Simone Severini

List of Publications by Year
in descending order

68	2,475	218677	214800
papers	citations	26	47
		h-index	g-index

70	70	70	2310
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Quantum state discrimination using noisy quantum neural networks. Physical Review Research, 2021, 3, .	3.6	19
2	Experimental learning of quantum states. Science Advances, 2019, 5, eaau1946.	10.3	46
3	Dynamic transcriptomic analysis reveals suppression of PGC1Î±/ERRÎ± drives perturbed myogenesis in facioscapulohumeral muscular dystrophy. Human Molecular Genetics, 2019, 28, 1244-1259.	2.9	52
4	Quantum machine learning: a classical perspective. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2018, 474, 20170551.	2.1	244
5	How to suppress dark states in quantum networks and bio-engineered structures. Journal of Physics A: Mathematical and Theoretical, 2018, 51, 365306.	2.1	2
6	Hierarchical quantum classifiers. Npj Quantum Information, 2018, 4, .	6.7	184
7	Image classification with quantum pre-training and auto-encoders. International Journal of Quantum Information, 2018, 16, 1840009.	1.1	9
8	Unitary equivalence between the Green's function and SchrÃ¶dinger approaches for quantum graphs. Physical Review A, 2018, 98, .	2.5	9
9	Entanglement properties of quantum grid states. Physical Review A, 2018, 97, .	2.5	13
10	Quantum walk search on Kronecker graphs. Physical Review A, 2018, 98, .	2.5	11
11	Learning hard quantum distributions with variational autoencoders. Npj Quantum Information, 2018, 4, .	6.7	49
12	The effects of mutational processes and selection on driver mutations across cancer types. Nature Communications, 2018, 9, 1857.	12.8	91
13	Note on von Neumann and RÃ©nyi entropies of a graph. Linear Algebra and Its Applications, 2017, 521, 240-253.	0.9	11
14	Pretty good state transfer in qubit chainsâ€”The Heisenberg Hamiltonian. Journal of Mathematical Physics, 2017, 58, .	1.1	35
15	PAX7 target genes are globally repressed in facioscapulohumeral muscular dystrophy skeletal muscle. Nature Communications, 2017, 8, 2152.	12.8	78
16	Edge Centrality via the Holevo Quantity. Lecture Notes in Computer Science, 2016, , 143-152.	1.3	5
17	Introduction for the special issue in honor of Chris Godsil. Journal of Algebraic Combinatorics, 2016, 43, 751-753.	0.8	0
18	Sabidussi versus Hedetniemi for three variations of the chromatic number. Combinatorica, 2016, 36, 395-415.	1.2	10

#	Article	IF	Citations
19	Descriptive Complexity of Graph Spectra. Lecture Notes in Computer Science, 2016, , 183-199.	1.3	1
20	Increased signaling entropy in cancer requires the scale-free property of proteininteraction networks. Scientific Reports, 2015, 5, 9646.	3.3	59
21	α-Kuramoto partitions from the frustrated Kuramoto model generalise equitable partitions. Applicable Analysis and Discrete Mathematics, 2015, 9, 29-38.	0.7	6
22	Logic circuits from zero forcing. Natural Computing, 2015, 14, 485-490.	3.0	27
23	Intra-Tumour Signalling Entropy Determines Clinical Outcome in Breast and Lung Cancer. PLoS Computational Biology, 2015, 11, e1004115.	3.2	62
24	Universal methods for extending any entanglement witness from the bipartite to the multipartite case. Physical Review A, 2014, 90, .	2.5	2
25	Hearing the Shape of the Ising Model with a Programmable Superconducting-Flux Annealer. Scientific Reports, 2014, 4, 5703.	3.3	22
26	Bounds on Entanglement-Assisted Source-Channel Coding via the Lovász (vartheta) Number and Its Variants. IEEE Transactions on Information Theory, 2014, 60, 7330-7344.	2.4	17
27	Entanglement and discord assisted entropic uncertainty relations under decoherence. Science China: Physics, Mechanics and Astronomy, 2014, 57, 1703-1711.	5.1	25
28	Randomized graph states and their entanglement properties. Physical Review A, 2014, 89, .	2.5	13
29	Graph-Theoretic Approach to Quantum Correlations. Physical Review Letters, 2014, 112, 040401.	7.8	213
30	Block weighing matrices. Cryptography and Communications, 2013, 5, 201-207.	1.4	3
31	Zero Forcing, Linear and Quantum Controllability for Systems Evolving on Networks. IEEE Transactions on Automatic Control, 2013, 58, 2349-2354.	5.7	41
32	Zero-Error Communication via Quantum Channels, Noncommutative Graphs, and a Quantum Lovász Number. IEEE Transactions on Information Theory, 2013, 59, 1164-1174.	2.4	111
33	Exclusivity structures and graph representatives of local complementation orbits. Journal of Mathematical Physics, 2013, 54, 072202.	1.1	3
34	New Separations in Zero-Error Channel Capacity Through Projective Kochen–Specker Sets and Quantum Coloring. IEEE Transactions on Information Theory, 2013, 59, 4025-4032.	2.4	18
35	An example of graph limits of growing sequences of random graphs. Electronic Journal of Combinatorics, 2013, 4, 67-80.	0.1	2
36	Approximate entropy of network parameters. Physical Review E, 2012, 85, 046111.	2.1	12

