

# Francesco Petruccione

## List of Publications by Year in descending order

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261  
papers

10,729  
citations

81434

41  
h-index

62345

84  
g-index

276  
all docs

276  
docs citations

276  
times ranked

10787  
citing authors

#	ARTICLE	IF	CITATIONS
1	Noninvertibility as a requirement for creating a semigroup under convex combinations of channels. <i>Physical Review A</i> , 2022, 105, .	1.0	5
2	Twisted Few-Mode Optical Fiber with Improved Height of Quasi-Step Refractive Index Profile. <i>Sensors</i> , 2022, 22, 3124.	2.1	5
3	Compact quantum kernel-based binary classifier. <i>Quantum Science and Technology</i> , 2022, 7, 045007.	2.6	7
4	Early transmission of SARS-CoV-2 in South Africa: An epidemiological and phylogenetic report. <i>International Journal of Infectious Diseases</i> , 2021, 103, 234-241.	1.5	63
5	Sixteen novel lineages of SARS-CoV-2 in South Africa. <i>Nature Medicine</i> , 2021, 27, 440-446.	15.2	326
6	Detection of a SARS-CoV-2 variant of concern in South Africa. <i>Nature</i> , 2021, 592, 438-443.	13.7	1,381
7	A divide-and-conquer algorithm for quantum state preparation. <i>Scientific Reports</i> , 2021, 11, 6329.	1.6	72
8	Researches of Parameters of Chiral Few-Mode Optical Fiber Pilot Sample with Improved Height of Step Refractive Index Profile. <i>Proceedings of Telecommunication Universities</i> , 2021, 7, 6-19.	0.1	0
9	Roles of quantum coherences in thermal machines. <i>European Physical Journal: Special Topics</i> , 2021, 230, 841-850.	1.2	23
10	Twisted Silica Microstructured Optical Fiber with Equiangular Spiral Six-Ray Geometry. <i>Fibers</i> , 2021, 9, 27.	1.8	9
11	A comparison of various classical optimizers for a variational quantum linear solver. <i>Quantum Information Processing</i> , 2021, 20, 1.	1.0	28
12	Robust quantum classifier with minimal overhead. , 2021, , .		2
13	Quantum-enhanced analysis of discrete stochastic processes. <i>Npj Quantum Information</i> , 2021, 7, .	2.8	12
14	Toward a quantum future for South Africa. <i>AVS Quantum Science</i> , 2021, 3, 040501.	1.8	4
15	Quantum Models as Kernel Methods. <i>Quantum Science and Technology</i> , 2021, , 217-245.	1.5	66
16	Fault-Tolerant Quantum Machine Learning. <i>Quantum Science and Technology</i> , 2021, , 247-272.	1.5	0
17	Influence of coincidence detection of a biphoton state through free-space atmospheric turbulence using a partially spatially coherent pump. <i>Physical Review A</i> , 2020, 102, .	1.0	11
18	Negative contributions to entropy production induced by quantum coherences. <i>Physical Review A</i> , 2020, 102, .	1.0	16

