

Valentin V Khoze

List of Publications by Year in descending order

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115
papers

4,441
citations

81900

39
h-index

114465

63
g-index

115
all docs

115
docs citations

115
times ranked

5954
citing authors

#	ARTICLE	IF	CITATIONS
1	Simplified models for dark matter searches at the LHC. <i>Physics of the Dark Universe</i> , 2015, 9-10, 8-23.	4.9	250
2	The calculus of many instantons. <i>Physics Reports</i> , 2002, 371, 231-459.	25.6	228
3	MHV Rules for Higgs Plus Multi-Gluon Amplitudes. <i>Journal of High Energy Physics</i> , 2004, 2004, 015-015.	4.7	168
4	Glينو condensate and magnetic monopoles in supersymmetric gluodynamics. <i>Nuclear Physics B</i> , 1999, 559, 123-142.	2.5	162
5	Recursion relations for gauge theory amplitudes with massive particles. <i>Journal of High Energy Physics</i> , 2005, 2005, 025-025.	4.7	143
6	Non-MHV Tree Amplitudes in Gauge Theory. <i>Journal of High Energy Physics</i> , 2004, 2004, 048-048.	4.7	140
7	Tree Amplitudes in Gauge Theory as Scalar MHV Diagrams. <i>Journal of High Energy Physics</i> , 2004, 2004, 070-070.	4.7	128
8	Dark Matter benchmark models for early LHC Run-2 Searches: Report of the ATLAS/CMS Dark Matter Forum. <i>Physics of the Dark Universe</i> , 2020, 27, 100371.	4.9	126
9	Multi-instanton calculus and the AdS/CFT correspondence in superconformal field theory. <i>Nuclear Physics B</i> , 1999, 552, 88-168.	2.5	116
10	Multi-instanton calculus in $N=2$ supersymmetric gauge theory. <i>Physical Review D</i> , 1996, 54, 2921-2943.	4.7	109
11	Illuminating the hidden sector of string theory by shining light through a magnetic field. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2008, 666, 66-70.	4.1	102
12	Inflation and dark matter in the Higgs portal of classically scale invariant Standard Model. <i>Journal of High Energy Physics</i> , 2013, 2013, 1.	4.7	101
13	Hearing the signal of dark sectors with gravitational wave detectors. <i>Physical Review D</i> , 2016, 94, .	4.7	91
14	Monopoles, affine algebras and the gluino condensate. <i>Journal of Mathematical Physics</i> , 2003, 44, 3640-3656.	1.1	89
15	Higgs vacuum stability from the dark matter portal. <i>Journal of High Energy Physics</i> , 2014, 2014, 1.	4.7	76
16	Constraining dark sectors at colliders: Beyond the effective theory approach. <i>Physical Review D</i> , 2015, 91, .	4.7	76
17	Leptogenesis and neutrino oscillations in the classically conformal standard model with the Higgs portal. <i>Journal of High Energy Physics</i> , 2013, 2013, 1.	4.7	75
18	Recursion relations for gauge theory amplitudes with massive vector bosons and fermions. <i>Journal of High Energy Physics</i> , 2006, 2006, 066-066.	4.7	74

