TamÃ¡s VÃ©rtesi

List of Publications by Year
in descending order

104 papers	3,458 citations	117571 34 h-index	161767 54 g-index
104 all docs	104 docs citations	104 times ranked	1547 citing authors

#	Article	IF	Citations
1	Bound entangled singlet-like states for quantum metrology. Physical Review Research, 2021, 3, .	1.3	5
2	Cyclic Einstein-Podolsky-Rosen steering. Physical Review Research, 2021, 3, .	1.3	4
3	Activating hidden metrological usefulness. , 2021, , .		0
4	Self-testing nonprojective quantum measurements in prepare-and-measure experiments. Science Advances, 2020, 6, eaaw6664.	4.7	45
5	Activating Hidden Metrological Usefulness. Physical Review Letters, 2020, 125, 020402.	2.9	14
6	Strength and typicality of nonlocality in multisetting and multipartite Bell scenarios. Physical Review A, 2020, 101, .	1.0	5
7	Class of genuinely high-dimensionally-entangled states with a positive partial transpose. Physical Review A, 2019, 100, .	1.0	4
8	<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi>k</mml:mi></mml:math> -uniform mixed states. Physical Review A, 2019, 100, .	1.0	7
9	Disproving hidden variable models with spin magnitude conservation. Communications Physics, 2019, 2, .	2.0	0
10	Geometry of the set of quantum correlations. Physical Review A, 2018, 97, .	1.0	71
11	Quantum States with a Positive Partial Transpose are Useful for Metrology. Physical Review Letters, 2018, 120, 020506.	2.9	36
12	Observation of Stronger-than-Binary Correlations with Entangled Photonic Qutrits. Physical Review Letters, 2018, 120, 180402.	2.9	18
13	Self-testing quantum states and measurements in the prepare-and-measure scenario. Physical Review A, 2018, 98, .	1.0	75
14	Survey on the Bell nonlocality of a pair of entangled qudits. Physical Review A, 2018, 98, .	1.0	13
15	Closing the detection loophole in multipartite Bell experiments with a limited number of efficient detectors. Physical Review A, 2018, 98, .	1.0	4
16	Measurement incompatibility does not give rise to Bell violation in general. New Journal of Physics, 2018, 20, 013021.	1.2	27
17	Proposed experiment to test fundamentally binary theories. Physical Review A, 2017, 96, .	1.0	9
18	Qutrit witness from the Grothendieck constant of order four. Physical Review A, 2017, 96, .	1.0	16

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19	Family of Bell inequalities violated by higher-dimensional bound entangled states. Physical Review A, 2017, 96, .	1.0	7
20	Multipartite nonlocality and random measurements. Physical Review A, 2017, 96, .	1.0	24
21	Device-Independent Certification of a Nonprojective Qubit Measurement. Physical Review Letters, 2016, 117, 260401.	2.9	35
22	Demonstration of Einstein-Podolsky-Rosen Steering Using Single-Photon Path Entanglement and Displacement-Based Detection. Physical Review Letters, 2016, 117, 070404.	2.9	37
23	Optimal randomness certification from one entangled bit. Physical Review A, 2016, 93, .	1.0	67
24	Bounding the persistency of the nonlocality ofWstates. Physical Review A, 2016, 93, .	1.0	8
25	Algorithmic Construction of Local Hidden Variable Models for Entangled Quantum States. Physical Review Letters, 2016, 117, 190402.	2.9	55
26	EPR Steering inequalities with Communication Assistance. Scientific Reports, 2016, 6, 21634.	1.6	12
27	Entanglement without hidden nonlocality. New Journal of Physics, 2016, 18, 113019.	1.2	16
28	Closing the detection loophole in tripartite Bell tests using theWstate. Physical Review A, 2015, 92, .	1.0	10
29	Characterizing finite-dimensional quantum behavior. Physical Review A, 2015, 92, .	1.0	31
30	Bell inequalities violated using detectors of low efficiency. Physical Review A, 2015, 92, .	1.0	5
31	Bounding the Set of Finite Dimensional Quantum Correlations. Physical Review Letters, 2015, 115, 020501.	2.9	61
32	Postquantum Steering. Physical Review Letters, 2015, 115, 190403.	2.9	48
33	Inequivalence of entanglement, steering, and Bell nonlocality for general measurements. Physical Review A, 2015, 92, .	1.0	165
34	Absolute nonlocality via distributed computing without communication. Physical Review A, 2015, 92, .	1.0	1
35	Highly noise resistant multiqubit quantum correlations. Journal of Physics A: Mathematical and Theoretical, 2015, 48, 465301.	0.7	17
36	Physical characterization of quantum devices from nonlocal correlations. Physical Review A, 2015, 91, .	1.0	62

