

# Yuri V Kovchegov

## List of Publications by Year in descending order

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83  
papers

6,095  
citations

126907

33  
h-index

88630

70  
g-index

86  
all docs

86  
docs citations

86  
times ranked

2332  
citing authors

#	ARTICLE	IF	CITATIONS
1	Small- $x$ structure function of a nucleus including multiple Pomeron exchanges. Physical Review D, 1999, 60, .	4.7	1,112
2	Unitarization of the BFKL Pomeron on a nucleus. Physical Review D, 2000, 61, .	4.7	618
3	Non-Abelian Weizsäcker-Williams field and a two-dimensional effective color charge density for a very large nucleus. Physical Review D, 1996, 54, 5463-5469.	4.7	349
4	Gluon production in current-nucleus and nucleon-nucleus collisions in a quasi-classical approximation. Nuclear Physics B, 1998, 529, 451-479.	2.5	327
5	Cronin effect and high- $p_T$ suppression in $pA$ collisions. Physical Review D, 2003, 68, .	4.7	293
6	Triumvirate of running couplings in small- $x$ evolution. Nuclear Physics A, 2007, 784, 188-226.	1.5	283
7	Inclusive gluon production in deep inelastic scattering at high parton density. Physical Review D, 2002, 65, .	4.7	228
8	Nuclear modification factor in $\langle \text{mml:math altimg="si1.gif" overflow="scroll" xmlns:xocs="http://www.elsevier.com/xml/xocs/dtd" xmlns:xs="http://www.w3.org/2001/XMLSchema" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns="http://www.elsevier.com/xml/ja/dtd" xmlns:ja="http://www.elsevier.com/xml/ja/dtd" xmlns:mml="http://www.w3.org/1998/Math/MathML" xmlns:tb="http://www.elsevier.com/xml/common/table/dtd" xmlns:sb="http://www.elsevier.com/xml/common/struct-bib/dtd" xmlns:ce="http://www.elsevier.com/x$	4.1	183
9	Quantum structure of the non-Abelian Weizsäcker-Williams field for a very large nucleus. Physical Review D, 1997, 55, 5445-5455.	4.7	182
10	Solving the high energy evolution equation including running coupling corrections. Physical Review D, 2007, 75, .	4.7	160
11	Classical gluon radiation in ultrarelativistic nucleus-nucleus collisions. Physical Review C, 1997, 56, 1084-1094.	2.9	147
12	Inclusive two-gluon and valence-quark-gluon production in DIS and $pA$ collisions. Physical Review D, 2004, 70, .	4.7	130
13	Long-range rapidity correlations in heavy-ion collisions. Nuclear Physics A, 2013, 906, 50-83.	1.5	99
14	Classical initial conditions for ultrarelativistic heavy ion collisions. Nuclear Physics A, 2001, 692, 557-582.	1.5	93
15	Subleading- corrections in non-linear small- $x$ evolution. Nuclear Physics A, 2009, 823, 47-82.	1.5	84
16	Perturbative odderon in the dipole model. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2004, 586, 267-281.	4.1	83
17	Quark loop contribution to BFKL evolution: Running coupling and leading- NLO intercept. Nuclear Physics A, 2007, 789, 260-284.	1.5	82
18	Diffraction structure function in a quasiclassical approximation. Physical Review D, 1999, 60, .	4.7	78

