 2017, 96, .	1.0	83
15	Stochastic unraveling of positive quantum dynamics. Physical Review A, 2017, 95, .	1.0	12
16	Non-Markovian dynamics of few emitters in a laser-driven cavity. Physical Review A, 2017, 96, .	1.0	3
17	Non-Markovianity and Coherence of a Moving Qubit inside a Leaky Cavity. Open Systems and Information Dynamics, 2017, 24, 1740006.	0.5	21
18	Quantifying Quantum-Mechanical Processes. Scientific Reports, 2017, 7, 13588.	1.6	17

#	Article	IF	CITATIONS
19	Quantum dissipation with conditional wave functions: Application to the realistic simulation of nanoscale electron devices. Physical Review B, 2017, 96, .	1.1	21
20	Probing nonclassicality under dissipation. Journal of Physics A: Mathematical and Theoretical, 2017, 50, 435303.	0.7	2
21	Engineering quantum hyperentangled states in atomic systems. Journal of Physics B: Atomic, Molecular and Optical Physics, 2017, 50, 215502.	0.6	11
22	Divisibility of quantum dynamical maps and collision models. Physical Review A, 2017, 96, .	1.0	70
23	Uncovering nonperturbative dynamics of the biased sub-Ohmic spin-boson model with variational matrix product states. Physical Review B, 2017, 96, .	1.1	9
24	Exact non-Markovian dynamics of qubits coupled to two interacting environments. Physical Review A, 2017, 96, .	1.0	22
25	Enabling quantum non-Markovian dynamics by injection of classical colored noise. Physical Review A, 2017, 95, .	1.0	23
26	Multiple emitters in a waveguide: Nonreciprocity and correlated photons at perfect elastic transmission. Physical Review A, 2017, 96, .	1.0	22
27	Noise-induced quantum state transfer in distant cavities. Journal of Physics B: Atomic, Molecular and Optical Physics, 2017, 50, 175502.	0.6	7
28	Non-Markovianity and memory of the initial state. Journal of Physics A: Mathematical and Theoretical, 2017, 50, 335301.	0.7	3
29	High-fidelity hot gates for generic spin-resonator systems. Physical Review A, 2017, 95, .	1.0	24
30	Quantum fluctuations in mesoscopic systems. Journal of Physics A: Mathematical and Theoretical, 2017, 50, 423001.	0.7	8
31	Analysis of the non-Markovianity for electron transfer reactions in an oligothiophene-fullerene heterojunction. Chemical Physics, 2017, 494, 90-102.	0.9	13
32	Thermodynamic description of non-Markovian information flux of nonequilibrium open quantum systems. Physical Review A, 2017, 96, .	1.0	19
33	Quantum critical probing and simulation of colored quantum noise. Physical Review A, 2017, 96, .	1.0	15
34	Application of quantum Darwinism to a structured environment. Physical Review A, 2017, 96, .	1.0	32
35	Efficient real-time path integrals for non-Markovian spin-boson models. New Journal of Physics, 2017, 19, 093009.	1.2	28
36	Heisenberg-Langevin versus quantum master equation. Physical Review A, 2017, 96, .	1.0	25

#	Article	IF	CITATIONS
37	Perturbation expansions of stochastic wavefunctions for open quantum systems. Journal of Chemical Physics, 2017, 147, 184103.	1.2	14
38	Recovering the lost steerability of quantum states within non-Markovian environments by utilizing quantum partially collapsing measurements. Laser Physics Letters, 2017, 14, 125204.	0.6	10
39	The study of an extended hierarchy equation of motion in the spin-boson model: The cutoff function of the sub-Ohmic spectral density. Journal of Chemical Physics, 2017, 147, 164112.	1.2	15
40	Classical simulation of arbitrary quantum noise. Physical Review A, 2017, 96, .	1.0	2
41	Information Retrieval and Criticality in Parity-Time-Symmetric Systems. Physical Review Letters, 2017, 119, 190401.	2.9	151
42	Collective dynamics of accelerated atoms. Physical Review A, 2017, 96, .	1.0	6
43	Momentum coupling in non-Markovian quantum Brownian motion. Physical Review A, 2017, 96, .	1.0	22
44	Coherence of mechanical oscillators mediated by coupling to different baths. Physical Review A, 2017, 96, .	1.0	17
45	Role of non-Markovianity and backflow of information in the speed of quantum evolution. Physical Review A, 2017, 96, .	1.0	32
46	Weak-coupling master equation for arbitrary initial conditions. Physical Review A, 2017, 95, .	1.0	10
47	Refined weak-coupling limit: Coherence, entanglement, and non-Markovianity. Physical Review A, 2017, 95, .	1.0	34
48	Quantum Zeno and anti-Zeno effects in quantum dissipative systems. Physical Review A, 2017, 95, .	1.0	25
49	Testing the Validity of the â€~Local' and â€~Clobal' GKLS Master Equations on an Exactly Solvable Model. Open Systems and Information Dynamics, 2017, 24, 1740010.	0.5	129
50	Quantum Non-Markovian Piecewise Dynamics from Collision Models. Open Systems and Information Dynamics, 2017, 24, 1740011.	0.5	29
51	Non-Markovianity over Ensemble Averages in Quantum Complex Networks. Open Systems and Information Dynamics, 2017, 24, 1740018.	0.5	2
52	Decoherence from spin environments: Loschmidt echo and quasiparticle excitations. Physical Review B, 2017, 96, .	1.1	27
53	Quantum non-Markovianity and localization. Physical Review A, 2017, 96, .	1.0	2
54	Optimized auxiliary representation of non-Markovian impurity problems by a Lindblad equation. New Journal of Physics, 2017, 19, 063005.	1.2	31

#	Article	IF	CITATIONS
55	Experimental simulation of a quantum channel without the rotating-wave approximation: testing quantum temporal steering. Optica, 2017, 4, 1065.	4.8	15
56	Dynamics of Entanglement in Jaynes–Cummings Nodes with Nonidentical Qubit-Field Coupling Strengths. Entropy, 2017, 19, 331.	1.1	15
57	Open quantum systems with delayed coherent feedback. Quantum Science and Technology, 2017, 2, 044008.	2.6	33
58	Zeno effect of an open quantum system in the presence of 1/f noise. Physical Review A, 2018, 97, .	1.0	4
59	Quantumness-generating capability of quantum dynamics. Quantum Information Processing, 2018, 17, 1.	1.0	7
60	Universal quantum uncertainty relations between nonergodicity and loss of information. Physical Review A, 2018, 97, .	1.0	6
61	Recursive approach for non-Markovian time-convolutionless master equations. Physical Review A, 2018, 97, .	1.0	10
62	Non-Markovian quantum Brownian motion in one dimension in electric fields. Physical Review A, 2018, 97, .	1.0	16
63	Exotic quantum dynamics and purely long-range coherent interactions in Dirac conelike baths. Physical Review A, 2018, 97, .	1.0	47
64	Mixing-induced quantum non-Markovianity and information flow. New Journal of Physics, 2018, 20, 043007.	1.2	33
65	Non-Markovianity in the optimal control of an open quantum system described by hierarchical equations of motion. New Journal of Physics, 2018, 20, 043050.	1.2	19
66	Classical-driving-assisted entanglement trapping in photonic-crystal waveguides. Optics Communications, 2018, 420, 183-188.	1.0	4
67	Measurement of quantum memory effects and its fundamental limitations. Physical Review A, 2018, 97, .	1.0	28
68	Quantum dynamics simulations in an ultraslow bath using hierarchy of stochastic SchrĶdinger equations. Molecular Physics, 2018, 116, 813-822.	0.8	5
69	A unified stochastic formulation of dissipative quantum dynamics. I. Generalized hierarchical equations. Journal of Chemical Physics, 2018, 148, 014103.	1.2	58
70	A unified stochastic formulation of dissipative quantum dynamics. II. Beyond linear response of spin baths. Journal of Chemical Physics, 2018, 148, 014104.	1.2	46
71	Quantum interference and complex photon statistics in waveguide QED. Physical Review A, 2018, 97, .	1.0	16
72	Experimental Investigation of Spectra of Dynamical Maps and their Relation to non-Markovianity. Physical Review Letters, 2018, 120, 060406.	2.9	22

#	Article	IF	CITATIONS
73	Effect of coherence of nonthermal reservoirs on heat transport in a microscopic collision model. Physical Review E, 2018, 97, 022111.	0.8	23
74	Nonperturbative Treatment of non-Markovian Dynamics of Open Quantum Systems. Physical Review Letters, 2018, 120, 030402.	2.9	101
75	Non-Markovianity-assisted high-fidelity Deutsch–Jozsa algorithm in diamond. Npj Quantum Information, 2018, 4, .	2.8	36
76	Continuous-variable quantum probes for structured environments. Physical Review A, 2018, 97, .	1.0	39
77	Outcomes in <mml:math <br="" xmlns:mml="http://www.w3.org/1998/Math/MathML">display="inline">< mml:mrow> <mml:mmultiscripts> <mml:mrow> <mml:mi>Ni </mml:mi> </mml:mrow> <mml:mpre /> <mml:none /> <mml:mrow> <mml:mn> 58 </mml:mn> </mml:mrow> </mml:none </mml:mpre </mml:mmultiscripts> <mml:mo> + </mml:mo> <mml:mmultiscripts> </mml:mmultiscripts> </mml:math>	escripts 2.9	34 mml·mrows
78	/> <mml:none></mml:none> <mml:mrow><mml:mn>60</mml:mn></mml:mrow> Fermionic reaction coordinates and their application to an autonomous Maxwell demon in the strong-coupling regime. Physical Review B, 2018, 97, .	1.1	69
79	Current rectification in a double quantum dot through fermionic reservoir engineering. Physical Review B, 2018, 97, .	1.1	13
80	Biomimetic photonic structures with tunable structural colours: From natural to biomimetic to applications. Journal of Bionic Engineering, 2018, 15, 1-33.	2.7	17
81	Observation of non-Markovianity at room temperature by prolonging entanglement in solids. Science Bulletin, 2018, 63, 336-339.	4.3	14
82	Stochastic wave-function simulation of irreversible emission processes for open quantum systems in a non-Markovian environment. AIP Conference Proceedings, 2018, , .	0.3	2
83	Basic mechanisms in the laser control of non-Markovian dynamics. Physical Review A, 2018, 97, .	1.0	5
84	Power-law tails and non-Markovian dynamics in open quantum systems: An exact solution from Keldysh field theory. Physical Review B, 2018, 97, .	1.1	19
85	Hierarchical Equations of Motion Approach to Quantum Thermodynamics. Fundamental Theories of Physics, 2018, , 579-595.	0.1	5
86	Derivation of the quantum-optical master equation based on coarse-graining of time. Journal of Physics Communications, 2018, 2, 091001.	0.5	6
87	Simulation of non-Markovian dynamics of dipole-dipole interacting atoms. Journal of Physics: Conference Series, 2018, 1096, 012169.	0.3	1
88	Quantum optimal control of the dissipative production of a maximally entangled state. New Journal of Physics, 2018, 20, 123010.	1.2	21
89	Non-Markovian dynamics of the electronic subsystem in a laser-driven molecule: Characterization and connections with electronic-vibrational entanglement and electronic coherence. Physical Review A, 2018, 98, .	1.0	2
90	Universal Dissipationless Dynamics in Gaussian Continuous-Variable Open Systems. Physical Review Letters, 2018, 121, 220403.	2.9	7