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19	Compressed-sensing tomography for qudits in Hilbert spaces of non-power-of-two dimensions. <i>Physical Review A</i> , 2020, 101, .	1.0	1
20	Formation of dialysis-free Kombucha-based bacterial nanocellulose embedded in a polypyrrole/PVA composite for bulk conductivity measurements. <i>RSC Advances</i> , 2020, 10, 27585-27597.	1.7	12
21	Lazy open quantum walks. <i>Physical Review A</i> , 2020, 102, .	1.0	4
22	Quantum classifier with tailored quantum kernel. <i>Npj Quantum Information</i> , 2020, 6, .	2.8	91
23	Dynamics of Quantum Correlations in a Qubit-Oscillator System Interacting via a Dissipative Bath. <i>Open Systems and Information Dynamics</i> , 2020, 27, 2050004.	0.5	5
24	Experimental investigation of Markovian and non-Markovian channel addition. <i>Physical Review A</i> , 2020, 101, .	1.0	15
25	Convex combinations of Pauli semigroups: Geometry, measure, and an application. <i>Physical Review A</i> , 2020, 101, .	1.0	21
26	On quantum ensembles of quantum classifiers. <i>Quantum Machine Intelligence</i> , 2020, 2, 1.	2.7	15
27	Origin of orientation-dependent $R_{1\rho}$ ( $=1/T_{1\rho}$ ) relaxation in white matter. <i>Magnetic Resonance in Medicine</i> , 2020, 84, 2713-2723.	1.9	14
28	Dynamical and thermodynamical approaches to open quantum systems. <i>Scientific Reports</i> , 2020, 10, 2607.	1.6	7
29	Quantum effects in the brain: A review. <i>AVS Quantum Science</i> , 2020, 2, .	1.8	38
30	The theory of the quantum kernel-based binary classifier. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 2020, 384, 126422.	0.9	35
31	Convex combinations of CP-divisible Pauli channels that are not semigroups. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 2020, 384, 126907.	0.9	18
32	Collective heat capacity for quantum thermometry and quantum engine enhancements. <i>New Journal of Physics</i> , 2020, 22, 083049.	1.2	25
33	Generalized theory of pseudomodes for exact descriptions of non-Markovian quantum processes. <i>Physical Review Research</i> , 2020, 2, .	1.3	27
34	Quantum gradient descent and Newton's method for constrained polynomial optimization. <i>New Journal of Physics</i> , 2019, 21, 073023.	1.2	65
35	Measure of not-completely-positive qubit maps: The general case. <i>Physical Review A</i> , 2019, 100, .	1.0	7
36	Parallel quantum trajectories via forking for sampling without redundancy. <i>New Journal of Physics</i> , 2019, 21, 083024.	1.2	11

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37	Dipolar induced spin-lattice relaxation in the myelin sheath: A molecular dynamics study. Scientific Reports, 2019, 9, 14813.	1.6	13
38	Radio and optical alignment method based on GPS. MethodsX, 2019, 6, 2057-2064.	0.7	0
39	Fibre-orientation dependent $R1(=1/T1)$ relaxation in the brain: The role of susceptibility induced spin-lattice relaxation in the myelin water compartment. Journal of Magnetic Resonance, 2019, 300, 135-141.	1.2	12
40	Open quantum walks. European Physical Journal: Special Topics, 2019, 227, 1869-1883.	1.2	12
41	Energetic and entropic effects of bath-induced coherences. Physical Review A, 2019, 99, .	1.0	29
42	Dynamics and thermalization in a simple mesoscopic fermionic bath. Physical Review A, 2019, 99, .	1.0	6
43	Circuit-Based Quantum Random Access Memory for Classical Data. Scientific Reports, 2019, 9, 3949.	1.6	68
44	Quantum coherence, many-body correlations, and non-thermal effects for autonomous thermal machines. Scientific Reports, 2019, 9, 3191.	1.6	45
45	A novel analogue keyboard for embedded applications, based on integer division truncation. HardwareX, 2019, 5, e00055.	1.1	1
46	Measure of positive and not completely positive single-qubit Pauli maps. Physical Review A, 2019, 99, .	1.0	7
47	Apparent temperature: demystifying the relation between quantum coherence, correlations, and heat flows. Quantum Science and Technology, 2019, 4, 025005.	2.6	33
48	Heat flow reversals without reversing the arrow of time: The role of internal quantum coherences and correlations. Physical Review Research, 2019, 1, .	1.3	18
49	Thermodynamics from indistinguishability: Mitigating and amplifying the effects of the bath. Physical Review Research, 2019, 1, .	1.3	18
50	Integrating machine learning techniques in quantum communication to characterize the quantum channel. Journal of the Optical Society of America B: Optical Physics, 2019, 36, B116.	0.9	9
51	Monitoring a free-space quantum communication channel using machine learning techniques. , 2019, , .		0
52	Probing Decoherence in Plasmonic Waveguides in the Quantum Regime. Physical Review Applied, 2018, 9, .	1.5	10
53	Quantum ensembles of quantum classifiers. Scientific Reports, 2018, 8, 2772.	1.6	47
54	Tackling Africa's digital divide. Nature Photonics, 2018, 12, 249-252.	15.6	44

