Gui-Lu Long

List of Publications by Year in Descending Order

332 papers	13,093 citations	45 h-index	105 g-index
369 ext. papers	15,242 ext. citations	3.7 avg, IF	6.99 L-index

#	Paper	IF	Citations
332	A quantum convolutional neural network on NISQ devices. *AAPPS Bulletin*, **2022**, 32, 1		5
331	A quantum circuit design of AES requiring fewer quantum qubits and gate operations. *Frontiers of Physics*, **2022**, 17, 1	3.7	1
330	Global correlation and local information flows in controllable non-Markovian open quantum dynamics. *Npj Quantum Information*, **2022**, 8,	8.6	4
329	Reconstructing unknown quantum states using variational layerwise method. *Frontiers of Physics*, **2022**, 17, 1	3.7	0
328	Realization of quantum secure direct communication over 100 km fiber with time-bin and phase quantum states.. *Light: Science and Applications*, **2022**, 11, 83	16.7	7
327	Implementations of Heralded Solid-State SWAP and SWAP$sqrt {SWAP}$ Gates through Waveguide-Assisted Interactions. *Annalen Der Physik*, **2022**, 534, 2100373	2.6	0
326	Dual-Frequency Quantum Phase Estimation Mitigates the Spectral Leakage of Quantum Algorithms. *IEEE Signal Processing Letters*, **2022**, 1-1	3.2	
325	Quantum Secure Direct Communication with Private Dense Coding Using a General Preshared Quantum State. *Physical Review Applied*, **2022**, 17,	4.3	4
324	One-step quantum secure direct communication. *Science Bulletin*, **2021**,	10.6	24
323	Deterministic secure quantum communication with practical devices. *Quantum Engineering*, **2021**, 3, e86	4.5	1
322	Generic security analysis framework for quantum secure direct communication. *Frontiers of Physics*, **2021**, 16, 1	3.7	14
321	Multimode Interference Induced Optical Routing in an Optical Microcavity. *Annalen Der Physik*, **2021**, 533, 2000506	2.6	4
320	Stable states with nonzero entropy under broken PT symmetry. *Physical Review Research*, **2021**, 3,	3.9	2
319	Low-loss and high-resolution mechanical mode tuning in microspheres. *Optics Letters*, **2021**, 46, 1592-1595		0
318	Quantum gradient algorithm for general polynomials. *Physical Review A*, **2021**, 103,	2.6	3
317	Drastic increase of channel capacity in quantum secure direct communication using masking. *Science Bulletin*, **2021**, 66, 1267-1267	10.6	22
316	Experimental Realization of Sensitivity Enhancement and Suppression with Exceptional Surfaces. *Laser and Photonics Reviews*, **2021**, 15, 2000569	8.3	9

315	Average distillated coherence without complete waste of resources. *Quantum Information Processing*, **2021**, 20, 1	1.6	
314	Collapse-in and collapse-out in partial measurement in quantum mechanics and its wise interpretation. *Science China: Physics, Mechanics and Astronomy*, **2021**, 64, 1	3.6	5
313	Microresonators in Lithium Niobate Thin Films. *Advanced Optical Materials*, **2021**, 9, 2100539	8.1	4
312	Maximum relative entropy of coherence for quantum channels. *Science China: Physics, Mechanics and Astronomy*, **2021**, 64, 1	3.6	1
311	Loophole-free plug-and-play quantum key distribution. *New Journal of Physics*, **2021**, 23, 063058	2.9	4
310	Heralded quantum gates for hybrid systems via waveguide-mediated photon scattering. *Physical Review A*, **2021**, 104,	2.6	2
309	Optimizing a polynomial function on a quantum processor. *Npj Quantum Information*, **2021**, 7,	8.6	6
308	Multilevel 2-D Quantum Wavelet Transforms. *IEEE Transactions on Cybernetics*, **2021**, PP,	10.2	6
307	Phase-controlled dual-wavelength resonance in a self-coupling whispering-gallery-mode microcavity. *Optics Letters*, **2021**, 46, 773-776	3	6
306	Color-detuning-dynamics-based quantum sensing with dressed states driving. *Optics Express*, **2021**, 29, 5358-5366	3.3	0
305	Demonstration of Yb-doped and Er/Yb-codoped on-chip microsphere lasers. *Optics Express*, **2021**, 29, 25663-25674	3.3	2
304	Implementation of a twin-beam state-based clock synchronization system with dispersion-free HOM feedback. *Optics Express*, **2021**, 29, 28607-28618	3.3	1
303	Scalable higher-order exceptional surface with passive resonators. *Optics Letters*, **2021**, 46, 4025-4028	3	0
302	Quantum second-order optimization algorithm for general polynomials. *Science China: Physics, Mechanics and Astronomy*, **2021**, 64, 1	3.6	7
301	Roles of fiber birefringence and Raman scattering in the spontaneous four-wave mixing process through birefringent fibers. *Optics Express*, **2021**, 29, 31348-31363	3.3	
300	Optical properties of a waveguide-mediated chain of randomly positioned atoms. *Optics Express*, **2021**, 29, 1903-1917	3.3	3
299	Two-copy quantum teleportation based on GHZ measurement. *Quantum Information Processing*, **2020**, 19, 1	1.6	2
298	Efficient quantum arithmetic operation circuits for quantum image processing. *Science China: Physics, Mechanics and Astronomy*, **2020**, 63, 1	3.6	22

