Yu-Ao Chen

List of Publications by Citations

108	9,718	49	98
papers	citations	h-index	g-index

118	12,151	12.9	5.72
ext. papers	ext. citations	avg, IF	L-index

#	Paper	IF	Citations
108	Probing the relaxation towards equilibrium in an isolated strongly correlated one-dimensional Bose gas. *Nature Physics*, **2012**, 8, 325-330	16.2	639
107	Satellite-to-ground quantum key distribution. *Nature*, **2017**, 549, 43-47	50.4	585
106	Experimental realization of strong effective magnetic fields in an optical lattice. *Physical Review Letters*, **2011**, 107, 255301	7.4	531
105	Satellite-based entanglement distribution over 1200 kilometers. *Science*, **2017**, 356, 1140-1144	33.3	527
104	Experimental demonstration of five-photon entanglement and open-destination teleportation. *Nature*, **2004**, 430, 54-8	50.4	470
103	Experimental Ten-Photon Entanglement. *Physical Review Letters*, **2016**, 117, 210502	7.4	310
102	Experimental demonstration of a BDCZ quantum repeater node. *Nature*, **2008**, 454, 1098-101	50.4	303
101	Ground-to-satellite quantum teleportation. *Nature*, **2017**, 549, 70-73	50.4	300
100	Observation of eight-photon entanglement. *Nature Photonics*, **2012**, 6, 225-228	33.9	296
99	Satellite-Relayed Intercontinental Quantum Network. *Physical Review Letters*, **2018**, 120, 030501	7.4	285
98	Quantum teleportation and entanglement distribution over 100-kilometre free-space channels. *Nature*, **2012**, 488, 185-8	50.4	284
97	Experimental demonstration of a heralded entanglement source. *Nature Photonics*, **2010**, 4, 549-552	33.9	268
96	Experimental demonstration of a hyper-entangled ten-qubit Schr□dinger cat state. *Nature Physics*, **2010**, 6, 331-335	16.2	236
95	10-Qubit Entanglement and Parallel Logic Operations with a Superconducting Circuit. *Physical Review Letters*, **2017**, 119, 180511	7.4	212
94	A millisecond quantum memory for scalable quantum networks. *Nature Physics*, **2009**, 5, 95-99	16.2	180
93	Experimental realization of entanglement concentration and a quantum repeater. *Physical Review Letters*, **2003**, 90, 207901	7.4	176
92	Direct and full-scale experimental verifications towards ground□satellite quantum key distribution. *Nature Photonics*, **2013**, 7, 387-393	33.9	170

91	Experimental violation of local realism by four-photon Greenberger-Horne-Zeilinger entanglement. *Physical Review Letters*, **2003**, 91, 180401	7.4	153
90	Robust creation of entanglement between remote memory qubits. *Physical Review Letters*, **2007**, 98, 240502	7.4	151
89	Memory-built-in quantum teleportation with photonic and atomic qubits. *Nature Physics*, **2008**, 4, 103-107	16.2	142
88	12-Photon Entanglement and Scalable Scattershot Boson Sampling with Optimal Entangled-Photon Pairs from Parametric Down-Conversion. *Physical Review Letters*, **2018**, 121, 250505	7.4	142
87	Experimental realization of one-way quantum computing with two-photon four-qubit cluster states. *Physical Review Letters*, **2007**, 99, 120503	7.4	139
86	Experimental quantum teleportation of a two-qubit composite system. *Nature Physics*, **2006**, 2, 678-682	16.2	136
85	Entanglement-based secure quantum cryptography over 1,120 kilometres. *Nature*, **2020**, 582, 501-505	50.4	131
84	Controlling correlated tunneling and superexchange interactions with ac-driven optical lattices. *Physical Review Letters*, **2011**, 107, 210405	7.4	131
83	Experimental demonstration of topological error correction. *Nature*, **2012**, 482, 489-94	50.4	122
82	Robust and efficient quantum repeaters with atomic ensembles and linear optics. *Physical Review A* , **2008**, 77,	2.6	117
81	Experimental demonstration of a nondestructive controlled-NOT quantum gate for two independent photon qubits. *Physical Review Letters*, **2005**, 94, 030501	7.4	115
80	Many-body Landau–Zener dynamics in coupled one-dimensional Bose liquids. *Nature Physics*, **2011**, 7, 61-67	16.2	114
79	Deterministic and storable single-photon source based on a quantum memory. *Physical Review Letters*, **2006**, 97, 173004	7.4	107
78	Experimental quantum secret sharing and third-man quantum cryptography. *Physical Review Letters* , **2005**, 95, 200502	7.4	107
77	An integrated space-to-ground quantum communication network over 4,600 kilometres. *Nature*, **2021**, 589, 214-219	50.4	97
76	Fault-tolerant quantum repeater with atomic ensembles and linear optics. *Physical Review A*, **2007**, 76,	2.6	94
75	Satellite-to-Ground Entanglement-Based Quantum Key Distribution. *Physical Review Letters*, **2017**, 119, 200501	7.4	91
74	Demonstration of a stable atom-photon entanglement source for quantum repeaters. *Physical Review Letters*, **2007**, 99, 180505	7.4	91

