Luca Peliti

List of Publications by Year
in descending order

92	5,778	116194 36	81351 76
papers	citations	h-index	g-index

95	95	95	3108
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Learning and Organization of Memory for Evolving Patterns. Physical Review X, 2022, 12, .	2.8	1
2	A review of: Massimo Cencini, Andrea Puglisi, Davide Vergni, Angelo Vulpiani: A Random Walk in Physics: Beyond Black Holes and Time-Travels. Journal of Statistical Physics, 2021, 185, 1.	0.5	0
3	The generality of transient compartmentalization and its associated error thresholds. Journal of Theoretical Biology, 2020, 487, 110110.	0.8	9
4	Survival of Self-Replicating Molecules under Transient Compartmentalization with Natural Selection. Life, 2019, 9, 78.	1.1	6
5	Selection Dynamics in Transient Compartmentalization. Physical Review Letters, 2018, 120, 158101.	2.9	21
6	JSP Special Issue on Statistical Theory of Biological Evolution. Journal of Statistical Physics, 2018, 172, 1-2.	0.5	1
7	Einstein's Approach to Statistical Mechanics: The 1902–04 Papers. Journal of Statistical Physics, 2017, 167, 1020-1038.	0.5	3
8	PROBABLY/POSSIBLY?. , 2017, , .		1
9	JSP Special Issue on Information Processing in Living Systems. Journal of Statistical Physics, 2016, 162, 1085-1087.	0.5	0
10	Elementary derivation of the expressions of momentum and energy in special relativity. Revista Brasileira De Ensino De Fisica, 2016, 38, .	0.2	0
11	Thermodynamics of accuracy in kinetic proofreading: dissipation and efficiency trade-offs. Journal of Statistical Mechanics: Theory and Experiment, 2015, 2015, P06001.	0.9	32
12	Studies in Composing Hydrogen Atom Wavefunctions. Leonardo, 2015, 48, 158-166.	0.2	4
13	Heat Release by Controlled Continuous-Time Markov Jump Processes. Journal of Statistical Physics, 2013, 150, 181-203.	0.5	15
14	Entropy production in quantum Brownian motion. Journal of Statistical Mechanics: Theory and Experiment, 2013, 2013, P04005.	0.9	37
15	The Rate of Beneficial Mutations Surfing on the Wave of a Range Expansion. PLoS Computational Biology, 2012, 8, e1002447.	1.5	55
16	Efficiency of molecular machines with continuous phase space. Europhysics Letters, 2012, 97, 60005.	0.7	44
17	Comment on "Evolutionary dynamics of RNA-like replicator systems: A bioinformatic approach to the origin of life" by Nobuto Takeuchi and Paulien Hogeweg. Physics of Life Reviews, 2012, 9, 268-269.	1.5	1
18	Membrane stress tensor in the presence of lipid density and composition inhomogeneities. European Physical Journal E, 2011, 34, 53.	0.7	14

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19	Modeling microevolution in a changing environment: the evolving quasispecies and the diluted champion process. Journal of Statistical Mechanics: Theory and Experiment, 2011, 2011, P08022.	0.9	7
20	Work distribution in manipulated single biomolecules. Physical Biology, 2009, 6, 025011.	0.8	5
21	Comment on â€œFailure of the Work-Hamiltonian Connection for Free-Energy Calculationsâ€• Physical Review Letters, 2008, 101, 098903; author reply 098904.	2.9	24
22	On the workâ€"Hamiltonian connection in manipulated systems. Journal of Statistical Mechanics: Theory and Experiment, 2008, 2008, P05002.	0.9	36
23	Population size effects in evolutionary dynamics on neutral networks and toy landscapes. Journal of Statistical Mechanics: Theory and Experiment, 2007, 2007, P05011-P05011.	0.9	6
24	Work and heat probability distribution of an optically driven Brownian particle: Theory and experiments. Physical Review E, 2007, 76, 050101.	0.8	108
25	The distribution function of entropy flow in stochastic systems. Journal of Statistical Mechanics: Theory and Experiment, 2007, 2007, L02001-L02001.	0.9	23
26	On the equipartition of kinetic energy in an ideal gas mixture. European Journal of Physics, 2007, 28, 249-254.	0.3	0
27	Work and heat probability distributions in out-of-equilibrium systems. Comptes Rendus Physique, 2007, 8, 556-566.	0.3	9
28	Evaluation of free energy landscapes from manipulation experiments. Journal of Statistical Mechanics: Theory and Experiment, 2006, 2006, P03005-P03005.	0.9	13
29	Direct Evaluation of Large-Deviation Functions. Physical Review Letters, 2006, 96, 120603.	2.9	250
30	Fluctuation relations for a driven Brownian particle. Physical Review E, 2006, 74, 026106.	0.8	56
31	Opinion dynamics in a three-choice system. European Physical Journal B, 2005, 45, 569-575.	0.6	57
32	Work distribution and path integrals in general mean-field systems. Europhysics Letters, 2005, 70, 740-746.	0.7	43
33	A minimal stochastic model for influenza evolution. Journal of Statistical Mechanics: Theory and Experiment, 2005, 2005, P07008-P07008.	0.9	36
34	Work probability distribution in single-molecule experiments. Europhysics Letters, 2005, 69, 643-649.	0.7	32
35	Work-probability distribution in systems driven out of equilibrium. Physical Review E, 2005, 72, 046114.	0.8	65
36	Evolutionary games and quasispecies. Europhysics Letters, 2003, 62, 446-451.	0.7	5

