

Olaf Kaczmarek

List of Publications by Year in descending order

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Version: 2024-02-01

109
papers

7,355
citations

71102

41
h-index

51608

86
g-index

113
all docs

113
docs citations

113
times ranked

2347
citing authors

#	ARTICLE	IF	CITATIONS
1	QCD thermal phase transition in the presence of a small chemical potential. Physical Review D, 2002, 66, .	4.7	457
2	QCD equation of state with almost physical quark masses. Physical Review D, 2008, 77, .	4.7	454
3	Thermodynamics of two flavor QCD to sixth order in quark chemical potential. Physical Review D, 2005, 71, .	4.7	391
4	Static quark-antiquark interactions in zero and finite temperature QCD: I. Heavy quark free energies, running coupling, and quarkonium binding. Physical Review D, 2005, 71, .	4.7	338
5	Heavy quark-antiquark free energy and the renormalized Polyakov-loop. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2002, 543, 41-47.	4.1	330
6	Equation of state for two flavor QCD at nonzero chemical potential. Physical Review D, 2003, 68, .	4.7	313
7	Chiral crossover in QCD at zero and non-zero chemical potentials. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2019, 795, 15-21.	4.1	303
8	Transition temperature in QCD. Physical Review D, 2006, 74, .	4.7	283
9	QCD equation of state to $\mathcal{O}(\mu^4)$	4.7	265
10	Freeze-Out Conditions in Heavy Ion Collisions from QCD Thermodynamics. Physical Review Letters, 2012, 109, 192302.	7.8	222
11	Baryon number, strangeness, and electric charge fluctuations in QCD at high temperature. Physical Review D, 2009, 79, .	4.7	221
12	Thermal dilepton rate and electrical conductivity: An analysis of vector current correlation functions in quenched lattice QCD. Physical Review D, 2011, 83, .	4.7	206
13	Static quark-antiquark free energy and the running coupling at finite temperature. Physical Review D, 2004, 70, .	4.7	203
14	Phase boundary for the chiral transition in (T, μ) QCD at small values of the chemical potential. Physical Review D, 2011, 83, .	4.7	183
15	Equation of state for physical quark masses. Physical Review D, 2010, 81, .	4.7	161
16	Additional Strange Hadrons from QCD Thermodynamics and Strangeness Freezeout in Heavy Ion Collisions. Physical Review Letters, 2014, 113, 072001.	7.8	160
17	Extraction of heavy-flavor transport coefficients in QCD matter. Nuclear Physics A, 2018, 979, 21-86.	1.5	137
18	Heavy quark potentials in quenched QCD at high temperature. Physical Review D, 2000, 62, .	4.7	133

