Charles H H Bennett

List of Publications by Citations

81 papers	42,806 citations	49 h-index	87 g-index
87 ext. papers	48,261 ext. citations	7.8 avg, IF	7.32 L-index

#	Paper	IF	Citations
81	Teleporting an unknown quantum state via dual classical and Einstein-Podolsky-Rosen channels. *Physical Review Letters*, **1993**, 70, 1895-1899	7.4	8817
80	Communication via one- and two-particle operators on Einstein-Podolsky-Rosen states. *Physical Review Letters*, **1992**, 69, 2881-2884	7.4	3595
79	Mixed-state entanglement and quantum error correction. *Physical Review A*, **1996**, 54, 3824-3851	2.6	3406
78	Elementary gates for quantum computation. *Physical Review A*, **1995**, 52, 3457-3467	2.6	2158
77	Concentrating partial entanglement by local operations. *Physical Review A*, **1996**, 53, 2046-2052	2.6	2101
76	Purification of noisy entanglement and faithful teleportation via noisy channels. *Physical Review Letters*, **1996**, 76, 722-725	7.4	1931
75	Logical Reversibility of Computation. *IBM Journal of Research and Development*, **1973**, 17, 525-532	2.5	1911
74	Efficient estimation of free energy differences from Monte Carlo data. *Journal of Computational Physics*, **1976**, 22, 245-268	4.1	1898
73	Quantum cryptography using any two nonorthogonal states. *Physical Review Letters*, **1992**, 68, 3121-3124	7.4	1857
72	Quantum information and computation. *Nature*, **2000**, 404, 247-55	50.4	1766
71	Quantum cryptography without Bell's theorem. *Physical Review Letters*, **1992**, 68, 557-559	7.4	1457
70	Experimental quantum cryptography. *Journal of Cryptology*, **1992**, 5, 3-28	2.1	1178
69	The thermodynamics of computation□ review. *International Journal of Theoretical Physics*, **1982**, 21, 905-940	1.1	1027
68	Generalized privacy amplification. *IEEE Transactions on Information Theory*, **1995**, 41, 1915-1923	2.8	823
67	Quantum nonlocality without entanglement. *Physical Review A*, **1999**, 59, 1070-1091	2.6	679
66	Strengths and Weaknesses of Quantum Computing. *SIAM Journal on Computing*, **1997**, 26, 1510-1523	1.1	665
65	Remote state preparation. *Physical Review Letters*, **2001**, 87, 077902	7.4	578

64	Privacy Amplification by Public Discussion. *SIAM Journal on Computing*, **1988**, 17, 210-229	1.1	557
63	Serially Deposited Amorphous Aggregates of Hard Spheres. *Journal of Applied Physics*, **1972**, 43, 2727-2734	2.5	530
62	Unextendible Product Bases and Bound Entanglement. *Physical Review Letters*, **1999**, 82, 5385-5388	7.4	475
61	Quantum Information and Computation. *Physics Today*, **1995**, 48, 24-30	0.9	402
60	Entanglement-Assisted Classical Capacity of Noisy Quantum Channels. *Physical Review Letters*, **1999**, 83, 3081-3084	7.4	350
59	Entanglement-assisted capacity of a quantum channel and the reverse Shannon theorem. *IEEE Transactions on Information Theory*, **2002**, 48, 2637-2655	2.8	341
58	Information distance. *IEEE Transactions on Information Theory*, **1998**, 44, 1407-1423	2.8	308
57	Relative to a Random Oracle A, ${bf P}^A ne {bf NP}^A ne text{co-}{bf NP}^A $ with Probability 1. *SIAM Journal on Computing*, **1981**, 10, 96-113	1.1	295
56	Exact and asymptotic measures of multipartite pure-state entanglement. *Physical Review A*, **2000**, 63,	2.6	276
55	Quantum information theory. *IEEE Transactions on Information Theory*, **1998**, 44, 2724-2742	2.8	266
54	Notes on Landauer's principle, reversible computation, and Maxwell's Demon. *Studies in History and Philosophy of Science Part B - Studies in History and Philosophy of Modern Physics*, **2003**, 34, 501-510	1	228
53	Capacities of Quantum Erasure Channels. *Physical Review Letters*, **1997**, 78, 3217-3220	7.4	217
52	Time/Space Trade-Offs for Reversible Computation. *SIAM Journal on Computing*, **1989**, 18, 766-776	1.1	215
51	The Fundamental Physical Limits of Computation. *Scientific American*, **1985**, 253, 48-56	0.5	200
50	. *IBM Journal of Research and Development*, **1988**, 32, 16-23	2.5	175
49	Demons, Engines and the Second Law. *Scientific American*, **1987**, 257, 108-116	0.5	172
48	Role of irreversibility in stabilizing complex and nonergodic behavior in locally interacting discrete systems. *Physical Review Letters*, **1985**, 55, 657-660	7.4	132
47	Dissipation-error tradeoff in proofreading. *BioSystems*, **1979**, 11, 85-91	1.9	117

