

Nathan Seiberg

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/9046799/publications.pdf>

Version: 2024-02-01

158
papers

28,115
citations

3159

92
h-index

6996

154
g-index

158
all docs

158
docs citations

158
times ranked

7931
citing authors

#	ARTICLE	IF	CITATIONS
1	String theory and noncommutative geometry. Journal of High Energy Physics, 1999, 1999, 032-032.	4.7	3,259
2	Classical and quantum conformal field theory. Communications in Mathematical Physics, 1989, 123, 177-254.	2.2	890
3	Noncommutative perturbative dynamics. Journal of High Energy Physics, 2000, 2000, 020-020.	4.7	870
4	Generalized global symmetries. Journal of High Energy Physics, 2015, 2015, 1.	4.7	755
5	Remarks on the canonical quantization of the Chern-Simons-Witten theory. Nuclear Physics B, 1989, 326, 108-134.	2.5	620
6	Dynamical supersymmetry breaking in supersymmetric QCD. Nuclear Physics B, 1984, 241, 493-534.	2.5	618
7	Dynamical supersymmetry breaking in four dimensions and its phenomenological implications. Nuclear Physics B, 1985, 256, 557-599.	2.5	561
8	Exact results on the space of vacua of four-dimensional SUSY gauge theories. Physical Review D, 1994, 49, 6857-6863.	4.7	551
9	Five dimensional SUSY field theories, non-trivial fixed points and string dynamics. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1996, 388, 753-760.	4.1	471
10	Dynamical SUSY breaking in meta-stable vacua. Journal of High Energy Physics, 2006, 2006, 021-021.	4.7	466
11	Symmetries and strings in field theory and gravity. Physical Review D, 2011, 83, .	4.7	439
12	Taming the conformal zoo. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1989, 220, 422-430.	4.1	429
13	Rigid supersymmetric theories in curved superspace. Journal of High Energy Physics, 2011, 2011, 1.	4.7	409
14	Notes on Quantum Liouville Theory and Quantum Gravity. Progress of Theoretical Physics Supplement, 1990, 102, 319-349.	0.1	400
15	Five-dimensional supersymmetric gauge theories and degenerations of Calabi-Yau spaces. Nuclear Physics B, 1997, 497, 56-100.	2.5	384
16	New = 2 superconformal field theories in four dimensions. Nuclear Physics B, 1996, 461, 71-84.	2.5	355
17	Should squarks be degenerate?. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1993, 309, 337-343.	4.1	328
18	Naturalness versus supersymmetric non-renormalization theorems. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1993, 318, 469-475.	4.1	328

#	ARTICLE	IF	CITATIONS
19	Why Is the Matrix Model Correct?. Physical Review Letters, 1997, 79, 3577-3580.	7.8	315
20	Mass matrix models: the sequel. Nuclear Physics B, 1994, 420, 468-504.	2.5	313
21	A duality web in $2+1$ dimensions and condensed matter physics. Annals of Physics, 2016, 374, 395-433.	2.8	312
22	F terms and D terms in string theory. Nuclear Physics B, 1987, 293, 253-265.	2.5	306
23	New theories in six dimensions and matrix description of M-theory on T5 and. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1997, 408, 98-104.	4.1	302
24	Extremal transitions and five-dimensional supersymmetric field theories. Nuclear Physics B, 1997, 483, 229-247.	2.5	297
25	Chiral Rings and Anomalies in Supersymmetric Gauge Theory. Journal of High Energy Physics, 2002, 2002, 071-071.	4.7	293
26	Theta, time reversal and temperature. Journal of High Energy Physics, 2017, 2017, 1.	4.7	292
27	Mass matrix models. Nuclear Physics B, 1993, 398, 319-342.	2.5	290
28	Is the superstring weakly coupled?. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1985, 162, 299-302.	4.1	287
29	Linear dilatons, NS5-branes and holography. Journal of High Energy Physics, 1998, 1998, 004-004.	4.7	275
30	General Gauge Mediation. Progress of Theoretical Physics Supplement, 2009, 177, 143-158.	0.1	275
31	R-symmetry breaking versus supersymmetry breaking. Nuclear Physics B, 1994, 416, 46-62.	2.5	274
32	Reading between the lines of four-dimensional gauge theories. Journal of High Energy Physics, 2013, 2013, 1.	4.7	273
33	Coupling a QFT to a TQFT and duality. Journal of High Energy Physics, 2014, 2014, 1.	4.7	272
34	The moduli space of vacua of $N = 2$ SUSY QCD and duality in $N = 1$ SUSY QCD. Nuclear Physics B, 1996, 471, 159-194.	2.5	257
35	Observations on the moduli space of superconformal field theories. Nuclear Physics B, 1988, 303, 286-304.	2.5	252
36	From linear SUSY to constrained superfields. Journal of High Energy Physics, 2009, 2009, 066-066.	4.7	240