297	Quantum algorithm for solving linear differential equations: Theory and experiment. *Physical Review A*, **2020**, 101,	2.6	16
296	Toward Practical Quantum Secure Direct Communication: A Quantum-Memory-Free Protocol and Code Design. *IEEE Transactions on Communications*, **2020**, 68, 5778-5792	6.9	26
295	Highly Efficient Optical Add-Drop Filter With an Angle-Polished Fiber Coupler. *IEEE Photonics Technology Letters*, **2020**, 32, 71-74	2.2	3
294	Observation of information flow in the anti-??-symmetric system with nuclear spins. *Npj Quantum Information*, **2020**, 6,	8.6	9
293	Simultaneous two-way classical communication and measurement-device-independent quantum key distribution with coherent states. *Physical Review A*, **2020**, 101,	2.6	9
292	Manipulation of optomechanically induced transparency and absorption by indirectly coupling to an auxiliary cavity mode. *Optics Express*, **2020**, 28, 580-592	3.3	9
291	Entanglement protection of Ince-Gauss modes in atmospheric turbulence using adaptive optics. *Optics Express*, **2020**, 28, 38366-38375	3.3	2
290	Frequency-tuning-induced state transfer in optical microcavities. *Photonics Research*, **2020**, 8, 490	6	8
289	Experimental free-space quantum secure direct communication and its security analysis. *Photonics Research*, **2020**, 8, 1522	6	24
288	A Full Quantum Eigensolver for Quantum Chemistry Simulations. *Research*, **2020**, 2020, 1486935	7.8	27
287	Enhanced sensitivity of optical gyroscope in a mechanical parity-time-symmetric system based on exceptional point. *New Journal of Physics*, **2020**, 22, 093009	2.9	8
286	Device-independent quantum secure direct communication against collective attacks. *Science Bulletin*, **2020**, 65, 12-20	10.6	115
285	Measurement-device-independent quantum secure direct communication. *Science China: Physics, Mechanics and Astronomy*, **2020**, 63, 1	3.6	91
284	One-step method for preparing the experimental pure state in nuclear magnetic resonance. *Science China: Physics, Mechanics and Astronomy*, **2020**, 63, 1	3.6	6
283	Coherent and incoherent theories for photosynthetic energy transfer. *Science Bulletin*, **2020**, 65, 318-328	10.6	14
282	Security analysis of measurement-device-independent quantum secure direct communication. *Quantum Information Processing*, **2020**, 19, 1	1.6	7
281	A novel method to fabricate on-chip ultra-high-Q microtoroid resonators. *Optics Communications*, **2020**, 476, 126259	2	2
280	Quantum secure direct communication with entanglement source and single-photon measurement. *Science China: Physics, Mechanics and Astronomy*, **2020**, 63, 1	3.6	14

279	Entanglement purification for memory nodes in a quantum network. *Science China: Physics, Mechanics and Astronomy*, **2020**, 63, 1	3.6	14
278	Quantum secure direct communication based on single-photon Bell-state measurement. *New Journal of Physics*, **2020**, 22, 063017	2.9	34
277	Preparation of pseudo-pure states for NMR quantum computing with one ancillary qubit. *Science China: Physics, Mechanics and Astronomy*, **2019**, 62, 1	3.6	9
276	Experimental simulation of shift operators in a quantum processor. *Physical Review A*, **2019**, 99,	2.6	1
275	Microwave transmission through an artificial atomic chain coupled to a superconducting photonic crystal. *Physical Review A*, **2019**, 99,	2.6	12
274	Measuring holographic entanglement entropy on a quantum simulator. *Npj Quantum Information*, **2019**, 5,	8.6	3
273	Quantum Random-Number Generator Based on Tunneling Effects in a Si Diode. *Physical Review Applied*, **2019**, 11,	4.3	4
272	Implementation and security analysis of practical quantum secure direct communication. *Light: Science and Applications*, **2019**, 8, 22	16.7	117
271	Searching nonadiabatic holonomic quantum gates via an optimization algorithm. *Physical Review A*, **2019**, 100,	2.6	9
270	Proposal to test quantum wave-particle superposition on massive mechanical resonators. *Npj Quantum Information*, **2019**, 5,	8.6	10
269	Linear optics-based entanglement concentration protocols for cluster-type entangled coherent state. *Quantum Information Processing*, **2019**, 18, 1	1.6	4
268	Experimental demonstration of a digital quantum simulation of a general PT-symmetric system. *Physical Review A*, **2019**, 99,	2.6	17
267	Topological dynamical decoupling. *Science China: Physics, Mechanics and Astronomy*, **2019**, 62, 1	3.6	8
266	Quantum spacetime on a quantum simulator. *Communications Physics*, **2019**, 2,	5.4	13
265	Characterization of microresonator-geometry-deformation for cavity optomechanics. *Optics Express*, **2019**, 27, 63-73	3.3	11
264	Multiple EIT and EIA in optical microresonators. *Optics Express*, **2019**, 27, 7344-7353	3.3	25
263	Complete analysis of hyperentangled Bell states assisted with auxiliary hyperentanglement. *Optics Express*, **2019**, 27, 8994-9003	3.3	18
262	Arbitrary function resonance tuner of the optical microcavity with sub-MHz resolution. *Optics Letters*, **2019**, 44, 3250-3253	3	5

261	Brillouin cavity optomechanics sensing with enhanced dynamical backaction. *Photonics Research*, **2019**, 7, 1440	6	13
260	Security of quantum secure direct communication based on Wyner's wiretap channel theory. *Quantum Engineering*, **2019**, 1, e26	4.5	42
259	Local-measurement-based quantum state tomography via neural networks. *Npj Quantum Information*, **2019**, 5,	8.6	17
258	Experimental realization of quantum algorithms for a linear system inspired by adiabatic quantum computing. *Physical Review A*, **2019**, 99,	2.6	20
257	High-fidelity quantum gates on quantum-dot-confined electron spins in low-Q optical microcavities. *Annals of Physics*, **2018**, 391, 150-160	2.5	14
256	Efficient universal quantum channel simulation in IBM's cloud quantum computer. *Science China: Physics, Mechanics and Astronomy*, **2018**, 61, 1	3.6	22
255	Entanglement measures in embedding quantum simulators with nuclear spins. *Physical Review A*, **2018**, 97,	2.6	6
254	NMRCloudQ: a quantum cloud experience on a nuclear magnetic resonance quantum computer. *Science Bulletin*, **2018**, 63, 17-23	10.6	18
253	Realistic interpretation of quantum mechanics and encounter-delayed-choice experiment. *Science China: Physics, Mechanics and Astronomy*, **2018**, 61, 1	3.6	25
252	Experimental realization of noise-induced adiabaticity in nuclear magnetic resonance. *Physical Review A*, **2018**, 97,	2.6	7
251	Nuclear magnetic resonance for quantum computing: Techniques and recent achievements. *Chinese Physics B*, **2018**, 27, 020308	1.2	30
250	Rapid and high precision measurement of opto-thermal relaxation with pump-probe method. *Science Bulletin*, **2018**, 63, 287-292	10.6	16
249	Single phonon source based on a giant polariton nonlinear effect. *Optics Letters*, **2018**, 43, 1163-1166	3	10
248	Photon transport mediated by an atomic chain trapped along a photonic crystal waveguide. *Physical Review A*, **2018**, 98,	2.6	25
247	Design and Implementation of a Practical Quantum Secure Direct Communication System **2018**,		12
246	Gain lifetime characterization through time-resolved stimulated emission in a whispering-gallery mode microresonator. *Nanophotonics*, **2018**, 8, 127-134	6.3	14
245	Physicists experimentally verify the multipartite generalized Hardy's paradox. *Science Bulletin*, **2018**, 63, 1597	10.6	1
244	Demonstration of multiparty quantum clock synchronization. *Quantum Information Processing*, **2018**, 17, 1	1.6	5

