

# Gza Tth

## List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

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	Uncertainty relations with the variance and the quantum Fisher information based on convex decompositions of density matrices. <i>Physical Review Research</i> , <b>2022</b> , 4,	3.9	2
76	Bound entangled singlet-like states for quantum metrology. <i>Physical Review Research</i> , <b>2021</b> , 3,	3.9	1
75	Measurement-induced, spatially-extended entanglement in a hot, strongly-interacting atomic system. <i>Nature Communications</i> , <b>2020</b> , 11, 2415	17.4	19
74	Activating Hidden Metrological Usefulness. <i>Physical Review Letters</i> , <b>2020</b> , 125, 020402	7.4	3
73	Entanglement and extreme planar spin squeezing. <i>Physical Review A</i> , <b>2018</b> , 97,	2.6	11
72	Quantum States with a Positive Partial Transpose are Useful for Metrology. <i>Physical Review Letters</i> , <b>2018</b> , 120, 020506	7.4	23
71	Entanglement loss in molecular quantum-dot qubits due to interaction with the environment. <i>Journal of Physics Condensed Matter</i> , <b>2018</b> , 30, 195602	1.8	3
70	Entanglement between two spatially separated atomic modes. <i>Science</i> , <b>2018</b> , 360, 416-418	33.3	105
69	Precision bounds for gradient magnetometry with atomic ensembles. <i>Physical Review A</i> , <b>2018</b> , 97,	2.6	21
68	Optimal witnessing of the quantum Fisher information with few measurements. <i>Physical Review A</i> , <b>2017</b> , 95,	2.6	18
67	Entanglement and extreme spin squeezing of unpolarized states. <i>New Journal of Physics</i> , <b>2017</b> , 19, 013027	2.9	16
66	Optimized parameter estimation in the presence of collective phase noise. <i>Physical Review A</i> , <b>2016</b> , 94,	2.6	7
65	Partial transposition as a direct link between concurrence and negativity. <i>Physical Review A</i> , <b>2015</b> , 91,	2.6	15
64	Evaluating convex roof entanglement measures. <i>Physical Review Letters</i> , <b>2015</b> , 114, 160501	7.4	36
63	Quantum Nondemolition Measurement Enables Macroscopic Leggett-Garg Tests. <i>Physical Review Letters</i> , <b>2015</b> , 115, 200403	7.4	29
62	Detecting metrologically useful entanglement in the vicinity of Dicke states. <i>New Journal of Physics</i> , <b>2015</b> , 17, 083027	2.9	21
61	Detecting multiparticle entanglement of Dicke states. <i>Physical Review Letters</i> , <b>2014</b> , 112, 155304	7.4	136

