

Timothy J Hollowood

List of Publications by Year in descending order

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103
papers

3,487
citations

136950

32
h-index

155660

55
g-index

103
all docs

103
docs citations

103
times ranked

1013
citing authors

#	ARTICLE	IF	CITATIONS
1	The calculus of many instantons. <i>Physics Reports</i> , 2002, 371, 231-459.	25.6	228
2	Glino condensate and magnetic monopoles in supersymmetric gluodynamics. <i>Nuclear Physics B</i> , 1999, 559, 123-142.	2.5	162
3	Matrix models, geometric engineering and elliptic genera. <i>Journal of High Energy Physics</i> , 2008, 2008, 069-069.	4.7	156
4	Solitons in affine Toda field theories. <i>Nuclear Physics B</i> , 1992, 384, 523-540.	2.5	144
5	Generalized Drinfel'd-Sokolov hierarchies. <i>Communications in Mathematical Physics</i> , 1992, 145, 57-84.	2.2	129
6	Rational conformal field theories at, and away from, criticality as Toda field theories. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 1989, 226, 73-79.	4.1	121
7	Multi-instanton calculus and the AdS/CFT correspondence in superconformal field theory. <i>Nuclear Physics B</i> , 1999, 552, 88-168.	2.5	116
8	Integrable deformations of strings on symmetric spaces. <i>Journal of High Energy Physics</i> , 2014, 2014, 1.	4.7	95
9	The BPS spectra of gauge theories in two and four dimensions. <i>Journal of High Energy Physics</i> , 1999, 1999, 006-006.	4.7	89
10	An integrable deformation of the AdS ₅ -S ⁵ superstring. <i>Journal of Physics A: Mathematical and Theoretical</i> , 2014, 47, 495402.	2.1	82
11	Islands and Page curves for evaporating black holes in JT gravity. <i>Journal of High Energy Physics</i> , 2020, 2020, 1.	4.7	79
12	Generalized Drinfel'd-Sokolov hierarchies. <i>Communications in Mathematical Physics</i> , 1993, 153, 187-215.	2.2	68
13	The refractive index of curved spacetime: The fate of causality in QED. <i>Nuclear Physics B</i> , 2008, 795, 138-171.	2.5	65
14	QUANTIZING SL(N) SOLITONS AND THE HECKE ALGEBRA. <i>International Journal of Modern Physics A</i> , 1993, 08, 947-981.	1.5	61
15	S-duality of the Leigh-Strassler Deformation via Matrix Models. <i>Journal of High Energy Physics</i> , 2002, 2002, 003-003.	4.7	61
16	Quantization of integrable systems and a 2d/4d duality. <i>Journal of High Energy Physics</i> , 2011, 2011, 1.	4.7	58
17	q-deformation of the AdS ₅ S ⁵ superstring S-matrix and its relativistic limit. <i>Journal of High Energy Physics</i> , 2012, 2012, 1.	4.7	58
18	Quantum scattering of charged solitons in the complex sine-Gordon model. <i>Nuclear Physics B</i> , 1995, 440, 215-233.	2.5	57

