## Gerardo Adesso

## List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/1022446/publications.pdf

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181 13,880 60
papers citations h-index

h-index g-index

184 4210
times ranked citing authors

21474

114

184 all docs 184 docs citations

#	Article	IF	CITATIONS
1	<i>Colloquium</i> : Quantum coherence as a resource. Reviews of Modern Physics, 2017, 89, .	16.4	1,108
2	Measuring Quantum Coherence with Entanglement. Physical Review Letters, 2015, 115, 020403.	2.9	665
3	Entanglement in continuous-variable systems: recent advances and current perspectives. Journal of Physics A: Mathematical and Theoretical, 2007, 40, 7821-7880.	0.7	503
4	Extremal entanglement and mixedness in continuous variable systems. Physical Review A, 2004, 70, .	1.0	479
5	Continuous Variable Quantum Information: Gaussian States and Beyond. Open Systems and Information Dynamics, 2014, 21, 1440001.	0.5	477
6	Robustness of Coherence: An Operational and Observable Measure of Quantum Coherence. Physical Review Letters, 2016, 116, 150502.	2.9	428
7	Quantum versus Classical Correlations in Gaussian States. Physical Review Letters, 2010, 105, 030501.	2.9	424
8	Characterizing Nonclassical Correlations via Local Quantum Uncertainty. Physical Review Letters, 2013, 110, 240402.	2.9	378
9	Frozen Quantum Coherence. Physical Review Letters, 2015, 114, 210401.	2.9	297
10	Measures and applications of quantum correlations. Journal of Physics A: Mathematical and Theoretical, 2016, 49, 473001.	0.7	286
11	Quantum discord for general two-qubit states: Analytical progress. Physical Review A, 2011, 83, .	1.0	270
12	Quantification of Gaussian Quantum Steering. Physical Review Letters, 2015, 114, 060403.	2.9	264
13	Quantum-enhanced measurements without entanglement. Reviews of Modern Physics, 2018, 90, .	16.4	257
14	Secure Continuous Variable Teleportation and Einstein-Podolsky-Rosen Steering. Physical Review Letters, 2015, 115, 180502.	2.9	237
15	All Nonclassical Correlations Can Be Activated into Distillable Entanglement. Physical Review Letters, 2011, 106, 220403.	2.9	220
16	Quantum-enhanced absorption refrigerators. Scientific Reports, 2014, 4, 3949.	1.6	215
17	Robustness of asymmetry and coherence of quantum states. Physical Review A, 2016, 93, .	1.0	206
18	Quantum Discord Determines the Interferometric Power of Quantum States. Physical Review Letters, 2014, 112, .	2.9	204

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19	Individual Quantum Probes for Optimal Thermometry. Physical Review Letters, 2015, 114, 220405.	2.9	190
20	Multipartite entanglement in three-mode Gaussian states of continuous-variable systems: Quantification, sharing structure, and decoherence. Physical Review A, 2006, 73, .	1.0	172
21	Measuring Gaussian Quantum Information and Correlations Using the Rényi Entropy of Order 2. Physical Review Letters, 2012, 109, 190502.	2.9	162
22	Gaussian measures of entanglement versus negativities: Ordering of two-mode Gaussian states. Physical Review A, 2005, 72, .	1.0	148
23	Performance bound for quantum absorption refrigerators. Physical Review E, 2013, 87, 042131.	0.8	147
24	Generalized Geometric Quantum Speed Limits. Physical Review X, 2016, 6, .	2.8	147
25	Entanglement of two-mode Gaussian states: characterization and experimental production and manipulation. Journal of Optics B: Quantum and Semiclassical Optics, 2005, 7, S577-S587.	1.4	145
26	Are General Quantum Correlations Monogamous?. Physical Review Letters, 2012, 109, 050503.	2.9	145
27	Optimal estimation of losses at the ultimate quantum limit with non-Gaussian states. Physical Review A, 2009, 79, .	1.0	137
28	Comparative investigation of the freezing phenomena for quantum correlations under nondissipative decoherence. Physical Review A, 2013, 88, .	1.0	135
29	Optimal Quantum Estimation of the Unruh-Hawking Effect. Physical Review Letters, 2010, 105, 151301.	2.9	133
30	Testing the Validity of the  Local' and  Global' GKLS Master Equations on an Exactly Solvable Model. Open Systems and Information Dynamics, 2017, 24, 1740010.	0.5	129
31	Continuous variable tangle, monogamy inequality, and entanglement sharing in Gaussian states of continuous variable systems. New Journal of Physics, 2006, 8, 15-15.	1.2	127
32	Unconditional security of entanglement-based continuous-variable quantum secret sharing. Physical Review A, 2017, 95, .	1.0	124
33	Multipartite Gaussian steering: Monogamy constraints and quantum cryptography applications. Physical Review A, 2017, 95, .	1.0	119
34	Determination of Continuous Variable Entanglement by Purity Measurements. Physical Review Letters, 2004, 92, 087901.	2.9	118
35	Continuous-variable entanglement sharing in noninertial frames. Physical Review A, 2007, 76, .	1.0	114
36	Negativity of quantumness and its interpretations. Physical Review A, 2013, 88, .	1.0	110