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55	Non-reversal Open Quantum Walks. <i>Open Systems and Information Dynamics</i> , 2018, 25, 1850017.	0.5	3
56	The future of quantum biology. <i>Journal of the Royal Society Interface</i> , 2018, 15, 20180640.	1.5	136
57	Non-Markovian Evolution: a Quantum Walk Perspective. <i>Open Systems and Information Dynamics</i> , 2018, 25, 1850014.	0.5	38
58	An open quantum system approach to the radical pair mechanism. <i>Scientific Reports</i> , 2018, 8, 15719.	1.6	9
59	Learning with Quantum Models. <i>Quantum Science and Technology</i> , 2018, , 247-272.	1.5	6
60	Supervised Learning with Quantum Computers. <i>Quantum Science and Technology</i> , 2018, , .	1.5	241
61	An Invitation to Quantum Channels. <i>Quanta</i> , 2018, 7, 54.	0.2	17
62	Quantum Computing for Training. <i>Quantum Science and Technology</i> , 2018, , 211-245.	1.5	0
63	Quantum Computing for Inference. <i>Quantum Science and Technology</i> , 2018, , 173-210.	1.5	0
64	Instrumentation limitation on a polarization-based entangled photon source. <i>Journal of the Optical Society of America B: Optical Physics</i> , 2017, 34, 1084.	0.9	4
65	Entanglement concentration for two-mode Gaussian states in non-inertial frames. <i>Journal of Physics A: Mathematical and Theoretical</i> , 2017, 50, 165302.	0.7	0
66	Polarization-entangled photon generation using partial spatially coherent pump beam. <i>Scientific Reports</i> , 2017, 7, 12091.	1.6	16
67	Robustness and fragility of Markovian dynamics in a qubit dephasing channel. <i>Physical Review A</i> , 2017, 95, .	1.0	2
68	Steady-state control of open Quantum Brownian Motion. <i>Fortschritte Der Physik</i> , 2017, 65, 1600063.	1.5	2
69	Stochastic wave-function unravelling of the generalized Lindblad equation. <i>Physical Review E</i> , 2017, 96, 063313.	0.8	2
70	Implementing a distance-based classifier with a quantum interference circuit. <i>Europhysics Letters</i> , 2017, 119, 60002.	0.7	148
71	Quantum Machine Learning. , 2017, , 1034-1043.		5
72	Intercept-resend attack on six-state quantum key distribution over collective-rotation noise channels. <i>Chinese Physics B</i> , 2016, 25, 070303.	0.7	5

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73	Exchange of information between system and environment: Facts and myths. Europhysics Letters, 2016, 113, 50001.	0.7	6
74	Projection operator based expansion of the evolution operator. Journal of Physics A: Mathematical and Theoretical, 2016, 49, 425301.	0.7	0
75	Prediction by linear regression on a quantum computer. Physical Review A, 2016, 94, .	1.0	188
76	Digital quantum simulation of many-body non-Markovian dynamics. Physical Review A, 2016, 94, .	1.0	35
77	Resummation for Nonequilibrium Perturbation Theory and Application to Open Quantum Lattices. Physical Review X, 2016, 6, .	2.8	27
78	Quantum force estimation in arbitrary non-Markovian Gaussian baths. Physical Review A, 2016, 94, .	1.0	10
79	The influences that spatial coherence of the pump beam imposes on the properties of entangled photon pairs. Proceedings of SPIE, 2016, , .	0.8	0
80	Free-space optical communication alignment system. , 2016, , .		0
81	The simulation of the non-Markovian behaviour of a two-level system. Physica A: Statistical Mechanics and Its Applications, 2016, 450, 395-402.	1.2	4
82	Minimalistic analytical approach to non-Markovian open quantum systems. Europhysics Letters, 2016, 113, 20004.	0.7	4
83	Quantum Machine Learning. , 2016, , 1-10.		5
84	Universal simulation of Markovian open quantum systems. Physical Review A, 2015, 91, .	1.0	46
85	Microscopic derivation of open quantum walks. Physical Review A, 2015, 92, .	1.0	12
86	Monte Carlo simulation of a noisy quantum channel with memory. Physical Review E, 2015, 92, 043304.	0.8	0
87	Microscopic derivation of open quantum Brownian motion: a particular example. Physica Scripta, 2015, T165, 014017.	1.2	4
88	Projection Operators Technique in the Theory of Open Quantum Systems. EPJ Web of Conferences, 2015, 103, 02007.	0.1	0
89	Towards polarisation-encoded quantum key distribution in optical fibre networks. South African Journal of Science, 2015, 111, 6.	0.3	1
90	Simulating a perceptron on a quantum computer. Physics Letters, Section A: General, Atomic and Solid State Physics, 2015, 379, 660-663.	0.9	114