#	Article	IF	CITATIONS
91	Non-Markovian Evolution: a Quantum Walk Perspective. Open Systems and Information Dynamics, 2018, 25, 1850014.	0.5	38
92	Non-Markovian polaron dynamics in a trapped Bose-Einstein condensate. Physical Review A, 2018, 98, .	1.0	28
93	Non-Markovian entanglement dynamics of open quantum systems with continuous measurement feedback. Physical Review A, 2018, 98, .	1.0	7
94	Controllable dissipation of a qubit coupled to an engineering reservoir. Physical Review A, 2018, 98, .	1.0	15
95	Kibble-Zurek scaling of the one-dimensional Bose-Hubbard model at finite temperatures. Physical Review A, 2018, 98, .	1.0	9
96	Dynamical exchange and phase induced switching of a localized molecular spin. Physical Review B, 2018, 98, .	1.1	4
97	Quantum Non-Markovian Processes Break Conditional Past-Future Independence. Physical Review Letters, 2018, 121, 240401.	2.9	37
98	Stochastic unravelings of non-Markovian completely positive and trace-preserving maps. Physical Review A, 2018, 98, .	1.0	8
99	Non-Markovian dephasing and depolarizing channels. Physical Review A, 2018, 98, .	1.0	34
100	Protecting quantum resources via frequency modulation of qubits in leaky cavities. Scientific Reports, 2018, 8, 14304.	1.6	38
101	Stochastic decoupling approach to the spin-boson dynamics: Perturbative and nonperturbative treatments. Physical Review A, 2018, 98, .	1.0	5
102	Ultrafast transient interference in pump-probe spectroscopy of band and Mott insulators. Physical Review B, 2018, 98, .	1.1	8
103	Coherent dynamics of a qubit–oscillator system in a noisy environment. Quantum Information Processing, 2018, 17, 1.	1.0	9
104	Endurance of quantum coherence due to particle indistinguishability in noisy quantum networks. Npj Quantum Information, 2018, 4, .	2.8	35
105	Decoherence in a Quantum Neural Network. NeuroQuantology, 2018, 16, .	0.1	4
106	Noise-induced non-Markovianity. Physical Review A, 2018, 98, .	1.0	5
107	Non-Markovianity of photon dynamics in a birefringent crystal. Physical Review A, 2018, 98, .	1.0	4
108	Floquet stroboscopic divisibility in non-Markovian dynamics. New Journal of Physics, 2018, 20, 093004.	1.2	10

#	Article	IF	CITATIONS
109	Quantum Evolution beyond the Markovian Semigroup — Generalizing the Stenholm–Barnett Approach. Journal of Russian Laser Research, 2018, 39, 325-339.	0.3	0
110	Dicke phase transition in a disordered emitter–graphene-plasmon system. Physical Review A, 2018, 98, .	1.0	5
111	Asymptotic states of accelerated detectors and universality of the Unruh effect. Physical Review D, 2018, 98, .	1.6	9
112	Non-Markovian decoherence dynamics in nonequilibrium environments. Journal of Chemical Physics, 2018, 149, 094107.	1.2	27
113	Experimental implementation of fully controlled dephasing dynamics and synthetic spectral densities. Nature Communications, 2018, 9, 3453.	5.8	43
114	Optimizing co-operative multi-environment dynamics in a dark-state-enhanced photosynthetic heat engine. Journal of Chemical Physics, 2018, 149, 084112.	1.2	31
115	Positive entropy production rate induced by non-Markovianity. Physical Review E, 2018, 98, .	0.8	9
116	Preservation of Gaussian state entanglement in a quantum beat laser by reservoir engineering. Laser Physics Letters, 2018, 15, 045209.	0.6	0
117	Unconventional single-photon blockade in non-Markovian systems. Physical Review A, 2018, 98, .	1.0	37
118	A Numerical Quantum Optimal Control with Grover Iteration. , 2018, , .		0
119	Steepest entropy ascent for two-state systems with slowly varying Hamiltonians. Physical Review E, 2018, 97, 052113.	0.8	8
120	Reconfigurable optical implementation of quantum complex networks. New Journal of Physics, 2018, 20, 053024.	1.2	39
121	Stable-unstable transition for a Bose-Hubbard chain coupled to an environment. Physical Review A, 2018, 97, .	1.0	16
122	Emergent phases and critical behavior in a non-Markovian open quantum system. Physical Review A, 2018, 97, .	1.0	5
123	Maximally non-Markovian quantum dynamics without environment-to-system backflow of information. Physical Review A, 2018, 97, .	1.0	16
124	Probing quantum coherence in ultrafast molecular processes: An <i>ab initio</i> approach to open quantum systems. Journal of Chemical Physics, 2018, 148, 204112.	1.2	18
125	Generating steady quantum coherence and magic through an autonomous thermodynamic machine by utilizing a spin bath. Physical Review A, 2018, 98, .	1.0	23
126	Adding dynamical generators in quantum master equations. Physical Review A, 2018, 97, .	1.0	41

#	Article	IF	CITATIONS
127	Analytical results for the quantum non-Markovianity of spin ensembles undergoing pure dephasing dynamics. Physical Review A, 2018, 97, .	1.0	1
128	Local quantum uncertainty and trace distance discord dynamics for two-qubit X states embedded in non-Markovian environment. International Journal of Modern Physics B, 2018, 32, 1850218.	1.0	25
129	Master Equations Versus Keldysh Green's Functions for Correlated Quantum Systems Out of Equilibrium. Springer Series in Solid-state Sciences, 2018, , 121-188.	0.3	1
130	Open-system quantum error correction. Physical Review A, 2018, 98, .	1.0	4
131	Entropy production and correlations in a controlled non-Markovian setting. Physical Review A, 2018, 98, .	1.0	29
132	Perturbative Treatment for Stationary State of Local Master Equation. Communications in Theoretical Physics, 2018, 70, 038.	1.1	2
133	Response Functions as Quantifiers of Non-Markovianity. Physical Review Letters, 2018, 121, 040601.	2.9	16
134	Spontaneous emission of matter waves from a tunableÂopen quantum system. Nature, 2018, 559, 589-592.	13.7	82
135	Intermediate scattering function and quantum recoil in non-Markovian quantum diffusion. Physical Review A, 2018, 98, .	1.0	2
136	Revealing memory effects in phase-covariant quantum master equations. New Journal of Physics, 2018, 20, 073012.	1.2	22
137	Spectral Filtering as a Tool for Two-Dimensional Spectroscopy: A Theoretical Model. Journal of Physical Chemistry A, 2018, 122, 6206-6213.	1.1	10
138	Calculations of coherent two-dimensional electronic spectra using forward and backward stochastic wavefunctions. Journal of Chemical Physics, 2018, 149, 014104.	1.2	9
139	Non-Markovianity in the collision model with environmental block. New Journal of Physics, 2018, 20, 053026.	1.2	33
140	Atomistic Framework for Time-Dependent Thermal Transport. Journal of Physical Chemistry C, 2018, 122, 21062-21068.	1.5	3
141	Time deformations of master equations. Physical Review A, 2018, 98, .	1.0	17
142	Efficient non-Markovian quantum dynamics using time-evolving matrix product operators. Nature Communications, 2018, 9, 3322.	5.8	187
143	Environment-assisted analog quantum search. Physical Review A, 2018, 98, .	1.0	13
144	Divisibility and Information Flow Notions of Quantum Markovianity for Noninvertible Dynamical Maps. Physical Review Letters, 2018, 121, 080407.	2.9	49

#	Article	IF	CITATIONS
145	Hierarchical-environment-assisted non-Markovian speedup dynamics control. Physical Review A, 2018, 98, .	1.0	26
146	Controllable Non-Markovianity for a Spin Qubit in Diamond. Physical Review Letters, 2018, 121, 060401.	2.9	38
147	Asymptotic Floquet states of a periodically driven spin-boson system in the nonperturbative coupling regime. Physical Review E, 2018, 98, 022111.	0.8	17
148	Thermodynamics of non-Markovian reservoirs and heat engines. Physical Review E, 2018, 97, 062108.	0.8	65
149	Temperature effects on quantum non-Markovianity via collision models. Physical Review A, 2018, 97, .	1.0	39
150	Non-Markovian dynamics of a qubit due to single-photon scattering in a waveguide. New Journal of Physics, 2018, 20, 043035.	1.2	37
151	Coherent quantum dynamics launched by incoherent relaxation in a quantum circuit simulator of a light-harvesting complex. Physical Review A, 2018, 97, .	1.0	13
152	Measurement-induced multipartite entanglement for distant four-level atoms in Markovian and non-Markovian environments. Physics Letters, Section A: General, Atomic and Solid State Physics, 2018, 382, 2044-2048.	0.9	4
153	Continued-fraction representation of the Kraus map for non-Markovian reservoir damping. Journal of Physics A: Mathematical and Theoretical, 2018, 51, 175304.	0.7	4
154	Quantum master equation with dissipators regularized by thermal fluctuations. Physical Review A, 2018, 97, .	1.0	12
155	Precursors of non-Markovianity. New Journal of Physics, 2019, 21, 053036.	1.2	24
156	Fourth order expressions for the electronic absorption lineshape of molecular excitons. Journal of Chemical Physics, 2019, 151, 044110.	1.2	2
157	Stochastic Representation of Non-Markovian Fermionic Quantum Dissipation. Physical Review Letters, 2019, 123, 050601.	2.9	14
158	Information-theoretical approach to the many-particle hierarchy problem. Physical Review A, 2019, 100,	1.0	1
159	Remote Hamiltonian interactions mediated by light. Physical Review A, 2019, 99, .	1.0	19
160	Modelling the ultra-strongly coupled spin-boson model with unphysical modes. Nature Communications, 2019, 10, 3721.	5.8	57
161	Loss-Free Excitonic Quantum Battery. Journal of Physical Chemistry C, 2019, 123, 18303-18314.	1.5	38
162	Engineering fidelity of the generalized Pauli channels via legitimate memory kernels. Physical Review A, 2019, 100, .	1.0	9

#	Article	IF	CITATIONS
163	Accurate control quantum transition in a nonlinear two-level system. Physica A: Statistical Mechanics and Its Applications, 2019, 533, 121932.	1.2	2
164	Non-Markovianity, information backflow, and system-environment correlation for open-quantum-system processes. Physical Review A, 2019, 100, .	1.0	11
165	Completely Positive Divisibility Does Not Mean Markovianity. Physical Review Letters, 2019, 123, 040401.	2.9	76
166	Five approaches to exact open-system dynamics: Complete positivity, divisibility, and time-dependent observables. Journal of Chemical Physics, 2019, 151, 044101.	1.2	17
167	Quantum Phonon Transport in Nanomaterials: Combining Atomistic with Non-Equilibrium Green's Function Techniques. Entropy, 2019, 21, 735.	1.1	12
168	Quantum Thermodynamics in the Refined Weak Coupling Limit. Entropy, 2019, 21, 725.	1.1	10
169	Introduction to Non-Markovian Evolution of n-Level Quantum Systems. Tutorials, Schools, and Workshops in the Mathematical Sciences, 2019, , 55-76.	0.3	3
170	Role of information backflow in the emergence of quantum Darwinism. Physical Review A, 2019, 100, .	1.0	23
171	Temporal coherence of a photon condensate: A quantum trajectory description. Physical Review A, 2019, 100, .	1.0	10
172	Exact Solution for Non-Markovian Master Equation Using Hyper-operator Approach. Communications in Theoretical Physics, 2019, 71, 1089.	1.1	1
173	An efficient spectral method for numerical time-dependent perturbation theory. Journal of Chemical Physics, 2019, 151, 144106.	1.2	1
174	Kraus operator formalism for quantum multiplexer operations for arbitrary two-qubit mixed states. Quantum Information Processing, 2019, 18, 1.	1.0	1
175	Quantum duets working as autonomous thermal motors. Physical Review E, 2019, 100, 042138.	0.8	4
176	Quantifying non-Markovianity in underdamped versus overdamped environments and its effect on spectral lineshape. Journal of Chemical Physics, 2019, 151, 174112.	1.2	7
177	Experimental investigation of the effect of classical noise on quantum non-Markovian dynamics. Physical Review A, 2019, 100, .	1.0	22
178	Quantum Dynamics in a Fluctuating Environment. Entropy, 2019, 21, 1040.	1.1	11
179	Quantum Probing Topological Phase Transitions by Nonâ€Markovianity. Annalen Der Physik, 2019, 531, 1900307.	0.9	8
180	Local temperatures out of equilibrium. Physics Reports, 2019, 830, 1-66.	10.3	22