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37	Monogamy Inequality for Distributed Gaussian Entanglement. Physical Review Letters, 2007, 98, 050503.	2.9	108
38	Unitarily localizable entanglement of Gaussian states. Physical Review A, 2005, 71, .	1.0	104
39	Demonstration of Monogamy Relations for Einstein-Podolsky-Rosen Steering in Gaussian Cluster States. Physical Review Letters, 2017, 118, 230501.	2.9	101
40	One-Shot Coherence Distillation. Physical Review Letters, 2018, 121, 010401.	2.9	99
41	Optimal estimation of joint parameters in phase space. Physical Review A, 2013, 87, .	1.0	98
42	Hierarchy and dynamics of trace distance correlations. New Journal of Physics, 2013, 15, 093022.	1,2	98
43	Hierarchy of Steering Criteria Based on Moments for All Bipartite Quantum Systems. Physical Review Letters, 2015, 115, 210401.	2.9	96
44	Observable Measure of Bipartite Quantum Correlations. Physical Review Letters, 2012, 108, 150403.	2.9	95
45	Equivalence between Entanglement and the Optimal Fidelity of Continuous Variable Teleportation. Physical Review Letters, 2005, 95, 150503.	2.9	92
46	Operational Advantage of Quantum Resources in Subchannel Discrimination. Physical Review Letters, 2019, 122, 140402.	2.9	88
47	Universal freezing of quantum correlations within the geometric approach. Scientific Reports, 2015, 5, 10177.	1.6	87
48	Observation of Time-Invariant Coherence in a Nuclear Magnetic Resonance Quantum Simulator. Physical Review Letters, 2016, 117, 160402.	2.9	87
49	Theory of Ground State Factorization in Quantum Cooperative Systems. Physical Review Letters, 2008, 100, 197201.	2.9	85
50	Multiparameter Gaussian quantum metrology. Physical Review A, 2018, 98, .	1.0	81
51	Quantification and Scaling of Multipartite Entanglement in Continuous Variable Systems. Physical Review Letters, 2004, 93, 220504.	2.9	80
52	Relativistic Quantum Metrology: Exploiting relativity to improve quantum measurement technologies. Scientific Reports, 2014, 4, 4996.	1.6	76
53	Faithful nonclassicality indicators and extremal quantum correlations in two-qubit states. Journal of Physics A: Mathematical and Theoretical, 2011, 44, 352002.	0.7	73
54	Separability and ground-state factorization in quantum spin systems. Physical Review B, 2009, 79, .	1.1	72

