Arul Lakshminarayan

List of Publications by Year
in descending order

76	1,552	304368	344852
papers	citations	22	36
		h-index	g-index

78	78	78	717
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Testing Statistical Bounds on Entanglement Using Quantum Chaos. Physical Review Letters, 2002, 89, 060402.	2.9	124
2	Entangling power of quantized chaotic systems. Physical Review E, 2001, 64, 036207.	0.8	121
3	Entanglement production in coupled chaotic systems: Case of the kicked tops. Physical Review E, 2004, 69, 016201.	0.8	87
4	Multipartite entanglement in a one-dimensional time-dependent Ising model. Physical Review A, 2005, 71, .	1.0	72
5	Entanglement, avoided crossings, and quantum chaos in an Ising model with a tilted magnetic field. Physical Review A, 2007, 75, .	1.0	66
6	Entanglement sharing in one-particle states. Physical Review A, 2003, 67, .	1.0	62
7	Exact Minimum Eigenvalue Distribution of an Entangled Random Pure State. Journal of Statistical Physics, 2008, 131, 33-49.	0.5	44
8	Creating Ensembles of Dual Unitary and Maximally Entangling Quantum Evolutions. Physical Review Letters, 2020, 125, 070501.	2.9	36
9	Entangling power of time-evolution operators in integrable and nonintegrable many-body systems. Physical Review B, 2018, 98, .	1.1	35
10	Scrambling in strongly chaotic weakly coupled bipartite systems: Universality beyond the Ehrenfest timescale. Physical Review B, 2020, 101, .	1.1	35
11	Tripartite mutual information, entanglement, and scrambling in permutation symmetric systems with an application to quantum chaos. Physical Review E, 2018, 98, .	0.8	34
12	Extreme Statistics of Complex Random and Quantum Chaotic States. Physical Review Letters, 2008, 100, 044103.	2.9	33
13	Local entanglement structure across a many-body localization transition. Physical Review B, 2016, 93, .	1.1	31
14	Out-of-time-ordered correlator in the quantum bakers map and truncated unitary matrices. Physical Review E, 2019, 99, 012201.	0.8	31
15	Fluctuations of finite-time stability exponents in the standard map and the detection of small islands. Physical Review E, 2007, 76, 036207.	0.8	29
16	From dual-unitary to quantum Bernoulli circuits: Role of the entangling power in constructing a quantum ergodic hierarchy. Physical Review Research, 2021, 3, .	1.3	29
17	Cyclic identities for Jacobi elliptic and related functions. Journal of Mathematical Physics, 2003, 44, 1822-1841.	0.5	25
18	Multifractal eigenstates of quantum chaos and the Thue-Morse sequence. Physical Review E, 2005, 71, 065303.	0.8	24

#	Article	IF	Citations
19	Entanglement between two subsystems, the Wigner semicircle and extreme-value statistics. Physical Review A, 2012, 85, .	1.0	24
20	Recurrence of fidelity in nearly integrable systems. Physical Review E, 2003, 68, 036216.	0.8	23
21	Diagonal unitary entangling gates and contradiagonal quantum states. Physical Review A, 2014, 90, .	1.0	23
22	Exploring phase space localization of chaotic eigenstates via parametric variation. Physical Review E, 2000, 63, 016208.	0.8	22
23	Local identities involving Jacobi elliptic functions. Pramana - Journal of Physics, 2004, 62, 1201-1229.	0.9	22
24	Transport of entanglement through a Heisenbergâ€"XY spin chain. Physics Letters, Section A: General, Atomic and Solid State Physics, 2006, 349, 164-169.	0.9	22
25	Localized zero-energy modes in the Kitaev model with vacancy disorder. Physical Review B, 2012, 85, .	1.1	20
26	Entanglement and localization transitions in eigenstates of interacting chaotic systems. Physical Review E, 2016, 94, 010205.	0.8	20
27	Universal Scaling of Spectral Fluctuation Transitions for Interacting Chaotic Systems. Physical Review Letters, 2016, 116, 054101.	2.9	19
28	Impact of local dynamics on entangling power. Physical Review A, 2017, 95, .	1.0	18
29	The Classical and Quantum Mechanics of Lazy Baker Maps. Annals of Physics, 1993, 226, 350-373.	1.0	16
30	On the Quantum Bakerâ€²s Map and Its Unusual Traces. Annals of Physics, 1995, 239, 272-295.	1.0	16
31	Chaos and exponentially localized eigenstates in smooth Hamiltonian systems. Physical Review E, 1998, 57, 345-349.	0.8	16
32	Classical diffusion and quantum level velocities: Systematic deviations from random matrix theory. Physical Review E, 1999, 60, 3992-3999.	0.8	16
33	On the number of real eigenvalues of products of random matrices and an application to quantum entanglement. Journal of Physics A: Mathematical and Theoretical, 2013, 46, 152003.	0.7	16
34	Quantum correlations as probes of chaos and ergodicity. Optics Communications, 2018, 420, 189-193.	1.0	16
35	Eigenstate entanglement between quantum chaotic subsystems: Universal transitions and power laws in the entanglement spectrum. Physical Review E, 2018, 98, .	0.8	16
36	Effect of classical bifurcations on the quantum entanglement of two coupled quartic oscillators. Physical Review E, 2008, 77, 026213.	0.8	15