60	Quantum metrology from a quantum information science perspective. <i>Journal of Physics A: Mathematical and Theoretical</i> , <b>2014</b> , 47, 424006	2	351
59	Spin squeezing and entanglement for an arbitrary spin. <i>Physical Review A</i> , <b>2014</b> , 89,	2.6	40
58	Experimental comparison of efficient tomography schemes for a six-qubit state. <i>Physical Review Letters</i> , <b>2014</b> , 113, 040503	7.4	43
57	Generation of macroscopic singlet states in a cold atomic ensemble. <i>Physical Review Letters</i> , <b>2014</b> , 113, 093601	7.4	38
56	Extremal properties of the variance and the quantum Fisher information. <i>Physical Review A</i> , <b>2013</b> , 87,	2.6	62
55	Macroscopic singlet states for gradient magnetometry. <i>Physical Review A</i> , <b>2013</b> , 88,	2.6	36
54	Permutationally invariant state reconstruction. <i>New Journal of Physics</i> , <b>2012</b> , 14, 105001	2.9	57
53	Multipartite entanglement and high-precision metrology. <i>Physical Review A</i> , <b>2012</b> , 85,	2.6	249
52	Entanglement and extreme spin squeezing for a fluctuating number of indistinguishable particles. <i>Physical Review A</i> , <b>2012</b> , 86,	2.6	37
51	Matrix variances with projections. <i>Acta Scientiarum Mathematicarum</i> , <b>2012</b> , 78, 683-688	1.2	1
50	Spin squeezing inequalities for arbitrary spin. <i>Physical Review Letters</i> , <b>2011</b> , 107, 240502	7.4	63
49	Permutationally invariant quantum tomography. <i>Physical Review Letters</i> , <b>2010</b> , 105, 250403	7.4	125
48	Mapping the spatial distribution of entanglement in optical lattices. <i>Physical Review A</i> , <b>2010</b> , 82,	2.6	9
47	Generation of macroscopic singlet states in atomic ensembles. <i>New Journal of Physics</i> , <b>2010</b> , 12, 053007	2.9	35
46	Number-operator-annihilation-operator uncertainty as an alternative for the number-phase uncertainty relation. <i>Physical Review A</i> , <b>2010</b> , 81,	2.6	18
45	Separability criteria and entanglement witnesses for symmetric quantum states. <i>Applied Physics B: Lasers and Optics</i> , <b>2010</b> , 98, 617-622	1.9	28
44	Spin squeezing and entanglement. <i>Physical Review A</i> , <b>2009</b> , 79,	2.6	128
43	Practical methods for witnessing genuine multi-qubit entanglement in the vicinity of symmetric states. <i>New Journal of Physics</i> , <b>2009</b> , 11, 083002	2.9	28

42	Entanglement detection. <i>Physics Reports</i> , <b>2009</b> , 474, 1-75	27.7	1265
41	Experimental entanglement of a six-photon symmetric Dicke state. <i>Physical Review Letters</i> , <b>2009</b> , 103, 020504	7.4	185
40	Entanglement and permutational symmetry. <i>Physical Review Letters</i> , <b>2009</b> , 102, 170503	7.4	77
39	QUBIT4MATLAB V3.0: A program package for quantum information science and quantum optics for MATLAB. <i>Computer Physics Communications</i> , <b>2008</b> , 179, 430-437	4.2	40
38	Experimental observation of four-photon entangled Dicke state with high fidelity. <i>Physical Review Letters</i> , <b>2007</b> , 98, 063604	7.4	170
37	Efficient algorithm for multiqubit twirling for ensemble quantum computation. <i>Physical Review A</i> , <b>2007</b> , 75,	2.6	19
36	Optimal spin squeezing inequalities detect bound entanglement in spin models. <i>Physical Review Letters</i> , <b>2007</b> , 99, 250405	7.4	162
35	Noise robustness of the nonlocality of entangled quantum states. <i>Physical Review Letters</i> , <b>2007</b> , 99, 040403	4.0	87
34	Detection of multipartite entanglement in the vicinity of symmetric Dicke states. <i>Journal of the Optical Society of America B: Optical Physics</i> , <b>2007</b> , 24, 275	1.7	83
33	Two-setting Bell inequalities for graph states. <i>Physical Review A</i> , <b>2006</b> , 73,	2.6	34
32	Genuine tripartite entangled states with a local hidden-variable model. <i>Physical Review A</i> , <b>2006</b> , 74,	2.6	48
31	Entanglement criteria based on local uncertainty relations are strictly stronger than the computable cross norm criterion. <i>Physical Review A</i> , <b>2006</b> , 74,	2.6	67
30	Energy and multipartite entanglement in multidimensional and frustrated spin models. <i>Physical Review A</i> , <b>2006</b> , 73,	2.6	41
29	Detection of multipartite entanglement with two-body correlations. <i>Applied Physics B: Lasers and Optics</i> , <b>2006</b> , 82, 237-241	1.9	16
28	Multipartite entanglement in spin chains. <i>New Journal of Physics</i> , <b>2005</b> , 7, 229-229	2.9	130
27	Bell inequalities for graph states. <i>Physical Review Letters</i> , <b>2005</b> , 95, 120405	7.4	119
26	Detecting genuine multipartite entanglement with two local measurements. <i>Physical Review Letters</i> , <b>2005</b> , 94, 060501	7.4	220
25	Entanglement detection in the stabilizer formalism. <i>Physical Review A</i> , <b>2005</b> , 72,	2.6	144

