Rodney Van Meter

List of Publications by Year
in descending order

71 papers	2,901 citations	304743 22 h-index	189892 50 g-index
74 all docs	74 docs citations	74 times ranked	1751 citing authors

#	Article	IF	Citations
1	Efficient Construction of a Control Modular Adder on a Carry-Lookahead Adder Using Relative-Phase Toffoli Gates. IEEE Transactions on Quantum Engineering, 2022, 3, 1-18.	4.9	7
2	Simultaneous Execution of Quantum Circuits on Current and Near-Future NISQ Systems. IEEE Transactions on Quantum Engineering, 2022, 3, 1-10.	4.9	11
3	The Present and Future of Discrete Logarithm Problems on Noisy Quantum Computers. IEEE Transactions on Quantum Engineering, 2022, 3, 1-21.	4.9	2
4	Modeling of measurement-based quantum network coding on a superconducting quantum processor. Physical Review A, 2020, 101, .	2.5	29
5	When Entanglement Meets Classical Communications: Quantum Teleportation for the Quantum Internet. IEEE Transactions on Communications, 2020, 68, 3808-3833.	7.8	117
6	Subdivided Phase Oracle for NISQ Search Algorithms. IEEE Transactions on Quantum Engineering, 2020, 1, 1-15.	4.9	18
7	Extracting Success from IBMâ€™s 20-Qubit Machines Using Error-Aware Compilation. ACM Journal on Emerging Technologies in Computing Systems, 2020, 16, 1-25.	2.3	47
8	Finding Small and Large k-Clique Instances on a Quantum Computer. IEEE Transactions on Quantum Engineering, 2020, 1, 1-11.	4.9	8
9	Quantum link bootstrapping using a RuleSet-based communication protocol. Physical Review A, 2019, 100, .	2.5	23
10	The network impact of hijacking a quantum repeater. Quantum Science and Technology, 2018, 3, 034008.	5.8	7
11	Resource-aware system architecture model for implementation of quantum aided Byzantine agreement on quantum repeater networks. Quantum Science and Technology, 2018, 3, 014011.	5.8	6
12	Analysis of measurement-based quantum network coding over repeater networks under noisy conditions. Physical Review A, 2018, 97, .	2.5	20
13	State injection, lattice surgery, and dense packing of the deformation-based surface code. Physical Review A, 2017, 95, .	2.5	2
14	Distributed quantum computing systems: Technology to quantum circuits. , 2017, , .		0
15	Surface code error correction on a defective lattice. New Journal of Physics, 2017, 19, 023050.	2.9	20
16	Distributed quantum computing systems: Technology to quantum circuits. , 2017, , .		1
17	High-speed quantum networking by ship. Scientific Reports, 2016, 6, 36163.	3.3	14
18	The Path to Scalable Distributed Quantum Computing. Computer, 2016, 49, 31-42.	1.1	104

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19	Analysis of quantum network coding for realistic repeater networks. Physical Review A, 2016, 93, .	2.5	36
20	Interoperability in encoded quantum repeater networks. Physical Review A, 2016, 93, .	2.5	7
21	A Classical Network Protocol to Support Distributed Quantum State Tomography. , 2016, , .		3
22	Designing a Million-Qubit Quantum Computer Using a Resource Performance Simulator. ACM Journal on Emerging Technologies in Computing Systems, 2016, 12, 1-25.	2.3	14
23	Fault-Tolerant Operations for Universal Blind Quantum Computation. ACM Journal on Emerging Technologies in Computing Systems, 2015, 12, 1-26.	2.3	13
24	Classification of Quantum Repeater Attacks. , 2015, , .		3
25	IP-NUMA for low-latency communication. , 2014, , .		0
26	The Quantum Memory Stick. , 2014, , .		0
27	A Resource-Efficient Design for a Reversible Floating Point Adder in Quantum Computing. ACM Journal on Emerging Technologies in Computing Systems, 2014, 11, 1-18.	2.3	11
28	Quantum Computingâ€™s Classical Problem, Classical Computingâ€™s Quantum Problem. Foundations of Physics, 2014, 44, 819-828.	1.3	2
29	A packet I/O architecture for shell script-based packet processing. China Communications, 2014, 11, 1-11.	3.2	1
30	Designing quantum repeater networks. , 2013, 51, 64-71.		70
31	Path selection for quantum repeater networks. Networking Science, 2013, 3, 82-95.	1.2	107
32	A blueprint for building a quantum computer. Communications of the ACM, 2013, 56, 84-93.	4.5	76
33	Optimization of the Solovay-Kitaev algorithm. Physical Review A, 2013, 87, .	2.5	19
34	Faster quantum chemistry simulation on fault-tolerant quantum computers. New Journal of Physics, 2012, 14, 115023.	2.9	91
35	Surface code quantum computing by lattice surgery. New Journal of Physics, 2012, 14, 123011.	2.9	276
36	Floating ground architecture. , 2012, , .		0