#	Article	IF	CITATIONS
181	Quantum dissipative systems beyond the standard harmonic model: Features of linear absorption and dynamics. Journal of Chemical Physics, 2019, 151, 164109.	1.2	2
182	Accessing the bath information in open quantum systems with the stochastic c -number Langevin equation method. Physical Review A, 2019, 100, .	1.0	4
183	Dynamics of initially correlated open quantum systems: Theory and applications. Physical Review A, 2019, 100, .	1.0	20
184	Markovian and non-Markovian dynamics induced by a generic environment. Physical Review A, 2019, 100,	1.0	1
185	Non-Markovian pure dephasing in a dielectric excited by a few-cycle laser pulse. Physical Review A, 2019, 100, .	1.0	7
186	Non-Markovian quantum dynamics: What does it mean?. Europhysics Letters, 2019, 127, 50001.	0.7	45
187	Machine learning study of the relationship between the geometric and entropy discord. Europhysics Letters, 2019, 127, 20009.	0.7	13
188	Efficient Simulation of Finite-Temperature Open Quantum Systems. Physical Review Letters, 2019, 123, 090402.	2.9	83
189	Dressed quantum trajectories: novel approach to the non-Markovian dynamics of open quantum systems on a wide time scale. New Journal of Physics, 2019, 21, 063004.	1.2	4
190	Quantum process identification: a method for characterizing non-markovian quantum dynamics. New Journal of Physics, 2019, 21, 083013.	1.2	10
191	Non-Markovianity in experimentally simulated quantum channels: Role of counterrotating-wave terms. Physical Review A, 2019, 100, .	1.0	6
192	Readout of the spectral density of an environment from the dynamics of an open system. Physical Review A, 2019, 100, .	1.0	10
193	Pushing the limits of the reaction-coordinate mapping. Journal of Chemical Physics, 2019, 151, 094107.	1.2	15
194	Coupled excitation energy and charge transfer dynamics in reaction centre inspired model systems. Faraday Discussions, 2019, 216, 72-93.	1.6	8
195	Two-time correlations functions and quantumness of an open two-level system. European Physical Journal D, 2019, 73, 1.	0.6	2
196	Effect of initial system–environment correlations with spin environments. European Physical Journal D, 2019, 73, 1.	0.6	12
197	Dynamics of multiple atoms in one-dimensional fields. Physical Review A, 2019, 99, .	1.0	7
198	Mean field theory of thermal energy transport in molecular junctions. Journal of Chemical Physics, 2019, 150, 204107.	1.2	10

#	Article	IF	CITATIONS
199	Spin-Boson Model as A Simulator of Non-Markovian Multiphoton Jaynes-Cummings Models. Symmetry, 2019, 11, 695.	1.1	10
200	Quantifying quantum non-Markovianity via max-relative entropy. Chinese Physics B, 2019, 28, 040301.	0.7	6
201	Conditional past-future correlation induced by non-Markovian dephasing reservoirs. Physical Review A, 2019, 99, .	1.0	28
202	Visualising the role of non-perturbative environment dynamics in the dissipative generation of coherent electronic motion. Chemical Physics, 2019, 525, 110392.	0.9	8
203	A systematic path to non-Markovian dynamics: new response probability density function evolution equations under Gaussian coloured noise excitation. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2019, 475, 20180837.	1.0	6
204	Memory effect and non-Markovian dynamics in an open quantum system. Physical Review A, 2019, 99, .	1.0	6
205	Two-particle quantum correlations in stochastically-coupled networks. New Journal of Physics, 2019, 21, 053041.	1.2	2
206	Non-Markovianity in the presence of multiple thermal environments via collision model. Physics Letters, Section A: General, Atomic and Solid State Physics, 2019, 383, 2456-2461.	0.9	3
207	Thermalization in the quantum Ising model—approximations, limits, and beyond. Quantum Science and Technology, 2019, 4, 034002.	2.6	10
208	Simulation Complexity of Open Quantum Dynamics: Connection with Tensor Networks. Physical Review Letters, 2019, 122, 160401.	2.9	60
209	Facets of quantum information under non-Markovian evolution. Physical Review A, 2019, 99, .	1.0	22
210	Entanglement dynamics in a spin star system coupled weakly to a bosonic bath. Quantum Information Processing, 2019, 18, 1.	1.0	3
211	Eigenstate thermalization and quantum chaos in the Holstein polaron model. Physical Review B, 2019, 99, .	1.1	73
212	Non-Markovian features in semiconductor quantum optics: quantifying the role of phonons in experiment and theory. Nanophotonics, 2019, 8, 655-683.	2.9	41
213	Control the relaxation properties of the diffuse bistable potential. Chinese Journal of Physics, 2019, 60, 141-152.	2.0	2
214	Frontiers of Open Quantum System Dynamics. Lecture Notes of the Unione Matematica Italiana, 2019, , 71-85.	0.4	1
215	Classical stochastic systems with fast-switching environments: Reduced master equations, their interpretation, and limits of validity. Physical Review E, 2019, 99, 032121.	0.8	7
216	All-optical implementation of collision-based evolutions of open quantum systems. Scientific Reports, 2019, 9, 3205.	1.6	36

#	Article	IF	CITATIONS
217	Quantum simulation of multiphoton and nonlinear dissipative spin-boson models. Physical Review A, 2019, 99, .	1.0	14
218	Non-Markovian dynamics of a system of two-level atoms coupled to a structured environment. Physical Review A, 2019, 99, .	1.0	20
219	Non-equilibrium dynamics: quantum systems and foundations of quantum mechanics. European Physical Journal: Special Topics, 2019, 227, 1837-1848.	1.2	4
220	Time-optimal control of the purification of a qubit in contact with a structured environment. Physical Review A, 2019, 99, .	1.0	20
221	Non-Markovianity of qubit evolution under the action of spin environment. Scientific Reports, 2019, 9, 2987.	1.6	4
222	Information flow versus divisibility for qubit evolution. Physical Review A, 2019, 99, .	1.0	27
223	Validity of the Landauer principle and quantum memory effects via collisional models. Physical Review A, 2019, 99, .	1.0	31
224	Quantum Markov Order. Physical Review Letters, 2019, 122, 140401.	2.9	44
225	Time-dependent quantum Monte Carlo simulation of electron devices with two-dimensional Dirac materials: A genuine terahertz signature for graphene. Physical Review B, 2019, 99, .	1.1	7
226	Geometry of quantum evolution in a nonequilibrium environment. Europhysics Letters, 2019, 125, 30007.	0.7	15
227	Experimental emulation of quantum non-Markovian dynamics and coherence protection in the presence of information backflow. Physical Review A, 2019, 99, .	1.0	23
228	Exact master equation and general non-Markovian dynamics in open quantum systems. European Physical Journal: Special Topics, 2019, 227, 1849-1867.	1.2	19
229	Nonequilibrium field theory for dynamics starting from arbitrary athermal initial conditions. Physical Review B, 2019, 99, .	1.1	10
230	Non-Markovianity of a Gaussian quantum Brownian motion channel using generalized LFS and Gaussian interferometric power measures. European Physical Journal D, 2019, 73, 1.	0.6	1
231	Non-Markovian Open Dynamics from Collision Models. Open Systems and Information Dynamics, 2019, 26, 1950018.	0.5	2
232	Stochastic SchrĶdinger Equations and Conditional States: A General Non-Markovian Quantum Electron Transport Simulator for THz Electronics. Entropy, 2019, 21, 1148.	1.1	7
233	Reading a Qubit Quantum State with a Quantum Meter: Time Unfolding of Quantum Darwinism and Quantum Information Flux. Open Systems and Information Dynamics, 2019, 26, 1950023.	0.5	6
234	Irreversible quantum evolution with quadratic generator: Review. Infinite Dimensional Analysis, Quantum Probability and Related Topics, 2019, 22, 1930001.	0.3	30

# 235	ARTICLE Non-Markovian dynamics of a three-level atom in a stochastic field with finite correlation time due to initial correlations. EPJ Web of Conferences, 2019, 220, 03031.	IF 0.1	Citations 0
236	Competing coherent and dissipative dynamics close to quantum criticality. Physical Review A, 2019, 100,	1.0	22
237	Lipkin-Meshkov-Glick model with Markovian dissipation: A description of a collective spin on a metallic surface. Physical Review B, 2019, 100, .	1.1	15
238	Statistical distributions of the tuning and coupling collective modes at a conical intersection using the hierarchical equations of motion. Journal of Chemical Physics, 2019, 151, 244102.	1.2	10
239	Hybrid classical-quantum linear solver using Noisy Intermediate-Scale Quantum machines. Scientific Reports, 2019, 9, 16251.	1.6	20
240	Dissipative generators, divisible dynamical maps, and the Kadison-Schwarz inequality. Physical Review A, 2019, 100, .	1.0	9
241	Optimal efficiency of the Q-cycle mechanism around physiological temperatures from an open quantum systems approach. Scientific Reports, 2019, 9, 16657.	1.6	7
242	Population transfer via a dissipative structural continuum. Physical Review A, 2019, 100, .	1.0	11
243	Dynamics of Quantum States in a System of 3 Quantum Dots with Dipole-Dipole Interaction. Physics of Particles and Nuclei Letters, 2019, 16, 911-915.	0.1	0
244	Markovian approaches to modeling intracellular reaction processes with molecular memory. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 23542-23550.	3.3	72
245	Exploiting the Causal Tensor Network Structure of Quantum Processes to Efficiently Simulate Non-Markovian Path Integrals. Physical Review Letters, 2019, 123, 240602.	2.9	80
246	Quantum process capability. Scientific Reports, 2019, 9, 20316.	1.6	14
247	Dissipative quantum dynamics using the stochastic surrogate Hamiltonian approach. Journal of Chemical Physics, 2019, 151, 134113.	1.2	2
248	Scaling behavior of the stationary states arising from dissipation at continuous quantum transitions. Physical Review B, 2019, 100, .	1.1	15
249	Non-Markovian quantum dynamics: What is it good for?. Europhysics Letters, 2019, 128, 30001.	0.7	48
250	FDTD: Solving 1+1D delay PDE in parallel. Computer Physics Communications, 2019, 235, 422-432.	3.0	4
251	Ultrastrongly dissipative quantum Rabi model. Physical Review A, 2019, 99, .	1.0	27
252	Quantum dissipation of planar harmonic systems: Maxwell-Chern-Simons theory. Physical Review D, 2019, 99, .	1.6	4