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19	Charmonium properties in hot quenched lattice QCD. Physical Review D, 2012, 86, .	4.7	133
20	Chiral Phase Transition Temperature in (T_c)	7.8	116
21	Static Quark-Antiquark Potential in the Quark-Gluon Plasma from Lattice QCD. Physical Review Letters, 2015, 114, 082001.	7.8	99
22	Renormalized Polyakov loops in many representations. Physical Review D, 2008, 77, .	4.7	93
23	Strangeness at High Temperatures: From Hadrons to Quarks. Physical Review Letters, 2013, 111, 082301.	7.8	92
24	Where is the chiral critical point in 3-flavor QCD?. Nuclear Physics, Section B, Proceedings Supplements, 2004, 129-130, 614-616.	0.4	90
25	Nonperturbative estimate of the heavy quark momentum diffusion coefficient. Physical Review D, 2015, 92, .	4.7	86
26	Skewness, kurtosis, and the fifth and sixth order cumulants of net baryon-number distributions from lattice QCD confront high-statistics STAR data. Physical Review D, 2020, 101, .	4.7	85
27	Study of QCD Thermodynamics at Finite Density by Taylor Expansion. Progress of Theoretical Physics Supplement, 2004, 153, 118-126.	0.1	83
28	Meson screening masses from lattice QCD with two light quarks and one strange quark. European Physical Journal C, 2011, 71, 1.	3.9	77
29	Heavy-flavor production and medium properties in high-energy nuclear collisions –What next?. European Physical Journal A, 2017, 53, 1.	2.5	75
30	Heavy quark interactions in finite temperature QCD. European Physical Journal C, 2005, 43, 71-75.	3.9	70
31	Publisher's Note: Static quark-antiquark free energy and the running coupling at finite temperature [Phys. Rev. D, 2004, 70, 074505]. Physical Review D, 2005, 72, .	4.7	69
32	The melting and abundance of open charm hadrons. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2014, 737, 210-215.	4.1	68
33	The quenched limit of lattice QCD at non-zero baryon number. Nuclear Physics B, 1999, 558, 307-326.	2.5	66
34	Skewness and kurtosis of net baryon-number distributions at small values of the baryon chemical potential. Physical Review D, 2017, 96, .	4.7	62
35	Polyakov loop fluctuations in SU(3) lattice gauge theory and an effective gluon potential. Physical Review D, 2013, 88, .	4.7	59
36	Thermal dilepton rates and electrical conductivity of the QGP from the lattice. Physical Review D, 2016, 94, .	4.7	54

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37	Heavy Quark Free Energies and the Renormalized Polyakov Loop in Full QCD. Progress of Theoretical Physics Supplement, 2004, 153, 287-294.	0.1	52
38	Heavy quark free energies, potentials and the renormalized Polyakov loop. Nuclear Physics, Section B, Proceedings Supplements, 2004, 129-130, 560-562.	0.4	48
39	Meson screening masses in ($\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"} \rangle T_j \text{ETQq1 1 0.784314 rgBT /Overlock}$)	4.7	48
40	Critical point and scale setting in SU(3) plasma: An update. Physical Review D, 2015, 91, .	4.7	45
41	String breaking in lattice quantum chromodynamics. Physical Review D, 1998, 59, .	4.7	43
42	Quarkonium at finite temperature: towards realistic phenomenology from first principles. Journal of High Energy Physics, 2015, 2015, 1-34.	4.7	42
43	Study of the finite temperature transition in 3-flavor QCD. Physical Review D, 2007, 75, .	4.7	41
44	Screening of heavy quark free energies at finite temperature and non-zero baryon chemical potential. European Physical Journal C, 2006, 46, 179-189.	3.9	36
45	Lattice constraints on the thermal photon rate. Physical Review D, 2016, 94, .	4.7	36
46	Color screening and quark-quark interactions in finite temperature QCD. Physical Review D, 2007, 75, .	4.7	35
47	Heavy quark momentum diffusion from the lattice using gradient flow. Physical Review D, 2021, 103, .	4.7	32
48	Width of the QCD transition in a Polyakov-loop Dyson-Schwinger equation model. Physical Review D, 2011, 84, .	4.7	31
49	Continuum estimate of the heavy quark momentum diffusion coefficient $\hat{\Gamma}^{\text{P}}$. Nuclear Physics A, 2014, 931, 633-637.	1.5	31
50	On the temperature dependence of the electrical conductivity in hot quenched lattice QCD. Progress in Particle and Nuclear Physics, 2012, 67, 212-217.	14.4	28
51	Probing deconfinement with Polyakov loop susceptibilities. Physical Review D, 2013, 88, .	4.7	28
52	The quark mass and $\hat{1}/4$ dependence of the QCD chiral critical point. Nuclear Physics, Section B, Proceedings Supplements, 2003, 119, 517-519.	0.4	25
53	The spatial string tension and dimensional reduction in QCD. Physical Review D, 2008, 78, .	4.7	25
54	Thermal quarkonium physics in the pseudoscalar channel. Journal of High Energy Physics, 2017, 2017, 1.	4.7	23