#	ARTICLE	IF	CITATIONS
19	Three-point functions in Script $N = 4$ Yang-Mills theory and pp-waves. Journal of High Energy Physics, 2002, 2002, 011-011.	4.7	72
20	MHV Rules for Higgs Plus Multi-Parton Amplitudes. Journal of High Energy Physics, 2005, 2005, 023-023.	4.7	72
21	Dynamical breaking of $U(1)$ supersymmetry in a metastable vacuum. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2008, 661, 201-209.	4.1	71
22	Multi-instanton calculus in $N=2$ supersymmetric gauge theory. II. Coupling to matter. Physical Review D, 1996, 54, 7832-7848.	4.7	68
23	SUSY breaking by a metastable ground state: why the early Universe preferred the non-supersymmetric vacuum. Journal of High Energy Physics, 2007, 2007, 089-089.	4.7	56
24	Multi-gluon collinear limits from MHV diagrams. Journal of High Energy Physics, 2005, 2005, 013-013.	4.7	55
25	Wilsonian effective actions and the IR/UV mixing in noncommutative gauge theories. Journal of High Energy Physics, 2001, 2001, 026-026.	4.7	51
26	Dark matter monopoles, vectors and photons. Journal of High Energy Physics, 2014, 2014, 1.	4.7	50
27	On $N = 2$ supersymmetric QCD with four flavors. Nuclear Physics B, 1997, 492, 607-622.	2.5	48
28	Magnons, classical strings and \hat{t}^2 -deformations. Journal of High Energy Physics, 2006, 2006, 093-093.	4.7	47
29	Yang-Mills instantons in the large- N limit and the AdS/CFT correspondence. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1998, 442, 145-151.	4.1	46
30	Multi-instanton check of the relation between the prepotential F and the modulus u in $N = 2$ SUSY Yang-Mills theory. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1997, 390, 205-209.	4.1	43
31	Notes on noncommutative instantons. Nuclear Physics B, 2002, 621, 101-130.	2.5	43
32	Amplitudes in the \hat{t}^2 -deformed conformal Yang-Mills. Journal of High Energy Physics, 2006, 2006, 040-040.	4.7	42
33	Magnetic mixing "electric" minicharges from magnetic monopoles. Journal of High Energy Physics, 2009, 2009, 037-037.	4.7	42
34	Phenomenology of pure general gauge mediation. Journal of High Energy Physics, 2009, 2009, 001-001.	4.7	42
35	On mass-deformed $N = 4$ supersymmetric Yang-Mills theory. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1997, 396, 141-149.	4.1	41
36	Recommendations on presenting LHC searches for missing transverse energy signals using simplified s -channel models of dark matter. Physics of the Dark Universe, 2020, 27, 100365.	4.9	41

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37	Patterns of gauge mediation in metastable SUSY breaking. Journal of High Energy Physics, 2008, 2008, 074-074.	4.7	40
38	Analytic results for MHV Wilson loops. Journal of High Energy Physics, 2010, 2010, 1.	4.7	40
39	Interplay and characterization of Dark Matter searches at colliders and in direct detection experiments. Physics of the Dark Universe, 2015, 9-10, 51-58.	4.9	40
40	The instanton hunter's guide to supersymmetric SU(N) gauge theories. Nuclear Physics B, 1998, 536, 69-109.	2.5	38
41	Dark matter and leptogenesis linked by classical scale invariance. Journal of High Energy Physics, 2016, 2016, 1.	4.7	36
42	Towards the next generation of simplified Dark Matter models. Physics of the Dark Universe, 2017, 16, 49-70.	4.9	34
43	Simplified models of dark matter with a long-lived co-annihilation partner. Journal of High Energy Physics, 2017, 2017, 1.	4.7	34
44	The axion mass from 5D small instantons. Journal of High Energy Physics, 2020, 2020, 1.	4.7	33
45	Simplicity of polygon Wilson loops in $\mathcal{N} = 4$ SYM. Journal of High Energy Physics, 2010, 2010, 1.	4.7	32
46	Vacuum birefringence as a probe of Planck scale noncommutativity. Journal of High Energy Physics, 2006, 2006, 074-074.	4.7	31
47	Breakdown of cluster decomposition in instanton calculations of the gluino condensate. Nuclear Physics B, 2000, 570, 241-266.	2.5	30
48	Why the early Universe preferred the non-supersymmetric vacuum: part II. Journal of High Energy Physics, 2007, 2007, 015-015.	4.7	30
49	Multi-instantons and Maldacena's conjecture. Journal of High Energy Physics, 1999, 1999, 023-023.	4.7	29
50	Exact results in noncommutative Script N = 2 supersymmetric gauge theories. Journal of High Energy Physics, 2001, 2001, 051-051.	4.7	29
51	Exact results in 5D from instantons and deconstruction. Physical Review D, 2002, 65, .	4.7	29
52	A two-instanton test of the exact solution of N = 2 supersymmetric QCD. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1996, 388, 324-330.	4.1	28
53	Gaugino versus sfermion masses in gauge mediation. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2010, 682, 441-445.	4.1	28
54	Direct mediation, duality and unification. Journal of High Energy Physics, 2008, 2008, 024-024.	4.7	27