243	Two-copy Quantum Teleportation. *Scientific Reports*, **2018**, 8, 13960	4.9	6
242	Efficient quantum simulation of photosynthetic light harvesting. *Npj Quantum Information*, **2018**, 4,	8.6	39
241	Measurement-device-independent quantum communication without encryption. *Science Bulletin*, **2018**, 63, 1345-1350	10.6	86
240	Quantum State Tomography via Reduced Density Matrices. *Physical Review Letters*, **2017**, 118, 020401	7.4	28
239	Estimation on Geometric Measure of Quantum Coherence. *Communications in Theoretical Physics*, **2017**, 67, 166	2.4	28
238	Experimental study of Forrelation in nuclear spins. *Science Bulletin*, **2017**, 62, 497-502	10.6	18
237	Experimental Identification of Non-Abelian Topological Orders on a Quantum Simulator. *Physical Review Letters*, **2017**, 118, 080502	7.4	18
236	Raman lasing and Fano lineshapes in a packaged fiber-coupled whispering-gallery-mode microresonator. *Science Bulletin*, **2017**, 62, 875-878	10.6	34
235	Experimental quantum Hamiltonian identification from measurement time traces. *Science Bulletin*, **2017**, 62, 863-868	10.6	21
234	Second-order magnetic field gradient-induced strong coupling between nitrogen-vacancy centers and a mechanical oscillator. *Science China: Physics, Mechanics and Astronomy*, **2017**, 60, 1	3.6	15
233	Refined entanglement concentration for electron-spin entangled cluster states with quantum-dot spins in optical microcavities. *Quantum Information Processing*, **2017**, 16, 1	1.6	7
232	Measurement of linear response functions in Nuclear Magnetic Resonance. *Scientific Reports*, **2017**, 7, 12797	4.9	4
231	What is the wave function in quantum mechanics?. *Science Bulletin*, **2017**, 62, 1355-1356	10.6	4
230	Accessible coherence and coherence distribution. *Physical Review A*, **2017**, 95,	2.6	22
229	Digital spiral object identification using random light. *Light: Science and Applications*, **2017**, 6, e17013	16.7	30
228	Dissipative preparation of steady Greenberger-Horne-Zeilinger states for Rydberg atoms with quantum Zeno dynamics. *Physical Review A*, **2017**, 96,	2.6	45
227	Quantum simulation of quantum channels in nuclear magnetic resonance. *Physical Review A*, **2017**, 96,	2.6	16
226	Enhancing quantum control by bootstrapping a quantum processor of 12 qubits. *Npj Quantum Information*, **2017**, 3,	8.6	49

225	Experimental realization of single-shot nonadiabatic holonomic gates in nuclear spins. *Science China: Physics, Mechanics and Astronomy*, **2017**, 60, 1	3.6	68
224	Entanglement monogamy in three qutrit systems. *Scientific Reports*, **2017**, 7, 1946	4.9	3
223	Quantum Secure Direct Communication: Principles, Current Status, Perspectives **2017**,		7
222	Realization of the Algorithm for System of Linear Equations in Duality Quantum Computing **2017**,		6
221	Quantum memory and non-demolition measurement of single phonon state with nitrogen-vacancy centers ensemble. *Optics Express*, **2017**, 25, 30149-30161	3.3	5
220	Quantum Computing. *Scientia Sinica Informationis*, **2017**, 47, 1277-1299	2.3	3
219	Quantum communication scheme based on quantum teleportation. *Wuli Xuebao/Acta Physica Sinica* , **2017**, 66, 230303	0.6	10
218	Experimental demonstration of concatenated composite pulses robustness to non-static errors. *Science China: Physics, Mechanics and Astronomy*, **2016**, 59, 1	3.6	14
217	Tomography is Necessary for Universal Entanglement Detection with Single-Copy Observables. *Physical Review Letters*, **2016**, 116, 230501	7.4	30
216	Optimal experimental dynamical decoupling of both longitudinal and transverse relaxations. *Physical Review A*, **2016**, 93,	2.6	14
215	Refined hyperentanglement purification of two-photon systems for high-capacity quantum communication with cavity-assisted interaction. *Annals of Physics*, **2016**, 375, 105-118	2.5	27
214	General hyperconcentration of photonic polarization-time-bin hyperentanglement assisted by nitrogen-vacancy centers coupled to resonators. *Scientific Reports*, **2016**, 6, 35922	4.9	8
213	Experimental quantum simulation of Avian Compass in a nuclear magnetic resonance system. *Science China: Physics, Mechanics and Astronomy*, **2016**, 59, 1	3.6	27
212	Variance-based uncertainty relations for incompatible observables. *Quantum Information Processing*, **2016**, 15, 3909-3917	1.6	24
211	Dynamics and entanglement of a membrane-in-the-middle optomechanical system in the extremely-large-amplitude regime. *Science China: Physics, Mechanics and Astronomy*, **2016**, 59, 1	3.6	26
210	Study of a monogamous entanglement measure for three-qubit quantum systems. *Quantum Information Processing*, **2016**, 15, 2405-2424	1.6	3
209	Multiphoton Controllable Transport between Remote Resonators. *Entropy*, **2016**, 18, 179	2.8	1
208	Duality quantum algorithm efficiently simulates open quantum systems. *Scientific Reports*, **2016**, 6, 30727	4.9	34