73	Large scale quantum key distribution: challenges and solutions [Invited]. *Optics Express*, **2018**, 26, 24260-24273	3.4	86
72	Controlling and detecting spin correlations of ultracold atoms in optical lattices. *Physical Review Letters*, **2010**, 105, 265303	7.4	82
71	Experimental realization of optimal asymmetric cloning and telecloning via partial teleportation. *Physical Review Letters*, **2005**, 95, 030502	7.4	79
70	Genuine High-Order Einstein-Podolsky-Rosen Steering. *Physical Review Letters*, **2015**, 115, 010402	7.4	72
69	Multistage entanglement swapping. *Physical Review Letters*, **2008**, 101, 080403	7.4	68
68	Experimental realization of plaquette resonating valence-bond states with ultracold atoms in optical superlattices. *Physical Review Letters*, **2012**, 108, 205301	7.4	63
67	Implementation of quantum key distribution surpassing the linear rate-transmittance bound. *Nature Photonics*, **2020**, 14, 422-425	33.9	61
66	Observation of Coupled Vortex Lattices in a Mass-Imbalance Bose and Fermi Superfluid Mixture. *Physical Review Letters*, **2016**, 117, 145301	7.4	57
65	High-Speed Device-Independent Quantum Random Number Generation without a Detection Loophole. *Physical Review Letters*, **2018**, 120, 010503	7.4	53
64	Experimental quasi-single-photon transmission from satellite to earth. *Optics Express*, **2013**, 21, 20032-40	3.3	53
63	Secret Sharing of a Quantum State. *Physical Review Letters*, **2016**, 117, 030501	7.4	50
62	Four-body ring-exchange interactions and anyonic statistics within a minimal toric-code Hamiltonian. *Nature Physics*, **2017**, 13, 1195-1200	16.2	49
61	Synchronized independent narrow-band single photons and efficient generation of photonic entanglement. *Physical Review Letters*, **2007**, 98, 180503	7.4	49
60	Experimental construction of optical multiqubit cluster states from Bell states. *Physical Review A*, **2006**, 73,	2.6	49
59	Experimental quantum repeater without quantum memory. *Nature Photonics*, **2019**, 13, 644-648	33.9	45
58	Generation and detection of atomic spin entanglement in optical lattices. *Nature Physics*, **2016**, 12, 783-787	16.2	45
57	Experimental realization of strong effective magnetic fields in optical superlattice potentials. *Applied Physics B: Lasers and Optics*, **2013**, 113, 1-11	1.9	42
56	Experimental Quantum Switching for Exponentially Superior Quantum Communication Complexity. *Physical Review Letters*, **2019**, 122, 120504	7.4	41