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91	Anomalies in non-Markovian quantum dynamics. Journal of Physics B: Atomic, Molecular and Optical Physics, 2015, 48, 035202.	0.6	3
92	A quantum protective mechanism in photosynthesis. Scientific Reports, 2015, 5, 8720.	1.6	17
93	An introduction to quantum machine learning. Contemporary Physics, 2015, 56, 172-185.	0.8	592
94	Six-State Symmetric Quantum Key Distribution Protocol. Journal of Quantum Information Science, 2015, 05, 33-40.	0.2	4
95	Suitability of quantum cryptography for national facilities. , 2014, , .		0
96	Dissipative quantum computing with open quantum walks. , 2014, , .		2
97	Microscopic derivation of open quantum walks. , 2014, , .		0
98	Simulation of single-qubit open quantum systems. Physical Review A, 2014, 90, .	1.0	25
99	Quantum Computing for Pattern Classification. Lecture Notes in Computer Science, 2014, , 208-220.	1.0	44
100	Encoding mutually unbiased bases in orbital angular momentum for quantum key distribution. Proceedings of SPIE, 2014, , .	0.8	0
101	Stochastic Schrödinger Equations for Markovian and non-Markovian Cases. Open Systems and Information Dynamics, 2014, 21, 1440008.	0.5	10
102	Control of dissipation of energy via reservoirs of coherent states. European Physical Journal D, 2014, 68, 1.	0.6	1
103	Quantum walks on graphs representing the firing patterns of a quantum neural network. Physical Review A, 2014, 89, .	1.0	36
104	Quantum optical implementation of open quantum walks. International Journal of Quantum Information, 2014, 12, 1461010.	0.6	11
105	Arbitrary spin in a spin bath: Exact dynamics and approximation techniques. Physical Review A, 2014, 89, .	1.0	12
106	Nonequilibrium-thermodynamics approach to open quantum systems. Physical Review A, 2014, 90, .	1.0	11
107	Finite-key-size security of the Phoenix-Barnett-Chefles 2000 quantum-key-distribution protocol. Physical Review A, 2014, 90, .	1.0	10
108	Fractional relaxations in photonic crystals. Journal of Physics A: Mathematical and Theoretical, 2014, 47, 395304.	0.7	4

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109	The quest for a Quantum Neural Network. Quantum Information Processing, 2014, 13, 2567-2586.	1.0	337
110	Coherence in a dissipative two-level system. European Physical Journal D, 2014, 68, 1.	0.6	3
111	Perturbative approach to Markovian open quantum systems. Scientific Reports, 2014, 4, 4887.	1.6	76
112	A Necessary Condition for the Security of Coherent-One-Way Quantum Key Distribution Protocol. Applied Mathematics and Information Sciences, 2014, 8, 2769-2773.	0.7	6
113	Dynamics and non-equilibrium steady state in a system of coupled harmonic oscillators. Physics Letters, Section A: General, Atomic and Solid State Physics, 2013, 377, 1682-1692.	0.9	8
114	Higher-dimensional orbital-angular-momentum-based quantum key distribution with mutually unbiased bases. Physical Review A, 2013, 88, .	1.0	264
115	Open Quantum Walks: a short introduction. Journal of Physics: Conference Series, 2013, 442, 012003.	0.3	18
116	Dissipative preparation of large $W$ states in optical cavities. Physical Review A, 2013, 87, .	1.0	32
117	Critical conditions protecting entanglement. European Physical Journal D, 2013, 67, 1.	0.6	2
118	Critical frequency control in harmonic quantum Brownian motion. Journal of Physics A: Mathematical and Theoretical, 2013, 46, 015304.	0.7	4
119	Dissipative preparation of generalized Bell states. Journal of Physics B: Atomic, Molecular and Optical Physics, 2013, 46, 104004.	0.6	10
120	Finite-size key in the Bennett 1992 quantum-key-distribution protocol for Rényi entropies. Physical Review A, 2013, 88, .	1.0	14
121	Filtering schemes in the quantum-classical Liouville approach to nonadiabatic dynamics. Physical Review E, 2013, 88, 033301.	0.8	16
122	Survival of coherence for open quantum systems in thermal baths. Physical Review A, 2013, 88, .	1.0	12
123	Simulating quantum circuits with GNU Octave and Python. , 2013, , .		0
124	Decoherence-assisted transport in quantum networks. New Journal of Physics, 2013, 15, 013038.	1.2	22
125	Microscopic Derivation of Open Quantum Walk on Two-Node Graph. Open Systems and Information Dynamics, 2013, 20, 1340007.	0.5	5
126	Anomalies in Strongly Coupled Harmonic Quantum Brownian Motion. Open Systems and Information Dynamics, 2013, 20, 1350002.	0.5	2



