

# Krzysztof Kutak

## List of Publications by Year in descending order

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Version: 2024-02-01

115  
papers

4,032  
citations

117571

34  
h-index

123376

61  
g-index

119  
all docs

119  
docs citations

119  
times ranked

6062  
citing authors



#	ARTICLE	IF	CITATIONS
19	Gluon saturation in dijet production in $p$ -Pb collisions at the Large Hadron Collider. Physical Review D, 2012, 86, .	1.6	74
20	A precision measurement of the inclusive ep scattering cross section at HERA. European Physical Journal C, 2009, 64, 561-587.	1.4	71
21	Helicity amplitudes for high-energy scattering. Journal of High Energy Physics, 2013, 2013, 1.	1.6	66
22	Deeply virtual Compton scattering and its beam charge asymmetry in $p$ -Pb collisions at HERA. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2009, 681, 391-399.	1.5	61
23	Jet production in ep collisions at low $Q^2$ and determination of $\hat{\Gamma}_{\pm}$ s. European Physical Journal C, 2010, 67, 1-24.	1.4	61
24	Jet production in ep collisions at high $Q^2$ and determination of $\hat{\Gamma}_{\pm}$ s. European Physical Journal C, 2010, 65, 363-383.	1.4	60
25	Inelastic production of $J/\psi$ mesons in photoproduction and deep inelastic scattering at HERA. European Physical Journal C, 2010, 68, 401-420.	1.4	50
26	Forward jets and energy flow in hadronic collisions. European Physical Journal C, 2012, 72, 1.	1.4	48
27	Forward di-jet production in p+Pb collisions in the small-x improved TMD factorization framework. Journal of High Energy Physics, 2016, 2016, 1.	1.6	47
28	Predictions for cold nuclear matter effects in p+Pb collisions at $\sqrt{s}$ TeV. Nuclear Physics A, 2018, 972, 18-85.	0.6	43
29	Novel tools and observables for jet physics in heavy-ion collisions. Journal of Physics G: Nuclear and Particle Physics, 2020, 47, 065102.	1.4	42
30	Multi-gluon helicity amplitudes with one off-shell leg within high energy factorization. Journal of High Energy Physics, 2012, 2012, 1.	1.6	39
31	Measurement of the cross section for diffractive deep-inelastic scattering with a leading proton at HERA. European Physical Journal C, 2011, 71, 1.	1.4	38
32	Scattering amplitudes with off-shell quarks. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2013, 727, 226-233.	1.5	37
33	Small- $x$ dynamics in forward central dijet correlations at the LHC. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2014, 737, 335-340.	1.5	37
34	Gluon saturation and entropy production in proton-proton collisions. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2011, 705, 217-221.	1.5	34
35	Estimating nonlinear effects in forward dijet production in ultra-peripheral heavy ion collisions at the LHC. European Physical Journal C, 2017, 77, 1.	1.4	33
36	QCD evolution based evidence for the onset of gluon saturation in exclusive photo-production of vector mesons. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2019, 795, 569-575.	1.5	32

#	ARTICLE	IF	CITATIONS
37	TMDlib2 and TMDplotter: a platform for 3D hadron structure studies. European Physical Journal C, 2021, 81, 1.	1.4	32
38	Exclusive Higgs boson production at the CERN LHC: Hard rescattering corrections. Physical Review D, 2006, 73, .	1.6	31
39	Search for single top quark production at HERA. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2009, 678, 450-458.	1.5	29
40	Diffraction dijet photoproduction in ep collisions at HERA. European Physical Journal C, 2010, 70, 15-37.	1.4	29
41	Predictions for p+Pb Collisions at sNN = 5TeV: Comparison with Data. International Journal of Modern Physics E, 2016, 25, 1630005.	0.4	29
42	Broadening and saturation effects in dijet azimuthal correlations in p-p and p-Pb collisions at $\sqrt{s} = 5.02$ TeV. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2019, 795, 511-515.	1.5	28
43	A general search for new phenomena at HERA. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2009, 674, 257-268.	1.5	27
44	Nonlinear equation for coherent gluon emission. Journal of High Energy Physics, 2012, 2012, 1.	1.6	27
45	Study of charm fragmentation into $D^{\pm}$ mesons in deep-inelastic scattering at HERA. European Physical Journal C, 2009, 59, 589-606.	1.4	26
46	Measurement of the meson production cross section and meson production cross section and $F_2$ at the LHC. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2015, 746, 301-306.	1.5	26
47	A momentum space analysis of the triple pomeron vertex in pQCD. European Physical Journal C, 2008, 53, 533-548.	1.4	23
48	Resummation effects in the forward production of $Z$ bosons at the LHC. Physical Review D, 2015, 92, .	1.6	23
49	Hard scale dependent gluon density, saturation, and forward-forward dijet production at the LHC. Physical Review D, 2015, 91, .	1.6	23
50	Saturation effects in forward-forward dijet production in p+Pb collisions. Physical Review D, 2014, 89, .	1.6	22
51	Calculations with off-shell matrix elements, TMD parton densities and TMD parton showers. European Physical Journal C, 2018, 78, 137.	1.4	22
52	Prompt photons in photoproduction at HERA. European Physical Journal C, 2010, 66, 17-33.	1.4	20
53	Forward Higgs production within high energy factorization in the heavy quark limit at next-to-leading order accuracy. European Physical Journal C, 2021, 81, 1.	1.4	20
54	Four-jet production in single- and double-parton scattering within high-energy factorization. Journal of High Energy Physics, 2016, 2016, 1-19.	1.6	19

