Rajan Gupta

List of Publications by Year
in descending order

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38 papers	3,944 citations	201674 27 h-index	330143 37 g-index
39 all docs	39 docs citations	39 times ranked	2372 citing authors

#	Article	IF	Citations
1	Chiral and deconfinement aspects of the QCD transition. Physical Review D, 2012, 85, .	4.7	752
2	Equation of state in (<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML") Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 707 Td (d QCD. Physical Review D, 2014, 90, .	4.7	694
3	Equation of state and QCD transition at finite temperature. Physical Review D, 2009, 80, .	4.7	424
4	QCD Phase Transition with Chiral Quarks and Physical Quark Masses. Physical Review Letters, 2014, 113, 082001.	7.8	286
5	Fluctuations and correlations of net baryon number, electric charge, and strangeness: A comparison of lattice QCD results with the hadron resonance gas model. Physical Review D, 2012, 86, .	4.7	211
6	Probing novel scalar and tensor interactions from (ultra)cold neutrons to the LHC. Physical Review D, 2012, 85, .	4.7	188
7	CO2 as a fracturing fluid: Potential for commercial-scale shale gas production and CO2 sequestration. Energy Procedia, 2014, 63, 7780-7784.	1.8	128
8	Axial, scalar, and tensor charges of the nucleon from<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mn>2</mml:mn><mml:mo>+</mml:mo><mml:mn>1</mml:mn><mml:mo>+</mml:mo><mml:mn> Lattice QCD. Physical Review D, 2016, 94, .	4.7	104
9	Neutron Electric Dipole Moment and Tensor Charges from Lattice QCD. Physical Review Letters, 2015, 115, 212002.	7.8	103
10	Isovector charges of the nucleon from <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mn>2</mml:mn><mml:mo>+</mml:mo><mml:mn>1</mml:mn><mml:mo>+</mml:mo><mml:mn> -flavor lattice QCD. Physical Review D, 2018, 98, .	4.7	96
11	Nucleon charges and electromagnetic form factors from<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mn>2</mml:mn><mml:mo>+</mml:mo><mml:mn>1</mml:mn><mml:mo>+</mml:mo><mml:mn> lattice QCD. Physical Review D, 2014, 89, .	4.7	95
12	Isovector and isoscalar tensor charges of the nucleon from lattice QCD. Physical Review D, 2015, 92, .	4.7	86
13	Axial-vector form factors of the nucleon from lattice QCD. Physical Review D, 2017, 96, .	4.7	80
14	Chiral transition and<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>U</mml:mi><mml:mo stretchy="false">(</mml:mo><mml:mn>1</mml:mn><mml:msub><mml:mo) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 504 717 Td (stretchy="fa lattice QCD using domain wall fermions. Physical Review D, 2012, 86, .	4.7	69
15	Flavor diagonal tensor charges of the nucleon from (<mml:math) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 192 Td (xmlns:mml="	4.7	63
16	Improved bilinears in lattice QCD with nondegenerate quarks. Physical Review D, 2006, 73, .	4.7	57
17	Axial Vector Form Factors from Lattice QCD that Satisfy the PCAC Relation. Physical Review Letters, 2020, 124, 072002.	7.8	55
18	Quantum computing for neutrino-nucleus scattering. Physical Review D, 2020, 101, .	4.7	51

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19	Nucleon transverse momentum-dependent parton distributions in lattice QCD: Renormalization patterns and discretization effects. Physical Review D, 2017, 96, .	4.7	45
20	Isovector charges of the nucleon from 2+1 -flavor QCD with clover fermions. Physical Review D, 2017, 95, .	4.7	39
21	Nucleon electromagnetic form factors in the continuum limit from (<mml:math) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 672 T	4.7	37
22	Controlling excited-state contamination in nucleon matrix elements. Physical Review D, 2016, 93, .	4.7	36
23	Precision nucleon charges and form factors using (<mml:math) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 592 Td (xmlns:mml="h	4.7	35
24	Quark contribution to the proton spin from <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mn>2</mml:mn><mml:mo>+</mml:mo><mml:mn>1</mml:mn><mml:mo>+</mml:mo><mml:mn> -flavor lattice QCD. Physical Review D, 2018, 98, .	4.7	31
25	Qubit Regularization of Asymptotic Freedom. Physical Review Letters, 2021, 126, 172001.	7.8	29
26	Pion-Nucleon Sigma Term from Lattice QCD. Physical Review Letters, 2021, 127, 242002.	7.8	28
27	Dimension-5<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>C</mml:mi><mml:mi>P</mml:mi></mml:math>-odd operators: QCD mixing and renormalization. Physical Review D, 2015, 92, .	4.7	27
28	Machine learning estimators for lattice QCD observables. Physical Review D, 2019, 100, .	4.7	19
29	State preparation and measurement in a quantum simulation of the <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>O</mml:mi><mml:mo stretchy="false">(</mml:mo><mml:mn>3</mml:mn><mml:mo stretchy="false">)</mml:mo></mml:math> sigma model. Physical Review D, 2020, 102, .	4.7	15
30	Moments of nucleon isovector structure functions in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mn>2</mml:mn><mml:mo>+</mml:mo><mml:mn>1</mml:mn><mml:mo>+</mml:mo><mml:mn> -flavor QCD. Physical Review D, 2020, 102, .	4.7	12
31	Contribution of the QCD <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi mathvariant="normal">Î˜</mml:mi></mml:math> -term to the nucleon electric dipole moment. Physical Review D, 2021, 103, .	4.7	12
32	General physics motivations for numerical simulations of quantum field theory. Parallel Computing, 1999, 25, 1199-1215.	2.1	10
33	Nuclear two point correlation functions on a quantum computer. Physical Review D, 2022, 105, .	4.7	9
34	Scaling behavior of discretization errors in renormalization and improvement constants. Physical Review D, 2006, 73, .	4.7	8
35	Spacetime symmetric qubit regularization of the asymptotically free two-dimensional <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mi>O</mml:mi><mml:mo stretchy="false">(</mml:mo><mml:mn>4</mml:mn><mml:mo>) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 87 Td (stretchy="false"	4.7	5
36	Nucleon momentum fraction, helicity and transversity from 2+1-flavor lattice QCD. Journal of High Energy Physics, 2021, 2021, 1.	4.7	4

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37	Lattice QCD calculations of transverse momentum-dependent parton distributions (TMDs). EPJ Web of Conferences, 2016, 112, 01008.	0.3	1
38	Equation of State from Lattice QCD Calculations. Nuclear Physics A, 2011, 862-863, 111-117.	1.5	0