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55	In-medium P-wave quarkonium from the complex lattice QCD potential. Journal of High Energy Physics, 2016, 2016, 1.	4.7	22
56	Curvature of the freeze-out line in heavy ion collisions. Physical Review D, 2016, 93, .	4.7	22
57	Heavy quark potential and quarkonia dissociation rates. European Physical Journal C, 2005, 43, 81-84.	3.9	21
58	Sphaleron rate from Euclidean lattice correlators: An exploration. Physical Review D, 2021, 103, .	4.7	21
59	Second order cumulants of conserved charge fluctuations revisited: Vanishing chemical potentials. Physical Review D, 2021, 104, .	4.7	21
60	Heavy quark diffusion from lattice QCD spectral functions. Journal of Physics G: Nuclear and Particle Physics, 2011, 38, 124070.	3.6	20
61	Stochastic reconstructions of spectral functions: Application to lattice QCD. Physical Review D, 2018, 97, .	4.7	19
62	Taylor expansions and Padé approximants for cumulants of conserved charge fluctuations at nonvanishing chemical potentials. Physical Review D, 2022, 105, .	4.7	19
63	The QCD equation of state for two flavours at non-zero chemical potential. Nuclear Physics A, 2006, 774, 837-840.	1.5	18
64	Heavy quark free energies for three quark systems at finite temperature. Physical Review D, 2008, 77, .	4.7	18
65	Heavy-quark free energies, internal-energy and entropy contributions. European Physical Journal C, 2009, 61, 811-817.	3.9	18
66	Static quark-antiquark interactions at nonzero temperature from lattice QCD. Physical Review D, 2022, 105, .	4.7	17
67	Polyakov loop in different representations of SU(3) at finite temperature. Nuclear Physics A, 2007, 785, 278-281.	1.5	15
68	Conserved Charge Fluctuations from Lattice QCD and the Beam Energy Scan. Nuclear Physics A, 2016, 956, 352-355.	1.5	15
69	Free energy of a heavy quark-antiquark pair in a thermal medium from AdS/CFT. Journal of High Energy Physics, 2018, 2018, 1.	4.7	14
70	Eigenvalue spectra of QCD and the fate of U_A breaking towards the chiral limit. Physical Review D, 2021, 104, .	4.7	14
71	Lattice calculation of medium effects at short and long distances. Nuclear Physics A, 2002, 698, 400-403.	1.5	13
72	Static quark anti-quark free and internal energy in two-flavor QCD. European Physical Journal C, 2005, 43, 63-66.	3.9	12

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73	Thermal mass and dispersion relations of quarks in the deconfined phase of quenched QCD. Physical Review D, 2012, 86, .	4.7	12
74	1/M correction to quenched QCD with non-zero baryon density. Nuclear Physics, Section B, Proceedings Supplements, 2002, 106-107, 456-458.	0.4	11
75	Diffusion coefficient matrix of the strongly interacting quark-gluon plasma. Physical Review D, 2021, 104, .	4.7	10
76	String breaking in lattice QCD. Nuclear Physics, Section B, Proceedings Supplements, 1999, 73, 447-449.	0.4	7
77	Fluctuations in the vicinity of the phase transition line for two flavor QCD. Nuclear Physics, Section B, Proceedings Supplements, 2005, 140, 505-507.	0.4	7
78	Charmonium and bottomonium spectral functions in the vector channel. Nuclear Physics A, 2019, 982, 715-718.	1.5	7
79	Short distance physics with heavy quark potentials. Nuclear Physics, Section B, Proceedings Supplements, 2002, 106-107, 519-521.	0.4	6
80	Polyakov loop susceptibility and correlators in the chiral limit. , 2020, , .		6
81	Charm and beauty in the deconfined plasma from quenched lattice QCD. Physical Review D, 2021, 104, .	4.7	6
82	The QCD phase transition at high temperature and low density. Nuclear Physics, Section B, Proceedings Supplements, 2003, 119, 538-540.	0.4	5
83	Open-charm Euclidean correlators within heavy-meson EFT interactions. European Physical Journal A, 2020, 56, 1.	2.5	5
84	Electrical conductivity and thermal dilepton rate from quenched lattice QCD. Journal of Physics G: Nuclear and Particle Physics, 2011, 38, 124178.	3.6	4
85	Recent Developments in Lattice Studies for Quarkonia. Nuclear Physics A, 2013, 910-911, 98-105.	1.5	4
86	Lattice QCD results on soft and hard probes of strongly interacting matter. Nuclear Physics A, 2017, 967, 137-144.	1.5	4
87	Euclidean correlation functions of the topological charge density. , 2020, , .		4
88	Thermodynamics of two-colour QCD. Nuclear Physics, Section B, Proceedings Supplements, 1999, 73, 441-443.	0.4	3
89	The non-zero baryon number formulation of QCD. Nuclear Physics, Section B, Proceedings Supplements, 2000, 83-84, 369-371.	0.4	3
90	QCD at non-zero temperature and density from the Lattice. Nuclear Physics, Section B, Proceedings Supplements, 2005, 141, 186-190.	0.4	3

