Biagio Lucini

List of Publications by Citations

87	2,526	24	49
papers	citations	h-index	g-index
118	3,057	4.5	5.34
ext. papers	ext. citations	avg, IF	L-index

#	Paper	IF	Citations
87	Artificial Intelligence (AI): Multidisciplinary perspectives on emerging challenges, opportunities, and agenda for research, practice and policy. *International Journal of Information Management*, **2021**, 57, 101994	16.4	352
86	gauge theories at large. *Physics Reports*, **2013**, 526, 93-163	27.7	161
85	The high temperature phase transition in SU(N) gauge theories. *Journal of High Energy Physics*, **2004**, 2004, 061-061	5.4	159
84	SU(N) gauge theories in four dimensions: exploring the approach to N = □*Journal of High Energy Physics*, **2001**, 2001, 050-050	5.4	147
83	Properties of the deconfining phase transition in SU(N) gauge theories. *Journal of High Energy Physics*, **2005**, 2005, 033-033	5.4	144
82	Glueballs and k-strings in SU(N) gauge theories: calculations with improved operators. *Journal of High Energy Physics*, **2004**, 2004, 012-012	5.4	123
81	Towards the glueball spectrum from unquenched lattice QCD. *Journal of High Energy Physics*, **2012**, 2012, 1	5.4	95
80	Evidence for diquarks in lattice QCD. *Physical Review Letters*, **2006**, 97, 222002	7.4	82
79	Conformal versus confining scenario in SU(2) with adjoint fermions. *Physical Review D*, **2009**, 80,	4.9	77
78	The deconfinement transition in SU(N) gauge theories. *Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics*, **2002**, 545, 197-206	4.2	73
77	Infrared dynamics of minimal walking technicolor. *Physical Review D*, **2010**, 82,	4.9	68
76	SU(N) gauge theories in 2+1 dimensions: Further results. *Physical Review D*, **2002**, 66,	4.9	56
75	Glueball masses in the large N limit. *Journal of High Energy Physics*, **2010**, 2010, 1	5.4	55
74	Topology of SU(N) gauge theories at T?0 and T?Tc. *Nuclear Physics B*, **2005**, 715, 461-482	2.8	54
73	Mesons in large-N QCD. *Journal of High Energy Physics*, **2013**, 2013, 1	5.4	48
72	Density of states in gauge theories. *Physical Review Letters*, **2012**, 109, 111601	7.4	47
71	Mesonic spectroscopy of minimal walking technicolor. *Physical Review D*, **2010**, 82,	4.9	45

70	G2gauge theory at finite temperature. *Journal of High Energy Physics*, **2007**, 2007, 100-100	5.4	38
69	Sp(4) gauge theory on the lattice: towards SU(4)/Sp(4) composite Higgs (and beyond). *Journal of High Energy Physics*, **2018**, 2018, 1	5.4	35
68	Improved lattice spectroscopy of minimal walking technicolor. *Physical Review D*, **2011**, 84,	4.9	34
67	Infrared regime of SU(2) with one adjoint Dirac flavor. *Physical Review D*, **2015**, 91,	4.9	31
66	Charged hadrons in local finite-volume QED+QCD with C? boundary conditions. *Journal of High Energy Physics*, **2016**, 2016, 1	5.4	27
65	Introductory lectures to large-N QCD phenomenology and lattice results. *Progress in Particle and Nuclear Physics*, **2014**, 75, 1-40	10.6	24
64	The phase diagram of the three dimensional Thirring model. *Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics*, **1999**, 461, 263-269	4.2	24
63	Density of states approach to dense quantum systems. *Physical Review D*, **2014**, 90,	4.9	23
62	Quenched mesonic spectrum at largeN. *Journal of High Energy Physics*, **2008**, 2008, 062-062	5.4	23
61	Sp (4) gauge theories on the lattice: Nf = 2 dynamical fundamental fermions. *Journal of High Energy Physics*, **2019**, 2019, 1	5.4	23
60	Numerical portrait of a relativistic thin film BCS superfluid. *Physical Review D*, **2002**, 65,	4.9	20
59	Machine Learning as a universal tool for quantitative investigations of phase transitions. *Nuclear Physics B*, **2019**, 944, 114639	2.8	19
58	Baryon currents in QCD with compact dimensions. *Physical Review D*, **2007**, 75,	4.9	19
57	The running of the coupling in SU(N) pure gauge theories. *Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics*, **2008**, 668, 226-232	4.2	18
56	Universality ofk-string tensions from holography and the lattice. *Journal of High Energy Physics*, **2006**, 2006, 036-036	5.4	17
55	Understanding and responding to COVID-19 in Wales: protocol for a privacy-protecting data platform for enhanced epidemiology and evaluation of interventions. *BMJ Open*, **2020**, 10, e043010	3	17
54	Vortices and confinement in hot and cold D = 2+1 gauge theories. *Journal of High Energy Physics*, **2000**, 2000, 040-040	5.4	16
53	An efficient algorithm for numerical computations of continuous densities of states. *European Physical Journal C*, **2016**, 76, 1	4.2	16

