Gza Tth

List of Publications by Citations

77 papers	6,588 citations	39 h-index	81 g-index
83 ext. papers	7,576 ext. citations	5.1 avg, IF	6.29 L-index

#	Paper	IF	Citations
77	Entanglement detection. *Physics Reports*, **2009**, 474, 1-75	27.7	1265
76	Digital logic gate using quantum-Dot cellular automata. *Science*, **1999**, 284, 289-91	33.3	451
75	Quantum metrology from a quantum information science perspective. *Journal of Physics A: Mathematical and Theoretical*, **2014**, 47, 424006	2	351
74	Multipartite entanglement and high-precision metrology. *Physical Review A*, **2012**, 85,	2.6	249
73	Detecting genuine multipartite entanglement with two local measurements. *Physical Review Letters*, **2005**, 94, 060501	7.4	220
72	Experimental analysis of a four-qubit photon cluster state. *Physical Review Letters*, **2005**, 95, 210502	7.4	207
71	Experimental entanglement of a six-photon symmetric Dicke state. *Physical Review Letters*, **2009**, 103, 020504	7.4	185
70	Quasiadiabatic switching for metal-island quantum-dot cellular automata. *Journal of Applied Physics* , **1999**, 85, 2977-2984	2.5	175
69	Experimental observation of four-photon entangled Dicke state with high fidelity. *Physical Review Letters*, **2007**, 98, 063604	7.4	170
68	Optimal spin squeezing inequalities detect bound entanglement in spin models. *Physical Review Letters*, **2007**, 99, 250405	7.4	162
67	Hydrodynamics of topological defects in nematic liquid crystals. *Physical Review Letters*, **2002**, 88, 105504	7.4	149
66	Entanglement detection in the stabilizer formalism. *Physical Review A*, **2005**, 72,	2.6	144
65	Entanglement witnesses in spin models. *Physical Review A*, **2005**, 71,	2.6	139
64	Detecting multiparticle entanglement of Dicke states. *Physical Review Letters*, **2014**, 112, 155304	7.4	136
63	Multipartite entanglement in spin chains. *New Journal of Physics*, **2005**, 7, 229-229	2.9	130
62	Spin squeezing and entanglement. *Physical Review A*, **2009**, 79,	2.6	128
61	Permutationally invariant quantum tomography. *Physical Review Letters*, **2010**, 105, 250403	7.4	125

60	Bell inequalities for graph states. *Physical Review Letters*, **2005**, 95, 120405	7.4	119
59	Experimental demonstration of a binary wire for quantum-dot cellular automata. *Applied Physics Letters*, **1999**, 74, 2875-2877	3.4	117
58	Entanglement between two spatially separated atomic modes. *Science*, **2018**, 360, 416-418	33.3	105
57	Experimental demonstration of clocked single-electron switching in quantum-dot cellular automata. *Applied Physics Letters*, **2000**, 77, 295-297	3.4	97
56	Noise robustness of the nonlocality of entangled quantum states. *Physical Review Letters*, **2007**, 99, 040403	7.4	87
55	Detection of multipartite entanglement in the vicinity of symmetric Dicke states. *Journal of the Optical Society of America B: Optical Physics*, **2007**, 24, 275	1.7	83
54	Quantum computing with quantum-dot cellular automata. *Physical Review A*, **2001**, 63,	2.6	79
53	Entanglement and permutational symmetry. *Physical Review Letters*, **2009**, 102, 170503	7.4	77
52	Power gain in a quantum-dot cellular automata latch. *Applied Physics Letters*, **2002**, 81, 1332-1334	3.4	77
51	Entanglement criteria based on local uncertainty relations are strictly stronger than the computable cross norm criterion. *Physical Review A*, **2006**, 74,	2.6	67
50	Experimental demonstration of a latch in clocked quantum-dot cellular automata. *Applied Physics Letters*, **2001**, 78, 1625-1627	3.4	65
49	Spin squeezing inequalities for arbitrary spin. *Physical Review Letters*, **2011**, 107, 240502	7.4	63
48	Extremal properties of the variance and the quantum Fisher information. *Physical Review A*, **2013**, 87,	2.6	62
47	Permutationally invariant state reconstruction. *New Journal of Physics*, **2012**, 14, 105001	2.9	57
46	Quantum cellular neural networks. *Superlattices and Microstructures*, **1996**, 20, 473-478	2.8	54
45	Entanglement detection in optical lattices of bosonic atoms with collective measurements. *Physical Review A*, **2004**, 69,	2.6	53
44	Entanglement detection based on interference and particle counting. *Physical Review A*, **2003**, 68,	2.6	50
43	Genuine tripartite entangled states with a local hidden-variable model. *Physical Review A*, **2006**, 74,	2.6	48