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37	Quasispecies evolution in general mean-field landscapes. Europhysics Letters, 2002, 57, 745-751.	0.7	38
38	Denaturation and unzipping of DNA: statistical mechanics of interacting loops. Physica A: Statistical Mechanics and Its Applications, 2002, 306, 39-50.	1.2	16
39	Detachment of molecular motors under tangential loading. Europhysics Letters, 2001, 56, 603-609.	0.7	34
40	Effective-Area Elasticity and Tension of Micromanipulated Membranes. Physical Review Letters, 2001, 86, 4970-4973.	2.9	64
41	Universal and nonuniversal properties of a lattice gas model with kinetic constraints. Physics Letters, Section A: General, Atomic and Solid State Physics, 2000, 269, 154-157.	0.9	5
42	Comment on "Theory for the bending anisotropy of lipid membranes and tubule formation" Physical Review E, 2000, 63, 013901.	0.8	4
43	Why is the DNA Denaturation Transition First Order?. Physical Review Letters, 2000, 85, 4988-4991.	2.9	235
44	Amorphization and anisotropy effects on a ferromagnetic bilayer system. Physica B: Condensed Matter, 1999, 269, 34-42.	1.3	8
45	A simple system with two temperatures. Physics Letters, Section A: General, Atomic and Solid State Physics, 1999, 261, 94-97.	0.9	21
46	Effective field approach to the Ising film in a transverse field. Physica A: Statistical Mechanics and Its Applications, 1999, 262, 505-517.	1.2	15
47	Title is missing!. Journal of Statistical Physics, 1999, 97, 459-488.	0.5	98
48	Measuring Equilibrium Properties in Aging Systems. Physical Review Letters, 1998, 81, 1758-1761.	2.9	184
49	Paired defects of nematic surfactant bilayers. Physical Review E, 1998, 58, R6919-R6922.	0.8	3
50	Dynamics of particles and manifolds in random force fields. Europhysics Letters, 1997, 39, 111-116.	0.7	9
51	Aging in lattice-gas models with constrained dynamics. Europhysics Letters, 1997, 39, 365-370.	0.7	57
52	Error threshold in simple landscapes. Journal of Physics A, 1997, 30, 4481-4487.	1.6	79
53	Glassy behaviour in disordered systems with nonrelaxational dynamics. Physical Review Letters, 1997, 78, 350-353.	2.9	68
54	Energy flow, partial equilibration, and effective temperatures in systems with slow dynamics. Physical Review E, 1997, 55, 3898-3914.	0.8	709