207	Deterministic error correction for nonlocal spatial-polarization hyperentanglement. *Scientific Reports*, **2016**, 6, 20677	4.9	11
206	Duality quantum computer and the efficient quantum simulations. *Quantum Information Processing*, **2016**, 15, 1189-1212	1.6	32
205	Sum uncertainty relations based on Wigner–Yanase skew information. *Quantum Information Processing*, **2016**, 15, 2639-2648	1.6	22
204	Gain competition induced mode evolution and resonance control in erbium-doped whispering-gallery microresonators. *Optics Express*, **2016**, 24, 9550-60	3.3	16
203	Hyperparallel optical quantum computation assisted by atomic ensembles embedded in double-sided optical cavities. *Physical Review A*, **2016**, 94,	2.6	58
202	Experimental quantum secure direct communication with single photons. *Light: Science and Applications*, **2016**, 5, e16144	16.7	233
201	Remote creation of quantum coherence. *Physical Review A*, **2016**, 94,	2.6	11
200	Hyper-parallel Toffoli gate on three-photon system with two degrees of freedom assisted by single-sided optical microcavities. *Optics Express*, **2016**, 24, 18619-30	3.3	46
199	Fabrication of a microtoroidal resonator with picometer precise resonant wavelength. *Optics Letters*, **2016**, 41, 3603-6	3	18
198	Superfluid density and Berezinskii-Kosterlitz-Thouless transition of a spin-orbit-coupled Fulde-Ferrell superfluid. *Physical Review A*, **2015**, 91,	2.6	12
197	High-dimensional quantum state transfer in a noisy network environment. *Chinese Physics B*, **2015**, 24, 040305	1.2	9
196	Three-pathway electromagnetically induced transparency in coupled-cavity optomechanical system. *Optics Express*, **2015**, 23, 11508-17	3.3	55
195	Quantum ratchet with photons. *Science Bulletin*, **2015**, 60, 278	10.6	5
194	Experimental estimation of average fidelity of a Clifford gate on a 7-qubit quantum processor. *Physical Review Letters*, **2015**, 114, 140505	7.4	40
193	Self-sustained oscillation and dynamical multistability of optomechanical systems in the extremely-large-amplitude regime. *Physical Review A*, **2015**, 91,	2.6	18
192	Universal photonic quantum gates assisted by ancilla diamond nitrogen-vacancy centers coupled to resonators. *Physical Review A*, **2015**, 91,	2.6	25
191	An Alternative Adiabatic Quantum Algorithm for the Hamiltonian Cycle Problem. *Communications in Theoretical Physics*, **2015**, 63, 554-558	2.4	2
190	Engineering optomechanical normal modes for single-phonon transfer and entanglement preparation. *Journal of the Optical Society of America B: Optical Physics*, **2015**, 32, 588	1.7	7

189	Realization of an entanglement-assisted quantum delayed-choice experiment. *Physical Review A*, **2015**, 92,	2.6	22
188	Raman gain induced mode evolution and on-demand coupling control in whispering-gallery-mode microcavities. *Optics Express*, **2015**, 23, 29573-83	3.3	19
187	One-step resonant controlled-phase gate on distant transmon qutrits in different 1D superconducting resonators. *Scientific Reports*, **2015**, 5, 14541	4.9	9
186	Hybrid quantum gates between flying photon and diamond nitrogen-vacancy centers assisted by optical microcavities. *Scientific Reports*, **2015**, 5, 12918	4.9	32
185	Chip-based silica microspheres for cavity optomechanics. *Optics Express*, **2015**, 23, 27260-5	3.3	29
184	Minimum-Time Selective Control of Homonuclear Spins. *IEEE Transactions on Control Systems Technology*, **2015**, 23, 2018-2025	4.8	12
183	Experimental digital quantum simulation of temporal□spatial dynamics of interacting fermion system. *Science Bulletin*, **2015**, 60, 241-248	10.6	30
182	Highly efficient hyperentanglement concentration with two steps assisted by quantum swap gates. *Scientific Reports*, **2015**, 5, 16444	4.9	31
181	Nano-partical sensing based on Raman laser in the whispering gallery mode microresonators. *Wuli Xuebao/Acta Physica Sinica*, **2015**, 64, 164212	0.6	2
180	Universal nonadiabatic geometric gates in two-qubit decoherence-free subspaces. *Scientific Reports* , **2014**, 4, 6814	4.9	54
179	Experimental optimal single qubit purification in an NMR quantum information processor. *Scientific Reports*, **2014**, 4, 6857	4.9	18
178	Detection of anyon□ braiding and identification of anyon entangled states in optical microcavities. *Physica A: Statistical Mechanics and Its Applications*, **2014**, 410, 88-93	3.3	3
177	Highly sensitive detection of nanoparticles with a self-referenced and self-heterodyned whispering-gallery Raman microlaser. *Proceedings of the National Academy of Sciences of the United States of America*, **2014**, 111, E3836-44	11.5	158
176	Gapless topological Fulde-Ferrell superfluidity in spin-orbit coupled Fermi gases. *Physical Review Letters*, **2014**, 113, 115302	7.4	35
175	Enhancement of quantum correlations between two particles under decoherence in finite-temperature environment. *Europhysics Letters*, **2014**, 106, 60003	1.6	12
174	Experimental quantum deletion in an NMR quantum information processor. *Science China: Physics, Mechanics and Astronomy*, **2014**, 57, 1256-1261	3.6	12
173	Multiphoton quantum communication in quantum networks. *Physical Review A*, **2014**, 89,	2.6	16
172	Thermodynamic properties of Heisenberg magnetic systems. *Chinese Physics B*, **2014**, 23, 037502	1.2	3