42	Experimental comparison of efficient tomography schemes for a six-qubit state. *Physical Review Letters*, **2014**, 113, 040503	7.4	43
41	Energy and multipartite entanglement in multidimensional and frustrated spin models. *Physical Review A*, **2006**, 73,	2.6	41
40	Spin squeezing and entanglement for an arbitrary spin. *Physical Review A*, **2014**, 89,	2.6	40
39	QUBIT4MATLAB V3.0: A program package for quantum information science and quantum optics for MATLAB. *Computer Physics Communications*, **2008**, 179, 430-437	4.2	40
38	Generation of macroscopic singlet states in a cold atomic ensemble. *Physical Review Letters*, **2014**, 113, 093601	7.4	38
37	Entanglement and extreme spin squeezing for a fluctuating number of indistinguishable particles. *Physical Review A*, **2012**, 86,	2.6	37
36	Hydrodynamics of domain growth in nematic liquid crystals. *Physical Review E*, **2003**, 67, 051705	2.4	37
35	Evaluating convex roof entanglement measures. *Physical Review Letters*, **2015**, 114, 160501	7.4	36
34	Macroscopic singlet states for gradient magnetometry. *Physical Review A*, **2013**, 88,	2.6	36
33	Generation of macroscopic singlet states in atomic ensembles. *New Journal of Physics*, **2010**, 12, 053007	2.9	35
32	Two-setting Bell inequalities for graph states. *Physical Review A*, **2006**, 73,	2.6	34
31	Role of correlation in the operation of quantum-dot cellular automata. *Journal of Applied Physics*, **2001**, 89, 7943-7953	2.5	32
30	Quantum Nondemolition Measurement Enables Macroscopic Leggett-Garg Tests. *Physical Review Letters*, **2015**, 115, 200403	7.4	29
29	Practical methods for witnessing genuine multi-qubit entanglement in the vicinity of symmetric states. *New Journal of Physics*, **2009**, 11, 083002	2.9	28
28	Separability criteria and entanglement witnesses for symmetric quantum states. *Applied Physics B: Lasers and Optics*, **2010**, 98, 617-622	1.9	28
27	Quantum States with a Positive Partial Transpose are Useful for Metrology. *Physical Review Letters*, **2018**, 120, 020506	7.4	23
26	Precision bounds for gradient magnetometry with atomic ensembles. *Physical Review A*, **2018**, 97,	2.6	21
25	Detecting metrologically useful entanglement in the vicinity of Dicke states. *New Journal of Physics*, **2015**, 17, 083027	2.9	21

24	Addendum to Sufficient conditions for three-particle entanglement and their tests in recent experiments *Physical Review A*, **2005**, 72,	2.6	20
23	Correlated electron transport in coupled metal double dots. *Applied Physics Letters*, **1998**, 73, 2787-2789	3.4	20
22	Measurement-induced, spatially-extended entanglement in a hot, strongly-interacting atomic system. *Nature Communications*, **2020**, 11, 2415	17.4	19
21	Efficient algorithm for multiqudit twirling for ensemble quantum computation. *Physical Review A*, **2007**, 75,	2.6	19
20	Optimal witnessing of the quantum Fisher information with few measurements. *Physical Review A*, **2017**, 95,	2.6	18
19	Number-operator annihilation-operator uncertainty as an alternative for the number-phase uncertainty relation. *Physical Review A*, **2010**, 81,	2.6	18
18	Entanglement and extreme spin squeezing of unpolarized states. *New Journal of Physics*, **2017**, 19, 013027	3.7	16
17	Detection of multipartite entanglement with two-body correlations. *Applied Physics B: Lasers and Optics*, **2006**, 82, 237-241	1.9	16
16	Partial transposition as a direct link between concurrence and negativity. *Physical Review A*, **2015**, 91,	2.6	15
15	Domain Motion in Confined Liquid Crystals. *Journal of Statistical Physics*, **2002**, 107, 187-202	1.5	15
14	Conductance suppression due to correlated electron transport in coupled double quantum dots. *Physical Review B*, **1999**, 60, 16906-16912	3.3	12
13	Entanglement and extreme planar spin squeezing. *Physical Review A*, **2018**, 97,	2.6	11
12	Mapping the spatial distribution of entanglement in optical lattices. *Physical Review A*, **2010**, 82,	2.6	9
11	Optimized parameter estimation in the presence of collective phase noise. *Physical Review A*, **2016**, 94,	2.6	7
10	Analogic CNN algorithms for 3D interpolation-approximation and object rotation using controlled switched templates. *International Journal of Circuit Theory and Applications*, **1996**, 24, 409-424	2	7
9	Modeling nematohydrodynamics in liquid crystal devices. *Computer Physics Communications*, **2002**, 147, 7-12	4.2	6
8	Activating Hidden Metrological Usefulness. *Physical Review Letters*, **2020**, 125, 020402	7.4	3
7	Entanglement loss in molecular quantum-dot qubits due to interaction with the environment. *Journal of Physics Condensed Matter*, **2018**, 30, 195602	1.8	3

6	Two Measurement Settings can Suffice to Verify Multipartite Entanglement. *AIP Conference Proceedings*, **2004**,	0	3
5	Uncertainty relations with the variance and the quantum Fisher information based on convex decompositions of density matrices. *Physical Review Research*, **2022**, 4,	3.9	2
4	CNNUM stereo architecture and 3D template design techniques. *International Journal of Circuit Theory and Applications*, **1999**, 27, 25-41	2	1
3	Stretching the limits of multiparticle entanglement4, 30		1
2	Matrix variances with projections. *Acta Scientiarum Mathematicarum*, **2012**, 78, 683-688	1.2	1
1	Bound entangled singlet-like states for quantum metrology. *Physical Review Research*, **2021**, 3,	3.9	1