#	Article	IF	Citations
253	The Influence of Nonâ€Markovian Characters on Quantum Adiabatic Evolution. Annalen Der Physik, 2019, 531, 1800234.	0.9	3
254	Non-Markovianity and negative entropy production rates. Physical Review E, 2019, 99, 012120.	0.8	60
255	Many-body open quantum systems beyond Lindblad master equations. Physical Review A, 2019, 99, .	1.0	28
256	Machine Learning Applied to Quantum Synchronizationâ€Assisted Probing. Advanced Quantum Technologies, 2019, 2, 1800085.	1.8	7
257	Qubit entanglement generation by Gaussian non-Markovian dynamics. Journal of Physics A: Mathematical and Theoretical, 2019, 52, 035305.	0.7	3
258	One-dimensional many-body entangled open quantum systems with tensor network methods. Quantum Science and Technology, 2019, 4, 013001.	2.6	35
259	Entropy production of a small quantum system under strong coupling with an environment: A computational experiment. Physica A: Statistical Mechanics and Its Applications, 2020, 552, 122627.	1.2	6
260	Spin Squeezing for Two Atoms in an Optical Coherent-State Cavity. International Journal of Theoretical Physics, 2020, 59, 173-180.	0.5	1
261	Quantum dephasing induced by non-Markovian random telegraph noise. Scientific Reports, 2020, 10, 88.	1.6	25
262	Revisiting Quantum Feedback Control: Disentangling the Feedbackâ€Induced Phase from the Corresponding Amplitude. Advanced Quantum Technologies, 2020, 3, 1900078.	1.8	14
263	Dephasing dynamics of an impurity coupled to an anharmonic environment. Physical Review A, 2020, 101, .	1.0	8
264	Detecting Nonâ€Markovianity via Linear Entropy of Choi State. Annalen Der Physik, 2020, 532, 1900320.	0.9	2
265	Quantum Fisher information matrix and multiparameter estimation. Journal of Physics A: Mathematical and Theoretical, 2020, 53, 023001.	0.7	316
266	Efficient compression of the environment of an open quantum system. Physical Review B, 2020, 102, .	1.1	5
267	Non-Markovian Methods in Glass Transition. Polymers, 2020, 12, 1997.	2.0	1
268	Ping-pong quantum key distribution with trusted noise: non-Markovian advantage. Quantum Information Processing, 2020, 19, 1.	1.0	13
269	Thermodynamic utility of non-Markovianity from the perspective of resource interconversion. Journal of Physics A: Mathematical and Theoretical, 2020, 53, 335301.	0.7	7
270	Excitation Dynamics in Chain-Mapped Environments. Entropy, 2020, 22, 1320.	1.1	8

#	Article	IF	CITATIONS
271	A hierarchical effective mode approach to phonon-driven multilevel vibrational relaxation dynamics at surfaces. Journal of Chemical Physics, 2020, 153, 064704.	1.2	5
272	Effective 1D Time-Dependent SchrĶdinger Equations for 3D Geometrically Correlated Systems. Materials, 2020, 13, 3033.	1.3	0
273	Coherent control of dissipative dynamics in a periodically driven lattice array. Physical Review A, 2020, 102, .	1.0	5
274	Non-Markovian modeling of Fermi-Bose systems coupled to one or several Fermi-Bose thermal baths. Physical Review A, 2020, 102, .	1.0	4
275	Universal non-Markovianity detection in hybrid open quantum systems. Scientific Reports, 2020, 10, 18258.	1.6	1
276	Quantum direct cause across the Cherenkov threshold in circuit QED. Physical Review A, 2020, 102, .	1.0	0
277	Collective radiation from distant emitters. Physical Review A, 2020, 102, .	1.0	22
278	Temporal self-similarity of quantum dynamical maps as a concept of memorylessness. Scientific Reports, 2020, 10, 15049.	1.6	26
279	Noise and charge discreteness as ultimate limit for the THz operation of ultra-small electronic devices. Scientific Reports, 2020, 10, 15990.	1.6	2
280	Dynamic Correlations in Open Quantum Systems: The Dephasing Model. Open Systems and Information Dynamics, 2020, 27, 2050007.	0.5	1
281	Incoherent quantum algorithm dynamics of an open system with near-term devices. Quantum Information Processing, 2020, 19, 1.	1.0	4
282	Distributing memory effects in an open two-qubit system. Physical Review A, 2020, 102, .	1.0	4
283	Phase Covariant Qubit Dynamics and Divisibility. Lobachevskii Journal of Mathematics, 2020, 41, 617-630.	0.1	23
284	Non-Markovianity of quantum Brownian motion. Physical Review A, 2020, 102, .	1.0	11
285	Steady-state quantum transport through an anharmonic oscillator strongly coupled to two heat reservoirs. Physical Review E, 2020, 102, 012155.	0.8	13
286	Quantum parameter estimation in a dissipative environment. Physical Review A, 2020, 102, .	1.0	17
287	Non-Markovian quantum dynamics: Extended correlated projection superoperators. Physical Review E, 2020, 102, 032107.	0.8	1
288	Using Matrix-Product States for Open Quantum Many-Body Systems: Efficient Algorithms for Markovian and Non-Markovian Time-Evolution. Entropy, 2020, 22, 984.	1.1	8

#	Article	IF	CITATIONS
289	Non-Markovianity of a Central Spin Interacting with a Lipkin–Meshkov–Glick Bath via a Conditional Past–Future Correlation. Entropy, 2020, 22, 895.	1.1	5
290	Perturbation theory for operational quantum non-Markovianity. Physical Review A, 2020, 102, .	1.0	7
291	Witnessing non-Markovian effects of quantum processes through Hilbert-Schmidt speed. Physical Review A, 2020, 102, .	1.0	20
292	Evolution Equations for Quantum Semi-Markov Dynamics. Entropy, 2020, 22, 796.	1.1	10
293	Memory-critical dynamical buildup of phonon-dressed Majorana fermions. Physical Review B, 2020, 102,	1.1	1
294	Discrete memory kernel for multitime correlations in non-Markovian quantum processes. Physical Review A, 2020, 102, .	1.0	11
295	Quantum entanglement and reflection coefficient for coupled harmonic oscillators. Physical Review E, 2020, 102, 052213.	0.8	22
296	Numerically "exact―simulations of entropy production in the fully quantum regime: Boltzmann entropy vs von Neumann entropy. Journal of Chemical Physics, 2020, 153, 234107.	1.2	10
297	Detectors interacting through quantum fields: Non-Markovian effects, nonperturbative generation of correlations, and apparent noncausality. Physical Review A, 2020, 102, .	1.0	4
298	Experimental realization of high-fidelity teleportation via a non-Markovian open quantum system. Physical Review A, 2020, 102, .	1.0	13
299	Correlation-Picture Approach to Open-Quantum-System Dynamics. Physical Review X, 2020, 10, .	2.8	26
300	Dynamics of an open double quantum dot system via quantum measurement. Physical Review B, 2020, 101, .	1.1	12
301	Large deviations and fluctuation theorem for the quantum heat current in the spin-boson model. Physical Review E, 2020, 101, 052116.	0.8	9
302	Nonadiabatic sunlight harvesting. Physical Chemistry Chemical Physics, 2020, 22, 12678-12687.	1.3	6
303	Experimental investigation of Markovian and non-Markovian channel addition. Physical Review A, 2020, 101, .	1.0	15
304	Non-classicality dynamics of Schrödinger cat states in a non-Markovian environment. Physica Scripta, 2020, 95, 075102.	1.2	0
305	Optimized auxiliary oscillators for the simulation of general open quantum systems. Physical Review A, 2020, 101, .	1.0	47
306	Quantum phase transitions in the spin-boson model: Monte Carlo method versus variational approach à la Feynman. Physical Review B, 2020, 101, .	1.1	13

#	Article	IF	CITATIONS
307	Stochastic equation of motion approach to fermionic dissipative dynamics. I. Formalism. Journal of Chemical Physics, 2020, 152, 204105.	1.2	13
308	Impact of the temperature and size of an Ising chain environment on quantum non-Markovian dynamics. Physical Review A, 2020, 101, .	1.0	1
309	Observing Information Backflow from Controllable Non-Markovian Multichannels in Diamond. Physical Review Letters, 2020, 124, 210502.	2.9	26
310	All-Mode Quantum–Classical Path Integral Simulation of Bacteriochlorophyll Dimer Exciton-Vibration Dynamics. Journal of Physical Chemistry B, 2020, 124, 5028-5038.	1.2	25
311	Prethermal memory loss in interacting quantum systems coupled to thermal baths. Physical Review B, 2020, 101, .	1.1	5
312	Benchmarking the forward–backward trajectory solution of the quantum-classical Liouville equation. Journal of Chemical Physics, 2020, 152, 214116.	1.2	3
313	Non-Markovian Noise Characterization with the Transfer Tensor Method. Physical Review Applied, 2020, 13, .	1.5	18
314	Coding closed and open quantum systems in MATLAB: applications in quantum optics and condensed matter. European Journal of Physics, 2020, 41, 045404.	0.3	5
315	Ohmic reservoir-based non-Markovianity and Quantum Speed Limit Time. Physica Scripta, 2020, 95, 085105.	1.2	5
316	Asymptotic properties for Markovian dynamics in quantum theory and general probabilistic theories. Journal of Physics A: Mathematical and Theoretical, 2020, 53, 215303.	0.7	8
317	Cumulant expansion for the treatment of light–matter interactions in arbitrary material structures. Journal of Chemical Physics, 2020, 152, 034108.	1.2	24
318	Geometric phase corrected by initial system-environment correlations. Physical Review A, 2020, 101, .	1.0	5
319	Multi-time measurements in Hawking radiation: information at higher-order correlations. Classical and Quantum Gravity, 2020, 37, 025015.	1.5	3
320	Discrete time-crystalline order in Bose–Hubbard model with dissipation. New Journal of Physics, 2020, 22, 023026.	1.2	5
321	Detecting non-Markovianity via uncertainty relations. Journal of Physics A: Mathematical and Theoretical, 2020, 53, 175301.	0.7	5
322	Non-Markovian Collective Emission from Macroscopically Separated Emitters. Physical Review Letters, 2020, 124, 043603.	2.9	72
323	Entanglement negativity as a universal non-Markovianity witness. Physical Review A, 2020, 101, .	1.0	18
324	Observation of Anti- <mml:math <br="" display="inline" xmlns:mml="http://www.w3.org/1998/Math/MathML">overflow="scroll"><mml:mrow><mml:mi mathvariant="script">P</mml:mi><mml:mi mathvariant="script">T</mml:mi </mml:mrow></mml:math> -Symmetry Phase Transition in the Magnon-Cavity-Magnon Coupled System, Physical Review Applied, 2020, 13	1.5	71

# 325	ARTICLE Interaction-impeded relaxation in the presence of finite-temperature baths. Physical Review A, 2020, 101,	IF 1.0	Citations
326	Quantifying phonon-induced non-Markovianity in color centers in diamond. Physical Review A, 2020, 101, .	1.0	7
327	IBM Q Experience as a versatile experimental testbed for simulating open quantum systems. Npj Quantum Information, 2020, 6, .	2.8	230
328	Topological Protection and Control of Quantum Markovianity. Photonics, 2020, 7, 18.	0.9	9
329	Compatibility of linear-response theory with the second law of thermodynamics and the emergence of negative entropy production rates. Journal of Statistical Mechanics: Theory and Experiment, 2020, 2020, 013206.	0.9	13
330	Non-markovian relaxation of a three-level atom in two laser fields with noise. Laser Physics, 2020, 30, 025204.	0.6	3
331	Dynamical quantum phase transitions and non-Markovian dynamics. Physical Review A, 2020, 101, .	1.0	23
332	Quantum master equations for a system interacting with a quantum gas in the low-density limit and for the semiclassical collision model. Physical Review A, 2020, 101, .	1.0	10
333	Quantumness and memory of one qubit in a dissipative cavity under classical control. Annals of Physics, 2020, 414, 168073.	1.0	21
334	Quantum algorithm for the simulation of open-system dynamics and thermalization. Physical Review A, 2020, 101, .	1.0	13
335	Memory effects in quantum processes. International Journal of Quantum Information, 2020, 18, 1941002.	0.6	10
336	<i>AbÂlnitio</i> Few-Mode Theory for Quantum Potential Scattering Problems. Physical Review X, 2020, 10, .	2.8	16
337	Exact entanglement dynamics mediated by leaky optical cavities. Journal of Physics B: Atomic, Molecular and Optical Physics, 2020, 53, 125501.	0.6	4
338	Quantifying quantum non-Markovianity via one-shot generalised mutual information. Laser Physics Letters, 2020, 17, 035203.	0.6	1
339	Enhancing quantum transport efficiency by tuning non-Markovian dephasing. Physical Review A, 2020, 101, .	1.0	9
340	Photonic dephasing dynamics and the role of initial correlations. Physical Review A, 2020, 101, .	1.0	7
341	On global solutions to some non-Markovian quantum kinetic models of Fokker–Planck type. Zeitschrift Fur Angewandte Mathematik Und Physik, 2020, 71, 1.	0.7	0
342	Quantum renewal processes. Scientific Reports, 2020, 10, 5592.	1.6	10

