

# Andrei Smilga

## List of Publications by Year in descending order

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56  
papers

1,201  
citations

394421

19  
h-index

395702

33  
g-index

58  
all docs

58  
docs citations

58  
times ranked

407  
citing authors

#	ARTICLE	IF	CITATIONS
1	Analytical properties of the quark polarization operator in an external self-dual field. Nuclear Physics B, 1981, 185, 109-132.	2.5	120
2	Benign vs. malicious ghosts in higher-derivative theories. Nuclear Physics B, 2005, 706, 598-614.	2.5	110
3	Ghost-free higher-derivative theory. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2006, 632, 433-438.	4.1	76
4	Renormalizable supersymmetric gauge theory in six dimensions. Nuclear Physics B, 2005, 726, 131-148.	2.5	67
5	Background field calculations and nonrenormalization theorems in 4d supersymmetric gauge theories and their low-dimensional descendants. Nuclear Physics B, 2005, 704, 445-474.	2.5	61
6	Supersymmetric gauge quantum mechanics: superfield description. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1991, 257, 79-82.	4.1	55
7	Normalized vacuum states in supersymmetric Yang-Mills quantum mechanics with any gauge group. Nuclear Physics B, 2000, 571, 515-554.	2.5	53
8	Complex Bogomol'nyi-Prasad-Sommerfield Domain Walls and Phase Transition in Mass in Supersymmetric QCD. Physical Review Letters, 1997, 79, 4529-4532.	7.8	51
9	Classical and quantum dynamics of higher-derivative systems. International Journal of Modern Physics A, 2017, 32, 1730025.	1.5	41
10	Perturbative corrections to effective zero-mode hamiltonian in supersymmetric QED. Nuclear Physics B, 1987, 291, 241-255.	2.5	39
11	VACUUM STRUCTURE IN SUPERSYMMETRIC YANG-MILLS THEORIES WITH ANY GAUGE GROUP. , 2000, , 185-234.		36
12	Conformal properties of hypermultiplet actions in six dimensions. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2006, 637, 374-381.	4.1	35
13	Domain walls zoo in supersymmetric QCD. Nuclear Physics B, 1998, 515, 163-183.	2.5	34
14	Supersymmetry versus ghosts. Journal of Mathematical Physics, 2008, 49, 042104.	1.1	34
15	How to quantize supersymmetric theories. Nuclear Physics B, 1987, 292, 363-380.	2.5	33
16	Supersymmetric field theory with benign ghosts. Journal of Physics A: Mathematical and Theoretical, 2014, 47, 052001.	2.1	23
17	Chiral anomalies in higher-derivative supersymmetric 6D gauge theories. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2007, 647, 298-304.	4.1	22
18	Comments on thermodynamics of supersymmetric matrix models. Nuclear Physics B, 2009, 818, 101-114.	2.5	22

#	ARTICLE	IF	CITATIONS
19	DIRAC OPERATOR ON COMPLEX MANIFOLDS AND SUPERSYMMETRIC QUANTUM MECHANICS. International Journal of Modern Physics A, 2012, 27, 1230024.	1.5	21
20	Symplectic sigma models in superspace. Nuclear Physics B, 2004, 694, 473-492.	2.5	19
21	Effective zero-mode hamiltonian in supersymmetric chiral nonabelian gauge theories. Nuclear Physics B, 1987, 287, 589-600.	2.5	18
22	Ultraviolet behavior of 6D supersymmetric Yang-Mills theories and harmonic superspace. Journal of High Energy Physics, 2015, 2015, 1-59.	4.7	17
23	Exceptional points in quantum and classical dynamics. Journal of Physics A: Mathematical and Theoretical, 2009, 42, 095301.	2.1	16
24	Effective Lagrangians for (0+1) and (1+1) dimensionally reduced versions of D=4, SYM theory. Nuclear Physics B, 2003, 652, 93-104.	2.5	14
25	On the Hilbert space of supersymmetric quantum systems. Nuclear Physics B, 1988, 299, 79-90.	2.5	12
26	Witten index in supersymmetric 3d theories revisited. Journal of High Energy Physics, 2010, 2010, 1.	4.7	10
27	Non-integer flux: Why it does not work. Journal of Mathematical Physics, 2012, 53, 042103.	1.1	10
28	N=4 mechanics with diverse (4, 4, 0) multiplets: Explicit examples of hyper-Kähler with torsion, Clifford Kähler with torsion, and octonionic Kähler with torsion geometries. Journal of Mathematical Physics, 2014, 55, 052302.	1.1	10
29	Once more on the Witten index of 3d supersymmetric YM-CS theory. Journal of High Energy Physics, 2012, 2012, 1.	4.7	9
30	Vacuum structure in quantum gravity. Nuclear Physics B, 1984, 234, 402-412.	2.5	8
31	Supercharges in the hyper-Kähler with torsion supersymmetric sigma models. Journal of Mathematical Physics, 2012, 53, .	1.1	8
32	Quasiclassical Expansion for $\text{Tr} \{ (\hat{a}^{-1}) F e^{\hat{a} \cdot \hat{I}^2 H} \}$ . Communications in Mathematical Physics, 2002, 230, 245-269.	2.2	7
33	REAL AND COMPLEX SUPERSYMMETRIC $d = 1$ SIGMA MODELS WITH TORSIONS. International Journal of Modern Physics A, 2012, 27, 1250146.	1.5	7
34	Taming the zoo of supersymmetric quantum mechanical models. Journal of High Energy Physics, 2013, 2013, 1.	4.7	7
35	Generic HKT geometries in the harmonic superspace approach. Journal of Mathematical Physics, 2018, 59, 083501.	1.1	7
36	On exactly solvable ghost-ridden systems. Physics Letters, Section A: General, Atomic and Solid State Physics, 2021, 389, 127104.	2.1	7