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19	Exact Superpotentials from Matrix Models. <i>Journal of High Energy Physics</i> , 2002, 2002, 039-039.	4.7	57
20	Decoherence, discord, and the quantum master equation for cosmological perturbations. <i>Physical Review D</i> , 2017, 95, .	4.7	57
21	A new 2d/4d duality via integrability. <i>Journal of High Energy Physics</i> , 2011, 2011, 1.	4.7	56
22	The causal structure of QED in curved spacetime: analyticity and the refractive index. <i>Journal of High Energy Physics</i> , 2008, 2008, 091-091.	4.7	53
23	Causality and micro-causality in curved spacetime. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2007, 655, 67-74.	4.1	49
24	S-duality in $N = 4$ supersymmetric gauge theories with arbitrary gauge group. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 1996, 383, 422-428.	4.1	46
25	Magnons, their solitonic avatars and the Pohlmeyer reduction. <i>Journal of High Energy Physics</i> , 2009, 2009, 060-060.	4.7	45
26	Beta function of k deformed $AdS_5 \tilde{A}-S^5$ string theory. <i>Journal of High Energy Physics</i> , 2015, 2015, 1.	4.7	39
27	Massive Vacua of Script $N = 1^*$ Theory and S-duality from Matrix Models. <i>Journal of High Energy Physics</i> , 2002, 2002, 040-040.	4.7	37
28	Solitonic integrable perturbations of parafermionic theories. <i>Nuclear Physics B</i> , 1997, 499, 673-689.	2.5	36
29	Hermitian versus anti-hermitian one-matrix models and their hierarchies. <i>Nuclear Physics B</i> , 1992, 373, 247-280.	2.5	34
30	QCD with chemical potential in a small hyperspherical box. <i>Journal of High Energy Physics</i> , 2010, 2010, 1.	4.7	34
31	Massive integrable soliton theories. <i>Nuclear Physics B</i> , 1995, 445, 451-468.	2.5	33
32	Semi-classical quantization in $N = 4$ supersymmetric Yang-Mills theory and duality. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 1997, 402, 106-112.	4.1	32
33	An exact elliptic superpotential for deformations of finite gauge theories. <i>Nuclear Physics B</i> , 2002, 624, 95-145.	2.5	31
34	The refractive index of curved spacetime II: QED, Penrose limits and black holes. <i>Journal of High Energy Physics</i> , 2009, 2009, 089-089.	4.7	31
35	Integrable theories that are asymptotically CFT. <i>Nuclear Physics B</i> , 1995, 438, 469-490.	2.5	30
36	Breakdown of cluster decomposition in instanton calculations of the gluino condensate. <i>Nuclear Physics B</i> , 2000, 570, 241-266.	2.5	30

#	ARTICLE	IF	CITATIONS
37	Causality violation, gravitational shockwaves and UV completion. Journal of High Energy Physics, 2016, 2016, 1.	4.7	29
38	Hawking radiation correlations of evaporating black holes in JT gravity. Journal of Physics A: Mathematical and Theoretical, 2020, 53, 475401.	2.1	29
39	A relativistic relative of the magnon S-matrix. Journal of High Energy Physics, 2011, 2011, 1.	4.7	28
40	Tau-functions and generalized integrable hierarchies. Communications in Mathematical Physics, 1993, 157, 99-117.	2.2	27
41	Instabilities of the small black hole: a view from Script $N = 4$ SYM. Journal of High Energy Physics, 2007, 2007, 001-001.	4.7	27
42	The AdS $5 \times S^5$ semi-symmetric space sine-Gordon theory. Journal of High Energy Physics, 2011, 2011, 14.7		27
43	Calculating the prepotential by localization on the moduli space of instantons. Journal of High Energy Physics, 2002, 2002, 038-038.	4.7	26
44	Bound states of the q-deformed AdS $5 \times S^5$ superstring S-matrix. Journal of High Energy Physics, 2012, 2012, 1.	4.7	26
45	Restoring unitarity in the q-deformed world-sheet S-matrix. Journal of High Energy Physics, 2013, 2013, 1.	4.7	26
46	The effect of gravitational tidal forces on renormalized quantum fields. Journal of High Energy Physics, 2012, 2012, 1.	4.7	24
47	On the Coulomb branch of a marginal deformation of Script $N = 4$ SUSY Yang-Mills. Journal of High Energy Physics, 2005, 2005, 036-036.	4.7	23
48	Quantum soliton mass corrections in $sl(n)$ affine Toda field theory. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1993, 300, 73-83.	4.1	22
49	The exact mass-gaps of the principal chiral models. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1994, 329, 450-456.	4.1	22
50	$\mathcal{N} = 4$ SYM on S^3 with near critical chemical potentials. Journal of High Energy Physics, 2008, 2008, 046-046.	4.7	21
51	Finite volume phases of large- N gauge theories with massive adjoint fermions. Journal of High Energy Physics, 2009, 2009, 008-008.	4.7	21
52	The effect of gravitational tidal forces on vacuum polarization: How to undress a photon. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2010, 691, 279-284.	4.1	20
53	The exact mass-gap of the supersymmetric CP^{n-1} sigma model. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1995, 343, 198-206.	4.1	19
54	On the weak coupling spectrum of $N = 2$ supersymmetric $SU(n)$ gauge theory. Nuclear Physics B, 1997, 490, 217-235.	2.5	19