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91	Running coupling of 2-flavor QCD at zero and finite temperature. European Physical Journal C, 2005, 43, 59-62.	3.9	3
92	Continuum extrapolation of quarkonium correlators at non-zero temperature. EPJ Web of Conferences, 2018, 175, 07010.	0.3	3
93	Thermal modifications of quarkonia and heavy quark diffusion from a comparison of continuum-extrapolated lattice results to perturbative QCD. , 2020, , .		3
94	Lattice QCD noise reduction for bosonic correlators through blocking. Physical Review D, 2022, 105, .	4.7	3
95	Aspects of the thermal phase transition of QCD with small chemical potential. Nuclear Physics, Section B, Proceedings Supplements, 2002, 106-107, 459-461.	0.4	2
96	Charmonium dissociation and heavy quark transport in hot quenched lattice QCD. EPJ Web of Conferences, 2014, 70, 00061.	0.3	2
97	Thermal Simulations, Open Boundary Conditions and Switches. EPJ Web of Conferences, 2018, 175, 07004.	0.3	2
98	Open-boundary conditions in the deconfined phase. European Physical Journal C, 2019, 79, 1039.	3.9	2
99	Spectral reconstruction details of a gradient-flowed color-electric correlator. EPJ Web of Conferences, 2022, 259, 10004.	0.3	2
100	THE QGP PHASE AND THE COUPLING. International Journal of Modern Physics A, 2005, 20, 3789-3791.	1.5	1
101	Flavoured aspects of the QCD thermodynamics. Journal of Physics: Conference Series, 2016, 668, 012003.	0.4	1
102	The Bayesian reconstruction of the in-medium heavy quark potential from lattice QCD and its stability. AIP Conference Proceedings, 2016, , .	0.4	1
103	Thermal modifications of charmonia and bottomonia from spatial correlation functions. EPJ Web of Conferences, 2018, 175, 07021.	0.3	1
104	Quark Cluster Expansion Model for Interpreting Finite-T Lattice QCD Thermodynamics. Symmetry, 2021, 13, 514.	2.2	1
105	The screening length in hot QCD. , 2005, , .		1
106	The equation of state for two flavor QCD at finite density. Nuclear Physics, Section B, Proceedings Supplements, 2004, 129-130, 545-547.	0.4	0
107	The RBC-Bielefeld Collaboration. Nuclear Physics A, 2009, 830, 968c.	1.5	0
108	Static quark anti-quark free and internal energy in 2-flavor QCD and bound states in the QGP. , 2005, , .		0

#	ARTICLE	IF	CITATIONS
109	Title is missing!. Acta Physica Polonica B, Proceedings Supplement, 2012, 5, 925.	0.1	0