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55	Higgsplosion: Solving the hierarchy problem via rapid decays of heavy states into multiple Higgs bosons. Nuclear Physics B, 2018, 926, 95-111.	2.5	27
56	Minkowski space non-Abelian classical solutions with noninteger winding number change. Physical Review D, 1993, 47, 5551-5564.	4.7	25
57	PP-wave string interactions from n-point correlators of BMN operators. Journal of High Energy Physics, 2002, 2002, 054-054.	4.7	24
58	Supersymmetry and the multi-instanton measure. Nuclear Physics B, 1998, 513, 681-708.	2.5	22
59	A note on string interaction on the pp-wave background. Classical and Quantum Gravity, 2004, 21, 1999-2009.	4.0	22
60	Telltale traces of U(1) fields in noncommutative standard model extensions. Journal of High Energy Physics, 2006, 2006, 028-028.	4.7	22
61	Pure general gauge mediation for early LHC searches. Journal of High Energy Physics, 2010, 2010, 1.	4.7	21
62	New constraints on gauge mediation and beyond from LHC SUSY searches at 7 TeV. Journal of High Energy Physics, 2011, 2011, 1.	4.7	21
63	The D-instanton partition function. Journal of High Energy Physics, 2001, 2001, 040-040.	4.7	20
64	Wilson loops @ 3-loops in special kinematics. Journal of High Energy Physics, 2011, 2011, 1.	4.7	20
65	Noncommutative Standard Modelling. Journal of High Energy Physics, 2004, 2004, 019-019.	4.7	19
66	Supersymmetry and the multi-instanton measure II. From N = 4 to N = 0. Nuclear Physics B, 1998, 519, 470-482.	2.5	18
67	Noncommutativity, extra dimensions, and power law running in the infrared. Journal of High Energy Physics, 2006, 2006, 105-105.	4.7	18
68	On the diversity of gauge mediation: footprints of dynamical SUSY breaking. Journal of High Energy Physics, 2009, 2009, 017-017.	4.7	17
69	Photo-production of a 750 GeV di-photon resonance mediated by Kaluza-Klein leptons in the loop. Journal of High Energy Physics, 2016, 2016, 1.	4.7	17
70	Scattering amplitudes in strongly coupled N= 4 SYM from semiclassical strings in AdS. Journal of High Energy Physics, 2008, 2008, 042-042.	4.7	15
71	Dynamical breaking of supersymmetry in noncommutative gauge theories. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2001, 513, 200-206.	4.1	14
72	Perturbative growth of high-multiplicity W, Z and Higgs production processes at high energies. Journal of High Energy Physics, 2015, 2015, 1.	4.7	14

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73	Instanton calculations in the \hat{t}^2 -deformed AdS/CFT correspondence. Journal of High Energy Physics, 2006, 2006, 049-049.	4.7	13
74	Upper limit on the scale of new physics phenomena from rising cross sections in high multiplicity Higgs and vector boson events. Physical Review D, 2015, 91, .	4.7	13
75	Spectroscopy of scalar mediators to dark matter at the LHC and at 100ÅTeV. Physical Review D, 2015, 92, .	4.7	13
76	Closing up on dark sectors at colliders: From 14 to 100ÅTeV. Physical Review D, 2016, 93, .	4.7	13
77	Mass sum rules and the role of the messenger scale in General Gauge Mediation. Journal of High Energy Physics, 2011, 2011, 1.	4.7	12
78	Multiparticle Higgs and vector boson amplitudes at threshold. Journal of High Energy Physics, 2014, 2014, 1.	4.7	12
79	Higgsploding universe. Physical Review D, 2017, 96, .	4.7	12
80	Multiparticle production in the large \hat{t}^n limit: realising Higgsplosion in a scalar QFT. Journal of High Energy Physics, 2017, 2017, 1.	4.7	12
81	Review of the semiclassical formalism for multiparticle production at high energies. Physics Reports, 2019, 822, 1-52.	25.6	12
82	Instanton test of non-supersymmetric deformations of the AdS5Å–S5. Journal of High Energy Physics, 2006, 2006, 005-005.	4.7	11
83	On Affleck-Dine-Seiberg superpotential and magnetic monopoles in supersymmetric QCD. Journal of High Energy Physics, 2000, 2000, 015-015.	4.7	10
84	ADHM and D-instantons in orbifold AdS/CFT duality. Nuclear Physics B, 2000, 575, 78-106.	2.5	10
85	Noncommutativity and model building. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2002, 543, 318-322.	4.1	10
86	MHV amplitudes in $\mathcal{N} = 2$ SQCD and in $\mathcal{N} = 4$ SYM at one-loop. Journal of High Energy Physics, 2008, 2008, 033-033.	4.7	10
87	Dual unified SU(5). Journal of High Energy Physics, 2010, 2010, 1.	4.7	10
88	String theory dual of the \hat{t}^2 -deformed gauge theory. Journal of High Energy Physics, 2006, 2006, 011-011.	4.7	9
89	Uplifting amplitudes in special kinematics. Journal of High Energy Physics, 2012, 2012, 1.	4.7	9
90	Multi-Higgs-boson production in gluon fusion at 100ÅTeV. Physical Review D, 2016, 94, .	4.7	9

