

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
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51608
86
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113
all docs

113
docs citations

113
times ranked

2347
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 1 | Spectral reconstruction details of a gradient-flowed color-electric correlator. EPJ Web of Conferences, 2022, 259, 10004. | 0.3 | 2 |
| 2 | Static quark-antiquark interactions at nonzero temperature from lattice QCD. Physical Review D, 2022, 105, . | 4.7 | 17 |
| 3 | Taylor expansions and PadÃ© approximants for cumulants of conserved charge fluctuations at nonvanishing chemical potentials. Physical Review D, 2022, 105, . | 4.7 | 19 |
| 4 | Lattice QCD noise reduction for bosonic correlators through blocking. Physical Review D, 2022, 105, . | 4.7 | 3 |
| 5 | Heavy quark momentum diffusion from the lattice using gradient flow. Physical Review D, 2021, 103, . | 4.7 | 32 |
| 6 | Quark Cluster Expansion Model for Interpreting Finite-T Lattice QCD Thermodynamics. Symmetry, 2021, 13, 514. | 2.2 | 1 |
| 7 | Sphaleron rate from Euclidean lattice correlators: An exploration. Physical Review D, 2021, 103, . | 4.7 | 21 |
| 8 | Diffusion coefficient matrix of the strongly interacting quark-gluon plasma. Physical Review D, 2021, 104, . | 4.7 | 10 |
| 9 | Second order cumulants of conserved charge fluctuations revisited: Vanishing chemical potentials. Physical Review D, 2021, 104, . | 4.7 | 21 |
| 10 | Eigenvalue spectra of QCD and the fate of $\langle \text{mml:math} \text{xml�:mathml="http://www.w3.org/1998/Math/MathML" display="block">\lambda_1^2 - \lambda_2^2 = \frac{1}{2} \left(\lambda_1 + \lambda_2 \right) \left(\lambda_1 - \lambda_2 \right) \left(\lambda_1 + \lambda_2 \right) \left(\lambda_1 - \lambda_2 \right) \rangle$ breaking towards the chiral limit. Physical Review D, 2021, 104, . | 4.7 | 14 |
| 11 | Charm and beauty in the deconfined plasma from quenched lattice QCD. Physical Review D, 2021, 104, . | 4.7 | 6 |
| 12 | 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 |
| 13 | Open-charm Euclidean correlators within heavy-meson EFT interactions. European Physical Journal A, 2020, 56, 1. | 2.5 | 5 |
| 14 | Polyakov loop susceptibility and correlators in the chiral limit. , 2020, , . | | 6 |
| 15 | Thermal modifications of quarkonia and heavy quark diffusion from a comparison of continuum-extrapolated lattice results to perturbative QCD. , 2020, , . | | 3 |
| 16 | Euclidean correlation functions of the topological charge density. , 2020, , . | | 4 |
| 17 | Chiral Phase Transition Temperature in (mml:math) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 112 Td (xml�:mathml="http://www.w3.org/1998/Math/MathML" display="block">T_c = \frac{1}{\pi} \int_0^\infty \frac{g^2 T^3}{\Lambda^2} dT = \frac{1}{\pi} \left[\frac{g^2 T^4}{4 \Lambda^2} \right]_0^\infty = \frac{g^2 \Lambda^2}{4 \pi} = 0.784314 \text{ GeV}) | 7.8 | 116 |

| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 19 | 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 |
| 20 | Open-boundary conditions in the deconfined phase. European Physical Journal C, 2019, 79, 1039. | 3.9 | 2 |
| 21 | Meson screening masses in ($\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" style="display:inline">\langle \text{mml:mi mathvariant="script">O$ $\rangle \text{mml:mo}$ $\rangle \text{mml:mi} \rangle^{\frac{1}{4}} \langle \text{mml:mi} \rangle \text{B} \langle \text{mml:mi} \rangle \langle \text{mml:mn} \rangle 6 \langle \text{mml:mn} \rangle^{\frac{1}{7}} \text{mml:msubsup} \rangle \langle \text{mml:mi} \rangle \text{Overlock}$) | 4.7 | 48 |
| 22 | 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 |
| 23 | Continuum extrapolation of quarkonium correlators at non-zero temperature. EPJ Web of Conferences, 2018, 175, 07010. | 0.3 | 3 |
| 24 | Thermal Simulations, Open Boundary Conditions and Switches. EPJ Web of Conferences, 2018, 175, 07004. | 0.3 | 2 |
| 25 | Thermal modifications of charmonia and bottomonia from spatial correlation functions. EPJ Web of Conferences, 2018, 175, 07021. | 0.3 | 1 |
| 26 | Extraction of heavy-flavor transport coefficients in QCD matter. Nuclear Physics A, 2018, 979, 21-86. | 1.5 | 137 |
| 27 | Stochastic reconstructions of spectral functions: Application to lattice QCD. Physical Review D, 2018, 97, . | 4.7 | 19 |
| 28 | QCD equation of state to $\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" style="display:inline">\langle \text{mml:mi mathvariant="script">O$ $\rangle \text{mml:mo}$ $\rangle \text{mml:mi} \rangle^{\frac{1}{4}} \langle \text{mml:mi} \rangle \text{B} \langle \text{mml:mi} \rangle \langle \text{mml:mn} \rangle 6 \langle \text{mml:mn} \rangle^{\frac{1}{7}} \text{mml:msubsup} \rangle \langle \text{mml:mi} \rangle \text{Overlock}$ | 4.7 | 265 |
| 29 | Lattice QCD results on soft and hard probes of strongly interacting matter. Nuclear Physics A, 2017, 967, 137-144. | 1.5 | 4 |
| 30 | Heavy-flavor production and medium properties in high-energy nuclear collisions –What next?. European Physical Journal A, 2017, 53, 1. | 2.5 | 75 |
| 31 | Thermal quarkonium physics in the pseudoscalar channel. Journal of High Energy Physics, 2017, 2017, 1. | 4.7 | 23 |
| 32 | Skewness and kurtosis of net baryon-number distributions at small values of the baryon chemical potential. Physical Review D, 2017, 96, . | 4.7 | 62 |
| 33 | Thermal dilepton rates and electrical conductivity of the QGP from the lattice. Physical Review D, 2016, 94, . | 4.7 | 54 |
| 34 | In-medium P-wave quarkonium from the complex lattice QCD potential. Journal of High Energy Physics, 2016, 2016, 1. | 4.7 | 22 |
| 35 | Flavoured aspects of the QCD thermodynamics. Journal of Physics: Conference Series, 2016, 668, 012003. | 0.4 | 1 |
| 36 | Conserved Charge Fluctuations from Lattice QCD and the Beam Energy Scan. Nuclear Physics A, 2016, 956, 352-355. | 1.5 | 15 |

| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 37 | Curvature of the freeze-out line in heavy ion collisions. Physical Review D, 2016, 93, . | 4.7 | 22 |
| 38 | The Bayesian reconstruction of the in-medium heavy quark potential from lattice QCD and its stability. AIP Conference Proceedings, 2016, . | 0.4 | 1 |
| 39 | Lattice constraints on the thermal photon rate. Physical Review D, 2016, 94, . | 4.7 | 36 |
| 40 | Critical point and scale setting in SU(3) plasma: An update. Physical Review D, 2015, 91, . | 4.7 | 45 |
| 41 | Nonperturbative estimate of the heavy quark momentum diffusion coefficient. Physical Review D, 2015, 92, . | 4.7 | 86 |
| 42 | Quarkonium at finite temperature: towards realistic phenomenology from first principles. Journal of High Energy Physics, 2015, 2015, 1-34. | 4.7 | 42 |
| 43 | Static Quark-Antiquark Potential in the Quark-Gluon Plasma from Lattice QCD. Physical Review Letters, 2015, 114, 082001. | 7.8 | 99 |
| 44 | Charmonium dissociation and heavy quark transport in hot quenched lattice QCD. EPJ Web of Conferences, 2014, 70, 00061. | 0.3 | 2 |
| 45 | Continuum estimate of the heavy quark momentum diffusion coefficient $\hat{\eta}_q$. Nuclear Physics A, 2014, 931, 633-637. | 1.5 | 31 |
| 46 | 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 |
| 47 | Additional Strange Hadrons from QCD Thermodynamics and Strangeness Freezeout in Heavy Ion Collisions. Physical Review Letters, 2014, 113, 072001. | 7.8 | 160 |
| 48 | Recent Developments in Lattice Studies for Quarkonia. Nuclear Physics A, 2013, 910-911, 98-105. | 1.5 | 4 |
| 49 | Probing deconfinement with Polyakov loop susceptibilities. Physical Review D, 2013, 88, . | 4.7 | 28 |
| 50 | Strangeness at High Temperatures: From Hadrons to Quarks. Physical Review Letters, 2013, 111, 082301. | 7.8 | 92 |
| 51 | Polyakov loop fluctuations in SU(3) lattice gauge theory and an effective gluon potential. Physical Review D, 2013, 88, . | 4.7 | 59 |
| 52 | Thermal mass and dispersion relations of quarks in the deconfined phase of quenched QCD. Physical Review D, 2012, 86, . | 4.7 | 12 |
| 53 | Charmonium properties in hot quenched lattice QCD. Physical Review D, 2012, 86, . | 4.7 | 133 |
| 54 | Freeze-Out Conditions in Heavy Ion Collisions from QCD Thermodynamics. Physical Review Letters, 2012, 109, 192302. | 7.8 | 222 |