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55	A COMPARTMENTAL MODEL OF ENDOSYMBIOSIS. Journal of Biological Systems, 1995, 03, 867-888.	0.5	1
56	Geographic speciation in the Derrida-Higgs model of species formation. Journal of Physics A, 1994, 27, 7079-7086.	1.6	39
57	Asymmetric pumping of particles. Physical Review Letters, 1994, 72, 2652-2655.	2.9	408
58	Towards a statistical mechanics of biological evolution?. Physics World, 1994, 7, 24-25.	0.0	0
59	Polymers in a Random Environment and Molecular Quasi-Species. NATO ASI Series Series B: Physics, 1994, , 129-132.	0.2	0
60	An evolutionary version of the random energy model. Journal of Physics A, 1993, 26, L1195-L1199.	1.6	33
61	Harmonic properties of hard-sphere crystals: a one-dimensional study. Journal of Physics A, 1993, 26, 4819-4825.	1.6	8
62	Ajdari, Prost, and Peliti reply. Physical Review Letters, 1992, 69, 861-861.	2.9	0
63	Evolution in a flat fitness landscape. Bulletin of Mathematical Biology, 1991, 53, 355-382.	0.9	118
64	Evolution in a flat fitness landscape. Bulletin of Mathematical Biology, 1991, 53, 355-382.	0.9	42
65	A statistical model of an evolving population with sexual reproduction. Journal of Physics A, 1991, 24, L705-L709.	1.6	28
66	Fluctuation-induced long-range forces in liquid crystals. Physical Review Letters, 1991, 66, 1481-1484.	2.9	131
67	A spin-glass model of chemical evolution. Physica A: Statistical Mechanics and Its Applications, 1990, 168, 619-625.	1.2	3
68	Crumpling and Buckling Transitions in Polymerized Membranes. Physical Review Letters, 1988, 61, 2949-2952.	2.9	73
69	On the possible non-universality of critical behaviour in micellar solutions. Journal of Physics A, 1987, 20, 1289-1292.	1.6	1
70	Random walks with memory. Rivista Del Nuovo Cimento, 1987, 10, 1-33.	2.0	49
71	Feasibility of model ecosystems. Nuovo Cimento Della Societa Italiana Di Fisica D - Condensed Matter, Atomic, Molecular and Chemical Physics, Biophysics, 1986, 7, 98-104.	0.4	0
72	Renormalisation of fluctuation effects in the A+A to A reaction. Journal of Physics A, 1986, 19, L365-L367.	1.6	184

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73	Intermittency as multifractality in history space. Journal of Physics A, 1986, 19, L991-L996.	1.6	32
74	Title is missing!. Journal of Physics A, 1986, 19, L429-L432.	1.6	207
75	Renormalisation of the long-range 'true' self-avoiding walk. Journal of Physics A, 1985, 18, L709-L712.	1.6	10
76	Migdal-Kadanoff approach to superfluid film formation near a wall in3He-4He mixtures. Journal of Physics A, 1985, 18, L543-L547.	1.6	7
77	Flory Approach to the Enhancement Factor in Polymer Statistics. Physical Review Letters, 1985, 55, 1479-1481.	2.9	13
78	Effects of Thermal Fluctuations on Systems with Small Surface Tension. Physical Review Letters, 1985, 54, 1690-1693.	2.9	494
79	Possible observation of surface and special transitions in mixtures. Physical Review B, 1984, 29, 1253-1257.	1.1	14
80	Fractal dimensions and 1/f noise. Lettere Al Nuovo Cimento Rivista Internazionale Della SocietÃ Italiana Di Fisica, 1983, 36, 471-474.	0.4	2
81	Asymptotic behavior of the "true" self-avoiding walk. Physical Review B, 1983, 27, 1635-1645.	1.1	222
82	Strong adsorption in critical binary mixtures. Journal of Physics C: Solid State Physics, 1983, 16, 2635-2640.	1.5	41
83	Renormalisation of the 'true' self-avoiding walk. Journal of Physics A, 1983, 16, L147-L151.	1.6	59
84	Magnetisation profile in the presence of a surface magnetic field. Journal of Physics C: Solid State Physics, 1982, 15, L403-L407.	1.5	29
85	On dangerous irrelevant operators. Annals of Physics, 1982, 140, 207-231.	1.0	36
86	Field-theory renormalization and critical dynamics aboveTc: Helium, antiferromagnets, and liquid-gas systems. Physical Review B, 1978, 18, 353-376.	1.1	521
87	Cross-over behavior of the nonlinear Ïƒ-model with quadratically broken symmetry. Annals of Physics, 1978, 116, 1-34.	1.0	26
88	Critical dynamics near dimension two for time-dependent Ginzburg-Landau models. Physical Review B, 1977, 15, 4313-4317.	1.1	24
89	Deviations from Dynamic Scaling in Helium and Antiferromagnets. Physical Review Letters, 1977, 38, 505-508.	2.9	75
90	Critical indices for the spherical model from conformal covariant self consistency conditions. Physics Letters, Section A: General, Atomic and Solid State Physics, 1972, 41, 331-332.	0.9	8

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91	Theoretical predictions for critical exponents at the λ-point of bose liquids. Lettere Al Nuovo Cimento Rivista Internazionale Della Società Italiana Di Fisica, 1971, 2, 878-880.	0.4	115
92	Calculation of critical indices. Lettere Al Nuovo Cimento Rivista Internazionale Della Società Italiana Di Fisica, 1971, 2, 627-628.	0.4	58