#	ARTICLE	IF	CITATIONS
37	Supersymmetry and non-perturbative beta functions. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1988, 206, 75-80.	4.1	219
38	Noncommutative superspace, Script N = 1/2 supersymmetry, field theory and string theory. Journal of High Energy Physics, 2003, 2003, 010-010.	4.7	218
39	Microscopic and macroscopic loops in non-perturbative two dimensional gravity. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1990, 238, 279-286.	4.1	207
40	Naturality in conformal field theory. Nuclear Physics B, 1989, 313, 16-40.	2.5	201
41	From loops to states in two-dimensional quantum gravity. Nuclear Physics B, 1991, 362, 665-709.	2.5	200
42	Anomalies, dualities, and topology of $D = 6$ $N = 1$ superstring vacua. Nuclear Physics B, 1996, 475, 115-148.	2.5	199
43	Probing F-theory with branes. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1996, 387, 278-281.	4.1	188
44	S-duality in $N = 2$ supersymmetric gauge theories. Journal of High Energy Physics, 2007, 2007, 088-088.	4.7	186
45	Couplings and scales in superstring models. Physical Review Letters, 1985, 55, 366-369.	7.8	181
46	D-brane decay in two-dimensional string theory. Journal of High Energy Physics, 2003, 2003, 045-045.	4.7	181
47	3d dualities from 4d dualities. Journal of High Energy Physics, 2013, 2013, 1.	4.7	176
48	Number of degrees of freedom, density of states and tachyons in string theory and CFT. Nuclear Physics B, 1991, 358, 600-618.	2.5	173
49	Contact terms, unitarity, and F-maximization in three-dimensional superconformal theories. Journal of High Energy Physics, 2012, 2012, 1.	4.7	172
50	Level/rank duality and Chern-Simons-matter theories. Journal of High Energy Physics, 2016, 2016, 1.	4.7	172
51	Branes from matrices. Nuclear Physics B, 1997, 490, 91-106.	2.5	171
52	Exploring curved superspace. Journal of High Energy Physics, 2012, 2012, 1.	4.7	169
53	Geometrical interpretation of D-branes in gauged WZW models. Journal of High Energy Physics, 2001, 2001, 046-046.	4.7	167
54	A dynamical theory for the rishon model. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1981, 98, 269-273.	4.1	165

#	ARTICLE	IF	CITATIONS
55	Matrix description of M-theory on T4 and T5. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1997, 408, 105-110.	4.1	165
56	Supersymmetry Breaking by Instantons. Physical Review Letters, 1983, 51, 1026-1029.	7.8	160
57	Comments on Chern-Simons contact terms in three dimensions. Journal of High Energy Physics, 2012, 2012, 1.	4.7	157
58	Non-trivial fixed points of the renormalization group in six dimensions. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1997, 390, 169-171.	4.1	147
59	Comments on supercurrent multiplets, supersymmetric field theories and supergravity. Journal of High Energy Physics, 2010, 2010, 1.	4.7	147
60	Exactly marginal deformations and global symmetries. Journal of High Energy Physics, 2010, 2010, 1.	4.7	144
61	Time-reversal breaking in QCD4, walls, and dualities in 2 + 1 dimensions. Journal of High Energy Physics, 2018, 2018, 1.	4.7	141
62	Lectures on supersymmetry breaking. Classical and Quantum Gravity, 2007, 24, S741-S772.	4.0	139
63	Branes, Calabi-Yau spaces, and toroidal compactification of the N = 1 six-dimensional E8 theory. Nuclear Physics B, 1997, 487, 93-127.	2.5	134
64	D-Brane Instantons and K-Theory Charges. Journal of High Energy Physics, 2001, 2001, 062-062.	4.7	134
65	Gapped boundary phases of topological insulators via weak coupling. Progress of Theoretical and Experimental Physics, 2016, 2016, 12C101.	6.6	133
66	Supersymmetry breaking, R-symmetry breaking and metastable vacua. Journal of High Energy Physics, 2007, 2007, 017-017.	4.7	132
67	Branes, Rings and Matrix Models in Minimal (Super)string Theory. Journal of High Energy Physics, 2004, 2004, 021-021.	4.7	126
68	Contact interactions in superstring theory. Nuclear Physics B, 1988, 299, 559-586.	2.5	125
69	Dynamical supersymmetry breaking in chiral theories. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1984, 137, 187-192.	4.1	123
70	IR dynamics on branes and space-time geometry. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1996, 384, 81-85.	4.1	123
71	Exploring general gauge mediation. Journal of High Energy Physics, 2009, 2009, 016-016.	4.7	122
72	OM theory in diverse dimensions. Journal of High Energy Physics, 2000, 2000, 008-008.	4.7	117