46	Remote preparation of quantum states. *IEEE Transactions on Information Theory*, **2005**, 51, 56-74	2.8	107
45	On the stability of vacancy and vacancy clusters in amorphous solids. *Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties*, **1979**, 40, 485-495		90
44	On the capacities of bipartite Hamiltonians and unitary gates. *IEEE Transactions on Information Theory*, **2003**, 49, 1895-1911	2.8	88
43	The Quantum Reverse Shannon Theorem and Resource Tradeoffs for Simulating Quantum Channels. *IEEE Transactions on Information Theory*, **2014**, 60, 2926-2959	2.8	86
42	Mass tensor molecular dynamics. *Journal of Computational Physics*, **1975**, 19, 267-279	4.1	76
41	Practical Quantum Oblivious Transfer **1991**, 351-366		71
40	On the nature and origin of complexity in discrete, homogeneous, locally-interacting systems. *Foundations of Physics*, **1986**, 16, 585-592	1.2	69
39	The Properties of a Ferrocene-Tetracyanoethylene Charge-Transfer Complex. *Journal of the American Chemical Society*, **1964**, 86, 5166-5170	16.4	66
38	Chain letters & evolutionary histories. *Scientific American*, **2003**, 288, 76-81	0.5	63
37	Postulates for measures of genuine multipartite correlations. *Physical Review A*, **2011**, 83,	2.6	58
36	Role of composition in metallic glass formation. *Acta Metallurgica*, **1971**, 19, 1295-1298		58
35	Quantum Cryptography, or Unforgeable Subway Tokens **1983**, 267-275		58
34	Quantum cryptography: uncertainty in the service of privacy. *Science*, **1992**, 257, 752-3	33.3	51
33	Purification of Noisy Entanglement and Faithful Teleportation via Noisy Channels[Phys. Rev. Lett. 76, 722 (1996)]. *Physical Review Letters*, **1997**, 78, 2031-2031	7.4	50
32	Stability of temporally periodic states of classical many-body systems. *Physical Review A*, **1990**, 41, 1932-1935	2.8	48
31	Can closed timelike curves or nonlinear quantum mechanics improve quantum state discrimination or help solve hard problems?. *Physical Review Letters*, **2009**, 103, 170502	7.4	47
30	Kinematics of the forced and overdamped sine-Gordon soliton gas. *Journal of Statistical Physics*, **1981**, 24, 419-442	1.5	45
29	Quantum Information. *Physica Scripta*, **1998**, T76, 210	2.6	44

28	Studies in Molecular Dynamics. IX. Vacancies in Hard Sphere Crystals. *Journal of Chemical Physics*, **1971**, 54, 4796-4808	3.9	43
27	The Structure and Chemistry of Ferrocene. VI. Mechanism of the Arylation Reaction. *Journal of the American Chemical Society*, **1962**, 84, 2726-2732	16.4	40
26	Temporally periodic phases and kinetic roughening. *Physical Review Letters*, **1993**, 70, 3607-3610	7.4	37
25	An Update on Quantum Cryptography **1984**, 475-480		37
24	. *IBM Journal of Research and Development*, **2000**, 44, 270-277	2.5	27
23	Persistence of vacancy motion in hard sphere crystals. *Journal of Physics and Chemistry of Solids*, **1971**, 32, 2111-2122	3.9	24
22	Entanglement-Enhanced Classical Communication on a Noisy Quantum Channel **1997**, 79-88		21
21	Inequalities and separations among assisted capacities of quantum channels. *Physical Review Letters*, **2006**, 96, 150502	7.4	21
20	Parity bit in quantum cryptography. *Physical Review A*, **1996**, 54, 2675-2684	2.6	21
19	Universal quantum data compression via nondestructive tomography. *Physical Review A*, **2006**, 73,	2.6	20
18	Universal computation and physical dynamics. *Physica D: Nonlinear Phenomena*, **1995**, 86, 268-273	3.3	20
17	Reduction of Quantum Entropy by Reversible Extraction of Classical Information. *Journal of Modern Optics*, **1994**, 41, 2307-2314	1.1	20
16	Thermodynamically Reversible Computation. *Physical Review Letters*, **1984**, 53, 1202-1202	7.4	18
15	Logical Depth and Physical Complexity. *Computerkultur*, **1995**, 207-235		18
14	Computers and mathematics. Quantum channel capacities. *Science*, **2004**, 303, 1784-7	33.3	16
13	QUANTUM CRYPTOGRAPHY:Privacy in a Quantum World. *Science*, **1999**, 284, 747-748	33.3	14
12	Experimental Quantum Cryptography. *Lecture Notes in Computer Science*, **1991**, 253-265	0.9	14
11	Molecular dynamics calculation of the isotope effect for vacancy diffusion. *Thin Solid Films*, **1975**, 25, 65-70	2.2	13

10	Quantum Information: Qubits and Quantum Error Correction. *International Journal of Theoretical Physics*, **2003**, 42, 153-176	1.1	12
9	Thermodynamics of computation and information distance **1993**,		8
8	Bond-energy variables for Ising spin-glass dynamics. *Physical Review B*, **1988**, 37, 2254	3.3	7
7	The Second Law and Quantum Physics **2008**,		4
6	Classical and Quantum Information Transmission and Interactions **1997**, 25-39		4
5	Publicity, Privacy, and Permanence of Information. *AIP Conference Proceedings*, **2006**,	0	2
4	Dissipation, anisotropy, and the stabilization of computationally complex states of homogeneous media. *Physica A: Statistical Mechanics and Its Applications*, **1990**, 163, 393-397	3.3	2
3	Comment on "The Aestivation Hypothesis for Resolving Fermi's Paradox". *Foundations of Physics*, **2019**, 49, 820-829	1.2	1
2	Quantum Cryptography: Principles and Prospects (Quantumkryptographie: Prinzipien und Ausblick). *IT - Information Technology*, **2006**, 48, 332-335	0.4	1
1	Rolf Landauer (In Memoriam). *Applicable Algebra in Engineering, Communications and Computing*, **2000**, 10, 273-276	0.6	