Nobuyuki Imoto

List of Publications by Citations

111 papers	4,473 citations	33 h-index	64 g-index
128 ext. papers	4,959 ext. citations	4.8 avg, IF	5.35 L-index

#	Paper	IF	Citations
111	Quantum entanglement for secret sharing and secret splitting. *Physical Review A*, **1999**, 59, 162-168	2.6	767
110	Concentration and purification scheme for two partially entangled photon pairs. *Physical Review A*, **2001**, 64,	2.6	219
109	Direct observation of Hardy\'s paradox by joint weak measurement with an entangled photon pair. *New Journal of Physics*, **2009**, 11, 033011	2.9	180
108	Experimental extraction of an entangled photon pair from two identically decohered pairs. *Nature*, **2003**, 421, 343-6	50.4	172
107	Observation of an electromagnetically induced grating in cold sodium atoms. *Physical Review A*, **1999**, 59, 4773-4776	2.6	147
106	Entangled webs: Tight bound for symmetric sharing of entanglement. *Physical Review A*, **2000**, 62,	2.6	118
105	Simple and efficient quantum key distribution with parametric down-conversion. *Physical Review Letters*, **2007**, 99, 180503	7.4	116
104	Wide-band quantum interface for visible-to-telecommunication wavelength conversion. *Nature Communications*, **2011**, 2, 1544	17.4	113
103	Quantum Cryptography Based on Split Transmission of One-Bit Information in Two Steps. *Physical Review Letters*, **1997**, 79, 2383-2386	7.4	108
102	Unconditionally secure key distribution based on two nonorthogonal states. *Physical Review Letters* , **2003**, 90, 167904	7.4	96
101	Polarization-entangled W state using parametric down-conversion. *Physical Review A*, **2002**, 66,	2.6	89
100	Frequency-domain Hong□Du□Mandel interference. *Nature Photonics*, **2016**, 10, 441-444	33.9	82
99	Probabilistic manipulation of entangled photons. *Physical Review A*, **2001**, 63,	2.6	80
98	Communication channels secured from eavesdropping via transmission of photonic Bell states. *Physical Review A*, **1999**, 60, 157-166	2.6	79
97	Quantum theory for continuous photodetection processes. *Physical Review A*, **1990**, 41, 3891-3904	2.6	79
96	Local transformation of two einstein-podolsky-rosen photon pairs into a three-photon w state. *Physical Review Letters*, **2009**, 102, 130502	7.4	77
95	Generation of high-fidelity four-photon cluster state and quantum-domain demonstration of one-way quantum computing. *Physical Review Letters*, **2008**, 100, 210501	7.4	77

94	Quantum nondemolition measurement of photon number via optical Kerr effect in an ultra-high-Q microtoroid cavity. *Optics Express*, **2008**, 16, 21462-75	3.3	71
93	Quantum-scissors device for optical state truncation: A proposal for practical realization. *Physical Review A*, **2001**, 64,	2.6	66
92	Elementary optical gate for expanding an entanglement web. *Physical Review A*, **2008**, 77,	2.6	65
91	Local expansion of photonic W state using a polarization-dependent beamsplitter. *New Journal of Physics*, **2009**, 11, 023024	2.9	58
90	Microscopic theory of the continuous measurement of photon number. *Physical Review A*, **1990**, 41, 4127-4130	2.6	53
89	Field Commutation Relations in Optical Cavities. *Physical Review Letters*, **1996**, 77, 1739-1742	7.4	49
88	Robust photonic entanglement distribution by state-independent encoding onto decoherence-free subspace. *Nature Photonics*, **2008**, 2, 488-491	33.9	48
87	Phase-sensitive reservoir modeled by beam splitters. *Physical Review A*, **1995**, 52, 2401-2410	2.6	46
86	Configuration of separability and tests for multipartite entanglement in bell-type experiments. *Physical Review Letters*, **2002**, 89, 260401	7.4	42
85	Generation of the Schrödinger-cat state by continuous photodetection. *Physical Review A*, **1991**, 43, 6458-6461	2.6	42
84	Continuous quantum-nondemolition measurement of photon number. *Physical Review A*, **1992**, 46, 2859-2869	2.6	42
83	Logical reversibility in quantum measurement: General theory and specific examples. *Physical Review A*, **1996**, 53, 3808-3817	2.6	41
82	Operations that do not disturb partially known quantum states. *Physical Review A*, **2002**, 66,	2.6	40
81	Demonstration of local expansion toward large-scale entangled webs. *Physical Review Letters*, **2010** , 105, 210503	7.4	39
80	QUANTUM AND CLASSICAL CORRELATIONS BETWEEN PLAYERS IN GAME THEORY. *International Journal of Quantum Information*, **2004**, 02, 79-89	0.8	35
79	Long-Distance Single Photon Transmission from a Trapped Ion via Quantum Frequency Conversion. *Physical Review Letters*, **2018**, 120, 203601	7.4	35
78	Pulse-mode quantum projection synthesis: Effects of mode mismatch on optical state truncation and preparation. *Physical Review A*, **2002**, 66,	2.6	33
77	No-Cloning Theorem of Entangled States. *Physical Review Letters*, **1998**, 81, 4264-4267	7.4	33