55	Implementation of a measurement-device-independent entanglement witness. *Physical Review Letters*, **2014**, 112, 140506	7.4	40
54	Heralded generation of an atomic NOON state. *Physical Review Letters*, **2010**, 104, 043601	7.4	40
53	Direct counterfactual communication via quantum Zeno effect. *Proceedings of the National Academy of Sciences of the United States of America*, **2017**, 114, 4920-4924	11.5	38
52	Observation of ten-photon entanglement using thin BiB_3O_6 crystals. *Optica*, **2017**, 4, 77	8.6	38
51	Controlled state-to-state atom-exchange reaction in an ultracold atomdimer mixture. *Nature Physics*, **2017**, 13, 699-703	16.2	37
50	Teleportation-based realization of an optical quantum two-qubit entangling gate. *Proceedings of the National Academy of Sciences of the United States of America*, **2010**, 107, 20869-74	11.5	35
49	Experimental nested purification for a linear optical quantum repeater. *Nature Photonics*, **2017**, 11, 695-699	33.9	31
48	Experimental realization of a concatenated GreenbergerHorneZeilinger state for macroscopic quantum superpositions. *Nature Photonics*, **2014**, 8, 364-368	33.9	31
47	Landau-Zener sweeps and sudden quenches in coupled Bose-Hubbard chains. *Physical Review Letters*, **2011**, 106, 155302	7.4	28
46	Increasing the statistical significance of entanglement detection in experiments. *Physical Review Letters*, **2010**, 104, 210401	7.4	28
45	Space-to-Ground Quantum Key Distribution Using a Small-Sized Payload on Tiangong-2 Space Lab. *Chinese Physics Letters*, **2017**, 34, 090302	1.8	23
44	Distributed quantum phase estimation with entangled photons. *Nature Photonics*, **2021**, 15, 137-142	33.9	23
43	Quantum memory with optically trapped atoms. *Physical Review Letters*, **2008**, 101, 120501	7.4	22
42	Production of large K41 Bose-Einstein condensates using D1 gray molasses. *Physical Review A*, **2016** , 94,	2.6	22
41	Experimental Quantum Generative Adversarial Networks for Image Generation. *Physical Review Applied*, **2021**, 16,	4.3	20
40	Two-Hierarchy Entanglement Swapping for a Linear Optical Quantum Repeater. *Physical Review Letters*, **2017**, 119, 170502	7.4	19
39	Experimental violation of BellS inequality beyond TsirelsonS bound. *Physical Review Letters*, **2006**, 97, 170408	7.4	16
38	Experimental quantum error rejection for quantum communication. *Physical Review Letters*, **2006**, 96, 220504	7.4	16

37	Bell Test over Extremely High-Loss Channels: Towards Distributing Entangled Photon Pairs between Earth and the Moon. *Physical Review Letters*, **2018**, 120, 140405	7.4	15
36	Experimental quantum channel simulation. *Physical Review A*, **2017**, 95,	2.6	15
35	Experimental measurement-based quantum computing beyond the cluster-state model. *Nature Photonics*, **2011**, 5, 117-123	33.9	15
34	Satellite testing of a gravitationally induced quantum decoherence model. *Science*, **2019**, 366, 132-135	33.3	14
33	Coupled dipole oscillations of a mass-imbalanced Bose-Fermi superfluid mixture. *Physical Review B*, **2018**, 97,	3.3	14
32	Towards satellite-based quantum-secure time transfer. *Nature Physics*, **2020**, 16, 848-852	16.2	13
31	Degenerate Bose gases near a d-wave shape resonance. *Nature Physics*, **2019**, 15, 570-576	16.2	12
30	Entanglement Structure: Entanglement Partitioning in Multipartite Systems and Its Experimental Detection Using Optimizable Witnesses. *Physical Review X*, **2018**, 8,	9.1	12
29	High-power 671 nm laser by second-harmonic generation with 93% efficiency in an external ring cavity. *Optics Letters*, **2018**, 43, 1666-1669	3	12
28	Experimental quantum network coding. *Npj Quantum Information*, **2019**, 5,	8.6	9
27	Experimental realization of programmable quantum gate array for directly probing commutation relations of Pauli operators. *Physical Review Letters*, **2010**, 105, 120402	7.4	7
26	Experimental exploration of five-qubit quantum error-correcting code with superconducting qubits.. *National Science Review*, **2022**, 9, nwab011	10.8	7
25	A quantum degenerate Bose–Fermi mixture of41K and6Li. *Journal of Physics B: Atomic, Molecular and Optical Physics*, **2017**, 50, 094001	1.3	6
24	Measurement-Device-Independent Entanglement Witness of Tripartite Entangled States and Its Applications. *Physical Review Letters*, **2020**, 124, 160503	7.4	6
23	Comment on "Quantum key distribution with blind polarization bases". *Physical Review Letters*, **2006**, 96, 078901; author reply 078902	7.4	6
22	Color Erasure Detectors Enable Chromatic Interferometry. *Physical Review Letters*, **2019**, 123, 243601	7.4	6
21	Deterministic spin-wave interferometer based on the Rydberg blockade. *Physical Review A*, **2011**, 83,	2.6	5
20	11-watt single-frequency 1342-nm laser based on multi-segmented Nd:YVO crystal. *Optics Express*, **2019**, 27, 31913-31925	3.3	5