#	Article	IF	Citations
37	Number-Theoretic Nature of Communication in Quantum Spin Systems. Physical Review Letters, 2012, 109, 050502.	7.8	73
38	Improved lower bounds on genuine-multipartite-entanglement concurrence. Physical Review A, 2012, 85, .	2.5	44
39	Kochenâ€"Specker Sets and the Rank-1 Quantum Chromatic Number. IEEE Transactions on Information Theory, 2012, 58, 2524-2529.	2.4	15
40	Shannon and von Neumann entropy of random networks with heterogeneous expected degree. Physical Review E, 2011, 83, 036109.	2.1	112
41	Zero-error communication via quantum channels and a quantum Lov&#x00E1;sz &#x003B8;-function. , 2011, , .		3
42	Entanglement manipulation via dynamics in multiple quantum spin systems. Quantum Information Processing, 2011, 10, 107-121.	2.2	6
43	Quantifying Disorder in Networks. , 2011, , 66-76.		4
44	The 3-dimensional cube is the only periodic, connected cubic graph with perfect state transfer. Journal of Physics: Conference Series, 2010, 254, 012012.	0.4	2
45	A note on the von Neumann entropy of random graphs. Linear Algebra and Its Applications, 2010, 433, 1722-1725.	0.9	17
46	Matrix permanent and quantum entanglement of permutation invariant states. Journal of Mathematical Physics, 2010, 51, 092203.	1.1	24
47	Quantum Bose-Hubbard model with an evolving graph as a toy model for emergent spacetime. Physical Review D, 2010, 81, .	4.7	47
48	Control by quantum dynamics on graphs. Physical Review A, 2010, 81, .	2.5	36
49	Quantifying Complexity in Networks. International Journal of Agent Technologies and Systems, 2009, 1, 58-67.	0.1	65
50	QUANTUM STATE TRANSFER THROUGH A QUBIT NETWORK WITH ENERGY SHIFTS AND FLUCTUATIONS. International Journal of Quantum Information, 2009, 07, 1417-1427.	1.1	37
51	A Note on Observables for Counting Trails and Paths in Graphs. Mathematical Modelling and Algorithms, 2009, 8, 335-342.	0.5	0
52	Weight of quadratic forms and graph states. Physical Review A, 2009, 80, .	2.5	7
53	Noncrossing Normal Ordering for Functions ofÂBosonÂOperators. International Journal of Theoretical Physics, 2008, 47, 832-849.	1.2	4
54	Extrema of discrete Wigner functions and applications. Physical Review A, 2008, 78, .	2.5	24

#	Article	IF	Citations
55	Quantum networks on cubelike graphs. Physical Review A, 2008, 78, .	2.5	57
56	Nondiscriminatory propagation on trees. Journal of Physics A: Mathematical and Theoretical, 2008, 41, 482002.	2.1	38
57	Combinatorial laplacians and positivity under partial transpose. Mathematical Structures in Computer Science, 2008, 18, 205-219.	0.6	15
58	PARAMETERS OF INTEGRAL CIRCULANT GRAPHS AND PERIODIC QUANTUM DYNAMICS. International Journal of Quantum Information, 2007, 05, 417-430.	1.1	69
59	Wick's theorem for q-deformed boson operators. Journal of Physics A: Mathematical and Theoretical, 2007, 40, 8393-8401.	2.1	13
60	The Quantum Separability Problem for Gaussian States. Electronic Notes in Theoretical Computer Science, 2007, 169, 121-131.	0.9	11
61	The disentangling power of unitaries. Physics Letters, Section A: General, Atomic and Solid State Physics, 2007, 365, 400-402.	2.1	5
62	A generalization of boson normal ordering. Physics Letters, Section A: General, Atomic and Solid State Physics, 2007, 364, 214-220.	2.1	16
63	The Laplacian of a Graph as a Density Matrix: A Basic Combinatorial Approach to Separability of Mixed States. Annals of Combinatorics, 2006, 10, 291-317.	0.6	118
64	Some families of density matrices for which separability is easily tested. Physical Review A, 2006, 73, .	2.5	36
65	Entangling power of permutations. Physical Review A, 2005, 72, .	2.5	30
66	The von Neumann Entropy of Networks. SSRN Electronic Journal, 0, , .	0.4	36
67	Approximating Hamiltonian dynamics with the Nyström method. Quantum - the Open Journal for Quantum Science, 0, 4, 234.	0.0	6
68	Perturbation Theory in a Pure Exchange Non-Equilibrium Economy. SSRN Electronic Journal, 0, , .	0.4	0