

Simon Hands

List of Publications by Year in descending order

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112
papers

2,910
citations

185998

28
h-index

174990

52
g-index

113
all docs

113
docs citations

113
times ranked

1074
citing authors

#	ARTICLE	IF	CITATIONS
1	Large- $\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" id="d1e2875" altimg="si671.svg" \rangle \langle \text{mml:mi} \rangle N \langle \text{mml:mi} \rangle \langle \text{mml:math} \rangle$ Chern insulators: Lattice field theory and quantum simulation approaches to correlation effects in the quantum anomalous Hall effect. <i>Annals of Physics</i> , 2022, 439, 168763.	1.0	9
2	Properties of the QCD thermal transition with $\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" \rangle \langle \text{mml:msub} \rangle \langle \text{mml:mi} \rangle N \langle \text{mml:mi} \rangle \langle \text{mml:mi} \rangle f \langle \text{mml:mi} \rangle \langle \text{mml:msub} \rangle \langle \text{mml:mo} \rangle = \langle \text{mml:mo} \rangle \langle \text{mml:m} \rangle 2 \langle \text{mml:m} \rangle \langle \text{mml:mi} \rangle \langle \text{mml:math} \rangle$ flavors of Wilson quark. <i>Physical Review D</i> , 2022, 105, .	1.6	1
3	Cold atoms meet lattice gauge theory. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2022, 380, 20210064.	1.6	72
4	Lattice QCD at nonzero temperature and density. <i>Journal of Physics: Conference Series</i> , 2022, 2207, 012055.	0.3	0
5	Large-S and Tensor-Network Methods for Strongly-Interacting Topological Insulators. <i>Symmetry</i> , 2022, 14, 799.	1.1	3
6	The Planar Thirring Model with Kähler-Dirac Fermions. <i>Symmetry</i> , 2021, 13, 1523.	1.1	6
7	Critical behavior in the single flavor Thirring model in $\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:m} \rangle 2 \langle \text{mml:m} \rangle \langle \text{mml:mo} \rangle + \langle \text{mml:mo} \rangle \langle \text{mml:m} \rangle 1 \langle \text{mml:m} \rangle \langle \text{mml:mi} \rangle \langle \text{mml:mathvariant="normal" \rangle D \langle \text{mml:mi} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:math} \rangle$. <i>Physical Review D</i> , 2020, 102, .	1.6	11
8	Dense two-color QCD towards continuum and chiral limits. <i>Physical Review D</i> , 2020, 101, .	1.6	28
9	Hyperons in Thermal QCD from the Lattice. <i>Springer Proceedings in Physics</i> , 2020, , 29-35.	0.1	0
10	Critical flavor number in the $\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:m} \rangle 2 \langle \text{mml:m} \rangle \langle \text{mml:mo} \rangle + \langle \text{mml:mo} \rangle \langle \text{mml:m} \rangle 1 \langle \text{mml:m} \rangle \langle \text{mml:mi} \rangle \langle \text{mml:mathvariant="normal" \rangle D \langle \text{mml:mi} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:math} \rangle$ Thirring model. <i>Physical Review D</i> , 2019, 99, .	1.6	18
11	Joint Contour Net Analysis for Feature Detection in Lattice Quantum Chromodynamics Data. <i>Big Data Research</i> , 2019, 15, 29-42.	2.6	0
12	Spontaneous Symmetry Breaking in the U(2) Planar Thirring Model?. , 2019, , .		1
13	Hadronic spectrum calculations in the quark-gluon plasma. , 2019, , .		0
14	Medium effects and parity doubling of hyperons across the deconfinement phase transition. <i>EPJ Web of Conferences</i> , 2018, 175, 07016.	0.1	3
15	Grossâ€™Neveuâ€™Wilson model and correlated symmetry-protected topological phases. <i>Annals of Physics</i> , 2018, 399, 149-180.	1.0	32
16	Baryons in the plasma: In-medium effects and parity doubling. <i>EPJ Web of Conferences</i> , 2018, 171, 14005.	0.1	10
17	QCDVis: a tool for the visualisation of Quantum Chromodynamics (QCD) data. <i>Computers and Graphics</i> , 2017, 67, 115-126.	1.4	1
18	Light baryons below and above the deconfinement transition: medium effects and parity doubling. <i>Journal of High Energy Physics</i> , 2017, 2017, 1.	1.6	66

