Remigiusz Augusiak

List of Publications by Year
in descending order

75 papers	2,550 citations	236833 25 h-index	214721 47 g-index
76 all docs	76 docs citations	76 times ranked	2060 citing authors

#	Article	IF	Citations
1	Multidimensional quantum entanglement with large-scale integrated optics. Science, 2018, 360, 285-291.	6.0	554
2	Inequivalence of entanglement, steering, and Bell nonlocality for general measurements. Physical Review A, 2015, 92, .	1.0	165
3	Local orthogonality as a multipartite principle for quantum correlations. Nature Communications, 2013, 4, 2263.	5.8	143
4	Detecting nonlocality in many-body quantum states. Science, 2014, 344, 1256-1258.	6.0	129
5	Unbounded randomness certification using sequences of measurements. Physical Review A, 2017, 95, .	1.0	75
6	Existence of an information unit as a postulate of quantum theory. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 16373-16377.	3.3	70
7	Universal observable detecting all two-qubit entanglement and determinant-based separability tests. Physical Review A, 2008, 77, .	1.0	65
8	Unified Framework for Correlations in Terms of Local Quantum Observables. Physical Review Letters, 2010, 104, 140404.	2.9	62
9	Random Bosonic States for Robust Quantum Metrology. Physical Review X, 2016, 6, .	2.8	62
10	Local hidden–variable models for entangled quantum states. Journal of Physics A: Mathematical and Theoretical, 2014, 47, 424002.	0.7	56
11	Bell Inequalities Tailored to Maximally Entangled States. Physical Review Letters, 2017, 119, 040402.	2.9	50
12	Self-testing multipartite entangled states through projections onto two systems. New Journal of Physics, 2018, 20, 083041.	1.2	47
13	Bound entanglement maximally violating Bell inequalities: Quantum entanglement is not fully equivalent to cryptographic security. Physical Review A, 2006, 74, .	1.0	46
14	Generalized Smolin states and their properties. Physical Review A, 2006, 73, .	1.0	44
15	Nonlocality in many-body quantum systems detected with two-body correlators. Annals of Physics, 2015, 362, 370-423.	1.0	43
16	Self-testing protocols based on the chained Bell inequalities. New Journal of Physics, 2016, 18, 035013.	1.2	43
17	Entanglement and Nonlocality are Inequivalent for Any Number of Parties. Physical Review Letters, 2015, 115, 030404.	2.9	41
18	Four-qubit entangled symmetric states with positive partial transpositions. Physical Review A, 2012, 85, .	1.0	38

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19	Scalable Bell Inequalities for Qubit Graph States and Robust Self-Testing. Physical Review Letters, 2020, 124, 020402.	2.9	35
20	Maximal nonlocality from maximal entanglement and mutually unbiased bases, and self-testing of two-qutrit quantum systems. Quantum - the Open Journal for Quantum Science, 0, 3, 198.	0.0	32
21	Exploring the local orthogonality principle. Physical Review A, 2014, 89, .	1.0	31
22	From unextendible product bases to genuinely entangled subspaces. Physical Review A, 2018, 98, .	1.0	30
23	A note on the optimality of decomposable entanglement witnesses and completely entangled subspaces. Journal of Physics A: Mathematical and Theoretical, 2011, 44, 212001.	0.7	29
24	Bell Inequalities with No Quantum Violation and Unextendable Product Bases. Physical Review Letters, 2011, 107, 070401.	2.9	28
25	Entangled symmetric states of N qubits with all positive partial transpositions. Physical Review A, 2012, 86, .	1.0	28
26	Multipartite secret key distillation and bound entanglement. Physical Review A, 2009, 80, .	1.0	27
27	Energy as a Detector of Nonlocality of Many-Body Spin Systems. Physical Review X, 2017, 7, .	2.8	27
28	Device-Independent Witnesses of Entanglement Depth from Two-Body Correlators. Physical Review Letters, 2019, 123, 100507.	2.9	27
29	Searching for extremal PPT entangled states. Optics Communications, 2010, 283, 805-813.	1.0	25
30	On structural physical approximations and entanglement breaking maps. Journal of Physics A: Mathematical and Theoretical, 2011, 44, 185308.	0.7	24
31	Asymptotic role of entanglement in quantum metrology. Physical Review A, 2016, 94, .	1.0	24
32	Bell correlation depth in many-body systems. Physical Review A, 2019, 100, .	1.0	24
33	Tight Bell inequalities with no quantum violation from qubit unextendible product bases. Physical Review A, 2012, 85, .	1.0	23
34	Translationally invariant multipartite Bell inequalities involving only two-body correlators. Journal of Physics A: Mathematical and Theoretical, 2014, 47, 424024.	0.7	23
35	Elemental and tight monogamy relations in nonsignaling theories. Physical Review A, 2014, 90, .	1.0	22
36	Optimal decomposable witnesses without the spanning property. Physical Review A, 2011, 84, .	1.0	20