| # | ARTICLE | IF | CITATIONS |
|----|---|------|-----------|
| 55 | On the temperature dependence of the electrical conductivity in hot quenched lattice QCD. <i>Progress in Particle and Nuclear Physics</i> , 2012, 67, 212-217. | 14.4 | 28 |
| 56 | Title is missing!. <i>Acta Physica Polonica B, Proceedings Supplement</i> , 2012, 5, 925. | 0.1 | 0 |
| 57 | Thermal dilepton rate and electrical conductivity: An analysis of vector current correlation functions in quenched lattice QCD. <i>Physical Review D</i> , 2011, 83, . | 4.7 | 206 |
| 58 | Meson screening masses from lattice QCD with two light quarks and one strange quark. <i>European Physical Journal C</i> , 2011, 71, 1. | 3.9 | 77 |
| 59 | Width of the QCD transition in a Polyakov-loop Dyson-Schwinger equation model. <i>Physical Review D</i> , 2011, 84, . | 4.7 | 31 |
| 60 | Phase boundary for the chiral transition in ($\langle \text{mml:math} \rangle T_j \text{ETQq0 } 0 \ 0 \text{ rgBT /Overlock } 10 \text{ Tf } 50 \ 552 \text{ Td }$ ($\text{xmlns:mml}=\text{"http://www.w3.org/1998/Math/MathML"}$)). <i>Physical Review D</i> , 2011, 83, . | 4.7 | 183 |
| 61 | QCD at small values of the chemical potential. <i>Physical Review D</i> , 2011, 83, . | | |
| 61 | Electrical conductivity and thermal dilepton rate from quenched lattice QCD. <i>Journal of Physics G: Nuclear and Particle Physics</i> , 2011, 38, 124178. | 3.6 | 4 |
| 62 | Heavy quark diffusion from lattice QCD spectral functions. <i>Journal of Physics G: Nuclear and Particle Physics</i> , 2011, 38, 124070. | 3.6 | 20 |
| 63 | Equation of state for physical quark masses. <i>Physical Review D</i> , 2010, 81, . | 4.7 | 161 |
| 64 | The RBC-Bielefeld Collaboration. <i>Nuclear Physics A</i> , 2009, 830, 968c. | 1.5 | 0 |
| 65 | Heavy-quark free energies, internal-energy and entropy contributions. <i>European Physical Journal C</i> , 2009, 61, 811-817. | 3.9 | 18 |
| 66 | Baryon number, strangeness, and electric charge fluctuations in QCD at high temperature. <i>Physical Review D</i> , 2009, 79, . | 4.7 | 221 |
| 67 | The spatial string tension and dimensional reduction in QCD. <i>Physical Review D</i> , 2008, 78, . | 4.7 | 25 |
| 68 | Renormalized Polyakov loops in many representations. <i>Physical Review D</i> , 2008, 77, . | 4.7 | 93 |
| 69 | Heavy quark free energies for three quark systems at finite temperature. <i>Physical Review D</i> , 2008, 77, . | 4.7 | 18 |
| 70 | QCD equation of state with almost physical quark masses. <i>Physical Review D</i> , 2008, 77, . | 4.7 | 454 |
| 71 | Color screening and quark-quark interactions in finite temperature QCD. <i>Physical Review D</i> , 2007, 75, . | 4.7 | 35 |
| 72 | Study of the finite temperature transition in 3-flavor QCD. <i>Physical Review D</i> , 2007, 75, . | 4.7 | 41 |

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|----|--|--|-----|-----------|
| 73 | Polyakov loop in different representations of SU(3) at finite temperature. Nuclear Physics A, 2007, 785, 278-281. | | 1.5 | 15 |
| 74 | Transition temperature in QCD. Physical Review D, 2006, 74, . | | 4.7 | 283 |
| 75 | The QCD equation of state for two flavours at non-zero chemical potential. Nuclear Physics A, 2006, 774, 837-840. | | 1.5 | 18 |
| 76 | 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 |
| 77 | QCD at non-zero temperature and density from the Lattice. Nuclear Physics, Section B, Proceedings Supplements, 2005, 141, 186-190. | | 0.4 | 3 |
| 78 | 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 |
| 79 | Static quark anti-quark free and internal energy in two-flavor QCD. European Physical Journal C, 2005, 43, 63-66. | | 3.9 | 12 |
| 80 | Running coupling of 2-flavor QCD at zero and finite temperature. European Physical Journal C, 2005, 43, 59-62. | | 3.9 | 3 |
| 81 | Heavy quark interactions in finite temperature QCD. European Physical Journal C, 2005, 43, 71-75. | | 3.9 | 70 |
| 82 | Heavy quark potential and quarkonia dissociation rates. European Physical Journal C, 2005, 43, 81-84. | | 3.9 | 21 |
| 83 | Publisherâ€™s Note: Static quark-antiquark free energy and the running coupling at finite temperature [Phys. Rev. DPRVDAQ0556-282170, 074505 (2004)]. Physical Review D, 2005, 72, . | | 4.7 | 69 |
| 84 | THE QGP PHASE AND THE COUPLING. International Journal of Modern Physics A, 2005, 20, 3789-3791. | | 1.5 | 1 |
| 85 | 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 |
| 86 | Thermodynamics of two flavor QCD to sixth order in quark chemical potential. Physical Review D, 2005, 71, . | | 4.7 | 391 |
| 87 | Static quark anti-quark free and internal energy in 2-flavor QCD and bound states in the QGP. , 2005, , . | | | 0 |
| 88 | The screening length in hot QCD. , 2005, , . | | | 1 |
| 89 | Static quark-antiquark free energy and the running coupling at finite temperature. Physical Review D, 2004, 70, . | | 4.7 | 203 |
| 90 | Study of QCD Thermodynamics at Finite Density by Taylor Expansion. Progress of Theoretical Physics Supplement, 2004, 153, 118-126. | | 0.1 | 83 |