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55	TMD splitting functions in $k_T$ factorization: the real contribution to the gluon-to-gluon splitting. European Physical Journal C, 2018, 78, 174.	1.4	19
56	Evidence for the maximally entangled low x proton in Deep Inelastic Scattering from H1 data. European Physical Journal C, 2022, 82, 1.	1.4	19
57	Calculation of the $\langle \mathcal{Z} \rangle$ jet cross section including transverse momenta of initial partons. Physical Review D, 2019, 99, .	1.6	18
58	Solutions of evolution equations for medium-induced QCD cascades. European Physical Journal C, 2019, 79, 1.	1.4	17
59	Sudakov effects in central-forward dijet production in high energy factorization. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2021, 814, 136078.	1.5	17
60	Events with isolated leptons and missing transverse momentum and measurement of W production at HERA. European Physical Journal C, 2009, 64, 251-271.	1.4	16
61	Measurement of charm and beauty jets in deep inelastic scattering at HERA. European Physical Journal C, 2011, 71, 1.	1.4	16
62	Transverse-momentum-dependent quark splitting functions in $k_T$ -factorization: real contributions. Journal of High Energy Physics, 2016, 2016, 1.	1.6	16
63	Search for excited electrons in ep collisions at HERA. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2008, 666, 131-139.	1.5	15
64	Single and double inclusive forward jet production at the LHC at $\sqrt{s}=7$ and $13$ TeV. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2016, 760, 594-601.	1.5	15
65	Transverse momentum dependent splitting functions at work: Quark-to-gluon splitting. Physical Review D, 2016, 94, .	1.6	15
66	Multi-lepton production at high transverse momenta in ep collisions at HERA. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2008, 668, 268-276.	1.5	13
67	Resummation in nonlinear equation for high energy factorizable gluon density and its extension to include coherence. Journal of High Energy Physics, 2012, 2012, 1.	1.6	13
68	boson production in proton-lead collisions at the LHC accounting for transverse momenta of initial partons. Physical Review D, 2019, 100, .	1.6	13
69	TMD gluon distributions for multiparton processes. European Physical Journal C, 2019, 79, 1.	1.4	13
70	A search for excited neutrinos in $ep$ collisions at HERA. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2008, 663, 382-389.	1.5	12
71	Search for optimal conditions for exploring double-parton scattering in four-jet production: $k_T$ -factorization approach. Physical Review D, 2016, 94, .	1.6	11
72	Trijets in $k_T$ -factorisation: matrix elements vs parton shower. European Physical Journal C, 2020, 80, 1.	1.4	11

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73	Probing gluon number density with electron-dijet correlations at EIC. European Physical Journal C, 2021, 81, 1.	1.4	10
74	Search for excited quarks in ep collisions at HERA. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2009, 678, 335-343.	1.5	9
75	Three-jet production and gluon saturation effects in $p\bar{p}$ and p-Pb collisions within high-energy factorization. Physical Review D, 2013, 88, .	1.6	9
76	On the different forms of the kinematical constraint in BFKL. European Physical Journal C, 2019, 79, 1.	1.4	9
77	Medium induced QCD cascades: broadening and rescattering during branching. Journal of High Energy Physics, 2021, 2021, 1.	1.6	9
78	A method for tuning parameters of Monte Carlo generators and its application to the determination of the unintegrated gluon density. European Physical Journal C, 2010, 70, 503-511.	1.4	8
79	Events with an isolated lepton and missing transverse momentum and measurement of W production at HERA. Journal of High Energy Physics, 2010, 2010, 1.	1.6	8
80	Search for squarks in R-parity violating supersymmetry in $e\bar{p}$ collisions at HERA. European Physical Journal C, 2011, 71, 1.	1.4	8
81	Single inclusive jet production and the nuclear modification ratio at very forward rapidity in proton-lead collisions with $\sqrt{s_{NN}}=5.02$ TeV. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2018, 780, 185-190.	1.5	8
82	Observation of the hadronic final state charge asymmetry in high $Q^2$ deep-inelastic scattering at HERA. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2009, 681, 125-133.	1.5	7
83	Forward trijet production in p-p and p-Pb collisions at LHC. Journal of High Energy Physics, 2020, 2020, 1.	1.6	7
84	All-plus helicity off-shell gauge invariant multigluon amplitudes at one loop. Journal of High Energy Physics, 2020, 2020, 1.	1.6	7
85	Multi-leptons with high transverse momentum at HERA. Journal of High Energy Physics, 2009, 2009, 013-013.	1.6	5
86	Measurement of diffractive scattering of photons with large momentum transfer at HERA. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2009, 672, 219-226.	1.5	5
87	A parton branching with transverse momentum dependent splitting functions. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2022, 833, 137276	1.5	5
88	Inclusive photoproduction of $\bar{K}^0$ , $K^0$ , $\bar{K}^*$ and $K^*$ mesons at HERA. $\text{altimg}="si1.gif"$ $\text{overflow}="scroll">\langle\text{mml:msup}\rangle\langle\text{mml:mi}\rangle\bar{K}\langle\text{mml:mi}\rangle\langle\text{mml:mrow}\rangle\langle\text{mml:mn}\rangle 0\langle\text{mml:mn}\rangle\langle\text{mml:msup}\rangle\langle\text{mml:math}\rangle,$ $\langle\text{mml:math}\text{ xmlns:mml}="http://www.w3.org/1998/Math/MathML" \text{ altimg}="si2.gif"$ $\text{overflow}="scroll">\langle\text{mml:msup}\rangle\langle\text{mml:mi}\rangle K\langle\text{mml:mi}\rangle\langle\text{mml:mrow}\rangle\langle\text{mml:mo}\rangle\hat{=}\langle\text{mml:mo}\rangle\langle\text{mml:mrow}\rangle\langle\text{mml:mspace}\text{ width}="0.2em"/>\langle\text{mml:mn}\rangle 0\langle\text{mml:mn}\rangle\langle\text{mml:mrow}\rangle\langle\text{mml:msup}\rangle\langle\text{mml:math}\rangle$ and $\bar{K}^*$ mesons at HERA.	1.5	4
89	Saturation and linear transport equation. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2009, 675, 332-335.	1.5	4
90	Strangeness production at low $Q^2$ in deep-inelastic ep scattering at HERA. European Physical Journal C, 2009, 61, 185-205.	1.4	4