171	Band-selective shaped pulse for high fidelity quantum control in diamond. *Applied Physics Letters*, **2014**, 104, 262403	3.4	4
170	General hyperentanglement concentration for photon systems assisted by quantum-dot spins inside optical microcavities. *Optics Express*, **2014**, 22, 6547-61	3.3	91
169	Dynamic Fano-like resonances in erbium-doped whispering-gallery-mode microresonators. *Applied Physics Letters*, **2014**, 105, 101112	3.4	53
168	Protecting geometric gates by dynamical decoupling. *Physical Review A*, **2014**, 90,	2.6	40
167	Characterizing Quantum Correlations in Arbitrary-Dimensional Bipartite Systems Using Hurwitz's Theory. *Communications in Theoretical Physics*, **2014**, 61, 273-280	2.4	4
166	Parity□ime-symmetric whispering-gallery microcavities. *Nature Physics*, **2014**, 10, 394-398	16.2	1394
165	Decoherent dynamics of quantum correlations in qubit□utrit systems. *Quantum Information Processing*, **2013**, 12, 3421-3435	1.6	28
164	Entanglement of linear cluster states in terms of averaged entropies. *Science Bulletin*, **2013**, 58, 48-52		25
163	Experimental simulation of anyonic fractional statistics with an NMR quantum-information processor. *Physical Review A*, **2013**, 88,	2.6	23
162	Mathematical Theory of Generalized Duality Quantum Computers Acting on Vector-States. *International Journal of Theoretical Physics*, **2013**, 52, 1751-1767	1.1	11
161	Complete Greenberger□Horne□Zeilinger state analyzer using hyperentanglement. *Quantum Information Processing*, **2013**, 12, 381-393	1.6	19
160	Measurement-induced disturbance and thermal negativity in 1D optical lattice chain. *Annals of Physics*, **2013**, 330, 192-200	2.5	17
159	Quantum correlation dynamics of a three-qubit system coupled to an XY spin chain. *European Physical Journal D*, **2013**, 67, 1	1.3	7
158	Quantifying entanglement of arbitrary-dimensional multipartite pure states in terms of the singular values of coefficient matrices. *Physical Review A*, **2013**, 87,	2.6	7
157	Stronger Criteria for Nonseparability in n-Partite Quantum States. *International Journal of Theoretical Physics*, **2013**, 52, 699-705	1.1	1
156	Experimental realization of nonadiabatic holonomic quantum computation. *Physical Review Letters*, **2013**, 110, 190501	7.4	297
155	High-dimensional quantum state transfer through a quantum spin chain. *Physical Review A*, **2013**, 87,	2.6	45
154	Hybrid entanglement purification for quantum repeaters. *Physical Review A*, **2013**, 88,	2.6	90

153	Direct experimental simulation of the YangBaxter equation. *Journal of the Optical Society of America B: Optical Physics*, **2013**, 30, 1688	1.7	18
152	Quantum Secure Direct Communication **2013**,		2
151	Entanglement classification of 2□□□ quantum systems via the ranks of the multiple coefficient matrices. *Physical Review A*, **2013**, 87,	2.6	12
150	Entanglement concentration for arbitrary unknown less-entangled three-photon W states with linear optics. *Journal of the Optical Society of America B: Optical Physics*, **2013**, 30, 1069	1.7	29
149	Effect of Transverse Correlation Function on the Thermodynamic Quantities of Ferromagnetic Systems. *Communications in Theoretical Physics*, **2013**, 59, 494-502	2.4	4
148	Entanglement generation with coherent states using cross-Kerr nonlinearity. *Journal of the Optical Society of America B: Optical Physics*, **2013**, 30, 2393	1.7	7
147	NMR realization of adiabatic quantum algorithms for the modified Simon problem. *Physical Review A*, **2013**, 88,	2.6	10
146	Observation of a fast evolution in a parity-time-symmetric system. *Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences*, **2013**, 371, 20120053	3	73
145	Experimental simulation of quantum tunneling in small systems. *Scientific Reports*, **2013**, 3, 2232	4.9	20
144	One-step deterministic multipartite entanglement purification with linear optics. *Physics Letters, Section A: General, Atomic and Solid State Physics*, **2012**, 376, 314-319	2.3	17
143	Quantum repeater based on spatial entanglement of photons and quantum-dot spins in optical microcavities. *Physical Review A*, **2012**, 85,	2.6	161
142	Validity of a single-channel model for a spin-orbit-coupled atomic Fermi gas near Feshbach resonances. *Physical Review A*, **2012**, 86,	2.6	8
141	Density matrix formalism of duality quantum computer and the solution of zero-wave-function paradox. *Quantum Information Processing*, **2012**, 11, 317-323	1.6	12
140	Geometric pictures for quantum search algorithms. *Quantum Information Processing*, **2012**, 11, 325-340	1.6	4
139	Control problems in quantum systems. *Science Bulletin*, **2012**, 57, 2194-2199		4
138	An optimal expression of a Kraus operator as a linear combination of unitary matrices. *Journal of Physics A: Mathematical and Theoretical*, **2012**, 45, 444011	2	6
137	Parity effect and phase transitions in quantum Szilard engines. *Physical Review E*, **2012**, 85, 011125	2.4	15
136	Generation and complete analysis of the hyperentangled Bell state for photons assisted by quantum-dot spins in optical microcavities. *Physical Review A*, **2012**, 86,	2.6	130

135	Quantum-nondemolition determination of an unknown Werner state. *Physical Review A*, **2012**, 85,	2.6	9
134	Duality Quantum Information and Duality Quantum Communication **2011**,		2
133	Decoherence-free subspaces of anyon states. *Physica A: Statistical Mechanics and Its Applications*, **2011**, 390, 4713-4718	3.3	4
132	Duality Quantum Computing and Duality Quantum Information Processing. *International Journal of Theoretical Physics*, **2011**, 50, 1305-1318	1.1	50
131	Quantum secret sharing protocol with four state Grover algorithm and its proof-of-principle experimental demonstration. *Optics Communications*, **2011**, 284, 3639-3642	2	37
130	Experimental implementation of a fixed-point duality quantum search algorithm in the nuclear magnetic resonance quantum system. *Science China: Physics, Mechanics and Astronomy*, **2011**, 54, 936-941	3.6	13
129	Multipartite electronic entanglement purification with charge detection. *Physics Letters, Section A: General, Atomic and Solid State Physics*, **2011**, 375, 396-400	2.3	43
128	Measure of nonclassical correlation in coherence-vector representation. *Physical Review A*, **2011**, 84,	2.6	61
127	Theory of degenerate three-wave mixing using circuit QED in solid-state circuits. *Physical Review A*, **2011**, 84,	2.6	18
126	A Scheme for Simulation of Quantum Gates by Abelian Anyons. *Communications in Theoretical Physics*, **2011**, 56, 873-876	2.4	3
125	Why Can We Copy Classical Information?. *Chinese Physics Letters*, **2011**, 28, 010306	1.8	8
124	Quantum Fourier Transform and Phase Estimation in Qudit System. *Communications in Theoretical Physics*, **2011**, 55, 790-794	2.4	17
123	QUANTUM DIRECT COMMUNICATION BASED ON QUANTUM SEARCH ALGORITHM. *International Journal of Quantum Information*, **2010**, 08, 443-450	0.8	30
122	MULTIPLE CONCURRENCE OF MULTI-PARTITE QUANTUM SYSTEM. *International Journal of Quantum Information*, **2010**, 08, 1169-1177	0.8	10
121	A Comparative Study of Quantum and Classical Deletion. *Communications in Theoretical Physics*, **2010**, 53, 486-488	2.4	4
120	ONE-PARTY QUANTUM-ERROR-CORRECTING CODES FOR UNBALANCED ERRORS: PRINCIPLES AND APPLICATION TO QUANTUM DENSE CODING AND QUANTUM SECURE DIRECT COMMUNICATION. *International Journal of Quantum Information*, **2010**, 08, 697-719	0.8	15
119	Complete hyperentangled-Bell-state analysis for quantum communication. *Physical Review A*, **2010**, 82,	2.6	257
118	Duality quantum information processing **2010**,		1