76	Optimal two-qubit tomography based on local and global measurements: Maximal robustness against errors as described by condition numbers. *Physical Review A*, **2014**, 90,	2.6	32
75	Stimulated Brillouin scattering and Brillouin-coupled four-wave-mixing in a silica microbottle resonator. *Optics Express*, **2016**, 24, 12082-92	3.3	31
74	Experimental time-reversed adaptive Bell measurement towards all-photonic quantum repeaters. *Nature Communications*, **2019**, 10, 378	17.4	30
73	Polarization insensitive frequency conversion for an atom-photon entanglement distribution via a telecom network. *Nature Communications*, **2018**, 9, 1997	17.4	30
72	High-fidelity conversion of photonic quantum information to telecommunication wavelength with superconducting single-photon detectors. *Physical Review A*, **2013**, 87,	2.6	29
71	Entangled states that cannot reproduce original classical games in their quantum version. *Physics Letters, Section A: General, Atomic and Solid State Physics*, **2004**, 328, 20-25	2.3	28
70	Measurement-induced oscillations of a highly squeezed state between super- and sub-Poissonian photon statistics. *Physical Review Letters*, **1991**, 66, 1046-1049	7.4	28
69	Optimal local expansion of W states using linear optics and Fock states. *Physical Review A*, **2011**, 83,	2.6	27
68	Blind quantum computation over a collective-noise channel. *Physical Review A*, **2016**, 93,	2.6	26
67	Robustness of the round-robin differential-phase-shift quantum-key-distribution protocol against source flaws. *Physical Review A*, **2015**, 92,	2.6	25
66	Simple experimental scheme of preparing a four-photon entangled state for the teleportation-based realization of a linear optical controlled-NOT gate. *Physical Review A*, **2005**, 71,	2.6	24
65	Quantum Cryptography Based on Two Mixed States. *Physical Review Letters*, **1996**, 77, 2137-2140	7.4	24
64	Distillation of photon entanglement using a plasmonic metamaterial. *Scientific Reports*, **2015**, 5, 18313	4.9	24
63	Frequency down-conversion of 637 nm light to the telecommunication band for non-classical light emitted from NV centers in diamond. *Optics Express*, **2014**, 22, 11205-14	3.3	23
62	High-fidelity entanglement swapping and generation of three-qubit GHZ state using asynchronous telecom photon pair sources. *Scientific Reports*, **2018**, 8, 1446	4.9	22
61	Observation of optomechanical coupling in a microbottle resonator. *Laser and Photonics Reviews*, **2016**, 10, 603-611	8.3	22
60	Optimal entanglement generation for efficient hybrid quantum repeaters. *Physical Review A*, **2009**, 80,	2.6	22
59	Temperature diagnostics for cold sodium atoms by transient four-wave mixing. *Optics Letters*, **1998**, 23, 840-2	3	22

