Robert D Pisarski

List of Publications by Year
in descending order

93 papers	10,620 citations	76326 40 h-index	53230 85 g-index
97 all docs	97 docs citations	97 times ranked	2780 citing authors

#	Article	IF	Citations
1	QCD and instantons at finite temperature. Reviews of Modern Physics, 1981, 53, 43-80.	45.6	1,824
2	Soft amplitudes in hot gauge theories: A general analysis. Nuclear Physics B, 1990, 337, 569-634.	2.5	1,049
3	Remarks on the chiral phase transition in chromodynamics. Physical Review D, 1984, 29, 338-341.	4.7	980
4	Phases of dense quarks at large. Nuclear Physics A, 2007, 796, 83-100.	1.5	548
5	High-temperature Yang-Mills theories and three-dimensional quantum chromodynamics. Physical Review D, 1981, 23, 2305-2317.	4.7	496
6	Scattering amplitudes in hot gauge theories. Physical Review Letters, 1989, 63, 1129-1132.	7.8	432
7	Chiral-symmetry breaking in three-dimensional electrodynamics. Physical Review D, 1984, 29, 2423-2426.	4.7	338
8	Deducing hard thermal loops from Ward identities. Nuclear Physics B, 1990, 339, 310-324.	2.5	322
9	Possibility of Spontaneous Parity Violation in Hot QCD. Physical Review Letters, 1998, 81, 512-515.	7.8	310
10	Simple effective Lagrangian for hard thermal loops. Physical Review D, 1992, 45, R1827-R1830.	4.7	307
11	Quark-gluon plasma as a condensate of Z(3) Wilson lines. Physical Review D, 2000, 62, .	4.7	261
12	Resummation and gauge invariance of the gluon damping rate in hot QCD. Physical Review Letters, 1990, 64, 1338-1341.	7.8	240
13	Production of soft dileptons in the quark-gluon plasma. Physical Review Letters, 1990, 64, 2242-2245.	7.8	240
14	Small, dense quark stars from perturbative QCD. Physical Review D, 2001, 63, .	4.7	235
15	Calculation of the gluon damping rate in hot QCD. Physical Review D, 1990, 42, 2156-2160.	4.7	201
16	Quarkyonic chiral spirals. Nuclear Physics A, 2010, 843, 37-58.	1.5	183
17	Deconfining phase transition as a matrix model of renormalized Polyakov loops. Physical Review D, 2004, 70, .	4.7	143
18	Event-by-event fluctuations from decay of a Polyakov loop condensate. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2001, 504, 282-290.	4.1	130

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19	Dense quarks, and the fermion sign problem, in aSU(N)matrix model. Physical Review D, 2005, 72, .	4.7	118
20	Calculation of the quark damping rate in hot QCD. Physical Review D, 1992, 46, 1829-1834.	4.7	110
21	Interface tension in an SU(N) gauge theory at high temperature. Physical Review Letters, 1991, 66, 998-1000.	7.8	101
22	Z(N) interface tension in a hot SU(N) gauge theory. Nuclear Physics B, 1992, 383, 497-524.	2.5	100
23	Effective theory of Wilson lines and deconfinement. Physical Review D, 2006, 74, .	4.7	100
24	Degrees of freedom and the deconfining phase transition. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2002, 525, 95-100.	4.1	98
25	A First Order Transition and Parity Violation in a Color Superconductor. Physical Review Letters, 1999, 83, 37-40.	7.8	90
26	Two-point functions forSU(3)Polyakov loops nearTc. Physical Review D, 2002, 66, .	4.7	90
27	Interweaving chiral spirals. Nuclear Physics A, 2012, 875, 94-138.	1.5	85
28	Renormalized fermion propagator in hot gauge theories. Nuclear Physics A, 1989, 498, 423-427.	1.5	79
29	Cold, dense nuclear matter in a SU(2) parity doublet model. Physical Review C, 2007, 75, .	2.9	78
30	Production and Elliptic Flow of Dileptons and Photons in a Matrix Model of the Quark-Gluon Plasma. Physical Review Letters, 2015, 114, 072301.	7.8	77
31	Effective matrix model for deconfinement in pure gauge theories. Physical Review D, 2012, 86, .	4.7	67
32	Where does the Ï•go? Chirally symmetric vector mesons in the quark-gluon plasma. Physical Review D, 1995, 52, R3773-R3776.	4.7	62
33	Suppression of the shear viscosity in a â€œsemiâ€•quark-gluon plasma. Physical Review D, 2008, 78, .	4.7	62
34	Deconfinement in matrix models about the Gross-Witten point. Physical Review D, 2005, 71, .	4.7	56
35	How wide is the transition to deconfinement?. Physical Review D, 2011, 83, .	4.7	56
36	How to compute scattering amplitudes in hot gauge theories. Physica A: Statistical Mechanics and Its Applications, 1989, 158, 246-250.	2.6	53