#	Article	IF	CITATIONS
343	Non-Markovian entanglement transfer to distant atoms in a coupled superconducting resonator. Chinese Physics B, 2020, 29, 060304.	0.7	3
344	Machine Learning Non-Markovian Quantum Dynamics. Physical Review Letters, 2020, 124, 140502.	2.9	63
345	Efficient simulation of open quantum systems coupled to a fermionic bath. Physical Review B, 2020, 101,	1.1	28
346	Detection of quantum non-Markovianity close to the Born-Markov approximation. Physical Review A, 2020, 101, .	1.0	17
347	Markovianity of an emitter coupled to a structured spin-chain bath. Physical Review A, 2020, 101, .	1.0	4
348	Subspace stabilization analysis for a class of non-Markovian open quantum systems. Physical Review A, 2020, 101, .	1.0	0
349	Phonon-Induced Optical Dephasing in Single Organic Molecules. Physical Review Letters, 2020, 124, 153602.	2.9	31
350	Tensor Products of Quantum Mappings. Journal of Mathematical Sciences, 2021, 252, 116-124.	0.1	2
351	Markovian embedding procedures for non-Markovian stochastic Schrödinger equations. Physics Letters, Section A: General, Atomic and Solid State Physics, 2021, 387, 127036.	0.9	3
959	Ouantum Information and Algorithms for Correlated Ouantum Matter. Chemical Reviews, 2021, 121,		67
392	3061-3120.	23.0	07
352	3061-3120. Quantum control in open and periodically driven systems. Advances in Physics: X, 2021, 6, 1870559.	23.0	3
353 353 354	3061-3120. Quantum control in open and periodically driven systems. Advances in Physics: X, 2021, 6, 1870559. Remote weak-signal measurement via bound states in optomechanical systems. Communications in Theoretical Physics, 2021, 73, 025102.	23.0 1.5 1.1	3
352 353 354 355	3061-3120. Quantum control in open and periodically driven systems. Advances in Physics: X, 2021, 6, 1870559. Remote weak-signal measurement via bound states in optomechanical systems. Communications in Theoretical Physics, 2021, 73, 025102. The quantum Zeno and anti-Zeno effects with driving fields in the weak and strong coupling regimes. Scientific Reports, 2021, 11, 1836.	23.0 1.5 1.1 1.6	3 3 2
352 353 354 355 355	3061-3120. Quantum control in open and periodically driven systems. Advances in Physics: X, 2021, 6, 1870559. Remote weak-signal measurement via bound states in optomechanical systems. Communications in Theoretical Physics, 2021, 73, 025102. The quantum Zeno and anti-Zeno effects with driving fields in the weak and strong coupling regimes. Scientific Reports, 2021, 11, 1836. Analysis of non-Markovian effects in generalized birth-death models. Discrete and Continuous Dynamical Systems - Series B, 2021, 26, 3717.	23.0 1.5 1.1 1.6 0.5	07 3 3 2 0
352 353 354 355 355 356	3061-3120. Quantum control in open and periodically driven systems. Advances in Physics: X, 2021, 6, 1870559. Remote weak-signal measurement via bound states in optomechanical systems. Communications in Theoretical Physics, 2021, 73, 025102. The quantum Zeno and anti-Zeno effects with driving fields in the weak and strong coupling regimes. Scientific Reports, 2021, 11, 1836. Analysis of non-Markovian effects in generalized birth-death models. Discrete and Continuous Dynamical Systems - Series B, 2021, 26, 3717. Simulating Quantum Vibronic Dynamics at Finite Temperatures With Many Body Wave Functions at 0 K. Frontiers in Chemistry, 2020, 8, 600731.	23.0 1.5 1.1 1.6 0.5 1.8	07 3 3 2 0 8
352 353 354 355 355 356 357 358	3061-3120. Quantum control in open and periodically driven systems. Advances in Physics: X, 2021, 6, 1870559. Remote weak-signal measurement via bound states in optomechanical systems. Communications in Theoretical Physics, 2021, 73, 025102. The quantum Zeno and anti-Zeno effects with driving fields in the weak and strong coupling regimes. Scientific Reports, 2021, 11, 1836. Analysis of non-Markovian effects in generalized birth-death models. Discrete and Continuous Dynamical Systems - Series B, 2021, 26, 3717. Simulating Quantum Vibronic Dynamics at Finite Temperatures With Many Body Wave Functions at 0 K. Frontiers in Chemistry, 2020, 8, 600731. The Controllability of Quantum Correlation Under Geometry and Entropy Discords. Computers, Materials and Continua, 2021, 66, 3107-3120.	23.0 1.5 1.1 1.6 0.5 1.8 1.5	07 3 3 2 0 8 8
352 353 354 355 355 356 357 358 359	3061-3120. Quantum control in open and periodically driven systems. Advances in Physics: X, 2021, 6, 1870559. Remote weak-signal measurement via bound states in optomechanical systems. Communications in Theoretical Physics, 2021, 73, 025102. The quantum Zeno and anti-Zeno effects with driving fields in the weak and strong coupling regimes. Scientific Reports, 2021, 11, 1836. Analysis of non-Markovian effects in generalized birth-death models. Discrete and Continuous Dynamical Systems - Series B, 2021, 26, 3717. Simulating Quantum Vibronic Dynamics at Finite Temperatures With Many Body Wave Functions at 0 K. Frontiers in Chemistry, 2020, 8, 600731. The Controllability of Quantum Correlation Under Geometry and Entropy Discords. Computers, Materials and Continua, 2021, 66, 3107-3120. Non-monotone metric on the quantum parametric model. European Physical Journal Plus, 2021, 136, 1.	23.0 1.5 1.1 1.6 0.5 1.8 1.5 1.2	07 3 3 2 2 0 8 8 0 3

#	Article	IF	CITATIONS
361	Relationship between costs for quantum error mitigation and non-Markovian measures. Physical Review A, 2021, 103, .	1.0	14
362	Non-Markovian dynamics of a two-level system in a bosonic bath and a Gaussian fluctuating environment with finite correlation time. Physical Review A, 2021, 103, .	1.0	3
363	Gradient algorithm for Hamiltonian identification of open quantum systems. Physical Review A, 2021, 103, .	1.0	12
364	Capturing non-Markovian dynamics on near-term quantum computers. Physical Review Research, 2021, 3, .	1.3	44
365	Quantum system dynamics with a weakly nonlinear Josephson junction bath. Physical Review B, 2021, 103, .	1.1	1
366	Markovian semigroup from mixing noninvertible dynamical maps. Physical Review A, 2021, 103, .	1.0	11
367	On the hybrid Davies like generator for quantum dissipation. Chaos, 2021, 31, 023110.	1.0	3
368	Machine learning studies for the effects of probes and cavity on quantum synchronization. Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences, 2021, 76, 395-405.	0.7	0
369	Efficient quantum simulation of open quantum dynamics at various Hamiltonians and spectral densities. Frontiers of Physics, 2021, 16, 1.	2.4	24
370	Heat transport through a superconducting artificial atom. Physical Review B, 2021, 103, .	1.1	17
371	Quantum Systems Correlated with a Finite Bath: Nonequilibrium Dynamics and Thermodynamics. PRX Quantum, 2021, 2, .	3.5	26
372	Scattering in Terms of Bohmian Conditional Wave Functions for Scenarios with Non-Commuting Energy and Momentum Operators. Entropy, 2021, 23, 408.	1.1	2
373	Quantum state transmission through a spin chain in finite-temperature heat baths. Journal of Physics A: Mathematical and Theoretical, 2021, 54, 155303.	0.7	8
374	Convolutional Neural Networks for Long Time Dissipative Quantum Dynamics. Journal of Physical Chemistry Letters, 2021, 12, 2476-2483.	2.1	28
375	Open Quantum Dynamics Theory for Non-Equilibrium Work: Hierarchical Equations of Motion Approach. Journal of the Physical Society of Japan, 2021, 90, 033001.	0.7	7
376	Tidal surface states as fingerprints of non-Hermitian nodal knot metals. Communications Physics, 2021, 4, .	2.0	39
377	Effect of entanglement embedded in environment on quantum non-Markovianity based on collision model. Communications in Theoretical Physics, 2021, 73, 055104.	1.1	2
378	Non-Markovianity and the Landauer principle in composite thermal environments. Physical Review A, 2021, 103, .	1.0	8

#	Article	IF	CITATIONS
379	Unidirectional quantum transport in optically driven <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi>V</mml:mi> -type quantum dot chains. Physical Review B, 2021, 103, .</mml:math 	1.1	1
380	Simulation methods for open quantum many-body systems. Reviews of Modern Physics, 2021, 93, .	16.4	85
381	Interferometric approach to open quantum systems and non-Markovian dynamics. Physical Review A, 2021, 103, .	1.0	10
382	Open quantum systems in thermal nonergodic environments. Physical Review A, 2021, 103, .	1.0	2
383	Impurity dephasing in a Bose–Hubbard model. New Journal of Physics, 2021, 23, 033018.	1.2	6
384	Hierarchical-environment-assisted non-Markovian and its effect on thermodynamic properties. EPJ Quantum Technology, 2021, 8, .	2.9	3
385	Quantum Maps with Memory from Generalized Lindblad Equation. Entropy, 2021, 23, 544.	1.1	9
386	Witnessing quantum memory in non-Markovian processes. Quantum - the Open Journal for Quantum Science, 0, 5, 440.	0.0	20
387	Entanglement Transition in a Monitored Free-Fermion Chain: From Extended Criticality to Area Law. Physical Review Letters, 2021, 126, 170602.	2.9	132
388	On the connection between microscopic description and memory effects in open quantum system dynamics. Quantum - the Open Journal for Quantum Science, 0, 5, 439.	0.0	10
389	Quantum Implications of Non-Extensive Statistics. Frontiers in Physics, 2021, 9, .	1.0	0
390	Efficient Exploration of Hamiltonian Parameter Space for Optimal Control of Non-Markovian Open Quantum Systems. Physical Review Letters, 2021, 126, 200401.	2.9	33
391	Application of non-Hermitian Hamiltonian model in open quantum optical systems*. Chinese Physics B, 2021, 30, 050301.	0.7	4
392	Possibility of the total thermodynamic entropy production rate of a finite-sized isolated quantum system to be negative for the Gorini-Kossakowski-Sudarshan-Lindblad-type Markovian dynamics of its subsystem. Physical Review A, 2021, 103, .	1.0	3
393	Controlling sudden transition between classical and quantum decoherence via squeezing phase of the baths. Laser Physics Letters, 2021, 18, 065202.	0.6	2
395	Macro-to-micro quantum mapping and the emergence of nonlinearity. Physical Review A, 2021, 103, .	1.0	6
396	Canonical Hamiltonian ensemble representation of dephasing dynamics and the impact of thermal fluctuations on quantum-to-classical transition. Scientific Reports, 2021, 11, 10046.	1.6	6
397	Threshold for a Discrete-Variable Sensor of Quantum Reservoirs. Physical Review Applied, 2021, 15, .	1.5	8