58	Quantum-Optical States in Finite-Dimensional Hilbert Space. I. General Formalism155-193		21
57	Single-photon-interference communication equivalent to Bell-state-basis cryptographic quantum communication. *Physical Review A*, **2000**, 62,	2.6	21
56	Frequency comb generation in a quadratic nonlinear waveguide resonator. *Optics Express*, **2018**, 26, 15551-15558	3.3	20
55	Anomalous commutation relation and modified spontaneous emission inside a microcavity. *Physical Review A*, **1994**, 50, 89-92	2.6	20
54	Quantum state tomography of large nuclear spins in a semiconductor quantum well: Optimal robustness against errors as quantified by condition numbers. *Physical Review B*, **2015**, 92,	3.3	19
53	Efficient decoherence-free entanglement distribution over lossy quantum channels. *Physical Review Letters*, **2011**, 106, 110503	7.4	19
52	Fidelity estimation and entanglement verification for experimentally produced four-qubit cluster states. *Physical Review A*, **2006**, 74,	2.6	19
51	Measurement-Free Topological Protection Using Dissipative Feedback. *Physical Review X*, **2014**, 4,	9.1	18
50	Quantum repeaters and computation by a single module: Remote nondestructive parity measurement. *Physical Review A*, **2012**, 85,	2.6	18
49	Threshold quantum cryptography. *Physical Review A*, **2005**, 71,	2.6	18
48	Heralded single excitation of atomic ensemble via solid-state-based telecom photon detection. *Optica*, **2016**, 3, 1279	8.6	18
47	Quantum kinetic theory for evaporative cooling of trapped atoms: Growth of Bose-Einstein condensate. *Physical Review A*, **1999**, 59, 2243-2249	2.6	17
46	Security of the Bennett 1992 quantum-key distribution protocol against individual attack over a realistic channel. *Physical Review A*, **2003**, 67,	2.6	16
45	Probabilistic cloning with supplementary information. *Physical Review A*, **2005**, 72,	2.6	16
44	Quantum key distribution with setting-choice-independently correlated light sources. *Npj Quantum Information*, **2019**, 5,	8.6	15
43	Nonclassical two-photon interference between independent telecommunication light pulses converted by difference-frequency generation. *Physical Review A*, **2013**, 88,	2.6	15
42	Continuous state reduction of correlated photon fields in photodetection processes. *Physical Review A*, **1990**, 41, 6331-6344	2.6	15
41	Differential-phase-shift quantum-key-distribution protocol with a small number of random delays. *Physical Review A*, **2017**, 95,	2.6	14

40	Circuit configurations which may or may not show superradiant phase transitions. *Physical Review A* , **2017**, 96,	2.6	14
39	Measurement-device-independent quantum key distribution for Scarani-Acin-Ribordy-Gisin 04 protocol. *Scientific Reports*, **2014**, 4, 5236	4.9	13
38	Mach-Zehnder interferometer using frequency-domain beamsplitter. *Optics Express*, **2017**, 25, 12052-12060	3.3	13
37	Universal gates for transforming multipartite entangled Dicke states. *New Journal of Physics*, **2014**, 16, 023005	2.9	13
36	Observables suitable for restricting the fidelity to multipartite maximally entangled states. *Physical Review A*, **2002**, 65,	2.6	12
35	Full characterization of modular values for finite-dimensional systems. *Physics Letters, Section A: General, Atomic and Solid State Physics*, **2016**, 380, 2129-2135	2.3	12
34	Security of quantum key distribution with light sources that are not independently and identically distributed. *Physical Review A*, **2016**, 93,	2.6	11
33	High visibility Hong-Ou-Mandel interference via a time-resolved coincidence measurement. *Optics Express*, **2017**, 25, 12069-12080	3.3	11
32	Cheat-sensitive commitment of a classical bit coded in a block of m □h round-trip qubits. *Physical Review A*, **2011**, 84,	2.6	11
31	Generalized modular-value-based scheme and its generalized modular value. *Physical Review A*, **2017**, 95,	2.6	10
30	Boosting up quantum key distribution by learning statistics of practical single-photon sources. *New Journal of Physics*, **2009**, 11, 113033	2.9	10
29	Photonic de broglie wave interferometers. *Journal of Modern Optics*, **1998**, 45, 2217-2232	1.1	9
28	Selective entanglement breaking. *Physical Review A*, **2007**, 75,	2.6	9
27	Optical qubit generation by state truncation using an experimentally feasible scheme. *Journal of Modern Optics*, **2002**, 49, 977-984	1.1	9
26	Frequency-Multiplexed Photon Pairs Over 1000 Modes from a Quadratic Nonlinear Optical Waveguide Resonator with a Singly Resonant Configuration. *Physical Review Letters*, **2019**, 123, 193603	7.4	8
25	Robustness of quantum communication based on a decoherence-free subspace using a counter-propagating weak coherent light pulse. *Physical Review A*, **2013**, 87,	2.6	8
24	Observation of two output light pulses from a partial wavelength converter preserving phase of an input light at a single-photon level. *Optics Express*, **2013**, 21, 27865-72	3.3	8
23	Communication channels analogous to one out of two oblivious transfers based on quantum uncertainty. *Physical Review A*, **2002**, 66,	2.6	8

