Zbigniew PuchaÅ‚a

List of Publications by Year
in descending order

57 papers	941 citations	471509 17 h-index	501196 28 g-index
57 all docs	57 docs citations	57 times ranked	631 citing authors

#	Article	IF	Citations
1	Algebraic and geometric structures inside the Birkhoff polytope. Journal of Mathematical Physics, 2022, 63, .	1.1	1
2	Encoding Classical Information Into Quantum Resources. IEEE Transactions on Information Theory, 2022, 68, 4518-4530.	2.4	8
3	On the optimal certification of von Neumann measurements. Scientific Reports, 2021, 11, 3623.	3.3	2
4	Generating random quantum channels. Journal of Mathematical Physics, 2021, 62, .	1.1	23
5	Log-convex set of Lindblad semigroups acting on N-level system. Journal of Mathematical Physics, 2021, 62, 072105.	1.1	2
6	Relating Entropies of Quantum Channels. Entropy, 2021, 23, 1028.	2.2	0
7	Excluding false negative error in certification of quantum channels. Scientific Reports, 2021, 11, 21716.	3.3	1
8	Discrimination of POVMs with rank-one effects. Quantum Information Processing, 2020, 19, 1.	2.2	8
9	Simulating all quantum measurements using only projective measurements and postselection. Physical Review A, 2019, 100, .	2.5	27
10	Distinguishing classically indistinguishable states and channels. Journal of Physics A: Mathematical and Theoretical, 2019, 52, 475303.	2.1	5
11	Pauli semigroups and unistochastic quantum channels. Physics Letters, Section A: General, Atomic and Solid State Physics, 2019, 383, 2376-2381.	2.1	13
12	Vertices cannot be hidden from quantum spatial search for almost all random graphs. Quantum Information Processing, 2018, 17, 1.	2.2	13
13	Unified approach to geometric and positive-map-based nonlinear entanglement identifiers. Physical Review A, 2018, 97, .	2.5	1
14	Coherifying quantum channels. New Journal of Physics, 2018, 20, 043028.	2.9	39
15	Majorization uncertainty relations for mixed quantum states. Journal of Physics A: Mathematical and Theoretical, 2018, 51, 175306.	2.1	14
16	Strategies for optimal single-shot discrimination of quantum measurements. Physical Review A, 2018, 98, .	2.5	22
17	Almost all quantum channels are equidistant. Journal of Mathematical Physics, 2018, 59, .	1.1	20
18	Unconditional security of a K-state quantum key distribution protocol. Quantum Information Processing, 2018, 17, 1.	2.2	1

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19	Conditional entropic uncertainty relations for Tsallis entropies. Quantum Information Processing, 2018, 17, 1.	2.2	6
20	Quantum noise generated by local random Hamiltonians. Physical Review A, 2017, 95, .	2.5	2
21	Symbolic integration with respect to the Haar measure on the unitary groups. Bulletin of the Polish Academy of Sciences: Technical Sciences, 2017, 65, 21-27.	0.8	51
22	Asymptotic entropic uncertainty relations. Journal of Mathematical Physics, 2016, 57, .	1.1	12
23	Distinguishability of generic quantum states. Physical Review A, 2016, 93, .	2.5	35
24	Quantifying channels output similarity with applications to quantum control. Quantum Information Processing, 2016, 15, 1455-1468.	2.2	2
25	Exploring boundaries of quantum convex structures: Special role of unitary processes. Physical Review A, 2015, 92, .	2.5	4
26	Certainty relations, mutual entanglement, and nondisplaceable manifolds. Physical Review A, 2015, 92, .	2.5	19
27	Minimal Rényi–Ingarden–Urbanik Entropy of Multipartite Quantum States. Entropy, 2015, 17, 5063-5084.	2.2	13
28	Quantum control robust with respect to coupling with an external environment. Quantum Information Processing, 2015, 14, 437-446.	2.2	7
29	Real numerical shadow and generalized B-splines. Linear Algebra and Its Applications, 2015, 479, 12-51.	0.9	3
30	Quantum control with spectral constraints. Quantum Information Processing, 2014, 13, 227-237.	2.2	8
31	Diagonal unitary entangling gates and contradiagonal quantum states. Physical Review A, 2014, 90, .	2.5	23
32	Strong majorization entropic uncertainty relations. Physical Review A, 2014, 89, .	2.5	119
33	Constructive entanglement test from triangle inequality. Journal of Physics A: Mathematical and Theoretical, 2014, 47, 424035.	2.1	8
34	Local controllability of quantum systems. Quantum Information Processing, 2013, 12, 459-466.	2.2	4
35	Increasing the security of the ping–pong protocol by using many mutually unbiased bases. Quantum Information Processing, 2013, 12, 569-576.	2.2	21
36	A MODEL FOR QUANTUM QUEUE. International Journal of Quantum Information, 2013, 11, 1350023.	1.1	2