#	Article	IF	CITATIONS
398	Invariant neural network ansatz for weakly symmetric open quantum lattices. Physical Review A, 2021, 103, .	1.0	1
399	Continuous and time-discrete non-Markovian system-reservoir interactions: Dissipative coherent quantum feedback in Liouville space. Physical Review Research, 2021, 3, .	1.3	6
400	Non-Markovian decoherence of a two-level system in a Lorentzian bosonic reservoir and a stochastic environment with ï¬nite correlation time. Computer Optics, 2021, 45, .	1.3	1
401	Experimental Demonstration of Instrument-Specific Quantum Memory Effects and Non-Markovian Process Recovery for Common-Cause Processes. Physical Review Letters, 2021, 126, 230401.	2.9	7
402	Validity of Born-Markov master equations for single- and two-qubit systems. Physical Review B, 2021, 103, .	1.1	8
403	Quantum Heat Statistics with Time-Evolving Matrix Product Operators. PRX Quantum, 2021, 2, .	3.5	21
404	Quantum Stochastic Processes and Quantum non-Markovian Phenomena. PRX Quantum, 2021, 2, .	3.5	63
405	Non-Markovian effects in the spin-boson model at zero temperature. Physical Review A, 2021, 104, .	1.0	9
406	Funneling dynamics in a phenylacetylene trimer: Coherent excitation of donor excitonic states and their superposition. Journal of Chemical Physics, 2021, 155, 034303.	1.2	6
407	Universal Constraint for Relaxation Rates for Quantum Dynamical Semigroup. Physical Review Letters, 2021, 127, 050401.	2.9	10
408	Constructing tensor network influence functionals for general quantum dynamics. Journal of Chemical Physics, 2021, 155, 044104.	1.2	18
409	Experimental Simulation of Open Quantum System Dynamics via Trotterization. Physical Review Letters, 2021, 127, 020504.	2.9	17
410	Principles underlying efficient exciton transport unveiled by information-geometric analysis. Physical Review Research, 2021, 3, .	1.3	2
411	Improving the estimation of environment parameters via initial probe-environment correlations. Physical Review A, 2021, 104, .	1.0	9
412	General Non-Markovian Quantum Dynamics. Entropy, 2021, 23, 1006.	1.1	21
413	Two-time correlation functions beyond quantum regression theorem: effect of external noise. Quantum Information Processing, 2021, 20, 1.	1.0	3
414	Periodically refreshed baths to simulate open quantum many-body dynamics. Physical Review B, 2021, 104, .	1.1	24
415	Lindbladian approximation beyond ultraweak coupling. Physical Review E, 2021, 104, 014110.	0.8	14

#	Article	IF	CITATIONS
416	First and Second Law of Quantum Thermodynamics: A Consistent Derivation Based on a Microscopic Definition of Entropy. PRX Quantum, 2021, 2, .	3.5	50
417	Quantum phase transition of many interacting spins coupled to a bosonic bath: Static and dynamical properties. Physical Review B, 2021, 104, .	1.1	5
418	Accuracy of the Quantum Regression Theorem for Photon Emission from a Quantum Dot. Physical Review Letters, 2021, 127, 100402.	2.9	15
419	Accurate Truncations of Chain Mapping Models for Open Quantum Systems. Nanomaterials, 2021, 11, 2104.	1.9	8
420	Symmetric dynamics in dissipative quantum many-body models. Physical Review A, 2021, 104, .	1.0	2
421	Effect of non-Markovianity on synchronization. Communications in Theoretical Physics, 2021, 73, 105101.	1.1	3
422	Convex geometry of Markovian Lindblad dynamics and witnessing non-Markovianity. Quantum Information Processing, 2021, 20, 1.	1.0	4
423	Nearly Markovian maps and entanglement-based bound on corresponding non-Markovianity. Journal of Physics A: Mathematical and Theoretical, 2021, 54, 395301.	0.7	1
424	Solvable class of non-Markovian quantum multipartite dynamics. Physical Review A, 2021, 104, .	1.0	3
425	Topological signatures in a weakly dissipative Kitaev chain of finite length. Physical Review B, 2021, 104,	1.1	4
426	Investigation of Quantum Correlations of Electron Spins of Cooper Pair in a Superconductor Under Magnetic Field Effect. Journal of Superconductivity and Novel Magnetism, 0, , 1.	0.8	0
427	Irreversible entropy production: From classical to quantum. Reviews of Modern Physics, 2021, 93, .	16.4	157
428	Quantifying non-Markovianity via conditional mutual information. Physical Review A, 2021, 104, .	1.0	5
429	Engineering Dissipation with Resistive Elements in Circuit Quantum Electrodynamics. Advanced Quantum Technologies, 2021, 4, 2100054.	1.8	11
430	Entanglement instability in the interaction of two qubits with a common non-Markovian environment. Quantum Information Processing, 2021, 20, 1.	1.0	5
431	Non-Markovian open quantum system approach to the early Universe: Damping of gravitational waves by matter. Physical Review D, 2021, 104, .	1.6	6
432	Coherent and dissipative dynamics at quantum phase transitions. Physics Reports, 2021, 936, 1-110.	10.3	50
433	Detection of bidirectional system-environment information exchanges. Physical Review A, 2021, 103, .	1.0	5

#	Article	IF	CITATIONS
434	Conditions for Legitimate Memory Kernel Master Equation. Springer Proceedings in Physics, 2019, , 147-162.	0.1	1
435	Non-monotonic Population and Coherence Evolution in Markovian Open-System Dynamics. Springer Proceedings in Physics, 2019, , 41-57.	0.1	4
436	Convex combinations of CP-divisible Pauli channels that are not semigroups. Physics Letters, Section A: General, Atomic and Solid State Physics, 2020, 384, 126907.	0.9	18
437	Nonequilibrium dynamics of photoinduced forward and backward electron transfer reactions. Journal of Chemical Physics, 2020, 152, 065102.	1.2	5
438	Small matrix disentanglement of the path integral: Overcoming the exponential tensor scaling with memory length. Journal of Chemical Physics, 2020, 152, 041104.	1.2	52
439	Non-Hermitian physics. Advances in Physics, 2020, 69, 249-435.	35.9	695
440	Equivalence between non-Markovian dynamics and correlation backflows. New Journal of Physics, 2020, 22, 093034.	1.2	11
441	Controllable non-Markovianity in phase relaxation. New Journal of Physics, 2020, 22, 103048.	1.2	1
442	Construction of propagators for divisible dynamical maps. New Journal of Physics, 2021, 23, 013009.	1.2	4
443	An operator derivation of the Feynman–Vernon theory, with applications to the generating function of bath energy changes and to an-harmonic baths. Journal of Physics A: Mathematical and Theoretical, 2020, 53, 275303.	0.7	9
444	Quantum evolution with a large number of negative decoherence rates. Journal of Physics A: Mathematical and Theoretical, 2020, 53, 375305.	0.7	15
445	Convex resource theory of non-Markovianity. Journal of Physics A: Mathematical and Theoretical, 2021, 54, 035302.	0.7	9
446	Influence of equilibrium and nonequilibrium environments on macroscopic realism through the Leggett-Garg inequalities. Physical Review A, 2020, 101, .	1.0	6
447	Nature of the nonequilibrium phase transition in the non-Markovian driven Dicke model. Physical Review A, 2020, 102, .	1.0	5
448	Dynamics of spatially indistinguishable particles and quantum entanglement protection. Physical Review A, 2020, 102, .	1.0	19
449	Nonequilibrium non-Markovian steady states in open quantum many-body systems: Persistent oscillations in Heisenberg quantum spin chains. Physical Review B, 2020, 102, .	1.1	8
450	Steady state thermodynamics of two qubits strongly coupled to bosonic environments. Physical Review Research, 2019, 1, .	1.3	13
451	Pronounced non-Markovian features in multiply excited, multiple emitter waveguide QED: Retardation induced anomalous population trapping. Physical Review Research, 2020, 2, .	1.3	27

		CITATION F	Report	
#	Article		IF	CITATIONS
452	Exact quantum dynamics in structured environments. Physical Review Research, 2020,	2,.	1.3	18
453	Simulation of open-quantum-system dynamics using the quantum Zeno effect. Physica Research, 2020, 2, .	l Review	1.3	12
454	<i>Ab initio</i> quantum models for thin-film x-ray cavity QED. Physical Review Researc	ch, 2020, 2, .	1.3	16
455	Irreversibility mitigation in unital non-Markovian quantum evolutions. Physical Review F 2020, 2, .	Research,	1.3	5
456	Tight bound on finite-resolution quantum thermometry at low temperatures. Physical F Research, 2020, 2, .	leview	1.3	27
457	Generalized theory of pseudomodes for exact descriptions of non-Markovian quantum Physical Review Research, 2020, 2, .	processes.	1.3	27
458	Non-Markovian dynamics of collective atomic states coupled to a waveguide. , 2019, ,			5
459	Divisibility of Dynamical Maps with Time Independent Invariant State. Open Systems a Dynamics, 2019, 26, 1950019.	nd Information	0.5	5
460	Entanglement transfer in a noisy cavity network with parity-deformed fields. Journal of Society of America B: Optical Physics, 2019, 36, 1858.	the Optical	0.9	22
461	Generation of multiqubit steady-state quantum correlation by squeezed-reservoir engir Express, 2018, 26, 20459.	neering. Optics	1.7	4
462	System susceptibility and bound-states in structured reservoirs. Optics Express, 2019,	27, 31504.	1.7	4
463	Optomechanical quadrature squeezing in the non-Markovian regime. Optics Letters, 20	018, 43, 6053.	1.7	29
464	Macroscopic QED for quantum nanophotonics: emitter-centered modes as a minimal b multiemitter problems. Nanophotonics, 2020, 10, 477-489.	asis for	2.9	45
466	Two distinguishable impurities in BEC: squeezing and entanglement of two Bose polar	ons. , 2019, 6, .		20
467	Density-operator evolution: Complete positivity and the Keldysh real-time expansion. S 2019, 7, .	ciPost Physics,	1.5	8
468	A nonequilibrium quantum phase transition in strongly coupled spin chains. Quantum - Journal for Quantum Science, 0, 1, 40.	the Open	0.0	9
469	Tomographically reconstructed master equations for any open quantum dynamics. Qu Open Journal for Quantum Science, 0, 2, 76.	antum - the	0.0	33
470	Non-Markovian Quantum Optics with Three-Dimensional State-Dependent Optical Latt the Open Journal for Quantum Science, 0, 2, 97.	ices. Quantum -	0.0	25

#	Article	IF	CITATIONS
471	Almost Markovian processes from closed dynamics. Quantum - the Open Journal for Quantum Science, 0, 3, 136.	0.0	23
472	Thermodynamics and the quantum speed limit in the non-Markovian regime. Physical Review A, 2021, 104, .	1.0	6
473	Master equation incorporating the system-environment correlations present in the joint equilibrium state. Physical Review A, 2021, 104, .	1.0	4
474	Relating heat and entanglement in strong-coupling thermodynamics. Physical Review E, 2021, 104, 044111.	0.8	6
475	Topological physics of non-Hermitian optics and photonics: a review. Journal of Optics (United) Tj ETQq0 0 0 rgBT	/Overlock	10 Tf 50 58

476	Non-Markovian memory strength bounds quantum process recoverability. Npj Quantum Information, 2021, 7, .	2.8	7
477	High-frequency expansions for time-periodic Lindblad generators. Physical Review B, 2021, 104, .	1.1	14
478	Conductance of a dissipative quantum dot: Nonequilibrium crossover near a non-Fermi-liquid quantum critical point. Physical Review B, 2021, 104, .	1.1	1
479	Non-Markovian dynamics control of spin-1/2 system interacting with magnets. New Journal of Physics, 2021, 23, 113004.	1.2	2
481	Information Flow Versus Divisibility for Non-invertible Dynamical Maps. Springer Proceedings in Physics, 2019, , 15-28.	0.1	0
482	Quantum Non-Markovian Collision Models from Colored-Noise Baths. Springer Proceedings in Physics, 2019, , 29-40.	0.1	0
483	The Dynamics of Quantum Correlations of Two Qubits in a Common Environment. Journal of Mathematical Physics, Analysis, Geometry, 2020, 16, 228-262.	0.1	0
484	Prethermalization of quantum systems interacting with non-equilibrium environments. New Journal of Physics, 2020, 22, 083067.	1.2	1
485	Lindblad Dynamics and Disentanglement in Multi-Mode Bosonic Systems. Entropy, 2021, 23, 1409.	1.1	2
488	Quantum evolution speed in a double-layer environment. Journal of the Optical Society of America B: Optical Physics, 2020, 37, 933.	0.9	1
489	Distant emitters in ultrastrong waveguide QED: Ground-state properties and non-Markovian dynamics. Physical Review A, 2021, 104, .	1.0	12
490	From the open generalized Heisenberg model to the Landau–Lifshitz equation. New Journal of Physics, 2020, 22, 103029.	1.2	7
491	Non-Markov Processes in Quantum Theory. Fundamental Theories of Physics, 2021, , 349-358.	0.1	0