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127	Anomalies in Strongly Coupled Harmonic Quantum Brownian Motion II. Open Systems and Information Dynamics, 2013, 20, 1350015.	0.5	0
128	Properties of open quantum walks on $\mathbb{Z}$ . Physica Scripta, 2012, T151, 014077.	1.2	13
129	Parametrizations of density matrices. Journal of Modern Optics, 2012, 59, 1-20.	0.6	39
130	Critical frequency control for arbitrarily slow decoherence of a qubit. Physical Review A, 2012, 85, .	1.0	10
131	Initial correlation in a system of a spin coupled to a spin bath through an intermediate spin. Physical Review A, 2012, 86, .	1.0	27
132	Quantum trajectories: Memory and continuous observation. Physical Review A, 2012, 86, .	1.0	17
133	Efficiency of open quantum walk implementation of dissipative quantum computing algorithms. Quantum Information Processing, 2012, 11, 1301-1309.	1.0	34
134	Open System Approach to the Internal Dynamics of a Model Multilevel Molecule. Open Systems and Information Dynamics, 2012, 19, 1250011.	0.5	2
135	Unsharp continuous measurement of a Bose-Einstein condensate: Full quantum state estimation and the transition to classicality. Physical Review A, 2012, 86, .	1.0	10
136	ARBITRARILY SLOW RELAXATIONS IN A SPIN-BOSON MODEL UNDER THE NONINTERACTING-BLIP APPROXIMATION. International Journal of Quantum Information, 2012, 10, 1241001.	0.6	2
137	Non-equilibrium thermal entanglement in a two-particle system. Physica Scripta, 2012, T151, 014017.	1.2	4
138	Decoherence-Assisted Transport in a Dimer System. Physical Review Letters, 2012, 108, 020602.	2.9	45
139	Discontinuities in a damped quantum harmonic oscillator. Journal of Physics A: Mathematical and Theoretical, 2012, 45, 285306.	0.7	5
140	Open Quantum Random Walks. Journal of Statistical Physics, 2012, 147, 832-852.	0.5	111
141	Open quantum walks on graphs. Physics Letters, Section A: General, Atomic and Solid State Physics, 2012, 376, 1545-1548.	0.9	54
142	Stochastic simulation of long-time nonadiabatic dynamics. Physica Scripta, 2011, T143, 014024.	1.2	10
143	Non-equilibrium thermal entanglement for a three spin chain. Physics Letters, Section A: General, Atomic and Solid State Physics, 2011, 375, 3157-3166.	0.9	20
144	Recent Findings From The Quantum Network in Durban. AIP Conference Proceedings, 2011, , .	0.3	2

