

Rafael I Nepomechie

List of Publications by Year in descending order

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137
papers

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citations

136950

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142
all docs

142
docs citations

142
times ranked

1182
citing authors

#	ARTICLE	IF	CITATIONS
1	Preparing exact eigenstates of the open XXZ chain on a quantum computer. Journal of Physics A: Mathematical and Theoretical, 2022, 55, 055301.	2.1	9
2	Bethe ansatz on a quantum computer?. Quantum Information and Computation, 2021, 21, 255-265.	0.3	3
3	Factorization identities and algebraic Bethe ansatz for $\mathbb{D}_2^{(2)}$ models. Journal of High Energy Physics, 2021, 2021, 1.	4.7	8
4	Entanglement in fermionic chains and bispectrality. Reviews in Mathematical Physics, 2021, 33, 2140001.	1.7	8
5	Spin chains with boundary inhomogeneities. Journal of High Energy Physics, 2021, 2021, 1.	4.7	2
6	A passion for theoretical physics: a special issue in memory of Peter G O Freund. Journal of Physics A: Mathematical and Theoretical, 2021, 54, 010301.	2.1	0
7	Wronskian-type formula for inhomogeneous STQ equations. Theoretical and Mathematical Physics(Russian Federation), 2020, 204, 1195-1200.	0.9	2
8	On generalized Q-systems. Journal of High Energy Physics, 2020, 2020, 1.	4.7	15
9	Cylinder partition function of the 6-vertex model from algebraic geometry. Journal of High Energy Physics, 2020, 2020, 1.	4.7	8
10	Q-systems with boundary parameters. Journal of Physics A: Mathematical and Theoretical, 2020, 53, 294001.	2.1	6
11	Entanglement in Fermionic Chains and Bispectrality. , 2020, , 77-96.		3
12	The $Am(1)$ Q-system. Modern Physics Letters A, 2020, 35, 2050260.	1.2	3
13	Completing the solution for the $OSp(1 2)$ spin chain. Nuclear Physics B, 2020, 951, 114887.	2.5	2
14	Free-Fermion entanglement and orthogonal polynomials. Journal of Statistical Mechanics: Theory and Experiment, 2019, 2019, 093101.	2.3	28
15	Towards the solution of an integrable $\mathbb{D}_2^{(2)}$ spin chain. Journal of Physics A: Mathematical and Theoretical, 2019, 52, 434004.	2.1	7
16	The spectrum of quantum-group-invariant transfer matrices. Nuclear Physics B, 2019, 938, 266-297.	2.5	6
17	A tale of two Bethe ansätze. Journal of Statistical Mechanics: Theory and Experiment, 2018, 2018, 043107.	2.3	1
18	Quantum integrability and quantum groups: a special issue in memory of Petr P Kulish. Journal of Physics A: Mathematical and Theoretical, 2018, 51, 110201.	2.1	0

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19	The spin- s homogeneous central spin model: exact spectrum and dynamics. Journal of Statistical Mechanics: Theory and Experiment, 2018, 2018, 103104.	2.3	11
20	Equivalent T-Q relations and exact results for the open TASEP. Journal of Statistical Mechanics: Theory and Experiment, 2018, 2018, 103105.	2.3	9
21	New $D_{n+1}^{(2)}$ K-matrices with quantum group symmetry. Journal of Physics A: Mathematical and Theoretical, 2018, 51, 39LT02.	2.1	8
22	Surveying the quantum group symmetries of integrable open spin chains. Nuclear Physics B, 2018, 930, 91-134.	2.5	9
23	An inhomogeneous Lax representation for the Hirota equation. Journal of Physics A: Mathematical and Theoretical, 2017, 50, 054001.	2.1	4
24	The integrable quantum group invariant A_2 open spin chains. Journal of Physics A: Mathematical and Theoretical, 2017, 50, 284002.	2.1	5
25	Quantum group symmetries and completeness for A_2 open spin chains. Journal of Physics A: Mathematical and Theoretical, 2017, 50, 284002.	2.1	5
26	Boundary integrability. Journal of Physics A: Mathematical and Theoretical, 2016, 49, 421004.	2.1	0
27	Algebraic Bethe ansatz for the quantum group invariant open XXZ chain at roots of unity. Nuclear Physics B, 2016, 909, 796-839.	2.5	17
28	Universal Bethe ansatz solution for the Temperley-Lieb spin chain. Nuclear Physics B, 2016, 910, 910-928.	2.5	9
29	Algebraic Bethe ansatz for the Temperley-Lieb spin-1 chain. Nuclear Physics B, 2016, 910, 885-909.	2.5	4
30	Wrapping corrections for non-diagonal boundaries in AdS/CFT. Journal of High Energy Physics, 2016, 2016, 1.	4.7	3
31	Fusion for AdS/CFT boundary S-matrices. Journal of High Energy Physics, 2015, 2015, 1.	4.7	1
32	Bethe ansatz for an AdS/CFT open spin chain with non-diagonal boundaries. Journal of High Energy Physics, 2015, 2015, 1.	4.7	11
33	Counting solutions of the Bethe equations of the quantum group invariant open XXZ chain at roots of unity. Journal of Physics A: Mathematical and Theoretical, 2015, 48, 494003.	2.1	13
34	Twisting singular solutions of Bethe equations. Journal of Physics A: Mathematical and Theoretical, 2014, 47, 505004.	2.1	16
35	Boundary energy of the open XXX chain with a non-diagonal boundary term. Journal of Physics A: Mathematical and Theoretical, 2014, 47, 032001.	2.1	9
36	The spectrum of tachyons in AdS/CFT. Journal of High Energy Physics, 2014, 2014, 1.	4.7	20