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55	Testing Seiberg's Witten theory to all orders in the instanton expansion. Nuclear Physics B, 2002, 639, 66-94.	2.5	19
56	The curve of compactified 6D gauge theories and integrable systems. Journal of High Energy Physics, 2003, 2003, 023-023.	4.7	19
57	The analytic structure of trigonometric S-matrices. Nuclear Physics B, 1994, 414, 379-404.	2.5	18
58	The N = 1 supersymmetric bootstrap and Lie algebras. Nuclear Physics B, 1997, 484, 631-652.	2.5	18
59	Supersymmetry and the multi-instanton measure II. From N = 4 to N = 0. Nuclear Physics B, 1998, 519, 470-482.	2.5	18
60	A new and elementary \hat{A}_{n-1} Dyon magnon. Journal of High Energy Physics, 2009, 2009, 109-109.	4.7	18
61	From \hat{A}_{n-1} trigonometric S-matrices to the thermodynamic Bethe Ansatz. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1994, 320, 43-51.	4.1	17
62	The exact mass-gap of the supersymmetric O(N) sigma model. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1995, 343, 189-197.	4.1	17
63	Numerical study of the two color world. Journal of High Energy Physics, 2010, 2010, 1.	4.7	17
64	A 5d/3d duality from relativistic integrable system. Journal of High Energy Physics, 2012, 2012, 1.	4.7	17
65	Critical points of glueball superpotentials and equilibria of integrable systems. Journal of High Energy Physics, 2003, 2003, 051-051.	4.7	16
66	Exact results for integrable asymptotically-free field theories. Nuclear Physics, Section B, Proceedings Supplements, 1996, 45, 130-139.	0.4	15
67	Classical and quantum solitons in the symmetric space sine-Gordon theories. Journal of High Energy Physics, 2011, 2011, 1.	4.7	15
68	Five-dimensional gauge theories and quantum mechanical matrix models. Journal of High Energy Physics, 2003, 2003, 039-039.	4.7	14
69	Weak coupling large-N transitions at finite baryon density. Journal of High Energy Physics, 2011, 2011, 1.	4.7	13
70	Islands in the stream of Hawking radiation. Journal of High Energy Physics, 2021, 2021, 1.	4.7	13
71	Ephemeral islands, plunging quantum extremal surfaces and BCFT channels. Journal of High Energy Physics, 2022, 2022, 1.	4.7	13
72	The relativistic avatars of giant magnons and their S-matrix. Journal of High Energy Physics, 2010, 2010, 1.	4.7	12