#	Article	IF	CITATIONS
492	Distinguishing environment-induced non-Markovianity from subsystem dynamics. International Journal of Quantum Information, 2020, 18, 2050042.	0.6	1
493	Generalized quantum master equation: A tutorial review and recent advances. Chinese Journal of Chemical Physics, 2021, 34, 497-524.	0.6	8
494	Intrinsic Entropy of Squeezed Quantum Fields and Nonequilibrium Quantum Dynamics of Cosmological Perturbations. Entropy, 2021, 23, 1544.	1.1	7
495	Entropy production and the role of correlations in quantum Brownian motion. Physical Review A, 2021, 104, .	1.0	8
496	Eternally non-Markovian dynamics of a qubit interacting with a single-photon wavepacket. New Journal of Physics, 2021, 23, 123019.	1.2	8
497	Control cost and quantum speed limit time in controlled almost-exact state transmission in open systems. Physical Review A, 2021, 104, .	1.0	7
498	Capturing non-Markovian dynamics with the reaction coordinate method. Physical Review A, 2021, 104,	1.0	10
499	Can Wigner distribution functions with collisions satisfy complete positivity and energy conservation?. Journal of Computational Electronics, 2021, 20, 2232.	1.3	3
500	On the non-Markovianity of quantum semi-Markov processes. Quantum Information Processing, 2021, 20, 1.	1.0	2
501	Introduction to Semi-Classical Analysis for Digital Errors of Qubit in Quantum Processor. Entropy, 2021, 23, 1577.	1.1	1
502	Open quantum dynamics with singularities: Master equations and degree of non-Markovianity. Physical Review A, 2021, 104, .	1.0	3
503	Electrically Controllable Kondo Correlation in Spin-Orbit-Coupled Quantum Point Contacts. Physical Review Letters, 2022, 128, 027701.	2.9	8
504	Trends, directions for further research, and some open problems of fractional calculus. Nonlinear Dynamics, 2022, 107, 3245-3270.	2.7	52
505	Capacity of non-Markovianity to boost the efficiency of molecular switches. Physical Review A, 2022, 105, .	1.0	9
506	Quantum Brownian motion for magnets. New Journal of Physics, 2022, 24, 033020.	1.2	15
507	Trajectory tracking for non-Markovian quantum systems. Physical Review A, 2022, 105, .	1.0	4
508	Quantum-parametric-oscillator heat engines in squeezed thermal baths: Foundational theoretical issues. Physical Review E, 2022, 105, 014108.	0.8	5
509	Coupled Harmonic Oscillator in a System of Free Particles. Mathematics, 2022, 10, 294.	1.1	1

#	Article	IF	CITATIONS
510	Study different quantum teleportation amounts by solving Lindblad master equation. Physica Scripta, 2022, 97, 035102.	1.2	5
511	No Intrinsic Decoherence of Inflationary Cosmological Perturbations. Universe, 2022, 8, 27.	0.9	10
512	Transfer-tensor description of memory effects in open-system dynamics and multi-time statistics. Quantum Science and Technology, 2022, 7, 025005.	2.6	6
513	Master equation for non-Markovian quantum Brownian motion: The emergence of lateral coherences. Physical Review A, 2022, 105, .	1.0	2
514	Dispersive readout with non-Markovian environments. Physical Review A, 2022, 105, .	1.0	4
515	Engineering Dynamical Couplings for Quantum Thermodynamic Tasks. PRX Quantum, 2022, 3, .	3.5	15
516	Neural-network-based qubit-environment characterization. Physical Review A, 2022, 105, .	1.0	7
517	Many-Body Quantum State Diffusion for Non-Markovian Dynamics in Strongly Interacting Systems. Physical Review Letters, 2022, 128, 063601.	2.9	17
518	Decoherence in open quantum systems: influence of the intrinsic bath dynamics. Condensed Matter Physics, 2022, 25, 13302.	0.3	2
519	Dynamics of a Nonlinear Quantum Oscillator Under Non-Markovian Pumping. Journal of Russian Laser Research, 2022, 43, 71-81.	0.3	4
520	Dynamics of classical and quantum correlations in a zigzag graphene nanoribbon under noisy environments. Quantum Information Processing, 2022, 21, 1.	1.0	1
521	Effects of symmetry breaking of the structurally-disordered Hamiltonian ensembles on the anisotropic decoherence of qubits. Scientific Reports, 2022, 12, 2869.	1.6	2
522	Real-time motion of open quantum systems: Structure of entanglement, renormalization group, and trajectories. Physical Review B, 2022, 105, .	1.1	0
523	Quantum theory of two-dimensional materials coupled to electromagnetic resonators. Physical Review B, 2022, 105, .	1.1	8
524	Open quantum system dynamics and the mean force Gibbs state. AVS Quantum Science, 2022, 4, .	1.8	32
525	Noninvertibility as a requirement for creating a semigroup under convex combinations of channels. Physical Review A, 2022, 105, .	1.0	5
526	Simulation of open quantum systems by automated compression of arbitrary environments. Nature Physics, 2022, 18, 662-668.	6.5	35
527	Master equationÂfor the quantum Rabi model in the adiabatic regime. Physical Review A, 2022, 105, .	1.0	2

#	Article	IF	CITATIONS
528	Global correlation and local information flows in controllable non-Markovian open quantum dynamics. Npj Quantum Information, 2022, 8, .	2.8	23
529	Memory Effects in High-Dimensional Systems Faithfully Identified by Hilbert–Schmidt Speed-Based Witness. Entropy, 2022, 24, 395.	1.1	0
530	Non-Markovianity criteria for mixtures of noninvertible Pauli dynamical maps. Journal of Physics A: Mathematical and Theoretical, 2022, 55, 215201.	0.7	6
531	Entanglement dynamics of an open moving-biparticle system driven by classical-field. Physica Scripta, 2022, 97, 055101.	1.2	4
532	Dynamics of quantum resources in regular and Majorana fermion systems. Physical Review A, 2022, 105,	1.0	2
533	Observations about utilitarian coherence in the avian compass. Scientific Reports, 2022, 12, 6011.	1.6	6
534	Quantum metrology with one auxiliary particle in a correlated bath and its quantum simulation. Physical Review A, 2021, 104, .	1.0	6
535	Dynamics of Characteristic and One-Point Correlation Functions of Multi-Mode Bosonic Systems: Exactly Solvable Model. Symmetry, 2021, 13, 2309.	1.1	1
536	Jump-time unraveling of Markovian open quantum systems. Physical Review A, 2021, 104, .	1.0	4
537	Quantum non-Markovian "casual bystander―environments. Physical Review A, 2021, 104, .	1.0	3
538	Controlling the dynamics of dissipationless localized bound states in open quantum systems with periodic driving fields. Physical Review A, 2021, 104, .	1.0	0
539	Observation of the tradeoff between internal quantum nonseparability and external classical correlations. Physical Review A, 2021, 104, .	1.0	1
541	Information retrieval and criticality in high-dimensional parity-time-symmetric systems. Wuli Xuebao/Acta Physica Sinica, 2022, .	0.2	0
542	Approximating invertible maps by recovery channels: Optimality and an application to non-Markovian dynamics. Physical Review A, 2022, 105, .	1.0	5
543	Searching for exceptional points and inspecting non-contractivity of trace distance in (anti-)\$\$mathcal {PT}!\$\$-symmetric systems. Quantum Information Processing, 2022, 21, 1.	1.0	5
544	Detecting genuine multipartite entanglement in 3-qubit systems with eternalnon-Markovianity. Journal of Physics A: Mathematical and Theoretical, 0, , .	0.7	3
545	Unraveling the topology of dissipative quantum systems. Physical Review Research, 2022, 4, .	1.3	7
546	Quantum noise of gravitons and stochastic force on geodesic separation. Physical Review D, 2022, 105,	1.6	9

ARTICLE IF CITATIONS # Tunable Single-Photon Scattering of a Giant \hat{b} -type Atom in a SOUID-Chain Waveguide. Frontiers in 547 1.0 4 Physics, 2022, 10, . Quantum regression in dephasing phenomena. Journal of Physics A: Mathematical and Theoretical, 548 2022, 55, 225308. Quantum enhancement of qutrit dynamics through driving field and photonic-band-gap crystal. 549 1.0 3 Physical Review A, 2022, 105, . Bargmann Representation of Quantum Absorption Refrigerators. Reports on Mathematical Physics, 2022, 89, 185-198. Quantum Maxwell's demon assisted by non-Markovian effects. Physical Review E, 2022, 105, 044141. 551 0.8 5 Typicality of nonequilibrium quasi-steady currents. Physical Review A, 2022, 105, . 1.0 Quantum Non-Markovian Environment-to-System Backflows of Information: Nonoperational vs. 553 1.1 6 Operational Approaches. Entropy, 2022, 24, 649. Slow oscillating dynamics of a two-level system subject to a fast telegraph noise: Beyond the NIBA 554 0.2 approximation. Low Temperature Physics, 2022, 48, 363-370. State transfer and maintenance for non-Markovian open quantum systems in a hybrid environment via 555 1.2 2 Lyapunov control method. European Physical Journal Plus, 2022, 137, . Open quantum systems coupled to finite baths: A hierarchy of master equations. Physical Review E, 0.8 2022, 105, . Smolyak Algorithm Adapted to a Systemâ€"Bath Separation: Application to an Encapsulated Molecule 557 2.35 with Large-Amplitude Motions. Journal of Chemical Theory and Computation, 2022, 18, 4366-4372. Open-system approach to nonequilibrium quantum thermodynamics at arbitrary coupling. Physical Review A, 2022, 105, . Quantum coherence dynamics of displaced squeezed thermal state in a non-Markovian environment. 559 1.0 2 Quantum Information Processing, 2022, 21, . Time evolution of quantum correlations in presence of state dependent bath. Physica Scripta, 2022, 97, 1.2 075104. Quantum decoherence of a two-level system in colored environments. Physical Review A, 2022, 105, . 561 1.0 3 Quantum regression beyond the Born-Markov approximation for generalized spin-boson models. Physical Review A, 2022, 105, . 563 Non-Markovian Quantum Process Tomography. PRX Quantum, 2022, 3, . 3.522 564 Continuous-variable quantum sensing of a dissipative reservoir. Physical Review Research, 2022, 4, . 1.3