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55	Strong Monogamy Conjecture for Multiqubit Entanglement: The Four-Qubit Case. Physical Review Letters, 2014, 113, 110501.	2.9	72
56	Interplay between computable measures of entanglement and other quantum correlations. Physical Review A, 2011, 84, .	1.0	71
57	Characterizing non-Markovianity via quantum interferometric power. Physical Review A, 2015, 91, .	1.0	69
58	Observation of Environment-Induced Double Sudden Transitions in Geometric Quantum Correlations. Physical Review Letters, 2013, 111, 250401.	2.9	68
59	Measuring Bipartite Quantum Correlations of an Unknown State. Physical Review Letters, 2013, 110, 140501.	2.9	66
60	Probabilistic Distillation of Quantum Coherence. Physical Review Letters, 2018, 121, 070404.	2.9	66
61	Should Entanglement Measures be Monogamous or Faithful?. Physical Review Letters, 2016, 117, 060501.	2.9	62
62	Gaussian quantum resource theories. Physical Review A, 2018, 98, .	1.0	61
63	Quantum resources for hybrid communication via qubit-oscillator states. Physical Review A, 2012, 86, .	1.0	60
64	Unifying approach to the quantification of bipartite correlations by Bures distance. Journal of Physics A: Mathematical and Theoretical, 2014, 47, 405302.	0.7	56
65	Schur Complement Inequalities for Covariance Matrices and Monogamy of Quantum Correlations. Physical Review Letters, 2016, 117, 220502.	2.9	55
66	Strong Monogamy of Bipartite and Genuine Multipartite Entanglement: The Gaussian Case. Physical Review Letters, 2007, 99, 150501.	2.9	53
67	Towards Superresolution Surface Metrology: Quantum Estimation of Angular and Axial Separations. Physical Review Letters, 2019, 122, 140505.	2.9	49
68	Probing Quantum Frustrated Systems via Factorization of the Ground State. Physical Review Letters, 2010, 104, 207202.	2.9	48
69	Measurement-induced disturbances and nonclassical correlations of Gaussian states. Physical Review A, 2011, 83, .	1.0	48
70	GAUSSIAN GEOMETRIC DISCORD. International Journal of Quantum Information, 2011, 09, 1773-1786.	0.6	48
71	Optimal performance of endoreversible quantum refrigerators. Physical Review E, 2014, 90, 062124.	0.8	48
72	Gaussian entanglement revisited. New Journal of Physics, 2018, 20, 023030.	1.2	47

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73	Quantumness of correlations revealed in local measurements exceeds entanglement. Physical Review A, 2012, 85, .	1.0	46
74	Gaussian interferometric power. Physical Review A, 2014, 90, .	1.0	42
75	Experimental Entanglement Activation from Discord in a Programmable Quantum Measurement. Physical Review Letters, 2014, 112, 140501.	2.9	42
76	Quantum Benchmark for Teleportation and Storage of Squeezed States. Physical Review Letters, 2008, 100, 170503.	2.9	41
77	Certification and Quantification of Multilevel Quantum Coherence. Physical Review X, 2018, 8, .	2.8	41
78	Optimal Continuous Variable Quantum Teleportation with Limited Resources. Physical Review Letters, 2017, 119, 120503.	2.9	39
79	Entanglement between Identical Particles Is a Useful and Consistent Resource. Physical Review X, 2020, 10, .	2.8	39
80	Teleportation of squeezing: Optimization using non-Gaussian resources. Physical Review A, 2010, 82, .	1.0	38
81	The geometric approach to quantum correlations: computability versus reliability. Journal of Physics A: Mathematical and Theoretical, 2013, 46, 275308.	0.7	38
82	Indistinguishability-enabled coherence for quantum metrology. Physical Review A, 2019, 100, .	1.0	35
83	Generic Bound Coherence under Strictly Incoherent Operations. Physical Review Letters, 2019, 122, 150402.	2.9	35
84	Nature of light correlations in ghost imaging. Scientific Reports, 2012, 2, 651.	1.6	33
85	Quantifying the source of enhancement in experimental continuous variable quantum illumination. Journal of the Optical Society of America B: Optical Physics, 2014, 31, 2045.	0.9	33
86	Converting multilevel nonclassicality into genuine multipartite entanglement. New Journal of Physics, 2018, 20, 033012.	1.2	33
87	Role of non-Markovianity and backflow of information in the speed of quantum evolution. Physical Review A, 2017, 96, .	1.0	32
88	Nonclassical correlations in continuous-variable non-Gaussian Werner states. Physical Review A, 2012, 85, .	1.0	31
89	Generation of quantum steering and interferometric power in the dynamical Casimir effect. Physical Review A, 2015, 92, .	1.0	31
90	Genuine multipartite entanglement of symmetric Gaussian states: Strong monogamy, unitary localization, scaling behavior, and molecular sharing structure. Physical Review A, 2008, 78, .	1.0	30