22	Fault-tolerant simple quantum-bit commitment unbreakable by individual attacks. *Physical Review A*, **2002**, 65,	2.6	8
21	Optimization of evaporative cooling towards a large number of Bose-Einstein-condensed atoms. *Physical Review A*, **2003**, 67,	2.6	6
20	Quantum weak and modular values in enlarged Hilbert spaces. *Physical Review A*, **2018**, 97,	2.6	5
19	Dynamics of evaporative cooling in magnetically trapped atomic hydrogen. *Physical Review A*, **2000**, 62,	2.6	5
18	Extracting an entangled photon pair from collectively decohered pairs at a telecommunication wavelength. *Optics Express*, **2015**, 23, 13545-53	3.3	4
17	Quantum algorithm for an additive approximation of Ising partition functions. *Physical Review A*, **2014**, 90,	2.6	4
16	Fabrication and Characterization of Superconducting Nanowire Single-Photon Detectors on Si Waveguide. *IEEE Transactions on Applied Superconductivity*, **2015**, 25, 1-4	1.8	3
15	When a negative weak value plays the counterpart of a probability 1. *New Journal of Physics*, **2016**, 18, 123002	2.9	3
14	A strange weak value in spontaneous pair productions via a supercritical step potential. *New Journal of Physics*, **2012**, 14, 083021	2.9	3
13	Quantum noise in optical beam propagation in distributed amplifiers. *Optics Communications*, **1996**, 130, 377-384	2	3
12	Various pointer states approaches to polar modular values. *Journal of Mathematical Physics*, **2018**, 59, 042107	1.2	2
11	A weak-value model for virtual particles supplying the electric current in graphene: the minimal conductivity and the Schwinger mechanism. *New Journal of Physics*, **2014**, 16, 073003	2.9	2
10	Quantum effects of spatial/temporal modulation of the optical field. *Materials Science and Engineering B: Solid-State Materials for Advanced Technology*, **1997**, 48, 34-38	3.1	2
9	Timing Jitter Characterization of the SFQ Coincidence Circuit by Optically Time-Controlled Signals From SSPDs. *IEEE Transactions on Applied Superconductivity*, **2019**, 29, 1-4	1.8	1
8	Fundamental limit to qubit control with coherent field. *Physical Review A*, **2013**, 87,	2.6	1
7	Experimental demonstration of robust entanglement distribution over reciprocal noisy channels assisted by a counter-propagating classical reference light. *Scientific Reports*, **2017**, 7, 4819	4.9	1
6	Nonlinear Phenomena in Quantum Optics491-601		1
5	Local Transformation of Two EPR Photon Pairs into a Three-Photon W State Using a Polarization Dependent Beamsplitter. *Lecture Notes of the Institute for Computer Sciences, Social-Informatics and Telecommunications Engineering*, **2010**, 39-45	0.2	1

4	Robust entanglement distribution via telecom fibre assisted by an asynchronous counter-propagating laser light. *Npj Quantum Information*, **2020**, 6,	8.6	1
3	Entangled photon pair detection by superconducting nanowire single-photon detectors with a single-flux-quantum coincidence circuit. *Applied Physics Express*, **2021**, 14, 102001	2.4	0
2	An Elementary Optical Gate for Expanding Symmetrically Shared Entanglement. *Lecture Notes in Computer Science*, **2008**, 70-82	0.9	
1	Negation of photon loss provided by negative weak value. *Journal of Physics Communications*, **2018**, 2, 065013	1.2	