#	Article	IF	CITATIONS
565	Unidirectional amplification in optomechanical system coupling with a structured bath. Optics Express, 2022, 30, 21649.	1.7	0
566	Information retrieval and criticality in high-dimensional parity-time-symmetric systems. Wuli Xuebao/Acta Physica Sinica, 2022, 71, 1.	0.2	1
567	Steady state entanglement of distant nitrogen-vacancy centers in a coherent thermal magnon bath. Physical Review Research, 2022, 4, .	1.3	4
568	Relation between non-Markovianity and Landauer's principle. Physical Review A, 2022, 105, .	1.0	2
569	The laws of thermodynamics for quantum dissipative systems: A quasi-equilibrium Helmholtz energy approach. Journal of Chemical Physics, 2022, 157, .	1.2	4
570	Eliminating Radiative Losses in Long-Range Exciton Transport. PRX Quantum, 2022, 3, .	3.5	5
571	The quantum Markovianity criterion based on correlations under random unitary qudit dynamical evolutions. Quantum Information Processing, 2022, 21, .	1.0	4
572	Noisy propagation of Gaussian states in optical media with finite bandwidth. Scientific Reports, 2022, 12, .	1.6	12
573	Incorporating Lindblad decay dynamics into mixed quantum-classical simulations. Journal of Chemical Physics, 2022, 157, .	1.2	7
574	Quantum kinetic theory of flux-carrying Brownian particles. Journal of Statistical Mechanics: Theory and Experiment, 2022, 2022, 073103.	0.9	0
575	Holevo skew divergence for the characterization of information backflow. Physical Review A, 2022, 106, .	1.0	3
576	Quantum Thermodynamic Uncertainty Relations, Generalized Current Fluctuations and Nonequilibrium Fluctuation–Dissipation Inequalities. Entropy, 2022, 24, 1016.	1.1	3
577	Nonperturbative Analytical Diagonalization of Hamiltonians with Application to Circuit QED. PRX Quantum, 2022, 3, .	3.5	4
578	Protecting quantum entanglement in thermal reservoir by detuning. Physica Scripta, 2022, 97, 095103.	1.2	0
579	Quantifying Non-Markovianity in Open Quantum Dynamics. SciPost Physics, 2022, 13, .	1.5	2
580	Dynamics of Open Quantum Systems—Markovian Semigroups and Beyond. Symmetry, 2022, 14, 1752.	1.1	18
581	Heisenberg treatment of multiphoton pulses in waveguide QED with time-delayed feedback. Physical Review A, 2022, 106, .	1.0	3
582	Field-theoretical approach to open quantum systems and the Lindblad equation. Physical Review A, 2022, 106, .	1.0	4

#	Article	IF	Citations
583	Few-mode field quantization for multiple emitters. Nanophotonics, 2022, 11, 4363-4374.	2.9	14
584	Learning quantum dissipation by the neural ordinary differential equation. Physical Review A, 2022, 106, .	1.0	1
585	Engineered dissipation for quantum information science. Nature Reviews Physics, 2022, 4, 660-671.	11.9	32
586	Reconstructing non-Markovian open quantum evolution from multiple time measurements. Physical Review A, 2022, 106, .	1.0	1
587	Experimental snapshot verification of non-Markovianity by quantum probing of convex coefficients. Physical Review A, 2022, 106, .	1.0	2
588	Phase-covariant mixtures of non-unital qubit maps. Journal of Physics A: Mathematical and Theoretical, 2022, 55, 405303.	0.7	3
589	Fingerprint and Universal Markovian Closure of Structured Bosonic Environments. Physical Review Letters, 2022, 129, .	2.9	10
590	Radiative properties of an artificial atom coupled to a Josephson-junction array. Physical Review A, 2022, 106, .	1.0	2
591	Dynamical heat engines with non-Markovian reservoirs. Physical Review Research, 2022, 4, .	1.3	8
592	Disentanglement Dynamics in Nonequilibrium Environments. Entropy, 2022, 24, 1330.	1.1	7
593	Dynamics of two central spins immersed in spin baths. Physical Review A, 2022, 106, .	1.0	1
594	Nonconjugate quantum subsystems. Physical Review E, 2022, 106, .	0.8	2
595	Probing non-Markovian quantum dynamics with data-driven analysis: Beyond "black-box― machine-learning models. Physical Review Research, 2022, 4, .	1.3	8
596	Optimal control and selectivity of qubits in contact with a structured environment. Physical Review A, 2022, 106, .	1.0	8
597	Laser-controlled electronic symmetry breaking in a phenylene ethynylene dimer: Simulation by the hierarchical equationsÂof motion and optimal control. Physical Review A, 2022, 106, .	1.0	3
598	Preferred basis of states derived from the eigenstate thermalization hypothesis. Physical Review A, 2022, 106, .	1.0	1
599	Quantum Energy Current Induced Coherence in a Spin Chain under Non-Markovian Environments. Entropy, 2022, 24, 1406.	1.1	2
600	Equation-of-Motion Methods for the Calculation of Femtosecond Time-Resolved 4-Wave-Mixing and <i>N</i> -Wave-Mixing Signals. Chemical Reviews, 2022, 122, 17339-17396.	23.0	19

#	Article	IF	CITATIONS
601	Quantum master equationsÂand steady states for the ultrastrong-coupling limit and the strong-decoherence limit. Physical Review A, 2022, 106, .	1.0	10
602	Dynamics of quantum Fisher information from a time-local non-Markovian master equationÂwith decoherence rates and operators depending on the estimated parameter. Physical Review A, 2022, 106, .	1.0	0
603	Using the Environment to Understand non-Markovian Open Quantum Systems. Quantum - the Open Journal for Quantum Science, 0, 6, 847.	0.0	7
604	Entanglement Dynamics Governed by Time-Dependent Quantum Generators. Axioms, 2022, 11, 589.	0.9	7
605	How to describe collective decay of uncoupled modes in the input–output formalism. Journal of the Optical Society of America B: Optical Physics, 2022, 39, 3128.	0.9	0
606	Open quantum dynamics of strongly coupled oscillators with multi-configuration time-dependent Hartree propagation and Markovian quantum jumps. Journal of Chemical Physics, 2022, 157, .	1.2	2
607	Implications of gauge freedom for nonrelativistic quantum electrodynamics. Reviews of Modern Physics, 2022, 94, .	16.4	14
608	Quantum correlations of a two-qubit system and the Aubry-André chain in bosonic environments. Physical Review A, 2022, 106, .	1.0	2
609	Precession-induced nonclassicality of the free induction decay of NV centers by a dynamical polarized nuclear spin bath. Journal of Physics Condensed Matter, 2022, 34, 505701.	0.7	3
610	Dynamical maps beyond Markovian regime. Physics Reports, 2022, 992, 1-85.	10.3	19
611	Coalescence of non-Markovian dissipation, quantum Zeno effect, and non-Hermitian physics in a simple realistic quantum system. Physical Review A, 2022, 106, .	1.0	3
612	Driven Radical Motion Enhances Cryptochrome Magnetoreception: Toward Live Quantum Sensing. Journal of Physical Chemistry Letters, 2022, 13, 10500-10506.	2.1	5
613	Unidirectional Information Flow and Positive Divisibility are Nonequivalent Notions of Quantum Markovianity for Noninvertible Dynamics. Open Systems and Information Dynamics, 2022, 29, .	0.5	0
614	On the classicality of quantum dephasing processes. , 0, 1, .		1
615	Nonequilibrium boundary-driven quantum systems: Models, methods, and properties. Reviews of Modern Physics, 2022, 94, .	16.4	42
616	Quantum speed limit time: role of coherence. Journal of Physics A: Mathematical and Theoretical, 2022, 55, 505302.	0.7	7
617	Non-Markovianity of an atom in a semi-infinite rectangular waveguide. Chinese Physics B, 2023, 32, 030305.	0.7	2
618	Witnessing non-Markovianity by quantum quasi-probability distributions. New Journal of Physics, 2022, 24, 123022.	1.2	1

#	Article	IF	CITATIONS
619	Steady-state relation of a two-level system strongly coupled to a many-body quantum chaotic environment. Communications in Theoretical Physics, 0, , .	1.1	0
620	Lindblad Tomography of a Superconducting Quantum Processor. Physical Review Applied, 2022, 18, .	1.5	5
621	Time inhomogeneous quantum dynamical maps. Scientific Reports, 2022, 12, .	1.6	0
622	Entanglement Dynamics of Coupled Quantum Oscillators in Independent NonMarkovian Baths. Entropy, 2022, 24, 1814.	1.1	5
623	Quantum cosmology of the flat universe via closed real-time path integral. European Physical Journal C, 2022, 82, .	1.4	2
624	Information preservation of two qubits in a structured environment. New Journal of Physics, 2022, 24, 123001.	1.2	1
625	Quantumness and speedup limit of a qubit under transition-frequency modulation. Physical Review A, 2022, 106, .	1.0	0
626	Strongly coupled quantum Otto cycle with single qubit bath. Physical Review E, 2022, 106, .	0.8	3
627	Towards a general framework of Randomized Benchmarking incorporating non-Markovian Noise. Quantum - the Open Journal for Quantum Science, 0, 6, 868.	0.0	2
628	Ultrastrong waveguide QED with giant atoms. Physical Review A, 2022, 106, .	1.0	9
629	Charging and self-discharging process of a quantum battery in composite environments. Frontiers of Physics, 2023, 18, .	2.4	0
630	Influence of polarization and the environment on wave–particle duality. Quantum Information Processing, 2023, 22, .	1.0	1
631	Memory effects in multipartite systems coupled by nondiagonal dephasing mechanisms. Physical Review A, 2023, 107, .	1.0	2
632	Decoherence and Its Role in Electronically Nonadiabatic Dynamics. Journal of Chemical Theory and Computation, 2023, 19, 380-395.	2.3	14
633	Non-Markovian Abraham-Lorentz-Dirac equation: Radiation reaction without pathology. Physical Review D, 2022, 106, .	1.6	3
634	On the role of initial coherence in the spin phase-space entropy production rate. New Journal of Physics, 2023, 25, 013030.	1.2	0
635	On Markovianity and classicality in multilevel spin–boson models. Scientific Reports, 2023, 13, .	1.6	6
636	Succinct Description and Efficient Simulation of Non-Markovian Open Quantum Systems. Communications in Mathematical Physics, 2023, 401, 147-183.	1.0	0

	CITATION	Report	
#	Article	IF	CITATIONS
637	Saturable Purcell filter for circuit quantum electrodynamics. Physical Review Research, 2023, 5, .	1.3	2
638	Signature of exceptional point phase transition in Hermitian systems. Quantum - the Open Journal for Quantum Science, 0, 7, 982.	0.0	1
639	Quantum State Tomography in Nonequilibrium Environments. Photonics, 2023, 10, 134.	0.9	3
640	Ancillary Gaussian modes activate the potential to witness non-Markovianity. New Journal of Physics, 2023, 25, 023025.	1.2	1
641	Classical-driving-assisted quantum synchronization in non-Markovian environments. Physical Review A, 2023, 107, .	1.0	1
642	Non-Markovian collisional dynamics probed with laser-aligned molecules. Physical Review A, 2023, 107,	1.0	4
643	Quantum geometrical current and coherence of the open gravitation system: loop quantum gravity coupled with a thermal scalar field. Physica Scripta, 2023, 98, 045303.	1.2	1
644	Optimally Controlled Non-Adiabatic Quantum State Transmission in the Presence of Quantum Noise. Photonics, 2023, 10, 274.	0.9	2
645	Quantum non-Markovianity: Overview and recent developments. , 0, 2, .		1
646	Engineering non-Markovianity from defect-phonon interactions. New Journal of Physics, 2023, 25, 043004.	1.2	0
647	Invertibility as a Witness of Markovianity of the Quantum Dynamical Maps. Brazilian Journal of Physics, 2023, 53, .	0.7	3
648	Quantum interferometric power and non-Markovianity in the decoherence channels. Chinese Physics B, O, , .	0.7	0
649	Dephasing Dynamics in a Non-Equilibrium Fluctuating Environment. Entropy, 2023, 25, 634.	1.1	0
650	Non-Markovian quantum Hadamard gate preparation in a hybrid bath: A Lyapunov approach. Physica A: Statistical Mechanics and Its Applications, 2023, 620, 128749.	1.2	0
651	Charging a quantum battery in a non-Markovian environment: a collisional model approach. Quantum Science and Technology, 2023, 8, 035007.	2.6	6
652	Sampling Complexity of Open Quantum Systems. PRX Quantum, 2023, 4, .	3.5	0