#	ARTICLE	IF	CITATIONS
19	QCDVis. , 2017, , .		1
20	Parity doubling of nucleons, Delta and Omega baryons across the deconfinement phase transition. EPJ Web of Conferences, 2017, 137, 07004.	0.1	1
21	Towards critical physics in 2+1d with U(2N)-invariant fermions. Journal of High Energy Physics, 2016, 2016, 1.	1.6	16
22	From domain wall to overlap in 2 + 1 d. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2016, 754, 264-269.	1.5	9
23	Two-color QCD at high density. AIP Conference Proceedings, 2016, , .	0.3	8
24	Quark-gluon plasma phenomenology from anisotropic lattice QCD. AIP Conference Proceedings, 2016, , .	0.3	3
25	Finite Temperature Lattice QCD — Baryons in the Quark-Gluon Plasma. Acta Physica Polonica B, Proceedings Supplement, 2016, 9, 441.	0.0	0
26	Nucleons and parity doubling across the deconfinement transition. Physical Review D, 2015, 92, .	1.6	39
27	Strong interaction effects at a Fermi surface in a model for voltage-biased bilayer graphene. Physical Review B, 2015, 92, .	1.1	1
28	Domain wall fermions for planar physics. Journal of High Energy Physics, 2015, 2015, 1.	1.6	13
29	Hadron wave functions as a probe of a two-color baryonic medium. European Physical Journal A, 2015, 51, 1.	1.0	3
30	Electrical conductivity and charge diffusion in thermal QCD from the lattice. Journal of High Energy Physics, 2015, 2015, 1.	1.6	143
31	Graphene as a Lattice Field Theory. , 2015, , .		1
32	Quark-gluon plasma phenomenology from the lattice. Journal of Physics: Conference Series, 2014, 509, 012015.	0.3	1
33	Towards the phase diagram of dense two-color matter. Physical Review D, 2013, 87, .	1.6	63
34	Electrical Conductivity of the Quark-Gluon Plasma Across the Deconfinement Transition. Physical Review Letters, 2013, 111, 172001.	2.9	173
35	Monte Carlo study of strongly interacting degenerate fermions: A model for voltage-biased bilayer graphene. Physical Review D, 2013, 87, .	1.6	3
36	The Phase Diagram of Two Color QCD. Journal of Physics: Conference Series, 2013, 432, 012020.	0.3	4

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37	Non-relativistic spectrum of two-color QCD at non-zero baryon density. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2012, 711, 199-204.	1.5	12
38	Magnetic monopole plasma phase in $2+1$ dimensional QCD over fermionic matter. Physical Review D, 2011, 84, .	1.1	34
39	Monte Carlo simulation of monolayer graphene at nonzero temperature. Physical Review B, 2011, 84, .	1.1	34
40	Lattice study of dense matter with two colors and four flavors. European Physical Journal A, 2011, 47, 1.	1.0	26
41	Topological fluctuations in dense matter with two colors. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2011, 701, 373-377.	1.5	14
42	QCD with chemical potential in a small hyperspherical box. Journal of High Energy Physics, 2010, 2010, 1.	1.6	34
43	Numerical study of the two color attoworld. Journal of High Energy Physics, 2010, 2010, 1.	1.6	17
44	Longitudinal and transverse meson correlators in the deconfined phase from the lattice. , 2010, , .		1
45	Monte Carlo simulation of the semimetal-insulator phase transition in monolayer graphene. Physical Review B, 2010, 81, .	1.1	91
46	Quarkyonic phase in dense two color matter. Physical Review D, 2010, 81, .	1.6	70
47	Topological aspects of fermions on a honeycomb lattice. Journal of High Energy Physics, 2009, 2009, 060-060.	1.6	16
48	Quantum phase transition in a graphene model. Journal of Physics: Conference Series, 2009, 150, 042191.	0.3	3
49	Hadron spectrum in a two-colour baryon-rich medium. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2008, 662, 405-412.	1.5	28
50	Can we study quark matter in the quenched approximation?. Nuclear Physics B, 2008, 789, 111-132.	0.9	1
51	Quantum critical behavior in a graphenelike model. Physical Review B, 2008, 78, .	1.1	119
52	Spectral Functions at Small Energies and the Electrical Conductivity in Hot Quenched Lattice QCD. Physical Review Letters, 2007, 99, 022002.	2.9	215
53	Chiral symmetry restoration in anisotropic QED3. Physical Review B, 2007, 75, .	1.1	22
54	Simulating Dense Matter. Progress of Theoretical Physics Supplement, 2007, 168, 253-260.	0.2	16