24	Entanglement witnesses in spin models. <i>Physical Review A</i> , <b>2005</b> , 71,	2.6	139
23	Addendum to Sufficient conditions for three-particle entanglement and their tests in recent experiments <i>Physical Review A</i> , <b>2005</b> , 72,	2.6	20
22	Experimental analysis of a four-qubit photon cluster state. <i>Physical Review Letters</i> , <b>2005</b> , 95, 210502	7.4	207
21	Two Measurement Settings can Suffice to Verify Multipartite Entanglement. <i>AIP Conference Proceedings</i> , <b>2004</b> ,	0	3
20	Entanglement detection in optical lattices of bosonic atoms with collective measurements. <i>Physical Review A</i> , <b>2004</b> , 69,	2.6	53
19	Hydrodynamics of domain growth in nematic liquid crystals. <i>Physical Review E</i> , <b>2003</b> , 67, 051705	2.4	37
18	Entanglement detection based on interference and particle counting. <i>Physical Review A</i> , <b>2003</b> , 68,	2.6	50
17	Modeling nematohydrodynamics in liquid crystal devices. <i>Computer Physics Communications</i> , <b>2002</b> , 147, 7-12	4.2	6
16	Domain Motion in Confined Liquid Crystals. <i>Journal of Statistical Physics</i> , <b>2002</b> , 107, 187-202	1.5	15
15	Hydrodynamics of topological defects in nematic liquid crystals. <i>Physical Review Letters</i> , <b>2002</b> , 88, 105504	7.4	149
14	Power gain in a quantum-dot cellular automata latch. <i>Applied Physics Letters</i> , <b>2002</b> , 81, 1332-1334	3.4	77
13	Role of correlation in the operation of quantum-dot cellular automata. <i>Journal of Applied Physics</i> , <b>2001</b> , 89, 7943-7953	2.5	32
12	Experimental demonstration of a latch in clocked quantum-dot cellular automata. <i>Applied Physics Letters</i> , <b>2001</b> , 78, 1625-1627	3.4	65
11	Quantum computing with quantum-dot cellular automata. <i>Physical Review A</i> , <b>2001</b> , 63,	2.6	79
10	Experimental demonstration of clocked single-electron switching in quantum-dot cellular automata. <i>Applied Physics Letters</i> , <b>2000</b> , 77, 295-297	3.4	97
9	Conductance suppression due to correlated electron transport in coupled double quantum dots. <i>Physical Review B</i> , <b>1999</b> , 60, 16906-16912	3.3	12
8	Experimental demonstration of a binary wire for quantum-dot cellular automata. <i>Applied Physics Letters</i> , <b>1999</b> , 74, 2875-2877	3.4	117
7	Quasiadiabatic switching for metal-island quantum-dot cellular automata. <i>Journal of Applied Physics</i> , <b>1999</b> , 85, 2977-2984	2.5	175

6	CNNUM stereo architecture and 3D template design techniques. <i>International Journal of Circuit Theory and Applications</i> , <b>1999</b> , 27, 25-41	2	1
5	Digital logic gate using quantum-Dot cellular automata. <i>Science</i> , <b>1999</b> , 284, 289-91	33.3	45 <sup>1</sup>
4	Correlated electron transport in coupled metal double dots. <i>Applied Physics Letters</i> , <b>1998</b> , 73, 2787-2789	3.4	20
3	Analogic CNN algorithms for 3D interpolation-approximation and object rotation using controlled switched templates. <i>International Journal of Circuit Theory and Applications</i> , <b>1996</b> , 24, 409-424	2	7
2	Quantum cellular neural networks. <i>Superlattices and Microstructures</i> , <b>1996</b> , 20, 473-478	2.8	54
1	Stretching the limits of multiparticle entanglement <sup>4</sup> , 30		1