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37	One-way Einstein-Podolsky-Rosen Steering. Physical Review Letters, 2014, 112, .	2.9	227
38	Robust and Versatile Black-Box Certification of Quantum Devices. Physical Review Letters, 2014, 113, 040401.	2.9	96
39	Device-independent tomography of multipartite quantum states. Physical Review A, 2014, 90, .	1.0	47
40	Characterization of Quantum Correlations with Local Dimension Constraints and Its Device-Independent Applications. Physical Review X, 2014, 4, .	2.8	34
41	Experimental Semi-Device-Independent Certification of Entangled Measurements. Physical Review Letters, 2014, 113, 080405.	2.9	11
42	Disproving the Peres conjecture by showing Bell nonlocality from bound entanglement. Nature Communications, 2014, 5, 5297.	5.8	75
43	Joint Measurability, Einstein-Podolsky-Rosen Steering, and Bell Nonlocality. Physical Review Letters, 2014, 113, 160402.	2.9	209
44	Certifying nonlocality from separable marginals. Physical Review A, 2014, 89, .	1.0	4
45	Translationally invariant multipartite Bell inequalities involving only two-body correlators. Journal of Physics A: Mathematical and Theoretical, 2014, 47, 424024.	0.7	23
46	Closed sets of correlations: answers from the zoo. Journal of Physics A: Mathematical and Theoretical, 2014, 47, 424029.	0.7	24
47	Detecting nonlocality in many-body quantum states. Science, 2014, 344, 1256-1258.	6.0	129
48	Dimension Witnesses and Quantum State Discrimination. Physical Review Letters, 2013, 110, 150501.	2.9	80
49	All quantum states useful for teleportation are nonlocal resources. Physical Review A, 2013, 87, .	1.0	57
50	Closing the detection loophole in multipartite Bell tests using Greenberger-Horne-Zeilinger states. Physical Review A, 2012, 86, .	1.0	12
51	Testing the Structure of Multipartite Entanglement with Bell Inequalities. Physical Review Letters, 2012, 108, 110501.	2.9	72
52	Guaranteed violation of a Bell inequality without aligned reference frames or calibrated devices. Scientific Reports, 2012, 2, 470.	1.6	54
53	Nonlocal multipartite correlations from local marginal probabilities. Physical Review A, 2012, 86, .	1.0	19
54	Quantum Nonlocality Does Not Imply Entanglement Distillability. Physical Review Letters, 2012, 108, 030403.	2.9	47

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55	Persistency of entanglement and nonlocality in multipartite quantum systems. Physical Review A, 2012, 86, .	1.0	20
56	Activation of Nonlocal Quantum Resources. Physical Review Letters, 2011, 106, 060403.	2.9	38
57	Nonclassicality threshold for the three-qubit Greenberger-Horne-Zeilinger state. Physical Review A, 2011, 84, .	1.0	8
58	Multisetting Bell-type inequalities for detecting genuine multipartite entanglement. Physical Review A, 2011, 83, .	1.0	36
59	Certifying entangled measurements in known Hilbert spaces. Physical Review A, 2011, 83, .	1.0	20
60	Semi-device-independent bounds on entanglement. Physical Review A, 2011, 83, .	1.0	58
61	Reciprocity in the degeneracies of some tetra-atomic molecular ions. Journal of Chemical Physics, 2011, 135, 084101.	1.2	12
62	Maximal violation of a bipartite three-setting, two-outcome Bell inequality using infinite-dimensional quantum systems. Physical Review A, 2010, 82, .	1.0	103
63	Two-qubit Bell inequality for which positive operator-valued measurements are relevant. Physical Review A, 2010, 82, .	1.0	37
64	Closing the Detection Loophole in Bell Experiments Using Qudits. Physical Review Letters, 2010, 104, 060401.	2.9	188
65	Quantum bounds on Bell inequalities. Physical Review A, 2009, 79, .	1.0	58
66	Bounding the dimension of bipartite quantum systems. Physical Review A, 2009, 79, .	1.0	33
67	Lower bound on the communication cost of simulating bipartite quantum correlations. Physical Review A, 2009, 80, .	1.0	10
68	Closed sets of nonlocal correlations. Physical Review A, 2009, 80, .	1.0	58
69	Concavity of the set of quantum probabilities for any given dimension. Physical Review A, 2009, 80, .	1.0	10
70	Excited state corrections to looped adiabatic-to-diabatic transformation phases. Chemical Physics, 2008, 351, 136-140.	0.9	1
71	Large Berry phases in layered graphene. Physical Review B, 2008, 78, .	1.1	9
72	Analytic study of some excited state effects in a slightly bent Rennerâ€“Teller molecule. Journal of Physics B: Atomic, Molecular and Optical Physics, 2008, 41, 025102.	0.6	22