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91	Regular Wilson loops and MHV amplitudes at weak and strong coupling. Journal of High Energy Physics, 2010, 2010, 1.	4.7	8
92	RG invariants, unification and the role of the messenger scale in General Gauge Mediation. Journal of High Energy Physics, 2011, 2011, 1.	4.7	8
93	Large effects from small QCD instantons: making soft bombs at hadron colliders. Journal of High Energy Physics, 2020, 2020, 1.	4.7	8
94	Mapping the shape of the scalar potential with gravitational waves. International Journal of Modern Physics A, 2019, 34, 1950223.	1.5	8
95	Fermion number violation in the background of a gauge field in Minkowski space. Nuclear Physics B, 1995, 445, 270-294.	2.5	7
96	The emergence of electroweak Skyrmions through Higgs bosons. Journal of High Energy Physics, 2021, 2021, 1.	4.7	7
97	Consistency of Higgspllosion in localizable QFT. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2019, 790, 466-474.	4.1	6
98	GAUGE THEORY AMPLITUDES, SCALAR GRAPHS AND TWISTOR SPACE. , 2005, , 622-657.		6
99	Small instantons and the strong CP problem in composite Higgs models. Physical Review D, 2021, 104, .	4.7	6
100	Spherical shells of a classical gauge field and their topological charge as a perturbative expansion. Physical Review D, 1994, 50, 4162-4174.	4.7	5
101	Travels on the squark-gluino mass plane. Physical Review D, 2012, 85, .	4.7	5
102	The TeV dawn of SUSY models – Consequences for flavour and CP. Journal of High Energy Physics, 2012, 2012, 1.	4.7	5
103	Diagrammatic computation of multi-Higgs processes at very high energies: Scaling log ² n with MadGraph. Physical Review D, 2015, 92, .	4.7	5
104	Searching for QCD instantons at hadron colliders. Physical Review D, 2021, 103, .	4.7	5
105	Suppression of electroweak instanton processes in high-energy collisions. International Journal of Modern Physics A, 2021, 36, 2150032.	1.5	5
106	Direct SUSY Searches at the LHC in the light of LEP Higgs bounds. Journal of High Energy Physics, 2012, 2012, 1.	4.7	4
107	Precision measurements for the Higgsploding standard model. Journal of Physics G: Nuclear and Particle Physics, 2019, 46, 065004.	3.6	3
108	Hunting for QCD instantons at the LHC in events with large rapidity gaps. Physical Review D, 2021, 104, .	4.7	3

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109	GAUGE THEORY AMPLITUDES, SCALAR GRAPHS AND TWISTOR SPACE. , 2004, , .		2
110	Electroweak skyrmions in the HEFT. Journal of High Energy Physics, 2021, 2021, 1.	4.7	2
111	Multiparticle amplitudes in a scalar EFT. Journal of High Energy Physics, 2022, 2022, .	4.7	2
112	The vacuum theta-angle is zero in non-abelian gauge theories. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1994, 328, 387-391.	4.1	1
113	From branes to branes. Nuclear Physics B, 2004, 682, 217-242.	2.5	1
114	Central instanton production. Physical Review D, 2022, 105, .	4.7	1
115	Optical effects of domain walls. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2022, 829, 137044.	4.1	0