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55	Critical flavor number in the three dimensional Thirring model. Physical Review D, 2007, 75, .	1.6	48
56	Meson spectral functions at nonzero momentum in hot QCD. Nuclear Physics A, 2007, 785, 202-205.	0.6	12
57	Quark matter in QC2D. European Physical Journal A, 2007, 31, 787-789.	1.0	7
58	Quark matter in QC2D. , 2007, , 489-491.		0
59	The QCD equation of state for two flavours at non-zero chemical potential. Nuclear Physics A, 2006, 774, 837-840.	0.6	18
60	Supercurrent flow in NJL2+1 at high baryon density. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2006, 637, 229-234.	1.5	3
61	Deconfinement in dense two-color QCD. European Physical Journal C, 2006, 48, 193-206.	1.4	111
62	The Lattice NJL Model at Non-zero Baryon and Isospin Densities. Nuclear Physics, Section B, Proceedings Supplements, 2005, 140, 532-534.	0.5	2
63	QED in 2+1 Dimensions with Fermi and Gap Anisotropies. Nuclear Physics, Section B, Proceedings Supplements, 2005, 140, 811-813.	0.5	1
64	Lattice study of anisotropic quantum electrodynamics in three dimensions. Physical Review B, 2005, 72, .	1.1	13
65	Numerical portrait of a relativistic BCS gapped superfluid. Physical Review D, 2004, 69, .	1.6	16
66	Zero lattice sound. Physical Review D, 2004, 70, .	1.6	4
67	Noncompact three-dimensional quantum electrodynamics with $N_f=1$ and $N_f=4$. Physical Review B, 2004, 70, .	1.1	88
68	High density effective theory confronts the Fermi liquid. Physical Review D, 2004, 69, .	1.6	3
69	Lattice Simulations of 2-Colour QCD with Wilson Fermions. Progress of Theoretical Physics Supplement, 2004, 153, 60-68.	0.2	9
70	Study of QCD Thermodynamics at Finite Density by Taylor Expansion. Progress of Theoretical Physics Supplement, 2004, 153, 118-126.	0.2	83
71	Quantum Chaos in Supersymmetric QCD at Finite Density. Progress of Theoretical Physics Supplement, 2004, 153, 295-300.	0.2	4
72	A BCS gap on the lattice. Nuclear Physics, Section B, Proceedings Supplements, 2004, 129-130, 554-556.	0.5	0

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73	Fermi surface phenomena in the (2+1)D four-Fermi model. <i>Physical Review D</i> , 2003, 68, .	1.6	16
74	A BCS CONDENSATE IN NJL ₃₊₁ ?, 2003, .		0
75	Numerical portrait of a relativistic thin film BCS superfluid. <i>Physical Review D</i> , 2002, 65, .	1.6	21
76	Lattice matter. <i>Nuclear Physics, Section B, Proceedings Supplements</i> , 2002, 106-107, 142-150.	0.5	24
77	Diquark condensation in dense SU(2) matter. <i>Nuclear Physics, Section B, Proceedings Supplements</i> , 2002, 106-107, 450-452.	0.5	1
78	Evidence for BCS diquark condensation in the 3+1d lattice NJL model. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2002, 548, 196-203.	1.5	24
79	The phase diagram of QCD. <i>Contemporary Physics</i> , 2001, 42, 209-225.	0.8	31
80	Diquark condensation in dense adjoint matter. <i>European Physical Journal C</i> , 2001, 22, 451-461.	1.4	40
81	Numerical study of dense adjoint 2-color matter. <i>Nuclear Physics, Section B, Proceedings Supplements</i> , 2001, 94, 461-468.	0.5	6
82	Critical Behavior in the Dense Planar Nambu–Jona-Lasinio Model. <i>Physical Review Letters</i> , 2001, 86, 753-756.	2.9	14
83	Numerical study of dense adjoint matter in two color QCD. <i>European Physical Journal C</i> , 2000, 17, 285-302.	1.4	124
84	Lattice approach to diquark condensation in dense matter. <i>Physical Review D</i> , 1999, 59, .	1.6	27
85	The phase diagram of the three dimensional Thirring model. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 1999, 461, 263-269.	1.5	27
86	Symmetries and spectrum of SU(2) lattice gauge theory at finite chemical potential. <i>Nuclear Physics B</i> , 1999, 558, 327-346.	0.9	118
87	Chiral symmetry restoration and realisation of the Goldstone mechanism in the U(1) Gross-Neveu model at non-zero chemical potential. <i>Nuclear Physics B</i> , 1999, 557, 327-351.	0.9	24
88	Four fermion models at non-zero density. <i>Nuclear Physics A</i> , 1998, 642, c228-c238.	0.6	9
89	Logarithmic corrections to the equation of state in the SU(2) \hat{a} – SU(2) Nambu-Jona-Lasinio model. <i>Nuclear Physics B</i> , 1998, 520, 382-408.	0.9	15
90	Electromagnetic self-duality in a lattice model. <i>Nuclear Physics B</i> , 1996, 462, 291-314.	0.9	8