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37	A Î˜(â^š n)-depth quantum adder on the 2D NTC quantum computer architecture. ACM Journal on Emerging Technologies in Computing Systems, 2012, 8, 1-22.	2.3	20
38	Layered Architecture for Quantum Computing. Physical Review X, 2012, 2, .	8.9	182
39	Decoding Cryptosystems. Science, 2012, 337, 1040-1040.	12.6	8
40	Quantum networking and internetworking. IEEE Network, 2012, 26, 59-64.	6.9	35
41	Counting Gates, Moving Qubits: Evaluating the Execution Cost of Quantum Circuits. , 2012, , .		1
42	Assessing the Dynamics of Bittorrent Swarms Topologies Using the Peer Exchange Protocol. IEICE Transactions on Communications, 2012, E95.B, 1566-1574.	0.7	1
43	Multiplexing schemes for quantum repeater networks. Proceedings of SPIE, 2011, , .	0.8	7
44	NAT-MANEMO: Route Optimization for Unlimited Network Extensibility in MANEMO. Journal of Information Processing, 2011, 19, 118-128.	0.4	2
45	Protocol design for quantum repeater networks. , 2011, , .		13
46	A temporal view of the topology of dynamic Bittorrent swarms. , 2011, , .		8
47	On the Effect of Quantum Interaction Distance on Quantum Addition Circuits. ACM Journal on Emerging Technologies in Computing Systems, 2011, 7, 1-17.	2.3	18
48	Recursive quantum repeater networks. Progress in Informatics, 2011, , 65.	0.2	31
49	Otedama: A Relocatable RFID Information Repository Architecture. IEICE Transactions on Information and Systems, 2010, E93-D, 2922-2931.	0.7	1
50	Surface Code Quantum Communication. Physical Review Letters, 2010, 104, 180503.	7.8	115
51	CIRCUIT DESIGN FOR A MEASUREMENT-BASED QUANTUM CARRY-LOOKAHEAD ADDER. International Journal of Quantum Information, 2010, 08, 843-867.	1.1	11
52	DISTRIBUTED QUANTUM COMPUTATION ARCHITECTURE USING SEMICONDUCTOR NANOPHOTONICS. International Journal of Quantum Information, 2010, 08, 295-323.	1.1	77
53	MANEMO Routing in Practice: Protocol Selection, Expected Performance, and Experimental Evaluation. IEICE Transactions on Communications, 2010, E93-B, 2004-2011.	0.7	3
54	Quantum repeater with encoding. Physical Review A, 2009, 79, .	2.5	224

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55	System Design for a Long-Line Quantum Repeater. IEEE/ACM Transactions on Networking, 2009, 17, 1002-1013.	3.8	107
56	Selecting an appropriate routing protocol for in-field MANEMO experiments. , 2009, , .		4
57	High-Bandwidth Hybrid Quantum Repeater. Physical Review Letters, 2008, 101, 040502.	7.8	68
58	Arithmetic on a distributed-memory quantum multicomputer. ACM Journal on Emerging Technologies in Computing Systems, 2008, 3, 1-23.	2.3	39
59	Architecture of a Quantum Multicomputer Implementing Shorâ€™s Algorithm. Lecture Notes in Computer Science, 2008, , 105-114.	1.3	5
60	ARCHITECTURE-DEPENDENT EXECUTION TIME OF SHOR'S ALGORITHM. , 2008, , .		3
61	Communication Links for Distributed Quantum Computation. IEEE Transactions on Computers, 2007, 56, 1643-1653.	3.4	39
62	Distributed Arithmetic on a Quantum Multicomputer. Computer Architecture News, 2006, 34, 354-365.	2.5	10
63	Architectural implications of quantum computing technologies. ACM Journal on Emerging Technologies in Computing Systems, 2006, 2, 31-63.	2.3	74
64	Fast quantum modular exponentiation. Physical Review A, 2005, 71, .	2.5	103
65	TRADING CLASSICAL FOR QUANTUM COMPUTATION USING INDIRECTION. , 2005, , .		0
66	Network attached storage architecture. Communications of the ACM, 2000, 43, 37-45.	4.5	285
67	VISA. , 1998, , .		12
68	VISA. ACM SIGPLAN Notices, 1998, 33, 71-80.	0.2	13
69	VISA. Operating Systems Review (ACM), 1998, 32, 71-80.	1.9	3
70	Response to the collapsed LAN. Computer Architecture News, 1997, 25, 1-12.	2.5	0
71	A brief survey of current work on network attached peripherals (extended abstract). Operating Systems Review (ACM), 1996, 30, 63-70.	1.9	15