52	Large volumes and spectroscopy of walking theories. *Physical Review D*, **2016**, 93,	4.9	15
51	Sp(4) gauge theories on the lattice: Quenched fundamental and antisymmetric fermions. *Physical Review D*, **2020**, 101,	4.9	14
50	Symmetry restoration at high-temperature in two-color and two-flavor lattice gauge theories. *Journal of High Energy Physics*, **2017**, 2017, 1	5.4	14
49	Critical behavior in the dense planar Nambu--Jona-Lasinio model. *Physical Review Letters*, **2001**, 86, 753-6	7.4	13
48	Large mass hierarchies from strongly-coupled dynamics. *Journal of High Energy Physics*, **2016**, 2016, 1	5.4	13
47	Strongly interacting dynamics beyond the standard model on a space-time lattice. *Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences*, **2010**, 368, 3657-70	3	12
46	Extending machine learning classification capabilities with histogram reweighting. *Physical Review E*, **2020**, 102, 033303	2.4	12
45	Is confinement a phase of broken dual gauge symmetry?. *Physical Review D*, **2008**, 78,	4.9	11
44	Lattice study of planar equivalence: The quark condensate. *Physical Review D*, **2008**, 78,	4.9	11
43	Magnetic monopole plasma phase in (2+1)d compact quantum electrodynamics with fermionic matter. *Physical Review D*, **2011**, 84,	4.9	10
42	Mapping distinct phase transitions to a neural network. *Physical Review E*, **2020**, 102, 053306	2.4	9
41	Higgs compositeness in Sp(2N) gauge theories Determining the low-energy constants with lattice calculations. *EPJ Web of Conferences*, **2018**, 175, 08011	0.3	9
40	k-string tensions and the 1/N expansion. *Physical Review D*, **2011**, 83,	4.9	7
39	Higgs compositeness in Sp(2N) gauge theories Resymplecticisation, scale setting and topology. *EPJ Web of Conferences*, **2018**, 175, 08012	0.3	7
38	Gauge invariant determination of charged hadron masses. *Journal of High Energy Physics*, **2018**, 2018, 1	5.4	7
37	Topology of Minimal Walking Technicolor. *European Physical Journal C*, **2013**, 73, 1	4.2	6
36	Infrared conformality and bulk critical points: SU(2) with heavy adjoint quarks. *Journal of High Energy Physics*, **2013**, 2013, 1	5.4	6
35	Casimir scaling and Yang Mills glueballs. *Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics*, **2017**, 775, 89-93	4.2	6