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73	The semi-classical spectrum of solitons and giant magnons. <i>Journal of High Energy Physics</i> , 2011, 2011, 1.	4.7	12
74	S -matrices and quantum group symmetry of k -deformed sigma models. <i>Journal of Physics A: Mathematical and Theoretical</i> , 2016, 49, 465201.	2.1	11
75	Quantum inverse scattering and the lambda deformed principal chiral model. <i>Journal of Physics A: Mathematical and Theoretical</i> , 2017, 50, 305401.	2.1	11
76	ADHM and D-instantons in orbifold AdS/CFT duality. <i>Nuclear Physics B</i> , 2000, 575, 78-106.	2.5	10
77	New results from glueball superpotentials and matrix models: the Leigh-Strassler deformation. <i>Journal of High Energy Physics</i> , 2003, 2003, 025-025.	4.7	10
78	THE UNBEARABLE BEINGNESS OF LIGHT “ Dressing and Undressing Photons in Black Hole Spacetimes. <i>International Journal of Modern Physics D</i> , 2012, 21, 1241003.	2.1	10
79	Exact scattering in the $SU(n)$ supersymmetric principal chiral model. <i>Nuclear Physics B</i> , 1997, 493, 517-540.	2.5	9
80	Summing the instanton series in Script $N = 2$ superconformal large- N QCD. <i>Journal of High Energy Physics</i> , 1999, 1999, 019-019.	4.7	9
81	Deconfinement transitions of large N QCD with chemical potential at weak and strong coupling. <i>Journal of High Energy Physics</i> , 2012, 2012, 1.	4.7	9
82	Causality, renormalizability and ultra-high energy gravitational scattering. <i>Journal of Physics A: Mathematical and Theoretical</i> , 2016, 49, 215401.	2.1	9
83	Giant magnons of string theory in the lambda background. <i>Journal of High Energy Physics</i> , 2017, 2017, 1.	4.7	9
84	Grey-body factors, irreversibility and multiple island saddles. <i>Journal of High Energy Physics</i> , 2022, 2022, 1.	4.7	9
85	The structure of non-abelian kinks. <i>Journal of High Energy Physics</i> , 2013, 2013, 1.	4.7	8
86	Dyon electric charge and fermion fractionalization in $N = 2$ gauge theory. <i>Nuclear Physics B</i> , 1998, 517, 161-178.	2.5	7
87	World sheet instantons via the Myers effect and Script $N = 1^*$ quiver superpotentials. <i>Journal of High Energy Physics</i> , 2002, 2002, 077-077.	4.7	7
88	Yang Baxter and anisotropic sigma and lambda models, cyclic RG and exact S-matrices. <i>Journal of High Energy Physics</i> , 2017, 2017, 1.	4.7	7
89	Quantum anisotropic sigma and lambda models as spin chains. <i>Journal of Physics A: Mathematical and Theoretical</i> , 2018, 51, 405401.	2.1	7
90	A comment on the Itzy genus and supersymmetric quantum mechanics. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2003, 566, 258-262.	4.1	6

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91	Double scaling limits in gauge theories and matrix models. Journal of High Energy Physics, 2006, 2006, 045-045.	4.7	6
92	The Phase Structure of Mass-Deformed $SU(2)$ \tilde{A} – $SU(2)$ Quiver Theory. Journal of High Energy Physics, 2003, 2003, 005-005.	4.7	5
93	LargeN gauge theories and topological cigars. Journal of High Energy Physics, 2007, 2007, 078-078.	4.7	5
94	Schrödinger's cat and the firewall. International Journal of Modern Physics D, 2014, 23, 1441004.	2.1	5
95	Chaos bound in Bershadsky-Polyakov theory. Journal of High Energy Physics, 2019, 2019, 1.	4.7	5
96	Asymptotic symmetries and thermodynamics of higher spin black holes in AdS_3 . Physical Review D, 2013, 88, .	4.7	4
97	Partition function of $N = 2$ $\mathcal{N} = 2$ SYM on a large four-sphere. Journal of High Energy Physics, 2015, 2015, 1-42.	4.7	4
98	The Copenhagen interpretation as an emergent phenomenon. Journal of Physics A: Mathematical and Theoretical, 2013, 46, 325302.	2.1	3
99	Copenhagen quantum mechanics. Contemporary Physics, 2016, 57, 289-308.	1.8	3
100	Graviton propagation and vacuum polarization in curved space. Journal of High Energy Physics, 2011, 2011, 1.	4.7	1
101	Symplectic deformations of integrable field theories and AdS/CFT. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2014, 739, 214-217.	4.1	1
102	Classical spectral curve of the AdS_5 \tilde{A} – S^5 lambda superstring. Journal of High Energy Physics, 2020, 2020, .	4.7	1
103	Unravelling cosmological perturbations. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2018, 785, 254-261.	4.1	0