#	ARTICLE	IF	CITATIONS
73	Calculable Nonperturbative Supersymmetry Breaking. <i>Physical Review Letters</i> , 1984, 52, 1677-1680.	7.8	110
74	Comments on higher derivative operators in some SUSY field theories. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 1997, 409, 239-244.	4.1	110
75	D-brane charges in five-brane backgrounds. <i>Journal of High Energy Physics</i> , 2001, 2001, 005-005.	4.7	110
76	Superstrings in graviphoton background and Script $N = 1/2+3/2$ supersymmetry. <i>Journal of High Energy Physics</i> , 2003, 2003, 010-010.	4.7	110
77	Comments on the Fayet-Iliopoulos term in field theory and supergravity. <i>Journal of High Energy Physics</i> , 2009, 2009, 007-007.	4.7	106
78	Higgs physics as a window beyond the MSSM. <i>Physical Review D</i> , 2007, 76, .	4.7	105
79	Comments on one-form global symmetries and their gauging in 3d and 4d. <i>SciPost Physics</i> , 2019, 6, .	4.9	105
80	On the moduli space of the cascading $SU(M+p) \tilde{A}-SU(p)$ gauge theory. <i>Journal of High Energy Physics</i> , 2006, 2006, 155-155.	4.7	104
81	Phases of Script $N = 1$ supersymmetric gauge theories. <i>Journal of High Energy Physics</i> , 2003, 2003, 042-042.	4.7	102
82	Comments on global symmetries, anomalies, and duality in $(2 + 1)d$. <i>Journal of High Energy Physics</i> , 2017, 2017, 1.	4.7	102
83	Exact vs. Semiclassical Target Space of the Minimal String. <i>Journal of High Energy Physics</i> , 2004, 2004, 020-020.	4.7	101
84	Exotic $U(1)$ symmetries, duality, and fractons in 3+1-dimensional quantum field theory. <i>SciPost Physics</i> , 2020, 9, .	4.9	101
85	Chiral rings and phases of supersymmetric gauge theories. <i>Journal of High Energy Physics</i> , 2003, 2003, 018-018.	4.7	99
86	Anomalies in the space of coupling constants and their dynamical applications I. <i>SciPost Physics</i> , 2020, 8, .	4.9	99
87	Non-critical superstrings. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 1990, 251, 67-72.	4.1	98
88	Supercurrents and brane currents in diverse dimensions. <i>Journal of High Energy Physics</i> , 2011, 2011, 1.	4.7	98
89	Aspects of 3d $N=2$ Chern-Simons-Matter theories. <i>Journal of High Energy Physics</i> , 2013, 2013, 1.	4.7	98
90	Flow and instability in quantum gravity. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 1990, 244, 381-386.	4.1	95