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37	Covering the Fermi surface with patches of quarkyonic chiral spirals. Physical Review D, 2010, 82, .	4.7	53
38	Finite-temperature QCD at largeN. Physical Review D, 1984, 29, 1222-1227.	4.7	45
39	Small shear viscosity in the semiquark gluon plasma. Physical Review D, 2010, 81, .	4.7	44
40	Potential for the phase of the Wilson line at nonzero quark density. Physical Review D, 2000, 61, .	4.7	41
41	Partition function for the eigenvalues of the Wilson line. Nuclear Physics B, 1993, 402, 657-668.	2.5	40
42	Real-time relaxation and kinetics in hot scalar QED: Landau damping. Physical Review D, 1998, 58, .	4.7	37
43	Critical endpoint for deconfinement in matrix and other effective models. Physical Review D, 2012, 85, .	4.7	37
44	Chiral matrix model of the semi-QGP in QCD. Physical Review D, 2016, 94, .	4.7	34
45	Dilepton and photon production in the presence of a nontrivial Polyakov loop. Journal of High Energy Physics, 2015, 2015, 1.	4.7	33
46	Anomalous Mesonic Interactions near a Chiral Phase Transition. Physical Review Letters, 1996, 76, 3084-3087.	7.8	31
47	Hard thermal loops, to quadratic order, in the background of a spatial â€™t Hooft loop. Physical Review D, 2009, 80, .	4.7	31
48	Universality of Plasmon Excitations in Dirac Semimetals. Physical Review Letters, 2015, 115, 236402.	7.8	31
49	How the axial anomaly controls flavor mixing among mesons. Physical Review D, 2018, 97, .	4.7	29
50	Nonequilibrium evolution of a â€œtsunami,â€•a high multiplicity initial quantum state: Dynamical symmetry breaking. Physical Review D, 1998, 57, 3653-3669.	4.7	24
51	Fluctuations in cool quark matter and the phase diagram of quantum chromodynamics. Physical Review D, 2019, 99, .	4.7	23
52	Zero point energy of renormalized Wilson loops. Physical Review D, 2009, 80, .	4.7	22
53	Collisional energy loss above the critical temperature in QCD. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2014, 730, 236-242.	4.1	22
54	How transverse thermal fluctuations disorder a condensate of chiral spirals into a quantum spin liquid. Physical Review D, 2020, 102, .	4.7	21