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91	Monte Carlo simulation of the three dimensional Thirring model. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1996, 373, 171-177.	1.5	23
92	Improving the lattice QED action. Nuclear Physics, Section B, Proceedings Supplements, 1995, 42, 663-665.	0.5	1
93	Point-to-point hadron correlation functions using the Sheikholeslami-Wohlert action. Physical Review D, 1995, 51, 6394-6402.	1.6	11
94	$O(1/N_f)$ corrections to the Thirring model in $2 < d < 4$. Physical Review D, 1995, 51, 5816-5826.	1.6	36
95	The $U(1)$ Gross-Neveu model at non-zero chemical potential. Nuclear Physics B, 1995, 442, 364-388.	0.9	23
96	The $U(1)$ Gross-Neveu model at non-zero chemical potential. Nuclear Physics B, 1995, 422, 364-388.	0.9	12
97	Level crossing for hot sphalerons. Nuclear Physics B, 1994, 425, 39-66.	0.9	14
98	Four-Fermi Theories in Fewer Than Four Dimensions. Annals of Physics, 1993, 224, 29-89.	1.0	144
99	A non-trivial fixed point in fewer than four dimensions. Nuclear Physics, Section B, Proceedings Supplements, 1992, 26, 555-557.	0.5	0
100	The magnetic condensate, strong vector forces and monopoles. Nuclear Physics B, 1991, 357, 467-494.	0.9	11
101	Compositeness, anomalous dimensions and renormalizability in four-Fermi theories. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1991, 273, 111-117.	1.5	31
102	Chiral symmetry breaking in strongly coupled quenched QED. Nuclear Physics, Section B, Proceedings Supplements, 1990, 17, 675-678.	0.5	0
103	Towards the chiral limit of strongly coupled quenched QED. Nuclear Physics B, 1990, 333, 551-580.	0.9	29
104	Lattice monopoles and lattice fermions. Nuclear Physics B, 1990, 329, 205-224.	0.9	9
105	Finite size effects and chiral symmetry breaking in quenched three-dimensional QED. Nuclear Physics B, 1990, 335, 455-468.	0.9	38
106	The equation of state and critical exponents in quenched strongly coupled QED. Nuclear Physics B, 1990, 347, 217-242.	0.9	40
107	Linearized lattice QED. Nuclear Physics B, 1990, 344, 255-282.	0.9	7
108	Effective monopoles in noncompact lattice QED. Physical Review Letters, 1989, 63, 2169-2172.	2.9	40

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109	The chiral condensate and topology in SU(2) lattice gauge theory. Nuclear Physics, Section B, Proceedings Supplements, 1989, 9, 422-424.	0.5	3
110	Abelian gauge glasses. Nuclear Physics B, 1988, 305, 597-622.	0.9	2
111	Finite-element lattice fermions in perturbation theory. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1987, 195, 448-452.	1.5	2
112	Weak matrix element calculations on the lattice using staggered fermions. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1987, 193, 85-90.	1.5	7