#	ARTICLE	IF	CITATIONS
91	The massless limit of supersymmetric QCD. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1983, 125, 487-492.	4.1	93
92	3d dualities from 4d dualities for orthogonal groups. Journal of High Energy Physics, 2013, 2013, 1.	4.7	93
93	Field theories with a vector global symmetry. SciPost Physics, 2020, 8, .	4.9	92
94	Chern-Simons-matter dualities with SO and USp gauge groups. Journal of High Energy Physics, 2017, 2017, 1.	4.7	91
95	Anomalies in the space of coupling constants and their dynamical applications II. SciPost Physics, 2020, 8, .	4.9	91
96	Exotic symmetries, duality, and fractons in 2+1-dimensional quantum field theory. SciPost Physics, 2021, 10, .	4.9	89
97	(S)quark masses and non-Abelian horizontal symmetries. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1993, 318, 169-173.	4.1	88
98	A note on (meta)stable brane configurations in MQCD. Journal of High Energy Physics, 2006, 2006, 088-088.	4.7	84
99	String theory and the strong CP problem. Nuclear Physics B, 1986, 273, 109-124.	2.5	83
100	FROM LOOPS TO FIELDS IN 2D QUANTUM GRAVITY. International Journal of Modern Physics A, 1992, 07, 2601-2634.	1.5	82
101	Anomalies, conformal manifolds, and spheres. Journal of High Energy Physics, 2016, 2016, 1.	4.7	81
102	Global Symmetries, Counterterms, and Duality in Chern-Simons Matter Theories with Orthogonal Gauge Groups. SciPost Physics, 2018, 4, .	4.9	77
103	Phases Of Adjoint QCD\$\$_3\$ And Dualities. SciPost Physics, 2018, 5, .	4.9	76
104	A symmetry breaking scenario for QCD ₃ . Journal of High Energy Physics, 2018, 2018, 1.	4.7	75
105	Lectures on RCFT. NATO ASI Series Series B: Physics, 1990, , 263-361.	0.2	71
106	Modifying the sum over topological sectors and constraints on supergravity. Journal of High Energy Physics, 2010, 2010, 1.	4.7	70
107	$\hat{1}/4$ and general gauge mediation. Journal of High Energy Physics, 2009, 2009, 072-072.	4.7	68
108	Surface defects and resolvents. Journal of High Energy Physics, 2013, 2013, 1.	4.7	63

#	ARTICLE	IF	CITATIONS
109	Exotic \mathbb{Z}_N symmetries, duality, and fractons in 3+1-dimensional quantum field theory. SciPost Physics, 2021, 10, .	4.9	63
110	Naturalized and simplified gauge mediation. Journal of High Energy Physics, 2007, 2007, 054-054.	4.7	60
111	Charge lattices and consistency of 6D supergravity. Journal of High Energy Physics, 2011, 2011, 1.	4.7	60
112	Exponential hierarchy from dynamical supersymmetry breaking. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1984, 140, 59-62.	4.1	59
113	The Coulomb branch of (4,4) supersymmetric field theories in two dimensions. Journal of High Energy Physics, 1997, 1997, 001-001.	4.7	56
114	Adding Fundamental Matter to "Chiral Rings and Anomalies in Supersymmetric Gauge Theory". Journal of High Energy Physics, 2003, 2003, 061-061.	4.7	55
115	Semi-direct gauge mediation. Journal of High Energy Physics, 2008, 2008, 004-004.	4.7	54
116	Generation labels in composite models for quarks and leptons. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1981, 102, 263-266.	4.1	53
117	Microscopic knowledge from macroscopic physics in string theory. Nuclear Physics B, 1988, 301, 357-380.	2.5	51
118	The runaway quiver. Journal of High Energy Physics, 2006, 2006, 031-031.	4.7	51
119	Annulus Amplitudes and ZZ Branes in Minimal String Theory. Journal of High Energy Physics, 2004, 2004, 026-026.	4.7	50
120	On S-duality for non-simply-laced gauge groups. Journal of High Energy Physics, 2006, 2006, 043-043.	4.7	48
121	Anomalies of duality groups and extended conformal manifolds. Progress of Theoretical and Experimental Physics, 2018, 2018, .	6.6	48
122	Are (0, 2) models string miracles?. Nuclear Physics B, 1988, 306, 137-159.	2.5	47
123	More exotic field theories in 3+1 dimensions. SciPost Physics, 2020, 9, .	4.9	47
124	Time-reversal symmetry, anomalies, and dualities in (2+1)d. SciPost Physics, 2018, 5, .	4.9	45
125	Topology in Strong Coupling. Physical Review Letters, 1984, 53, 637-640.	7.8	44
126	General messenger gauge mediation. Journal of High Energy Physics, 2010, 2010, 1.	4.7	44