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73	Efficiency of higher-dimensional Hilbert spaces for the violation of Bell inequalities. Physical Review A, 2008, 77, .	1.0	39
74	More efficient Bell inequalities for Werner states. Physical Review A, 2008, 78, .	1.0	69
75	Generalized Clauser-Horne-Shimony-Holt inequalities maximally violated by higher-dimensional systems. Physical Review A, 2008, 77, .	1.0	26
76	Nonseparability tests by noncommutativity of excitations. Physical Review A, 2007, 75, .	1.0	3
77	Genuine tripartite entanglement in the noninteracting Fermi gas. Physical Review A, 2007, 75, .	1.0	12
78	Discrimination between evolution operators. Physical Review A, 2007, 76, .	1.0	1
79	Power of unentangled measurements on two antiparallel spins. Physical Review A, 2007, 75, .	1.0	1
80	Unexpected phase-jumps upon cycling around a conical intersection. Journal of Molecular Structure, 2007, 838, 20-23.	1.8	2
81	Phase avalanches in near-adiabatic evolutions. Physical Review A, 2006, 73, .	1.0	5
82	Perturbative analysis of possible failures in the traditional adiabatic conditions. Physics Letters, Section A: General, Atomic and Solid State Physics, 2006, 353, 11-18.	0.9	17
83	Blaschke-term interpretation of multiple-Ï€ geometric phases. Physics Letters, Section A: General, Atomic and Solid State Physics, 2006, 354, 196-199.	0.9	12
84	Relative information encoded in the degree of entanglement to discriminate bipartite states. Physics Letters, Section A: General, Atomic and Solid State Physics, 2006, 357, 167-170.	0.9	2
85	The origin of molecular distortions: A proposed experimental test. Journal of Chemical Physics, 2006, 125, 064102.	1.2	7
86	Thermal entanglement in the nanotubular systemNa2V3O7. Physical Review B, 2006, 73, .	1.1	44
87	On the detectability of threefold degeneracies of real Hamiltonians. Physics Letters, Section A: General, Atomic and Solid State Physics, 2005, 334, 363-369.	0.9	0
88	A quasi-static treatment of multiple phase jumps. Journal of Physics B: Atomic, Molecular and Optical Physics, 2005, 38, 2443-2456.	0.6	10
89	N-State Adiabatic-to-Diabatic Transformation Angle:Â Theory and Application. Journal of Physical Chemistry A, 2005, 109, 3476-3484.	1.1	39
90	The Berry phase revisited: application to Bornâ€“Oppenheimer molecular systems. Journal of Physics B: Atomic, Molecular and Optical Physics, 2004, 37, 4603-4620.	0.6	13

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91	Electronic Diabatic Framework:â€‰ Restrictions Due to Quantization of the Nonadiabatic Coupling Matrix. Journal of Physical Chemistry A, 2004, 108, 9134-9142.	1.1	7
92	On the peculiarities of the diabatic framework: New insight. Journal of Chemical Physics, 2004, 120, 2565-2574.	1.2	11
93	Pair annihilation of conical intersections and a study to infer the phenomenon. Chemical Physics Letters, 2004, 392, 17-22.	1.2	4
94	On diabatization and the topological D-matrix: Theory and numerical studies of the Hâ€‰+â€‰H2system and the C2H2molecule. Faraday Discussions, 2004, 127, 337-353.	1.6	47
95	Vectorâ^'Algebra Approach To Obtain Molecular Fields from Conical Intersections:Â Numerical Applications to H + H2and Na + H2â€. Journal of Physical Chemistry A, 2004, 108, 8590-8598.	1.1	4
96	A field theoretical approach to calculate electronic Born-Oppenheimer coupling terms. Journal of Chemical Physics, 2004, 121, 4000-4013.	1.2	11
97	Derivation of the electronic nonadiabatic coupling field in molecular systems: An algebraic-vectorial approach. Journal of Chemical Physics, 2004, 120, 8420-8424.	1.2	5
98	The Electronic Non-Adiabatic Coupling Matrix:â€‰ A Numerical Study of the Curl Condition and the Quantization Condition Employing the Mathieu Equation. Journal of Physical Chemistry A, 2003, 107, 7189-7196.	1.1	12
99	Ab initioconical intersections for the Na+H2 system: A four-state study. Journal of Chemical Physics, 2003, 119, 6588-6596.	1.2	28
100	Experimentally friendly approach towards nonlocal correlations in multisetting N-partite Bell scenarios. Quantum - the Open Journal for Quantum Science, 0, 5, 430.	0.0	4
101	Better local hidden variable models for two-qubit Werner states and an upper bound on the Grothendieck constant<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>K</mml:mi><mml:mi>G</mml:mi></mml:msub><mml:mo stretchy="false">(</mml:mo><mml:mn>3</mml:mn><mml:mo stretchy="false">)</mml:mo></mml:math>. Quantum - the Open Journal for Quantum Science, 0, 1, 3.	0.0	57
102	Bond dimension witnesses and the structure of homogeneous matrix product states. Quantum - the Open Journal for Quantum Science, 0, 2, 50.	0.0	5
103	Naturally restricted subsets of nonsignaling correlations: typicality and convergence. Quantum - the Open Journal for Quantum Science, 0, 6, 765.	0.0	3
104	Platonic Bell inequalities for all dimensions. Quantum - the Open Journal for Quantum Science, 0, 6, 756.	0.0	3