#	ARTICLE	IF	CITATIONS
37	Quantum gravity as Escher's Dragon. Physics of Atomic Nuclei, 2003, 66, 2092-2102.	0.4	6
38	Exceptional Points of Infinite Order Giving a Continuous Spectrum. International Journal of Theoretical Physics, 2015, 54, 3900-3906.	1.2	5
39	Comments on HKT supersymmetric sigma models and their Hamiltonian reduction. Journal of Physics A: Mathematical and Theoretical, 2015, 48, 215401.	2.1	5
40	Dynamical systems with benign ghosts. Physical Review D, 2022, 105, .	4.7	5
41	On the relation between effective supersymmetric actions in different dimensions. Physics of Atomic Nuclei, 2003, 66, 2238-2244.	0.4	4
42	Witten index in $\mathcal{N}=1$ supersymmetric sigma models and $\mathcal{N}=2$ supersymmetric sigma models. Journal of Mathematical Physics, 2016, 57, 042103.	2.5	4
43	6D SUPERCONFORMAL THEORY AS THE THEORY OF EVERYTHING. , 2006, , .		4
44	On Dynamics of 5D superconformal theories. Physics of Atomic Nuclei, 2007, 70, 960-968.	0.4	3
45	Bi-HKT and bi-Kähler supersymmetric sigma models. Journal of Mathematical Physics, 2016, 57, 042103.	1.1	3
46	Abelian matrix models in two loops. Nuclear Physics B, 2003, 659, 424-436.	2.5	2
47	Vacuum structure in 3D supersymmetric gauge theories. Physics-Uspekhi, 2014, 57, 155-166.	2.2	2
48	LOW-DIMENSIONAL SISTERS OF SEIBERG-WITTEN EFFECTIVE THEORY. , 2005, , 523-558.		2
49	Benign ghosts in higher-derivative systems. Journal of Physics: Conference Series, 2021, 2038, 012023.	0.4	2
50	Witten index for weak supersymmetric systems: invariance under deformations. International Journal of Modern Physics A, 0, , .	1.5	1
51	Multidimensional Dirac strings and the Witten index of SYMCS theories with groups of higher rank. Journal of High Energy Physics, 2014, 2014, 1.	4.7	0
52	Group manifolds and homogeneous spaces with HKT geometry: The role of automorphisms. Nuclear Physics B, 2020, 957, 115052.	2.5	0
53	Comments on the Newlander-Nirenberg Theorem. Springer Proceedings in Mathematics and Statistics, 2020, , 167-183.	0.2	0
54	An eight-dimensional Taub-NUT-like hyper-Kähler metric in harmonic superspace formalism. Journal of Mathematical Physics, 2020, 61, 112301.	1.1	0

#	ARTICLE	IF	CITATIONS
55	Spin(7) and generalized SO(8) instantons in eight dimensions. Nuclear Physics B, 2022, 975, 115666.	2.5	0
56	Weak supersymmetric $U(N+1)$ quantum systems. International Journal of Modern Physics A, 0, , .	1.5	0