Marcin PawÅ‚owski

List of Publications by Year
in descending order

68 papers	1,948 citations	361045 20 h-index	264894 42 g-index
70 all docs	70 docs citations	70 times ranked	1020 citing authors

#	Article	IF	Citations
1	Information causality as a physical principle. Nature, 2009, 461, 1101-1104.	13.7	545
2	Semi-device-independent security of one-way quantum key distribution. Physical Review A, 2011, 84, .	1.0	194
3	Security proof for cryptographic protocols based only on the monogamy of Bellâ€™s inequality violations. Physical Review A, 2010, 82, .	1.0	111
4	Semi-device-independent randomness certification using<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mi>n</mml:mi><mml:mo>â†’</mml:mo><mml:mn>1</mml:mn></mml:mrow></mml:math>quantu random access codes. Physical Review A, 2012, 85, .	1.0	90
5	Weak randomness in device-independent quantum key distribution and the advantage of using high-dimensional entanglement. Physical Review A, 2013, 88, .	1.0	74
6	Entanglement-assisted random access codes. Physical Review A, 2010, 81, .	1.0	70
7	Monogamy of Bellâ€™s Inequality Violations in Nonsignaling Theories. Physical Review Letters, 2009, 102, 030403.	2.9	65
8	Recovering part of the boundary between quantum and nonquantum correlations from information causality. Physical Review A, 2009, 80, .	1.0	63
9	State independent contextuality advances one-way communication. New Journal of Physics, 2019, 21, 093057.	1.2	41
10	Certifying an Irreducible 1024-Dimensional Photonic State Using Refined Dimension Witnesses. Physical Review Letters, 2018, 120, 230503.	2.9	36
11	Semi-device-independent self-testing of unsharp measurements. Physical Review Research, 2020, 2, .	1.3	35
12	Experimental Tests of Classical and Quantum Dimensionality. Physical Review Letters, 2014, 112, 140401.	2.9	33
13	Connections between Mutually Unbiased Bases and Quantum Random Access Codes. Physical Review Letters, 2018, 121, 050501.	2.9	31
14	â€œHyperbitsâ€• The information quasiparticles. Physical Review A, 2012, 85, .	1.0	25
15	Testing dimension and nonclassicality in communication networks. Physical Review A, 2015, 92, .	1.0	24
16	Experimentally feasible semi-device-independent certification of four-outcome positive-operator-valued measurements. Physical Review A, 2019, 100, .	1.0	24
17	Non-local setting and outcome information for violation of Bell's inequality. New Journal of Physics, 2010, 12, 083051.	1.2	23
18	Tight Bell inequalities with no quantum violation from qubit unextendible product bases. Physical Review A, 2012, 85, .	1.0	23

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19	Spatial versus sequential correlations for random access coding. Physical Review A, 2016, 93, .	1.0	23
20	Elemental and tight monogamy relations in nonsignaling theories. Physical Review A, 2014, 90, .	1.0	22
21	Degree of entanglement as a physically ill-posed problem: The case of entanglement with vacuum. Physical Review A, 2006, 73, .	1.0	20
22	Free randomness amplification using bipartite chain correlations. Physical Review A, 2014, 90, .	1.0	20
23	Device-independent randomness extraction from an arbitrarily weak min-entropy source. Physical Review A, 2014, 90, .	1.0	20
24	A strategy for quantum algorithm design assisted by machine learning. New Journal of Physics, 2014, 16, 073017.	1.2	19
25	Quantum Bidding in Bridge. Physical Review X, 2014, 4, .	2.8	19
26	Properties of dimension witnesses and their semidefinite programming relaxations. Physical Review A, 2014, 90, .	1.0	18
27	Complementarity between entanglement-assisted and quantum distributed random access code. Physical Review A, 2017, 95, .	1.0	18
28	Relationship between semi- and fully-device-independent protocols. Physical Review A, 2013, 87, .	1.0	15
29	Dimensional discontinuity in quantum communication complexity at dimension seven. Physical Review A, 2017, 95, .	1.0	15
30	When Are Popescu-Rohrlich Boxes and Random Access Codes Equivalent?. Physical Review Letters, 2014, 113, 100401.	2.9	14
31	Robustness of quantum-randomness expansion protocols in the presence of noise. Physical Review A, 2013, 88, .	1.0	12
32	Increased certification of semi-device independent random numbers using many inputs and more post-processing. New Journal of Physics, 2016, 18, 065004.	1.2	12
33	On the security of semi-device-independent QKD protocols. Quantum Information Processing, 2018, 17, 131.	1.0	12
34	Detection efficiency and noise in a semi-device-independent randomness-extraction protocol. Physical Review A, 2015, 91, .	1.0	11
35	Completely device-independent quantum key distribution. Physical Review A, 2016, 94, .	1.0	11
36	Compcryptâ€“Lightweight ANS-Based Compression and Encryption. IEEE Transactions on Information Forensics and Security, 2021, 16, 3859-3873.	4.5	11