#	ARTICLE	IF	CITATIONS
127	I-brane dynamics. Journal of High Energy Physics, 2006, 2006, 119-119.	4.7	41
128	Global dipole symmetry, compact Lifshitz theory, tensor gauge theory, and fractons. Physical Review B, 2022, 106, .	3.2	41
129	Low-energy limit of some exotic lattice theories and UV/IR mixing. Physical Review B, 2021, 104, .	3.2	40
130	Comments on scaling limits of 4d $\mathcal{N} = 2$ theories. Journal of High Energy Physics, 2011, 2011, 1.	4.7	38
131	The rishon model. Nuclear Physics B, 1982, 204, 141-167.	2.5	37
132	A modified Villain formulation of fractons and other exotic theories. Journal of Mathematical Physics, 2021, 62, .	1.1	37
133	Irrational axions as a solution of the strong CP problem in an eternal universe. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1991, 273, 105-110.	4.1	35
134	Emergent Spacetime. , 2007, , .		34
135	The Sum Over Topological Sectors and $\hat{\mathbb{Z}}$ in the 2+1-Dimensional \mathbb{CP}^1 sigma-Model. Communications in Mathematical Physics, 2018, 362, 167-183.	2.2	32
136	Dynamical symmetry breaking and composite quarks and leptons. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1981, 100, 41-46.	4.1	31
137	Note on background (in)dependence. Physical Review D, 1992, 45, 4581-4587.	4.7	29
138	String theory, supersymmetry, unification, and all that. Reviews of Modern Physics, 1999, 71, S112-S120.	45.6	29
139	Minimal string theory. Comptes Rendus Physique, 2005, 6, 165-174.	0.9	29
140	Sigma models on flags. , 2019, 6, .		29
141	Flux-vacua in two dimensional string theory. Journal of High Energy Physics, 2005, 2005, 077-077.	4.7	28
142	Comments on quantum effects in supergravity theories. Journal of High Energy Physics, 2007, 2007, 040-040.	4.7	27
143	Flux Vacua and Branes of the Minimal Superstring. Journal of High Energy Physics, 2005, 2005, 055-055.	4.7	25
144	The long flow to freedom. Journal of High Energy Physics, 2017, 2017, 1.	4.7	25

#	ARTICLE	IF	CITATIONS
145	Scaling and \hat{c} Dependence in the $O(3)$ \hat{c} Model. Physical Review Letters, 1984, 53, 519-522.	7.8	24
146	Fractons with twisted boundary conditions and their symmetries. Physical Review B, 2021, 103, .	3.2	24
147	Method for numerical simulations of metastable states. Physical Review D, 1983, 27, 2980-2989.	4.7	23
148	fcc lattice, checkerboards, fractons, and quantum field theory. Physical Review B, 2021, 103, .	3.2	20
149	SUSY gauge dynamics and singularities of 4d $N = 1$ string vacua. Nuclear Physics B, 1996, 480, 170-184.	2.5	19
150	Observations On The Moduli Space Of Two Dimensional String Theory. Journal of High Energy Physics, 2005, 2005, 010-010.	4.7	17
151	Heterotic strings in two dimensions and new stringy phase transitions. Journal of High Energy Physics, 2005, 2005, 035-035.	4.7	16
152	Long strings, anomaly cancellation, phase transitions, T-duality and locality in the 2d heterotic string. Journal of High Energy Physics, 2006, 2006, 057-057.	4.7	16
153	Non-supersymmetric deformations of non-critical superstrings. Journal of High Energy Physics, 2005, 2005, 035-035.	4.7	15
154	Analytic study of \hat{c} vacua on the lattice. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1984, 148, 456-460.	4.1	13
155	Shortening anomalies in supersymmetric theories. Journal of High Energy Physics, 2017, 2017, 1.	4.7	13
156	Lectures on Supersymmetry Breaking. Les Houches Summer School Proceedings, 2008, , 125-172.	0.2	1
157	Is the Superstring Weakly Coupled?. Current Physics Sources and Comments, 1988, 1, 473-476.	0.0	0
158	MICROSCOPIC AND MACROSCOPIC LOOPS IN NON-PERTURBATIVE TWO DIMENSIONAL GRAVITY. , 1993, , 780-787.		0