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91	Entanglement, Purity, and Information Entropies in Continuous Variable Systems. Open Systems and Information Dynamics, 2005, 12, 189-205.	0.5	29
92	Quantum Benchmarks for Pure Single-Mode Gaussian States. Physical Review Letters, 2014, 112, 010501.	2.9	29
93	Einstein–Podolsky–Rosen steering measure for two-mode continuous variable states. Journal of the Optical Society of America B: Optical Physics, 2015, 32, A27.	0.9	29
94	Practical quantum metrology in noisy environments. Physical Review A, 2016, 94, .	1.0	29
95	Entanglement Replication in Driven Dissipative Many-Body systems. Physical Review Letters, 2013, 110, 040503.	2.9	28
96	Generic Emergence of Objectivity of Observables in Infinite Dimensions. Physical Review Letters, 2018, 121, 160401.	2.9	28
97	Generic Entanglement and Standard Form forN-Mode Pure Gaussian States. Physical Review Letters, 2006, 97, 130502.	2.9	27
98	Quantum Teamwork for Unconditional Multiparty Communication with Gaussian States. Physical Review Letters, 2009, 103, 070501.	2.9	26
99	CHARACTERIZING QUANTUMNESS VIA ENTANGLEMENT CREATION. International Journal of Quantum Information, 2011, 09, 1701-1713.	0.6	25
100	Continuous variable methods in relativistic quantum information: characterization of quantum and classical correlations of scalar field modes in noninertial frames. Classical and Quantum Gravity, 2012, 29, 224002.	1.5	24
101	Strong monogamy inequalities for four qubits. Physical Review A, 2016, 93, .	1.0	24
102	Demonstrating Quantum Coherence and Metrology that is Resilient to Transversal Noise. Physical Review Letters, 2019, 123, 180504.	2.9	24
103	Optical state engineering, quantum communication, and robustness of entanglement promiscuity in three-mode Gaussian states. New Journal of Physics, 2007, 9, 60-60.	1.2	23
104	Gaussian interferometric power as a measure of continuous-variable non-Markovianity. Physical Review A, 2015, 92, .	1.0	23
105	ENTANGLEMENT SHARING: FROM QUBITS TO GAUSSIAN STATES. International Journal of Quantum Information, 2006, 04, 383-393.	0.6	22
106	Theory of Genuine Tripartite Nonlocality of Gaussian States. Physical Review Letters, 2014, 112, 010401.	2.9	22
107	Strong subadditivity for log-determinant of covariance matrices and its applications. Journal of Physics A: Mathematical and Theoretical, 2016, 49, 34LT02.	0.7	22
108	General Expressions for the Quantum Fisher Information Matrix with Applications to Discrete Quantum Imaging. PRX Quantum, 2021, 2, .	3.5	21

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109	Thermodynamics of Quantum Feedback Cooling. Entropy, 2016, 18, 48.	1.1	20
110	Characterizing entanglement with global and marginal entropic measures. Physical Review A, 2003, 68,	1.0	19
111	Certifying quantumness: Benchmarks for the optimal processing of generalized coherent and squeezed states. Physical Review A, 2014, 90, .	1.0	19
112	Entanglement Quantification Made Easy: Polynomial Measures Invariant under Convex Decomposition. Physical Review Letters, 2016, 116, 070504.	2.9	19
113	Estimating phase with a random generator: Strategies and resources in multiparameter quantum metrology. Physical Review A, 2017, 95, .	1.0	19
114	Multipartite Einstein-Podolsky-Rosen steering sharing with separable states. Physical Review A, 2019, 99, .	1.0	19
115	Optimal distillation of quantum coherence with reduced waste of resources. Physical Review A, 2019, 99, .	1.0	19
116	Simple proof of the robustness of Gaussian entanglement in bosonic noisy channels. Physical Review A, $2011, 83, .$	1.0	18
117	Quantum learning of coherent states. EPJ Quantum Technology, 2015, 2, .	2.9	17
118	Building versatile bipartite probes for quantum metrology. New Journal of Physics, 2016, 18, 013049.	1.2	17
119	Experimentally friendly bounds on non-Gaussian entanglement from second moments. Physical Review A, 2009, 79, .	1.0	16
120	Continuous-variable versus hybrid schemes for quantum teleportation of Gaussian states. Physical Review A, 2014, $89$ , .	1.0	16
121	Probing the diamagnetic term in light–matter interaction. Quantum Science and Technology, 2017, 2, 01LT01.	2.6	16
122	Investigating Einstein-Podolsky-Rosen steering of continuous-variable bipartite states by non-Gaussian pseudospin measurements. Physical Review A, 2017, 96, .	1.0	16
123	Assisted Work Distillation. Physical Review Letters, 2019, 122, 130601.	2.9	16
124	Standard forms and entanglement engineering of multimode Gaussian states under local operations. Journal of Physics A: Mathematical and Theoretical, 2007, 40, 8041-8053.	0.7	15
125	Controllable Gaussian-Qubit Interface for Extremal Quantum State Engineering. Physical Review Letters, 2010, 104, 240501.	2.9	15
126	Pushing the limits of the reaction-coordinate mapping. Journal of Chemical Physics, 2019, 151, 094107.	1.2	15