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|-----|---|--|-----|-----------|
| 91 | Heavy Quark Free Energies and the Renormalized Polyakov Loop in Full QCD. <i>Progress of Theoretical Physics Supplement</i> , 2004, 153, 287-294. | | 0.1 | 52 |
| 92 | The equation of state for two flavor QCD at finite density. <i>Nuclear Physics, Section B, Proceedings Supplements</i> , 2004, 129-130, 545-547. | | 0.4 | 0 |
| 93 | Heavy quark free energies, potentials and the renormalized Polyakov loop. <i>Nuclear Physics, Section B, Proceedings Supplements</i> , 2004, 129-130, 560-562. | | 0.4 | 48 |
| 94 | Where is the chiral critical point in 3-flavor QCD?. <i>Nuclear Physics, Section B, Proceedings Supplements</i> , 2004, 129-130, 614-616. | | 0.4 | 90 |
| 95 | The quark mass and $\hat{t}^{1/4}$ dependence of the QCD chiral critical point. <i>Nuclear Physics, Section B, Proceedings Supplements</i> , 2003, 119, 517-519. | | 0.4 | 25 |
| 96 | The QCD phase transition at high temperature and low density. <i>Nuclear Physics, Section B, Proceedings Supplements</i> , 2003, 119, 538-540. | | 0.4 | 5 |
| 97 | Equation of state for two flavor QCD at nonzero chemical potential. <i>Physical Review D</i> , 2003, 68, . | | 4.7 | 313 |
| 98 | QCD thermal phase transition in the presence of a small chemical potential. <i>Physical Review D</i> , 2002, 66, . | | 4.7 | 457 |
| 99 | 1/M correction to quenched QCD with non-zero baryon density. <i>Nuclear Physics, Section B, Proceedings Supplements</i> , 2002, 106-107, 456-458. | | 0.4 | 11 |
| 100 | Aspects of the thermal phase transition of QCD with small chemical potential. <i>Nuclear Physics, Section B, Proceedings Supplements</i> , 2002, 106-107, 459-461. | | 0.4 | 2 |
| 101 | Short distance physics with heavy quark potentials. <i>Nuclear Physics, Section B, Proceedings Supplements</i> , 2002, 106-107, 519-521. | | 0.4 | 6 |
| 102 | Heavy quark-antiquark free energy and the renormalized Polyakov loop. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2002, 543, 41-47. | | 4.1 | 330 |
| 103 | Lattice calculation of medium effects at short and long distances. <i>Nuclear Physics A</i> , 2002, 698, 400-403. | | 1.5 | 13 |
| 104 | The non-zero baryon number formulation of QCD. <i>Nuclear Physics, Section B, Proceedings Supplements</i> , 2000, 83-84, 369-371. | | 0.4 | 3 |
| 105 | Heavy quark potentials in quenched QCD at high temperature. <i>Physical Review D</i> , 2000, 62, . | | 4.7 | 133 |
| 106 | Thermodynamics of two-colour QCD. <i>Nuclear Physics, Section B, Proceedings Supplements</i> , 1999, 73, 441-443. | | 0.4 | 3 |
| 107 | String breaking in lattice QCD. <i>Nuclear Physics, Section B, Proceedings Supplements</i> , 1999, 73, 447-449. | | 0.4 | 7 |
| 108 | The quenched limit of lattice QCD at non-zero baryon number. <i>Nuclear Physics B</i> , 1999, 558, 307-326. | | 2.5 | 66 |

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IF CITATIONS

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|-----|---|-----|----|
| 109 | String breaking in lattice quantum chromodynamics. Physical Review D, 1998, 59, . | 4.7 | 43 |
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