117	Realization of quantum state privacy amplification in a nuclear magnetic resonance quantum system. *Journal of Physics B: Atomic, Molecular and Optical Physics*, **2010**, 43, 125502	1.3	11
116	Multiple Entropy Measures for Multi-particle Pure Quantum State. *Communications in Theoretical Physics*, **2010**, 54, 825-828	2.4	22
115	Eavesdropping in a quantum secret sharing protocol based on Grover algorithm and its solution. *Science China: Physics, Mechanics and Astronomy*, **2010**, 53, 491-495	3.6	77
114	An N/4 fixed-point duality quantum search algorithm. *Science China: Physics, Mechanics and Astronomy*, **2010**, 53, 1765-1768	3.6	19
113	The relation between properties of Gentile statistics and fractional statistics of anyon. *Physica A: Statistical Mechanics and Its Applications*, **2010**, 389, 1565-1570	3.3	13
112	Nonadiabatic fluctuation in the measured geometric phase. *Physical Review A*, **2009**, 80,	2.6	9
111	Competition in rotation-alignment between high-j neutrons and protons in transfermium nuclei. *Physical Review C*, **2009**, 79,	2.7	28
110	DOUBLING THE CAPACITY OF QUANTUM KEY DISTRIBUTION BY USING BOTH POLARIZATION AND DIFFERENTIAL PHASE SHIFT. *International Journal of Quantum Information*, **2009**, 07, 529-537	0.8	12
109	DELETING A MARKED BASIS-STATE FROM AN EVEN SUPERPOSITION OF ALL BASIS-STATES WITH A SINGLE QUERY. *International Journal of Quantum Information*, **2009**, 07, 567-572	0.8	7
108	Nuclear magnetic resonance implementation of universal quantum gate with constant Hamiltonian evolution. *Applied Physics Letters*, **2009**, 94, 064103	3.4	9
107	Searching an Unsorted Database in Quantum Computers and Duality Quantum Computers **2009**,		2
106	The relativistic consistent angular-momentum projected shell model study of the N=Z nucleus 52Fe **2009**, 52, 1471-1476		3
105	Arbitrarily long distance quantum communication using inspection and power insertion. *Science Bulletin*, **2009**, 54, 158-162		39
104	Coexistence of normal, super-, and hyper-deformation in nuclei: A study with angular momentum projection method. *Science Bulletin*, **2009**, 54, 358-363	10.6	10
103	Simulation of the four-body interaction in a nuclear magnetic resonance quantum information processor. *Science Bulletin*, **2009**, 54, 4262-4265		13
102	Efficient entanglement purification for doubly entangled photon state. *Science in China Series D: Earth Sciences*, **2009**, 52, 3464-3467		19
101	Two mode photon bunching effect as witness of quantum criticality in circuit QED **2009**, 52, 1898-1905		17
100	Quantum key distribution using polarization and frequency hyperentangled photons. *Journal of the Optical Society of America B: Optical Physics*, **2009**, 26, 2072	1.7	12

99	Efficient generation of multi-photon W states by joint-measurement. *Progress in Natural Science: Materials International*, **2008**, 18, 119-122	3.6	10
98	Generation of squeezed states of nanomechanical resonator using three-wave mixing. *Applied Physics Letters*, **2008**, 92, 133102	3.4	35
97	Entanglement and squeezing in solid-state circuits. *New Journal of Physics*, **2008**, 10, 013026	2.9	26
96	ANALYTIC ONE-BIT AND CNOT GATE CONSTRUCTIONS OF GENERAL n-QUBIT CONTROLLED GATES. *International Journal of Quantum Information*, **2008**, 06, 447-462	0.8	44
95	Dynamical decoupling method for the suppression of decoherence of the Λ-type three-level atom with finite control pulse length. *Journal of Physics B: Atomic, Molecular and Optical Physics*, **2008**, 41, 125501	1.3	7
94	Λ-vibrational states in superheavy nuclei. *Physical Review C*, **2008**, 77,	2.7	18
93	Negative-parity states and α-decays in odd Ho and Dy nuclei with A=151,153. *Physical Review C*, **2008**, 77,	2.7	3
92	Induced entanglement enhanced by quantum criticality. *Physical Review A*, **2008**, 78,	2.6	24
91	Efficient strategy for sharing entanglement via noisy channels with doubly entangled photon pairs. *Physical Review A*, **2008**, 77,	2.6	55
90	Bang-bang control suppression of amplitude damping in a three-level atom **2008**, 51, 29-37		11
89	Simulation of general three-body interactions in a nuclear magnetic resonance ensemble quantum computer **2008**, 51, 1089-1096		16
88	Duality quantum computing. *Frontiers of Computer Science*, **2008**, 2, 167-178		27
87	Entanglement transfer from photon-subtracted and photon-added two-mode squeezed fields to a pair of qubits. *Physics Letters, Section A: General, Atomic and Solid State Physics*, **2008**, 372, 7124-7128	2.3	8
86	Behavior of quantum coherence of Λ-type four-level atom under bang–bang control. *Optics Communications*, **2008**, 281, 4793-4799	2	16
85	Creation of entanglement between two electron spins induced by many spin ensemble excitations. *European Physical Journal D*, **2008**, 48, 293-300	1.3	6
84	Mathematical Theory of the Duality Computer in the Density Matrix Formalism. *Quantum Information Processing*, **2007**, 6, 49-54	1.6	43
83	Search an unsorted database with quantum mechanics. *Frontiers of Computer Science*, **2007**, 1, 247-271		19
82	Quantum secure direct communication and deterministic secure quantum communication. *Frontiers of Physics in China*, **2007**, 2, 251-272		204