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127	From Log-Determinant Inequalities to Gaussian Entanglement via Recoverability Theory. IEEE Transactions on Information Theory, 2017, 63, 7553-7568.	1.5	14
128	Operational Quantification of Continuous-Variable Correlations. Physical Review Letters, 2008, 100, 110505.	2.9	13
129	Coexistence of unlimited bipartite and genuine multipartite entanglement: Promiscuous quantum correlations arising from discrete to continuous-variable systems. Physical Review A, 2007, 76, .	1.0	12
130	Passing quantum correlations to qubits using any two-mode state. Physical Review A, 2009, 80, .	1.0	12
131	Quantum-teleportation benchmarks for independent and identically distributed spin states and displaced thermal states. Physical Review A, 2010, 82, .	1.0	12
132	Dynamics of atom–atom correlations in the Fermi problem. New Journal of Physics, 2012, 14, 103010.	1.2	12
133	Non-Markovianity Hierarchy of Gaussian Processes and Quantum Amplification. Physical Review Letters, 2017, 118, 050401.	2.9	12
134	Wave–particle superposition. Nature Photonics, 2012, 6, 579-580.	15.6	11
135	Concentrating Tripartite Quantum Information. Physical Review Letters, 2015, 115, 030505.	2.9	11
136	There is more to quantum interferometry than entanglement. Physical Review A, 2017, 95, .	1.0	11
137	Extendibility of Bosonic Gaussian States. Physical Review Letters, 2019, 123, 050501.	2.9	11
138	Activation of indistinguishability-based quantum coherence for enhanced metrological applications with particle statistics imprint. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, .	3.3	11
139	Multipartite continuous-variable solution for the Byzantine agreement problem. Physical Review A, 2008, 77, .	1.0	10
140	Versatile Gaussian probes for squeezing estimation. Physical Review A, 2017, 95, .	1.0	10
141	Energy-efficient quantum frequency estimation. New Journal of Physics, 2018, 20, 063009.	1.2	10
142	Efficiency of Inefficient Endoreversible Thermal Machines. Brazilian Journal of Physics, 2016, 46, 282-287.	0.7	9
143	Quantum coherence fluctuation relations. Journal of Physics A: Mathematical and Theoretical, 2018, 51, 414007.	0.7	9
144	Assisted concentration of Gaussian resources. Physical Review A, 2020, 101, .	1.0	9