19	Narrow-linewidth cooling of (^{6})Li atoms using the 2S-3P transition. *Applied Physics B: Lasers and Optics*, **2016**, 122, 1	1.9	5
18	30 W, sub-kHz frequency-locked laser at 532 nm. *Optics Express*, **2018**, 26, 33756-33763	3.3	4
17	Counting Classical Nodes in Quantum Networks. *Physical Review Letters*, **2020**, 124, 180503	7.4	3
16	Sine wave gating silicon single-photon detectors for multiphoton entanglement experiments. *Review of Scientific Instruments*, **2017**, 88, 083102	1.7	3
15	Discriminating quantum correlations with networking quantum teleportation. *Physical Review Research*, **2020**, 2,	3.9	3
14	Oscillatory-like expansion of a Fermionic superfluid. *Science Bulletin*, **2020**, 65, 7-11	10.6	3
13	Feshbach spectroscopy of an ultracold K41Li6 mixture and K41 atoms. *Physical Review A*, **2018**, 98,	2.6	3
12	Chromatic interferometry with small frequency differences. *Optics Express*, **2020**, 28, 32294-32301	3.3	2
11	Universal Dynamical Scaling of Quasi-Two-Dimensional Vortices in a Strongly Interacting Fermionic Superfluid. *Physical Review Letters*, **2021**, 126, 185302	7.4	2
10	Observation of state-to-state hyperfine-changing collisions in a Bose-Fermi mixture of Li6 and K41 atoms. *Physical Review A*, **2020**, 101,	2.6	1
9	Loss-tolerant all-photonic quantum repeater with generalized Shor code. *Optica*, **2022**, 9, 152	8.6	1
8	Second sound attenuation near quantum criticality.. *Science*, **2022**, 375, 528-533	33.3	1
7	Photonic realization of quantum resetting. *Optica*, **2020**, 7, 766	8.6	1
6	Dynamic formation of quasicondensate and spontaneous vortices in a strongly interacting Fermi gas. *Physical Review Research*, **2021**, 3,	3.9	1
5	A battery-powered floating current source of 100 A for precise and fast control of magnetic field. *AIP Advances*, **2020**, 10, 125207	1.5	1
4	Improved Spatial Resolution Achieved by Chromatic Intensity Interferometry. *Physical Review Letters*, **2021**, 127, 103601	7.4	1
3	Quantum State Transfer over 1200km Assisted by Prior Distributed Entanglement.. *Physical Review Letters*, **2022**, 128, 170501	7.4	1
2	Efficient Bipartite Entanglement Detection Scheme with a Quantum Adversarial Solver.. *Physical Review Letters*, **2022**, 128, 110501	7.4	0

1 High detection efficiency silicon single-photon detector with a monolithic integrated circuit of active quenching and active reset. *Review of Scientific Instruments*, **2020**, 91, 123106 1.7