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37	General construction of noiseless networks detecting entanglement with the help of linear maps. Physical Review A, 2006, 74, .	1.0	19
38	Self-testing quantum systems of arbitrary local dimension with minimal number of measurements. Npj Quantum Information, 2021, 7, .	2.8	19
39	Towards measurable bounds on entanglement measures. Quantum Information Processing, 2009, 8, 493-521.	1.0	17
40	Perfect Quantum Privacy Implies Nonlocality. Physical Review Letters, 2010, 104, 230401.	2.9	16
41	Entanglement and the three-dimensionality of the Bloch ball. Journal of Mathematical Physics, 2014, 55, .	0.5	16
42	Device-Independent Certification of Genuinely Entangled Subspaces. Physical Review Letters, 2020, 125, 260507.	2.9	16
43	Quantum states representing perfectly secure bits are always distillable. Physical Review A, 2006, 74, .	1.0	15
44	Progress towards a unified approach to entanglement distribution. Physical Review A, 2015, 92, .	1.0	15
45	Maximal randomness from partially entangled states. Physical Review Research, 2020, 2, .	1.3	14
46	Optimization of device-independent witnesses of entanglement depth from two-body correlators. Physical Review A, 2019, 100, .	1.0	13
47	Constructing genuinely entangled multipartite states with applications to local hidden variables and local hidden states models. Physical Review A, 2018, 98, .	1.0	12
48	Many-Body Physics from a Quantum Information Perspective. Lecture Notes in Physics, 2012, , 245-294.	0.3	11
49	Sufficient separability criteria and linear maps. Physical Review A, 2016, 93, .	1.0	11
50	Checking the optimality of entanglement witnesses: an application to structural physical approximations. Journal of Physics A: Mathematical and Theoretical, 2014, 47, 065301.	0.7	10
51	Generalized xor games with d outcomes and the task of nonlocal computation. Physical Review A, 2016, 93, .	1.0	10
52	Separability in terms of a single entanglement witness. Physical Review A, 2013, 88, .	1.0	9
53	Bell inequalities tailored to the Greenberger–Horne–Zeilinger states of arbitrary local dimension. New Journal of Physics, 2019, 21, 113001.	1.2	9
54	Entanglement of genuinely entangled subspaces and states: Exact, approximate, and numerical results. Physical Review A, 2019, 100, .	1.0	9

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55	Beyond the standard entropic inequalities: Stronger scalar separability criteria and their applications. Physical Review A, 2008, 77, .	1.0	8
56	Positive maps, majorization, entropic inequalities and detection of entanglement. New Journal of Physics, 2009, 11, 053018.	1.2	8
57	An approach to constructing genuinely entangled subspaces of maximal dimension. Quantum Information Processing, 2020, 19, 1.	1.0	8
58	Self-testing maximally-dimensional genuinely entangled subspaces within the stabilizer formalism. New Journal of Physics, 2021, 23, 043042.	1.2	8
59	Sum-of-squares decompositions for a family of noncontextuality inequalities and self-testing of quantum devices. Quantum - the Open Journal for Quantum Science, 0, 4, 302.	0.0	8
60	Rotationally invariant bipartite states and bound entanglement. Physics Letters, Section A: General, Atomic and Solid State Physics, 2007, 363, 182-191.	0.9	7
61	Quantum kinetic Ising models. New Journal of Physics, 2010, 12, 025021.	1.2	7
62	General scheme for construction of scalar separability criteria from positive maps. Physical Review A, 2008, 77, .	1.0	6
63	Self-testing of multipartite Greenberger-Horne-Zeilinger states of arbitrary local dimension with arbitrary number of measurements per party. Physical Review A, 2022, 105, .	1.0	6
64	W-like bound entangled states and secure key distillation. Europhysics Letters, 2009, 85, 50001.	0.7	5
65	Tightness of correlation inequalities with no quantum violation. Physical Review A, 2017, 95, .	1.0	5
66	Simple sufficient condition for subspace to be completely or genuinely entangled. New Journal of Physics, 2021, 23, 103016.	1.2	5
67	Non-relativistic quantum scattering from non-local separable potentials: the eigenchannel approach. Annalen Der Physik, 2005, 14, 398-407.	0.9	4
68	Perfect discrimination of quantum measurements using entangled systems. New Journal of Physics, 2021, 23, 043021.	1.2	3
69	Device-Independent Certification of Maximal Randomness from Pure Entangled Two-Qutrit States Using Non-Projective Measurements. Entropy, 2022, 24, 350.	1.1	3
70	Guess Your Neighbour's Input: No Quantum Advantage but an Advantage for Quantum Theory. Fundamental Theories of Physics, 2016, , 465-496.	0.1	2
71	Simple and tight monogamy relations for a class of Bell inequalities. Physical Review A, 2017, 95, .	1.0	2
72	Certification of incompatible measurements using quantum steering. , 2021, , .		1

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73	Scattering of Dirac particles from nonlocal separable potentials: The eigenchannel approach. Physical Review C, 2007, 75, .	1.1	0
74	Communication Strength of Correlations Violating Monogamy Relations. Foundations of Physics, 2016, 46, 620-634.	0.6	0
75	Random Bosonic States for Robust Quantum Metrology. , 2017, , .		0