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37	Device- and semiâ€“device-independent random numbers based on noninequality paradox. Physical Review A, 2015, 92, .	1.0	10
38	Robust amplification of Santha-Vazirani sources with three devices. Physical Review A, 2015, 91, .	1.0	10
39	Reformulating noncontextuality inequalities in an operational approach. Physical Review A, 2016, 94, .	1.0	10
40	The speed of quantum and classical learning for performing thekth root of NOT. New Journal of Physics, 2009, 11, 113018.	1.2	9
41	Device-independent witness of arbitrary-dimensional quantum systems employing binary-outcome measurements. Physical Review A, 2018, 98, .	1.0	9
42	Quantum randomness protected against detection loophole attacks. Quantum Information Processing, 2021, 20, 1.	1.0	8
43	Amplifying the Randomness of Weak Sources Correlated With Devices. IEEE Transactions on Information Theory, 2017, 63, 7592-7611.	1.5	7
44	Quantum-mechanical machinery for rational decision-making in classical guessing game. Scientific Reports, 2016, 6, 21424.	1.6	6
45	Effects of Polychlorinated Pesticides and Their Metabolites on Phospholipid Organization in Model Microbial Membranes. Journal of Physical Chemistry B, 2018, 122, 12017-12030.	1.2	6
46	Structure of quantum and broadcasting nonlocal correlations. Physical Review A, 2015, 92, .	1.0	5
47	Device-independent quantum key distribution based on measurement inputs. Physical Review A, 2015, 92, .	1.0	5
48	Detection-efficiency loophole and the Pusey-Barrett-Rudolph theorem. Physical Review A, 2015, 91, .	1.0	5
49	Quantum nonlocality via local contextuality with qubit-qubit entanglement. Physical Review A, 2016, 93, .	1.0	4
50	Maximal non-classicality in multi-setting Bell inequalities. Journal of Physics A: Mathematical and Theoretical, 2016, 49, 145301.	0.7	4
51	Random access codes and nonlocal resources. Physical Review A, 2017, 96, .	1.0	4
52	Information Causality without Concatenation. Physical Review Letters, 2021, 126, 220403.	2.9	4
53	Reply to â€œComment on â€˜Security proof for cryptographic protocols based only on the monogamy of Bell's inequality violations'â€• Physical Review A, 2012, 85, .	1.0	3
54	Activation of entanglement in teleportation. Journal of Physics A: Mathematical and Theoretical, 2013, 46, 435301.	0.7	3

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55	Tight bound on the classical value of generalized Clauser-Horne-Shimony-Holt games. Physical Review A, 2016, 94, .	1.0	3
56	1-out-of-2 oblivious transfer using a flawed bit-string quantum protocol. Physical Review A, 2017, 95, .	1.0	3
57	Influence of the choice of postprocessing method on Bell inequalities. Physical Review A, 2018, 97, .	1.0	3
58	Experimental test of nonclassicality with arbitrarily low detection efficiency. Physical Review A, 2020, 102, .	1.0	3
59	Detection loophole attacks on semi-device-independent quantum and classical protocols. Quantum Information and Computation, 2015, 15, 37-49.	0.1	3
60	Entangled-state cryptographic protocol that remains secure even if nonlocal hidden variables exist and can be measured with arbitrary precision. Physical Review A, 2006, 73, .	1.0	2
61	Intrinsic asymmetry with respect to adversary: a new feature of Bell inequalities. Journal of Physics A: Mathematical and Theoretical, 2014, 47, 424016.	0.7	2
62	ANS-based compression and encryption with 128-bit security. International Journal of Information Security, 2022, 21, 1051-1067.	2.3	2
63	Security in Quantum Cryptography vs. Nonlocal Hidden Variables. AIP Conference Proceedings, 2007, , .	0.3	0
64	Publisherâ€™s Note: Experimental Tests of Classical and Quantum Dimensionality [Phys. Rev. Lett.112, 140401 (2014)]. Physical Review Letters, 2014, 113, .	2.9	0
65	Optimal pumping strength for BBM92 key distribution protocol. International Journal of Quantum Information, 2016, 14, 1650049.	0.6	0
66	Experimental Device-Independent Certification of a SIC-POVM. , 2019, , .		0
67	Entropy in Foundations of Quantum Physics. Entropy, 2020, 22, 371.	1.1	0
68	Quantum Bell inequalities from Information Causality â€“ tight for Macroscopic Locality. Quantum - the Open Journal for Quantum Science, 0, 6, 717.	0.0	0