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145	Reservoir for inverse-power-law decoherence of a qubit. <i>Physical Review A</i> , 2011, 83, .	1.0	10
146	Designing Reservoirs for $1/t$ Decoherence of a Qubit. <i>Open Systems and Information Dynamics</i> , 2011, 18, 289-299.	0.5	3
147	Dynamics of nonequilibrium thermal entanglement for simple spin chains. , 2011, , .		0
148	â€Nonlinearâ€™ positive mappings for density matrices. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2010, 42, 436-438.	1.3	1
149	Sampling of quantum dynamics at long time. <i>Physical Review E</i> , 2010, 81, 032101.	0.8	15
150	A Lie Symmetry Analysis of the Caldeira-Leggett Model. <i>Open Systems and Information Dynamics</i> , 2010, 17, 409-417.	0.5	0
151	Stochastic SchrÃ¶dinger equations with coloured noise. <i>Europhysics Letters</i> , 2010, 91, 24001.	0.7	25
152	Monitoring the wave function by time continuous position measurement. <i>New Journal of Physics</i> , 2010, 12, 043038.	1.2	15
153	A necessary condition for the security of differential-phase-shift quantum key distribution. <i>Journal of Physics A: Mathematical and Theoretical</i> , 2010, 43, 305302.	0.7	3
154	Realizing long-term quantum cryptography. <i>Journal of the Optical Society of America B: Optical Physics</i> , 2010, 27, A185.	0.9	37
155	Diffusion approximation of stochastic master equations with jumps. <i>Journal of Mathematical Physics</i> , 2009, 50, 122101.	0.5	4
156	Classical capacity of a qubit depolarizing channel with memory. <i>Physical Review A</i> , 2009, 79, .	1.0	9
157	Non-Markovian dynamics of an interacting qubit pair coupled to two independent bosonic baths. <i>Journal of Physics A: Mathematical and Theoretical</i> , 2009, 42, 485301.	0.7	30
158	Non-Markovian quantum repeated interactions and measurements. <i>Journal of Physics A: Mathematical and Theoretical</i> , 2009, 42, 425304.	0.7	33
159	The Algebraic Measure of a Hidden Markov Quantum Memory Channel. , 2009, , .		0
160	Stochastic wave-function unraveling of the generalized Lindblad master equation. <i>Physical Review A</i> , 2009, 79, .	1.0	24
161	Numerical and analytical approach to the quantum dynamics of two coupled spins in bosonic baths. <i>Physical Review A</i> , 2009, 80, .	1.0	24
162	Kinetic description of quantum Brownian motion. <i>European Physical Journal: Special Topics</i> , 2008, 159, 135-141.	1.2	1

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163	Parametrizing Density Matrices for Composite Quantum Systems. Open Systems and Information Dynamics, 2008, 15, 397-408.	0.5	4
164	Density Matrices and Their Time Evolution. Open Systems and Information Dynamics, 2008, 15, 109-121.	0.5	4
165	NosÃ“ Hoover dynamics in quantum phase space. Journal of Physics A: Mathematical and Theoretical, 2008, 41, 355304.	0.7	5
166	Dynamics of nonequilibrium thermal entanglement. Physical Review A, 2008, 78, .	1.0	64
167	Qubits in a random environment. Journal of Physics A: Mathematical and Theoretical, 2007, 40, 8069-8080.	0.7	3
168	Time evolution and decoherence of a spin-12particle coupled to a spin bath in thermal equilibrium. Physical Review B, 2007, 76, .	1.1	42
169	Stochastic analysis and simulation of spin star systems. Physical Review E, 2007, 76, 016701.	0.8	9
170	Exact treatment of linear difference equations with noncommutative coefficients. Mathematical Methods in the Applied Sciences, 2007, 30, 2147-2153.	1.2	3
171	Decoherence. , 2007, , 219-280.		6
172	Non-Markovian dynamics of a qubit. Physical Review A, 2006, 73, .	1.0	161
173	Exact dynamics of a two-qubit system in a spin star environment. Physical Review B, 2006, 73, .	1.1	79
174	Spatial Decoherence in QED. Open Systems and Information Dynamics, 2006, 13, 393-402.	0.5	0
175	Loss of coherence and dressing in QED. Physical Review A, 2006, 74, .	1.0	6
176	Theoretical analysis of a recent experiment on mesoscopic state superpositions in cavity QED. Physical Review A, 2005, 72, .	1.0	1
177	Initial correlations effects on decoherence at zero temperature. Journal of Physics A, 2005, 38, 10203-10216.	1.6	6
178	Quantum description of Einsteinâ€™s Brownian motion. Physical Review E, 2005, 71, 046134.	0.8	37
179	Scaling of non-Markovian Monte Carlo wave-function methods. Physical Review E, 2005, 71, 056701.	0.8	2
180	Simulating Open Quantum Systems with Trapped Ions. European Physical Journal A, 2005, 23, 67-74.	0.2	1