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145	Entanglement in Gaussian matrix-product states. Physical Review A, 2006, 74, .	1.0	8
146	No-activation theorem for Gaussian nonclassical correlations by Gaussian operations. Physical Review A, $2014,90,$ .	1.0	8
147	Foundations of quantum mechanics and their impact on contemporary society. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2018, 376, 20180112.	1.6	8
148	Geometric characterization of separability and entanglement in pure Gaussian states by single-mode unitary operations. Physical Review A, 2007, 76, .	1.0	7
149	Asymptotically optimal purification and dilution of mixed qubit and Gaussian states. Physical Review A, 2011, 84, .	1.0	7
150	Noisy frequency estimation with noisy probes. New Journal of Physics, 2018, 20, 083008.	1.2	7
151	Activation and superactivation of single-mode Gaussian quantum channels. Physical Review A, 2019, 99,	1.0	7
152	State Exchange with Quantum Side Information. Physical Review Letters, 2019, 122, 010502.	2.9	7
153	THEORETICAL INSIGHTS ON MEASURING QUANTUM CORRELATIONS. International Journal of Modern Physics B, 2013, 27, 1345020.	1.0	6
154	Unveiling the Hanbury Brown and Twiss effect through Rényi entropy correlations. Physica Scripta, 2013, T153, 014052.	1.2	6
155	Towards quantum cybernetics. Annalen Der Physik, 2015, 527, 757-764.	0.9	6
156	Genuine multipartite nonlocality of permutationally invariant Gaussian states. Physical Review A, 2017, 95, .	1.0	6
157	Genuine Tripartite Entanglement and Nonlocality in Bose-Einstein Condensates by Collective Atomic Recoil. Entropy, 2013, 15, 1875-1886.	1.1	5
158	Accessible quantification of multiparticle entanglement. Npj Quantum Information, 2016, 2, .	2.8	5
159	Geometric approach to entanglement quantification with polynomial measures. Physical Review A, 2016, 94, .	1.0	5
160	Connecting measurement invasiveness to optimal metrological scenarios. Physical Review A, 2017, 96, .	1.0	5
161	Shannon's information theory 70 years on: applications in classical and quantum physics. Journal of Physics A: Mathematical and Theoretical, 2019, 52, 320201.	0.7	5
162	Refined diamond norm bounds on the emergence of objectivity of observables. Journal of Physics A: Mathematical and Theoretical, 2020, 53, 395305.	0.7	5

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163	Bipartite and Multipartite Entanglement of Gaussian States. , 2007, , 1-21.		4
164	Let researchers try new paths. Nature, 2016, 538, 451-453.	13.7	4
165	Accessible bounds for general quantum resources. Journal of Physics A: Mathematical and Theoretical, 2018, 51, 325303.	0.7	4
166	Analysis of the conditional mutual information in ballistic and diffusive non-equilibrium steady-states. Journal of Physics A: Mathematical and Theoretical, 2020, 53, 305302.	0.7	4
167	Mixing indistinguishable systems leads to a quantum Gibbs paradox. Nature Communications, 2021, 12, 1471.	5.8	4
168	Quantum secure learning with classical samples. Physical Review A, 2021, 103, .	1.0	4
169	Thermality versus Objectivity: Can They Peacefully Coexist?. Entropy, 2021, 23, 1506.	1.1	4
170	Holographic entanglement in spin network states: A focused review. AVS Quantum Science, 2022, 4, .	1.8	4
171	Discriminating quantum field theories in non-inertial frames. Classical and Quantum Gravity, 2015, 32, 035013.	1.5	3
172	Quantum-enhanced passive remote sensing. Physical Review A, 2022, 106, .	1.0	3
173	Optical implementation and entanglement distribution in Gaussian valence bond states. Optics and Spectroscopy (English Translation of Optika I Spektroskopiya), 2007, 103, 178-186.	0.2	2
174	Asymptotically optimal quantum channel reversal for qudit ensembles and multimode Gaussian states. New Journal of Physics, 2012, 14, 113041.	1.2	2
175	One-shot quantum state exchange. Physical Review A, 2019, 100, .	1.0	2
176	Catalytic Gaussian thermal operations. Journal of Physics A: Mathematical and Theoretical, 2022, 55, 325301.	0.7	2
177	Optimal secure quantum teleportation of coherent states of light. , 2017, , .		1
178	Analysing Surface Structures on (Ga, Mn)As by Atomic Force Microscopy. Journal of Nanoscience and Nanotechnology, 2012, 12, 7545-7549.	0.9	0
179	Characterising Two-Sided Quantum Correlations Beyond Entanglement via Metric-Adjusted f–Correlations. Springer Proceedings in Mathematics and Statistics, 2018, , 411-430.	0.1	0
180	Multipartite Einstein-Podolsky-Rosen steering sharing with separable states. , 2019, , .		0

# ARTICLE IF CITATIONS

181 Multipartite Einstein-Podolsky-Rosen steering sharing with separable states., 2019,,... o