81	Quantum Fourier Transform in a d-level Quantum System **2007**,		1
80	Systematics of g factors of 21+ states in even-even nuclei from Gd to Pt: A microscopic description by the projected shell model. *Physical Review C*, **2007**, 75,	2.7	27
79	VERIFIER-BASED ALGORITHM FOR UNSORTED DATABASE SEARCH PROBLEM. *International Journal of Quantum Information*, **2007**, 05, 597-604	0.8	6
78	GENERATING QUANTUM ENTANGLEMENT IN SCALABLE SUPERCONDUCTING CHARGE QUBITS. *International Journal of Quantum Information*, **2007**, 05, 829-836	0.8	5
77	Secure Quantum Key Expansion between Two Parties Sharing a Key. *Journal of the Korean Physical Society*, **2007**, 51, 1245	0.6	4
76	Influences of Gate Operation Errors in the Quantum Counting Algorithm. *Journal of Computer Science and Technology*, **2006**, 21, 927-932	1.7	10
75	Entropy product measure for multipartite pure states **2006**, 49, 606-615		20
74	Circular quantum secret sharing. *Journal of Physics A*, **2006**, 39, 14089-14099		111
73	Density Matrix in Quantum Mechanics and Distinctness of Ensembles Having the Same Compressed Density Matrix. *Foundations of Physics*, **2006**, 36, 1217-1243	1.2	22
72	Quantum secure direct communication with high-dimension quantum superdense coding. *Physical Review A*, **2005**, 71,	2.6	693
71	Modified Bennett-Brassard 1984 quantum key distribution protocol with two-way classical communications. *Physical Review A*, **2005**, 72,	2.6	26
70	Experimental realization of quantum cryptography communication in free space **2005**, 48, 237		9
69	Multi-step quantum secure direct communication using multi-particle Green–Horne–Zeilinger state. *Optics Communications*, **2005**, 253, 15-20	2	286
68	Bidirectional quantum secret sharing and secret splitting with polarized single photons. *Physics Letters, Section A: General, Atomic and Solid State Physics*, **2005**, 337, 329-334	2.3	174
67	An efficient quantum secret sharing scheme with Einstein–Podolsky–Rosen pairs. *Physics Letters, Section A: General, Atomic and Solid State Physics*, **2005**, 340, 43-50	2.3	112
66	Control of state localization in a two-level quantum system. *Journal of Optics B: Quantum and Semiclassical Optics*, **2005**, 7, 66-69		13
65	Modularization of a multi-qubit controlled phase gate and its nuclear magnetic resonance implementation. *Journal of Optics B: Quantum and Semiclassical Optics*, **2005**, 7, 22-28		20
64	No-relationship Between Impossibility of Faster-Than-Light Quantum Communication and Distinction of Ensembles with the Same Density Matrix. *Communications in Theoretical Physics*, **2005** , 44, 622-624	2.4	5

63	Creation of Entanglement with Nonlocal Operations. *Communications in Theoretical Physics*, **2005**, 44, 625-630	2.4	6
62	Reply to Comment on Secure direct communication with a quantum one-time-pad *Physical Review A*, **2005**, 72,	2.6	15
61	Simulation of Heisenberg XY interactions and realization of a perfect state transfer in spin chains using liquid nuclear magnetic resonance. *Physical Review A*, **2005**, 72,	2.6	78
60	Dynamical control of adiabatic decoherence in the single three-level atom. *Journal of Optics B: Quantum and Semiclassical Optics*, **2005**, 7, 268-273		11
59	Decoupling Bang-Bang Group for Adiabatic Decoherence Control in a Three-Level Atom. *Communications in Theoretical Physics*, **2005**, 44, 810-814	2.4	8
58	Implementation of a multiple round quantum dense coding using nuclear magnetic resonance **2005** , 48, 706		8
57	Nuclear magnetic resonance implementation of a quantum clock synchronization algorithm. *Physical Review A*, **2004**, 70,	2.6	33
56	Parallel quantum computing in a single ensemble quantum computer. *Physical Review A*, **2004**, 69,	2.6	61
55	Isospin and symmetry structure in the f7/2shell4448Ti isotopes. *Journal of Physics G: Nuclear and Particle Physics*, **2004**, 30, 1287-1298	2.9	33
54	Nuclear structure of 178Hf related to the spin-16, 31-year isomer. *Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics*, **2004**, 589, 83-88	4.2	33
53	Efficient multiparty quantum-secret-sharing schemes. *Physical Review A*, **2004**, 69,	2.6	619
52	Secure direct communication with a quantum one-time pad. *Physical Review A*, **2004**, 69,	2.6	852
51	Bidirectional quantum key distribution protocol with practical faint laser pulses. *Physical Review A*, **2004**, 70,	2.6	259
50	Collective properties of low-lying octupole excitations in 20882Pb126, 6020Ca40 and 288O20. *Nuclear Physics A*, **2003**, 723, 375-386	1.3	3
49	Two-step quantum direct communication protocol using the Einstein-Podolsky-Rosen pair block. *Physical Review A*, **2003**, 68,	2.6	1242
48	Experimental realization of a fetching algorithm in a 7-qubit NMR spin Liouville space computer. *Journal of Chemical Physics*, **2003**, 119, 8473-8481	3.9	46
47	Nuclear magnetic dipole properties and the triaxial deformation. *Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics*, **2002**, 533, 253-258	4.2	19
46	Cooperative three- and four-player quantum games. *Physics Letters, Section A: General, Atomic and Solid State Physics*, **2002**, 301, 117-124	2.3	8