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37	Majorization entropic uncertainty relations. Journal of Physics A: Mathematical and Theoretical, 2013, 46, 272002.	2.1	122
38	Entropic trade-off relations for quantum operations. Physical Review A, 2013, 87, .	2.5	20
39	ANALYSIS OF PATENT ACTIVITY IN THE FIELD OF QUANTUM INFORMATION PROCESSING. International Journal of Quantum Information, 2013, 11, 1350007.	1.1	6
40	Enhancing Pseudo-Telepathy in the Magic Square Game. PLoS ONE, 2013, 8, e64694.	2.5	9
41	Notes on the Riccati operator equation in open quantum systems. Journal of Mathematical Physics, 2012, 53, 012106.	1.1	1
42	Collectibility for mixed quantum states. Physical Review A, 2012, 86, .	2.5	13
43	Qubit flip game on a Heisenberg spin chain. Quantum Information Processing, 2012, 11, 1571-1583.	2.2	15
44	Restricted numerical shadow and the geometry of quantum entanglement. Journal of Physics A: Mathematical and Theoretical, 2012, 45, 415309.	2.1	13
45	Numerical shadow and geometry of quantum states. Journal of Physics A: Mathematical and Theoretical, 2011, 44, 335301.	2.1	22
46	Probability measure generated by the superfidelity. Journal of Physics A: Mathematical and Theoretical, 2011, 44, 405301.	2.1	4
47	Stationary states of two-level open quantum systems. Journal of Physics A: Mathematical and Theoretical, 2011, 44, 215306.	2.1	2
48	Experimentally feasible measures of distance between quantum operations. Quantum Information Processing, 2011, 10, 1-12.	2.2	22
49	Product numerical range in a space with tensor product structure. Linear Algebra and Its Applications, 2011, 434, 327-342.	0.9	21
50	Numerical shadows: Measures and densities on the numerical range. Linear Algebra and Its Applications, 2011, 434, 2042-2080.	0.9	9
51	Eigengestures for Natural Human Computer Interface. Advances in Intelligent and Soft Computing, 2011, , 49-56.	0.2	3
52	Restricted numerical range: A versatile tool in the theory of quantum information. Journal of Mathematical Physics, 2010, 51, .	1.1	29
53	Bound on trace distance based on superfidelity. Physical Review A, 2009, 79, .	2.5	21
54	The exact asymptotic of the collision time tail distribution for independent Brownian particles with different drifts. Probability Theory and Related Fields, 2008, 142, 595-617.	1.8	8

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55	Quantum state discrimination: A geometric approach. Physical Review A, 2008, 77, .	2.5	40
56	Multiple-shot and unambiguous discrimination of von Neumann measurements. Quantum - the Open Journal for Quantum Science, 0, 5, 425.	0.0	7
57	Gauge invariant information concerning quantum channels. Quantum - the Open Journal for Quantum Science, 0, 2, 60.	0.0	15