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181	Non-Markovian Wave Function Simulations of Quantum Brownian Motion. European Physical Journal A, 2005, 23, 117-124.	0.2	0
182	Simulating quantum Brownian motion with single trapped ions. Physical Review A, 2004, 69, .	1.0	44
183	Wave Packet Decoherence in Momentum Space. AIP Conference Proceedings, 2004, , .	0.3	2
184	Non-Markovian dynamics in a spin star system: Exact solution and approximation techniques. Physical Review B, 2004, 70, .	1.1	214
185	Lindblad- and non-Lindblad-type dynamics of a quantum Brownian particle. Physical Review A, 2004, 70, .	1.0	85
186	Dissipation-induced stationary entanglement in dipole-dipole interacting atomic samples. Physical Review A, 2004, 70, .	1.0	55
187	A master equation approach to option pricing. Physica A: Statistical Mechanics and Its Applications, 2003, 319, 519-534.	1.2	8
188	Preparation and decoherence of superpositions of electromagnetic field states. European Physical Journal D, 2001, 14, 377-386.	0.6	8
189	The Time-Convolutionless Projection Operator Technique in the Quantum Theory of Dissipation and Decoherence. Annals of Physics, 2001, 291, 36-70.	1.0	125
190	Non-Markovian spectral broadening in interacting continuous-wave atom lasers. Europhysics Letters, 2001, 54, 14-20.	0.7	11
191	Destruction of quantum coherence through emission of bremsstrahlung. Physical Review A, 2001, 63, .	1.0	64
192	Non-Markovian dynamics in continuous-wave atom lasers. , 2001, , 367-380.		0
193	Relativistic Theory of Continuous Measurements. Lecture Notes in Physics, 2001, , 195-212.	0.3	1
194	Numerical integration methods for stochastic wave function equations. Computer Physics Communications, 2000, 132, 30-43.	3.0	32
195	Quasistationary distributions of dissipative nonlinear quantum oscillators in strong periodic driving fields. Physical Review E, 2000, 61, 4883-4889.	0.8	68
196	Time-Convolutionless Stochastic Unraveling of Non-Markovian Quantum Master Equations. , 2000, , 233-241.		1
197	Non-Markovian dynamics in pulsed- and continuous-wave atom lasers. Physical Review A, 1999, 60, 3188-3196.	1.0	29
198	Non-equilibrium Monte Carlo simulation of decaying Navier-Stokes turbulence. Physics Letters, Section A: General, Atomic and Solid State Physics, 1999, 256, 147-152.	0.9	2

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199	Stochastic Wave Function Approach to Generalized Master Equations. Journal of Superconductivity and Novel Magnetism, 1999, 12, 695-702.	0.5	0
200	Stochastic wave-function method for non-Markovian quantum master equations. Physical Review A, 1999, 59, 1633-1643.	1.0	256
201	Stochastic unraveling of relativistic quantum measurements. , 1999, , 81-116.		2
202	Heisenberg picture operators in the stochastic wave function approach to open quantum systems. European Physical Journal D, 1998, 1, 9-13.	0.6	5
203	A Lorentz covariant stochastic wave function dynamics for open systems. Physics Letters, Section A: General, Atomic and Solid State Physics, 1998, 242, 205-210.	0.9	5
204	Reply to `Relativistic formulation of quantum state diffusion?'. Journal of Physics A, 1998, 31, 9605-9612.	1.6	1
205	Heisenberg picture operators in the quantum-state diffusion model. Journal of Physics A, 1998, 31, L147-L151.	1.6	2
206	Relativistic formulation of quantum-state diffusion. Journal of Physics A, 1998, 31, 33-52.	1.6	15
207	Stochastic wave-function approach to the calculation of multitime correlation functions of open quantum systems. Physical Review A, 1997, 56, 2334-2351.	1.0	23
208	Dissipative quantum systems in strong laser fields: Stochastic wave-function method and Floquet theory. Physical Review A, 1997, 55, 3101-3116.	1.0	41
209	Stochastic wave-function method versus density matrix: a numerical comparison. Computer Physics Communications, 1997, 104, 46-58.	3.0	20
210	On a Fourier space master equation for Navier-Stokes turbulence. Zeitschrift für Physik B-Condensed Matter, 1997, 100, 461-468.	1.1	4
211	Stochastic Dynamics of Reduced Wave Functions and Continuous Measurement in Quantum Optics. , 1997, 45, 39-78.		11
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