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55	Critical line for H superfluidity in strange quark matter?. Physical Review C, 2000, 62, .	2.9	20
56	Phase of the Wilson Line at High Temperature in the Standard Model. Physical Review Letters, 1994, 73, 1754-1757.	7.8	19
57	Gross-Witten-Wadia transition in a matrix model of deconfinement. Physical Review D, 2012, 86, .	4.7	19
58	Roberge-Weiss transition and â€™t Hooft loops. Physical Review D, 2013, 87, .	4.7	19
59	Volume dependence of baryon number cumulants and their ratios. Physical Review D, 2017, 95, .	4.7	19
60	Remarks on nuclear matter: How an ω_0 condensate can spike the speed of sound, and a model of $Z(3)$ baryons. Physical Review D, 2021, 103, .	4.7	19
61	Signatures of Moat Regimes in Heavy-Ion Collisions. Physical Review Letters, 2021, 127, 152302.	7.8	17
62	β-functions for a SU(2) matrix model in 2+1 dimensions. Physical Review D, 2006, 74, .	4.7	15
63	The Lifshitz Regime and its Experimental Signals. Nuclear Physics A, 2021, 1005, 121910.	1.5	14
64	How tetraquarks can generate a second chiral phase transition. Physical Review D, 2016, 94, .	4.7	12
65	Production of heavy sterile neutrinos from vector boson decay at electroweak temperatures. Physical Review D, 2017, 95, .	4.7	12
66	Multi-instanton contributions to anomalous quark interactions. Physical Review D, 2020, 101, .	4.7	12
67	Zero interface tensions at the deconfining phase transition for a matrix model of a SU(∞) gauge theory. Physical Review D, 2013, 87, .	4.7	10
68	Emergent QCD Kondo effect in two-flavor color superconducting phase. Physical Review D, 2019, 99, .	4.7	10
69	A Pedagogical Introduction to the Lifshitz Regime. Universe, 2019, 5, 48.	2.5	9
70	Free energy of a holonomous plasma. Physical Review D, 2020, 101, .	4.7	9
71	Test of the Polyakov Loop Model. Nuclear Physics, Section B, Proceedings Supplements, 2002, 106-107, 483-485.	0.4	8
72	Finite-temperature phase transitions of third and higher order in gauge theories at large N. Physical Review D, 2018, 97, .	4.7	8

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73	Quasi-particle and matrix models of the semi Quark Gluon Plasma. Nuclear Physics A, 2013, 904-905, 973c-976c.	1.5	6
74	Matrix model for deconfinement in aSU(Nc)gauge theory in2+1dimensions. Physical Review D, 2014, 89, .	4.7	6
75	Conundrum for the free energy of a holonomous gluonic plasma at cubic order. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2020, 803, 135336.	4.1	6
76	Medley in finite-temperature field theory. Canadian Journal of Physics, 1993, 71, 280-284.	1.1	5
77	Matrix model for deconfinement in aSU(2)gauge theory in2+1dimensions. Physical Review D, 2013, 88, .	4.7	5
78	When cold, dense quarks in $1+1$ and $3+1$ dimensions are not a Fermi liquid. Physical Review D, 2022, 105, .	4.7	4
79	Effective lagrangian at high temperature. Nuclear Physics A, 1992, 544, 527-530.	1.5	3
80	Towards a theory of the semi-Quark Gluon Plasma. Nuclear Physics, Section B, Proceedings Supplements, 2009, 195, 157-198.	0.4	3
81	Notes on the Deconfining Phase Transition. , 2002, , 353-384.		3
82	GROSSâ€"WITTEN POINT AND DECONFINEMENT. International Journal of Modern Physics A, 2005, 20, 4469-4474.	1.5	1
83	Why Cold, Dense Quark Matter could be â€œQuarkyonicâ€. Nuclear Physics, Section B, Proceedings Supplements, 2009, 195, 199-216.	0.4	1
84	WHY THE QUARK-GLUON PLASMA ISN'T A PLASMA. , 2001, , .		1
85	Roman Jackiw and Chernâ€"Simons theories. Notices of the International Congress of Chinese Mathematicians, 2021, 9, 47-56.	0.0	1
86	Suppression of the Shear Viscosity as QCD Cools into a Confining Phase. Progress of Theoretical Physics Supplement, 2008, 174, 228-232.	0.1	0
87	Quarkyonic Chiral Spirals. , 2010, , .		0
88	Chiral matrix model for the phase transition in QCD. Nuclear Physics A, 2016, 956, 673-676.	1.5	0
89	REVIEW OF THE CHIRAL PHASE TRANSITION. , 2003, , .		0
90	THEORY VERSUS EXPERIMENT IN HIGH ENERGY NUCLEUS COLLISIONS. , 2003, , .		0

#	ARTICLE	IF	CITATIONS
91	IN A HOT, CHIRALLY SYMMETRIC PHASE, Ï€0 DOESN'T GO INTO 2Î³, BUT Ï€0Ïƒ DOES. , 1996, , 41-47.		0
92	Nuclear Matter in 1 + 1 Dimensions. Universe, 2021, 7, 411.	2.5	0
93	Wilson loops in the Hamiltonian formalism. Physical Review D, 2022, 105, .	4.7	0