

Harry Buhrman

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/10869372/publications.pdf>

Version: 2024-02-01

52
papers

3,806
citations

331670

21
h-index

233421

45
g-index

53
all docs

53
docs citations

53
times ranked

2272
citing authors

#	ARTICLE	IF	CITATIONS
1	Quantum Fingerprinting. Physical Review Letters, 2001, 87, 167902.	7.8	739
2	Nonlocality and communication complexity. Reviews of Modern Physics, 2010, 82, 665-698.	45.6	396
3	Complexity measures and decision tree complexity: a survey. Theoretical Computer Science, 2002, 288, 21-43.	0.9	394
4	The quantum technologies roadmap: a European community view. New Journal of Physics, 2018, 20, 080201.	2.9	358
5	Quantum lower bounds by polynomials. Journal of the ACM, 2001, 48, 778-797.	2.2	356
6	Substituting quantum entanglement for communication. Physical Review A, 1997, 56, 1201-1204.	2.5	296
7	Limit on Nonlocality in Any World in Which Communication Complexity Is Not Trivial. Physical Review Letters, 2006, 96, 250401.	7.8	275
8	Quantum Entanglement and Communication Complexity. SIAM Journal on Computing, 2001, 30, 1829-1841.	1.0	86
9	Multiparty quantum communication complexity. Physical Review A, 1999, 60, 2737-2741.	2.5	83
10	Power from Random Strings. SIAM Journal on Computing, 2006, 35, 1467-1493.	1.0	77
11	The first peptides: The evolutionary transition between prebiotic amino acids and early proteins. Journal of Theoretical Biology, 2009, 261, 531-539.	1.7	74
12	Resource-Bounded Kolmogorov Complexity Revisited. SIAM Journal on Computing, 2001, 31, 887-905.	1.0	42
13	Distributed Quantum Computing. Lecture Notes in Computer Science, 2003, , 1-20.	1.3	41
14	Implications of superstrong non-locality for cryptography. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2006, 462, 1919-1932.	2.1	34
15	Robust Polynomials and Quantum Algorithms. Theory of Computing Systems, 2007, 40, 379-395.	1.1	34
16	Quantum communication complexity advantage implies violation of a Bell inequality. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 3191-3196.	7.1	34
17	Completeness for nondeterministic complexity classes. Mathematical Systems Theory, 1991, 24, 179-200.	0.5	29
18	Separating Complexity Classes Using Autoreducibility. SIAM Journal on Computing, 2000, 29, 1497-1520.	1.0	29

#	ARTICLE	IF	CITATIONS
19	Kolmogorov Random Graphs and the Incompressibility Method. SIAM Journal on Computing, 1999, 29, 590-599.	1.0	28
20	Combinatorics and Quantum Nonlocality. Physical Review Letters, 2003, 91, 047903.	7.8	28
21	Quantum Property Testing. SIAM Journal on Computing, 2008, 37, 1387-1400.	1.0	27
22	Classical Simulation of Entanglement Swapping with Bounded Communication. Physical Review Letters, 2012, 109, 100401.	7.8	23
23	What can be efficiently reduced to the Kolmogorov-random strings?. Annals of Pure and Applied Logic, 2006, 138, 2-19.	0.5	22
24	Towards a Reverse Newman's Theorem in Interactive Information Complexity. Algorithmica, 2016, 76, 749-781.	1.3	21
25	Near-Optimal and Explicit Bell Inequality Violations. , 2011, , .		19
26	Two Queries. Journal of Computer and System Sciences, 1999, 59, 182-194.	1.2	18
27	P-Selective Self-Reducible Sets: A New Characterization of P. Journal of Computer and System Sciences, 1996, 53, 210-217.	1.2	17
28	Splittings, Robustness, and Structure of Complete Sets. SIAM Journal on Computing, 1998, 27, 637-653.	1.0	17
29	A Generalization of Resource-Bounded Measure, with Application to the BPP vs. EXP Problem. SIAM Journal on Computing, 2000, 30, 576-601.	1.0	17
30	Enumerations of the Kolmogorov function. Journal of Symbolic Logic, 2006, 71, 501-528.	0.5	17
31	An Excursion to the Kolmogorov Random Strings. Journal of Computer and System Sciences, 1997, 54, 393-399.	1.2	16
32	Space-efficient Routing Tables for Almost All Networks and the Incompressibility Method. SIAM Journal on Computing, 1999, 28, 1414-1432.	1.0	15
33	Some Mathematical Refinements Concerning Error Minimization in the Genetic Code. IEEE/ACM Transactions on Computational Biology and Bioinformatics, 2011, 8, 1358-1372.	3.0	15
34	Twenty questions to a p-selector. Information Processing Letters, 1993, 48, 201-204.	0.6	14
35	A Realistic Model Under Which the Genetic Code is Optimal. Journal of Molecular Evolution, 2013, 77, 170-184.	1.8	13
36	Towards a Reverse Newman's Theorem in Interactive Information Complexity. , 2013, , .		12

#	ARTICLE	IF	CITATIONS
37	Computing with a full memory. , 2014, , .		11
38	Randomness is Hard. SIAM Journal on Computing, 2000, 30, 1485-1501.	1.0	10
39	Derandomizing from Random Strings. , 2010, , .		9
40	Violating the Shannon capacity of metric graphs with entanglement. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 19227-19232.	7.1	8
41	The relative power of logspace and polynomial time reductions. Computational Complexity, 1993, 3, 231-244.	0.3	7
42	Entanglement-Assisted Zero-Error Source-Channel Coding. IEEE Transactions on Information Theory, 2015, 61, 1124-1138.	2.4	7
43	Randomised Individual Communication Complexity. , 2008, , .		6
44	Non-Uniform Reductions. Theory of Computing Systems, 2010, 47, 317-341.	1.1	6
45	Complete Sets and Structure in Subrecursive Classes. Lecture Notes in Logic, 1998, , 45-77.	0.1	6
46	Multipartite nonlocal quantum correlations resistant to imperfections. Physical Review A, 2006, 73, .	2.5	5
47	Catalytic Space: Non-determinism and Hierarchy. Theory of Computing Systems, 2018, 62, 116-135.	1.1	5
48	Reductions to the Set of Random Strings: The Resource-Bounded Case. Lecture Notes in Computer Science, 2012, , 88-99.	1.3	5
49	One Bit of Advice. Lecture Notes in Computer Science, 2003, , 547-558.	1.3	4
50	Arbitrarily little knowledge can give a quantum advantage for nonlocal tasks. Physical Review A, 2009, 80, .	2.5	1
51	Clean Quantum and Classical Communication Protocols. Physical Review Letters, 2016, 117, 230503.	7.8	0
52	Sparse Selfreducible Sets and Nonuniform Lower Bounds. Algorithmica, 2019, 81, 179-200.	1.3	0