#	ARTICLE	IF	CITATIONS
19	QCD instantons and the soft pomeron. Nuclear Physics A, 2001, 690, 621-646.	1.5	62
20	Helicity evolution at small x. Journal of High Energy Physics, 2016, 2016, 1.	4.7	61
21	Baryon stopping and valence quark distribution at small x. Nuclear Physics A, 2004, 730, 160-190.	1.5	57
22	Elliptic flow from minijet production in heavy ion collisions. Nuclear Physics A, 2002, 708, 413-434.	1.5	53
23	New mechanism for generating a single transverse spin asymmetry. Physical Review D, 2012, 86, .	4.7	53
24	Helicity evolution at small $x$ : Flavor singlet and nonsinglet observables. Physical Review D, 2017, 95, .	4.7	49
25	Small- $x$ asymptotics of the Quark Helicity Distribution. Physical Review Letters, 2017, 118, 052001.	7.8	47
26	Small- $x$ asymptotics of the gluon helicity distribution. Journal of High Energy Physics, 2017, 2017, 1.	4.7	46
27	Small- $x$ helicity evolution: An operator treatment. Physical Review D, 2019, 99, .	4.7	43
28	Small- $x$ asymptotics of the quark helicity distribution: Analytic results. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2017, 772, 136-140.	4.1	42
29	Production of $q\bar{q}$ pairs in proton-nucleus collisions at high energies. Physical Review D, 2006, 74, .	4.7	41
30	Two-gluon correlations in heavy-ion collisions: Energy and geometry dependence, IR divergences, and $k_T$ dependence. Nuclear Physics A, 2014, 925, 254-295.	1.5	40
31	Helicity-dependent generalization of the JIMWLK evolution. Physical Review D, 2019, 100, .	4.7	40
32	Toward thermalization in heavy ion collisions at strong coupling. Journal of High Energy Physics, 2010, 2010, 1.	4.7	39
33	Can thermalization in heavy ion collisions be described by QCD diagrams?. Nuclear Physics A, 2005, 762, 298-325.	1.5	37
34	Calculating TMDs of a large nucleus: Quasi-classical approximation and quantum evolution. Nuclear Physics B, 2016, 903, 164-203.	2.5	30
35	Running coupling corrections to high energy inclusive gluon production. Nuclear Physics A, 2011, 849, 72-97.	1.5	29
36	How classical gluon fields generate odd azimuthal harmonics for the two-gluon correlation function in high-energy collisions. Physical Review D, 2018, 97, .	4.7	29

#	ARTICLE	IF	CITATIONS
37	Single-spin asymmetries in semi-inclusive deep inelastic scattering and Drell-Yan processes. Physical Review D, 2013, 88, .	4.7	27
38	Comparing AdS/CFT calculations to HERA $\int_0^1 dx F_2(x, Q^2)$ data. Physical Review D, 2009, 80, .	4.7	25
39	Solution of the NLO BFKL equation and a strategy for solving the all-order BFKL equation. Journal of High Energy Physics, 2013, 2013, 1.	4.7	25
40	Collinear singularities and running coupling corrections to gluon production in CGC. Nuclear Physics A, 2008, 807, 158-189.	1.5	24
41	Instantons in the saturation environment. Nuclear Physics A, 2002, 699, 745-769.	1.5	23
42	Helicity-dependent extension of the McLerran-Venugopalan model. Nuclear Physics A, 2020, 1004, 122051.	1.5	23
43	Helicity at small x: oscillations generated by bringing back the quarks. Journal of High Energy Physics, 2020, 2020, 1.	4.7	22
44	Orbital angular momentum at small x. Journal of High Energy Physics, 2019, 2019, 1.	4.7	20
45	$\hat{\sigma}^3 * \hat{\sigma}^3$ cross section at NLO and properties of the BFKL evolution at higher orders. Journal of High Energy Physics, 2014, 2014, 1.	4.7	19
46	Sivers function in the quasiclassical approximation. Physical Review D, 2014, 89, .	4.7	18
47	First analysis of world polarized DIS data with small- $x$ helicity evolution. Physical Review D, 2021, 104, .	4.7	18
48	Quark sivers function at small x: spin-dependent odderon and the sub-eikonal evolution. Journal of High Energy Physics, 2021, 2021, 1.	4.7	18
49	Correlation functions and cumulants in elliptic flow analysis. Nuclear Physics A, 2003, 717, 249-267.	1.5	17
50	Valence quark transversity at small $x$ . Physical Review D, 2019, 99, .	4.7	16
51	Quark and gluon helicity evolution at small x: revised and updated. Journal of High Energy Physics, 2022, 2022, .	4.7	16
52	Helicity evolution at small x: the single-logarithmic contribution. Journal of High Energy Physics, 2022, 2022, 1.	4.7	15
53	Classical gluon production amplitude for nucleus-nucleus collisions: First saturation correction in the projectile. Journal of High Energy Physics, 2015, 2015, 1.	4.7	14
54	Thoughts on non-perturbative thermalization and jet quenching in heavy ion collisions. Nuclear Physics A, 2006, 764, 476-497.	1.5	13