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91	Gluon saturation scale from the KGBJS equation. Journal of High Energy Physics, 2013, 2013, 1.	1.6	4
92	QCD amplitudes with 2 initial spacelike legs via generalised BCFW recursion. Journal of High Energy Physics, 2017, 2017, 1.	1.6	4
93	On systematic effects in the numerical solutions of the JIMWLK equation. European Physical Journal C, 2021, 81, 1.	1.4	4
94	System of evolution equations for quark and gluon jet quenching with broadening. European Physical Journal C, 2022, 82, 1.	1.4	4
95	Title is missing!. Acta Physica Polonica B, 2013, 44, 1527.	0.3	3
96	Single inclusive jet transverse momentum and energy spectra at very forward rapidity in proton-proton collisions with $\sqrt{s}=7$ and $13$ TeV. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2017, 770, 412-417.	1.5	3
97	Towards tomography of quark-gluon plasma using double inclusive forward-central jets in Pb-Pb collision. European Physical Journal C, 2017, 77, 1.	1.4	3
98	A new Monte Carlo study of evolution equation with coherence. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2013, 722, 151-156.	1.5	2
99	Nonlinear evolution of unintegrated gluon density at large values of coupling constant. Physical Review D, 2014, 89, .	1.6	2
100	Jet quenching and effects of non-Gaussian transverse-momentum broadening on dijet observables. Physical Review C, 2020, 102, .	1.1	2
101	Rapidity dependence of the average transverse momentum in p+p and p+Pb collisions revisited. Physical Review D, 2017, 95, .	1.6	2
102	Forward Physics Hard Processes and Saturation: Theory and Phenomenology Review. Progress of Theoretical Physics Supplement, 2012, 193, 197-203.	0.2	1
103	Kinematical constraint effects in the evolution equations based on angular ordering. Journal of High Energy Physics, 2015, 2015, 1.	1.6	1
104	Forward di-jet production in dilute-dense collisions. EPJ Web of Conferences, 2016, 112, 04006.	0.1	1
105	Small-x phenomenology - Summary of the 3rd Lund small-x workshop in 2004. , 0, .		1
106	Four-jet production in single- and double-parton scattering within high-energy factorization. , 2017, , .		1
107	Physics of forward jets at the Large Hadron Collider. , 2011, , .		0
108	Title is missing!. Acta Physica Polonica B, 2011, 42, 1487.	0.3	0

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109	Markov chain Monte Carlo solution of BK equation through Newton-Kantorovich method. Journal of High Energy Physics, 2013, 2013, 1.	1.6	0
110	IMPACT PARAMETER DEPENDENT GLUON DENSITY FROM THE BK EQUATION.. , 2007, , .		0
111	An approach to fast fits of the unintegrated gluon density. , 2008, , .		0
112	Parton shower effects in central scalar production at the LHC. , 2009, , .		0
113	Studies of forward jets and production of W,Z within kt factorisation approach. , 2010, , .		0
114	Title is missing!. Acta Physica Polonica B, Proceedings Supplement, 2013, 6, 207.	0.0	0
115	Gluon saturation and final states. , 2013, , .		0