#	Article	IF	Citations
37	Thirty-six Entangled Officers of Euler: Quantum Solution to a Classically Impossible Problem. Physical Review Letters, 2022, 128, 080507.	2.9	15
38	On the quantum cat and sawtooth maps—Return to generic behaviour. Chaos, Solitons and Fractals, 1995, 5, 1169-1179.	2.5	14
39	Protocol using kicked Ising dynamics for generating states with maximal multipartite entanglement. Physical Review A, 2015, 91, .	1.0	14
40	Quantum signatures of chaos, thermalization, and tunneling in the exactly solvable few-body kicked top. Physical Review E, 2019, 99, 062217.	0.8	14
41	Accuracy of trace formulas. Pramana - Journal of Physics, 1997, 48, 517-535.	0.9	13
42	Local Scaling in Homogeneous Hamiltonian Systems. Physical Review Letters, 1996, 76, 396-399.	2.9	12
43	Entanglement optimizing mixtures of two-qubit states. Journal of Physics A: Mathematical and Theoretical, 2011, 44, 345301.	0.7	12
44	Out-of-time-ordered correlators and the Loschmidt echo in the quantum kicked top: how low can we go?. Journal Physics D: Applied Physics, 2021, 54, 274004.	1.3	12
45	Entanglement measures of bipartite quantum gates and their thermalization under arbitrary interaction strength. Physical Review Research, 2020, 2, .	1.3	12
46	Chaos in a well: effects of competing length scales. Physics Letters, Section A: General, Atomic and Solid State Physics, 2001, 279, 313-320.	0.9	11
47	Phase space localization of chaotic eigenstates: Violating ergodicity. Physical Review E, 2000, 63, 016209.	0.8	10
48	Shuffling cards, factoring numbers and the quantum baker's map. Journal of Physics A, 2005, 38, L597-L605.	1.6	10
49	Quantum chaos in the spectrum of operators used in Shor's algorithm. Physical Review E, 2006, 74, 035203.	0.8	10
50	Real eigenvalues of non-Gaussian random matrices and their products. Journal of Physics A: Mathematical and Theoretical, 2015, 48, 385204.	0.7	10
51	Ordered level spacing probability densities. Journal of Physics A: Mathematical and Theoretical, 2019, 52, 025101.	0.7	10
52	Entanglement production by interaction quenches of quantum chaotic subsystems. Physical Review E, 2020, 101, 032212.	0.8	9
53	Using the Hadamard and related transforms for simplifying the spectrum of the quantum baker's map. Journal of Physics A, 2006, 39, 11205-11216.	1.6	8
54	Resonance and generation of random states in a quenched Ising model. Europhysics Letters, 2014, 105, 10002.	0.7	8

#	Article	IF	Citations
55	Kolmogorov-Sinai entropy of many-body Hamiltonian systems. Physical Review E, 2011, 84, 016218.	0.8	7
56	Records in the classical and quantum standard map. Chaos, Solitons and Fractals, 2015, 74, 67-78.	2.5	7
57	Entanglement production in quantized chaotic systems. Pramana - Journal of Physics, 2005, 64, 577-592.	0.9	6
58	Entanglement transitions in random definite particle states. Physical Review A, 2011, 84, .	1.0	6
59	Record statistics in random vectors and quantum chaos. Europhysics Letters, 2013, 101, 10003.	0.7	6
60	Out-of-time-ordered correlators and quantum walks. Physical Review E, 2019, 99, 062128.	0.8	6
61	Quantum walks with quantum chaotic coins: Loschmidt echo, classical limit, and thermalization. Physical Review E, 2021, 103, 012207.	0.8	6
62	Semiclassical theory of the sawtooth map. Physics Letters, Section A: General, Atomic and Solid State Physics, 1994, 192, 345-354.	0.9	5
63	Entanglement signatures for the dimerization transition in the Majumdar-Ghosh model. Physical Review A, 2013, 87, .	1.0	5
64	Using partial transpose and realignment to generate local unitary invariants. Physical Review A, 2013, 87, .	1.0	5
65	Quantum walk on a toral phase space. Journal of Physics A: Mathematical and Theoretical, 2018, 51, 385306.	0.7	5
66	Out-of-time-order correlators of nonlocal block-spin and random observables in integrable and nonintegrable spin chains. Physical Review B, 2022, 105, .	1.1	5
67	On the quantization of linear maps. Annals of Physics, 1991, 212, 220-234.	1.0	3
68	On the noncommutativity of quantization and discrete time evolution. Nuclear Physics A, 1994, 572, 37-47.	0.6	3
69	Relaxation and localization in interacting quantum maps. Journal of Statistical Physics, 1994, 77, 311-344.	0.5	3
70	Simple permutation-based measure of quantum correlations and maximally-3-tangled states. Physical Review A, 2016, 94, .	1.0	3
71	Persistent entanglement in a class of eigenstates of quantum Heisenberg spin glasses. Europhysics Letters, 2016, 115, 57005.	0.7	3
72	Fluctuations in classical sum rules. Physical Review E, 2010, 82, 046223.	0.8	2

#	Article	IF	Citations
73	Relaxation fluctuations about an equilibrium in quantum chaos. Physical Review E, 1997, 56, 2540-2547.	0.8	1
74	Modular multiplication operator and quantized baker's maps. Physical Review A, 2007, 76, .	1.0	1
75	Barnett-Pegg formalism of angle operators, revivals, and flux lines. Physical Review A, 2000, 62, .	1.0	0
76	Borromean triangles and prime knots in an ancient temple. Resonance, 2007, 12, 41-47.	0.2	0