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55	Baryon stopping in proton-nucleus collisions. Nuclear Physics A, 2007, 781, 122-149.	1.5	12
56	Early Time Dynamics in Heavy Ion Collisions from CGC and from AdS/CFT. Nuclear Physics A, 2009, 830, 395c-402c.	1.5	12
57	DIS in AdS. , 2009, , .		9
58	Shock Wave Collisions and Thermalization in AdS <sub>5</sub> . Progress of Theoretical Physics Supplement, 2011, 187, 96-105.	0.1	8
59	Cronin effect and high-p <sub>T</sub> suppression in p(d)A collisions. Journal of Physics G: Nuclear and Particle Physics, 2004, 30, S979-S982.	3.6	7
60	Lensing mechanism meets small- $x$ : physics: Single transverse spin asymmetry in $\hat{\sigma}^{\uparrow} \langle \sigma^{\uparrow} \rangle p$ and $\langle \sigma^{\uparrow} \rangle + \langle \sigma^{\uparrow} \rangle p$	4.7	7
61	Running coupling evolution for diffractive dissociation and the NLO odderon intercept. AIP Conference Proceedings, 2013, , .	0.4	6
62	Long-range rapidity correlations in heavy ion collisions at strong coupling from AdS/CFT. Journal of High Energy Physics, 2011, 2011, 1.	4.7	5
63	Regularization of the light-cone gauge gluon propagator singularities using sub-gauge conditions. Journal of High Energy Physics, 2015, 2015, 1-26.	4.7	4
64	Time-dependent observables in heavy ion collisions. Part II. In search of pressure isotropization in the $\hat{\tau}^4$ theory. Journal of High Energy Physics, 2018, 2018, 1.	4.7	4
65	Time-dependent observables in heavy ion collisions. Part I. Setting up the formalism. Journal of High Energy Physics, 2018, 2018, 1.	4.7	3
66	LONG-RANGE RAPIDITY CORRELATIONS IN HEAVY-LIGHT ION COLLISIONS. International Journal of Modern Physics Conference Series, 2014, 25, 1460023.	0.7	2
67	Helicity evolution at small $x$ . , 2016, 2016, 1.		2
68	Elliptic flow from parton saturation. Nuclear Physics A, 2003, 715, 891c-894c.	1.5	1
69	SINGLE SPIN ASYMMETRY IN HIGH ENERGY QCD. International Journal of Modern Physics Conference Series, 2012, 20, 177-186.	0.7	1
70	Recent Developments at Small- $x$ . International Journal of Modern Physics Conference Series, 2015, 37, 1560054.	0.7	1
71	$\hat{\sigma}^{\uparrow} \hat{\sigma}^{\uparrow}$ cross section at NLO and properties of the BFKL evolution at higher orders. , 2014, 2014, 1.		1
72	QCD at high parton density. AIP Conference Proceedings, 2001, , .	0.4	0

#	ARTICLE	IF	CITATIONS
73	Saturation Physics in Heavy Ion Collisions. AIP Conference Proceedings, 2004, , .	0.4	0
74	Baryon Stopping in pA Collisions. Nuclear Physics A, 2007, 783, 573-576.	1.5	0
75	Parton Saturation and the Color Glass Condensate. Nuclear Physics A, 2007, 785, 68-75.	1.5	0
76	Heavy ion collisions in AdS5. Nuclear Physics A, 2011, 855, 237-240.	1.5	0
77	Small $x$ Asymptotics of the Quark and Gluon Helicity Distributions. EPJ Web of Conferences, 2018, 172, 03006.	0.3	0
78	HIGH ENERGY QCD AND THE LARGE $N_C$ LIMIT. , 2002, , .		0
79	SATURATION PHYSICS MEETS RHIC DATA. , 2004, , .		0
80	Quark and Gluon Helicity at Small $x$ . , 2020, , .		0
81	Introduction for Week IV. , 2020, , .		0
82	Introduction for Week III. , 2020, , .		0
83	From Parton Saturation to Proton Spin: The Impact of BFKL Equation and Reggeon Evolution. , 2021, , 203-238.		0