34	Color dependence of tensor and scalar glueball masses in Yang-Mills theories. *Physical Review D*, **2020**, 102,	4.9	6
33	Adding machine learning within Hamiltonians: Renormalization group transformations, symmetry breaking and restoration. *Physical Review Research*, **2021**, 3,	3.9	6
32	Higgs compositeness in Sp(2N) gauge theories The pure gauge model. *EPJ Web of Conferences*, **2018**, 175, 08013	0.3	6
31	Numerical results for gauge theories near the conformal window. *Journal of Physics: Conference Series*, **2015**, 631, 012065	0.3	5
30	Confinement, screening and the center onS3S1. *Journal of High Energy Physics*, **2008**, 2008, 075-075	5.4	5
29	Disease control across urban-rural gradients. *Journal of the Royal Society Interface*, **2020**, 17, 20200775	4.1	5
28	Quantum field-theoretic machine learning. *Physical Review D*, **2021**, 103,	4.9	5
27	Discrete symmetry breaking and baryon currents in U(N) and SU(N) gauge theories. *Physical Review D*, **2009**, 79,	4.9	4
26	The Large N Limit from the Lattice. *Few-Body Systems*, **2005**, 36, 161-166	1.6	4
25	Progress in the lattice simulations of Sp(2N) gauge theories **2019**,		4
24	Simulations of QCD and QED with C* boundary conditions. *EPJ Web of Conferences*, **2018**, 175, 09001	0.3	4
23	Recent results from SU(2) with one adjoint Dirac fermion. *International Journal of Modern Physics A*, **2017**, 32, 1747006	1.2	3
22	A cluster algorithm for lattice gauge theories. *Computer Physics Communications*, **2005**, 169, 370-373	4.2	3
21	Bbb Z2 monopoles in D = 2+1 SU(2) lattice gauge theory. *Journal of High Energy Physics*, **2000**, 2000, 043-043	5.4	3
20	Ergodic sampling of the topological charge using the density of states. *European Physical Journal C*, **2021**, 81, 1	4.2	3
19	The density of states approach for the simulation of finite density quantum field theories. *Journal of Physics: Conference Series*, **2015**, 631, 012063	0.3	2
18	A numerical investigation of orientifold planar equivalence for quenched mesons. *Physical Review D*, **2010**, 82,	4.9	2
17	A finite temperature investigation of the Georgi-Glashow model in 3D. *Nuclear Physics, Section B, Proceedings Supplements*, **2005**, 140, 814-816		2

16	Meson spectrum of Sp(4) lattice gauge theory with two fundamental Dirac fermions **2019**,		2
15	Sp(2N) Yang-Mills towards large N. **2020**,		2
14	Free energy of the self-interacting relativistic lattice Bose gas at finite density. *Physical Review D*, **2020**, 101,	4.9	2
13	Glueballs and strings in Sp(2N) Yang-Mills theories. *Physical Review D*, **2021**, 103,	4.9	2
12	Ergodicity of the LLR method for the Density of States. *EPJ Web of Conferences*, **2018**, 175, 02005	0.3	2
11	Numerical method for determining the interface free energy. *Physical Review E*, **2011**, 84, 056702	2.4	1
10	IMPLEMENTATION OF C? BOUNDARY CONDITIONS IN THE HYBRID MONTE CARLO ALGORITHM. *International Journal of Modern Physics C*, **2000**, 11, 637-653	1.1	1
9	Investigating the conformal behavior of SU(2) with one adjoint Dirac flavor. *Physical Review D*, **2021**, 104,	4.9	1
8	Non-perturbative results for large-N gauge theories. *Nuclear and Particle Physics Proceedings*, **2016**, 273-275, 1657-1663	0.4	1
7	Guest Editor⬚ Preface to the Special Issue on lattice gauge theories beyond QCD. *International Journal of Modern Physics A*, **2016**, 31, 1602002	1.2	1
6	Inverse Renormalization Group in Quantum Field Theory.. *Physical Review Letters*, **2022**, 128, 081603	7.4	1
5	Quantitative analysis of phase transitions in two-dimensional XY models using persistent homology.. *Physical Review E*, **2022**, 105, 024121	2.4	1
4	Sp(4) gauge theories and beyond the standard model physics. *EPJ Web of Conferences*, **2022**, 258, 08003	0.3	0
3	Chiral transition and deconfinement in Nf = 2 QCD. *Nuclear Physics, Section B, Proceedings Supplements*, **2005**, 140, 632-634		
2	Quantum field theories, Markov random fields and machine learning. *Journal of Physics: Conference Series*, **2022**, 2207, 012056	0.3	
1	Efficient computations of continuous action densities of states for lattice models. *Journal of Physics: Conference Series*, **2022**, 2207, 012052	0.3	