45	Phase matching condition for quantum search with a generalized initial state. *Physics Letters, Section A: General, Atomic and Solid State Physics*, **2002**, 294, 143-152	2.3	55
44	Fetching marked items from an unsorted database in NMR ensemble computing. *Physical Review A*, **2002**, 66,	2.6	22
43	Experimental realization of the Br□chweiler□ algorithm in a homonuclear system. *Journal of Chemical Physics*, **2002**, 117, 3310-3315	3.9	9
42	Effects of Imperfect Gate Operations in Shor's Prime Factorization Algorithm. *Journal of the Chinese Chemical Society*, **2001**, 48, 449-454	1.5	11
41	Experimental NMR realization of a generalized quantum search□algorithm. *Physics Letters, Section A: General, Atomic and Solid State Physics*, **2001**, 286, 121-126	2.3	37
40	AnSO(3) picture for quantum searching. *Journal of Physics A*, **2001**, 34, 861-866		16
39	Analysis of density matrix reconstruction in NMR quantum computing. *Journal of Optics B: Quantum and Semiclassical Optics*, **2001**, 3, 376-381		38
38	Efficient scheme for initializing a quantum register with an arbitrary superposed state. *Physical Review A*, **2001**, 64,	2.6	67
37	Superdeformed band in 36Ar described by the projected shell model. *Physical Review C*, **2001**, 63,	2.7	30
36	Quantum computing. *Proceedings of the National Academy of Sciences of the United States of America*, **2001**, 98, 11847-8	11.5	145
35	Dominant gate imperfection in Grover□ quantum search algorithm. *Physical Review A*, **2000**, 61,	2.6	58
34	Octupole Deformation Bands of □h 11/2 in Neutron-Rich 145,147 La Nuclei. *Chinese Physics Letters*, **1999**, 16, 169-171	1.8	5
33	Identification of Collective Oblate Bands in 138 Ce. *Chinese Physics Letters*, **1999**, 16, 635-637	1.8	12
32	Octupole Deformation and Signature Inversion in 145 Ba. *Chinese Physics Letters*, **1999**, 16, 715-717	1.8	1
31	Comprehensive Evidence of Octupole Vibration in 158 Gd. *Chinese Physics Letters*, **1999**, 16, 870-872	1.8	
30	Octupole correlations in neutron-rich 145,147La nuclei: Coriolis-limit-coupling bands with aligned h11/2 proton. *Physical Review C*, **1999**, 59, 1316-1323	2.7	49
29	Direct and indirect relativistic effect on electron scattering from cesium and gold atoms. *Physical Review A*, **1999**, 60, 5108-5110	2.6	1
28	Studies of the electric dipole transition of deformed rare-earth nuclei. *Nuclear Physics A*, **1999**, 658, 197-216	2.5	9

27	Phase matching in quantum searching. *Physics Letters, Section A: General, Atomic and Solid State Physics*, **1999**, 262, 27-34	2.3	129
26	SU(3) limit ofsdgpf interacting boson model. *Science in China Series A: Mathematics*, **1998**, 41, 1296-1301		7
25	Analytical expressions for electromagnetic transition rates in the SU(3) limit of the spdf interacting boson model. *Physical Review C*, **1998**, 57, 2301-2307	2.7	13
24	Generalized Michailov plot analysis of inbandE2 transitions of deformed nuclei. *Journal of Physics G: Nuclear and Particle Physics*, **1998**, 24, 2133-2138	2.9	1
23	Table of Wigner coefficients. *Journal of Physics A*, **1998**, 31, 7821-7828		
22	Collective Band Structures in the Neutron-Rich 107,109 Ru Nuclei. *Chinese Physics Letters*, **1998**, 15, 793-795	1.8	23
21	Splitting of One-Phonon Coupling States in the Weakly Coupling Model. *Chinese Physics Letters*, **1998**, 15, 5-7	1.8	1
20	Spin dependence of intra□ground-state-band E2 transitions in the SU(3) limit of the sdg interacting boson model. *Physical Review C*, **1998**, 57, 1686-1690	2.7	11
19	Collective backbending effect in the interacting boson model. *Physical Review C*, **1997**, 55, 3163-3165	2.7	11
18	An IBM-3 analysis of the nuclei just beyond the magic numbers N = Z = 28. *Nuclear Physics A*, **1996**, 609, 1-20	1.3	26
17	Band structure in 98Sr. *Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics*, **1995**, 345, 351-354	4.2	6
16	A comparison of the IBM-1 projections from IBM-2 and IBM-3. *Nuclear Physics A*, **1995**, 587, 101-110	1.3	16
15	An IBM-3 hamiltonian from a multi-j-shell model. *Nuclear Physics A*, **1995**, 593, 85-94	1.3	24
14	Description of116,118,120Cd in the interacting boson model. *Journal of Physics G: Nuclear and Particle Physics*, **1995**, 21, 331-338	2.9	9
13	Algebraic expressions for SU(3) contains/implies R(3) Wigner coefficients for (lambda 0)*(3 0). *Journal of Physics A*, **1995**, 28, 6417-6421		5
12	Shell-model matrix elements in a neutron-proton quasi-spin formalism for several shells. *Journal of Physics A*, **1994**, 27, 4465-4471		5
11	A checking method on calculating code for the eigenvalue problem of many particle systems. *Computer Physics Communications*, **1994**, 81, 145-152	4.2	
10	A microscopic derivation of the dependence of the IBM3 hamiltonian on the boson number and isospin. *Nuclear Physics A*, **1993**, 561, 201-231	1.3	34

9	Shell-model matrix elements in the neutron-proton quasi-spin formalism using vector coherent states. *Journal of Physics A*, **1992**, 25, 4633-4657		13
8	An IBM2 description of the staggering phenomenon in the platinum isotopes. *Journal of Physics G: Nuclear and Particle Physics*, **1991**, 17, 877-885	2.9	7
7	Staggering in nuclear spectra and the proton-neutron interacting boson model. *Journal of Physics G: Nuclear and Particle Physics*, **1990**, 16, 813-821	2.9	11
6	Coefficients of fractional parentage for a double-l boson system. *Journal of Physics A*, **1990**, 23, 1959-1967		6
5	A new recursion relation of CFP for the system of identical bosons. *Journal of Physics A*, **1989**, 22, 4769-4775		11
4	The analytical wavefunctions of the SU(3) limit in the interacting boson model. *Journal of Mathematical Physics*, **1989**, 30, 1937-1941	1.2	
3	A Recurrent Formula for Fractional Parentage Coefficients of Identical Fermions. *Communications in Theoretical Physics*, **1989**, 11, 441-447	2.4	10
2	Fermion dynamical symmetry model of 2s-1d shell. *Chinese Physics Letters*, **1987**, 4, 505-508	1.8	1
1	Variational quantum packaged deflation for arbitrary excited states. *Quantum Engineering*,e80	4.5	1