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37	Singular solutions, repeated roots and completeness for higher-spin chains. Journal of Statistical Mechanics: Theory and Experiment, 2014, 2014, P03024.	2.3	13
38	Algebraic Bethe ansatz for singular solutions. Journal of Physics A: Mathematical and Theoretical, 2013, 46, 325002.	2.1	22
39	An inhomogeneous T-Q equation for the open XXX chain with general boundary terms: completeness and arbitrary spin. Journal of Physics A: Mathematical and Theoretical, 2013, 46, 442002.	2.1	27
40	Completeness of solutions of Bethe's equations. Physical Review E, 2013, 88, 052113.	2.1	53
41	OPE in planar QCD from integrability. Journal of High Energy Physics, 2012, 2012, 1.	4.7	5
42	Y-system for \mathbb{Z}_2 brane in planar AdS/CFT. Journal of High Energy Physics, 2012, 2012, 1.	4.7	18
43	Review of AdS/CFT Integrability, Chapter III.2: Exact World-Sheet S-Matrix. Letters in Mathematical Physics, 2012, 99, 209-229.	1.1	10
44	Review of AdS/CFT Integrability: An Overview. Letters in Mathematical Physics, 2012, 99, 3-32.	1.1	908
45	Twisted Bethe equations from a twisted S-matrix. Journal of High Energy Physics, 2011, 2011, 1.	4.7	37
46	Revisiting the \mathbb{Z}_2 open spin chain at one loop. Journal of High Energy Physics, 2011, 2011, 1.	4.7	7
47	TBA, NLO \mathcal{L}^2 correction, and double wrapping in twisted AdS/CFT. Journal of High Energy Physics, 2011, 2011, 1.	4.7	54
48	On the absence of reflection in AdS ₄ /CFT ₃ . Journal of High Energy Physics, 2010, 2010, 1.	4.7	3
49	Yangian symmetry and bound states in AdS/CFT boundary scattering. Journal of High Energy Physics, 2010, 2010, 1.	4.7	22
50	Finite-size effect for four-loop Konishi of the $\hat{\mathfrak{t}}_2$ -deformed SYM. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2010, 693, 380-385.	4.1	28
51	Nested algebraic Bethe ansatz for open \mathfrak{gl}_3 spin chains with projected K-matrices. Nuclear Physics B, 2010, 831, 429-451.	2.5	4
52	Bethe ansatz equations for open spin chains from giant gravitons. Journal of High Energy Physics, 2009, 2009, 100-100.	4.7	14
53	An alternative S-matrix for $\mathfrak{su}(2 2)$ Chern-Simons theory?. Journal of High Energy Physics, 2009, 2009, 068-068.	4.7	10
54	Two-loop test of the $\mathfrak{su}(2 2)$ Chern-Simons theory S-matrix. Journal of High Energy Physics, 2009, 2009, 144-144.	4.7	19

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55	The QCD spin chain S matrix. Nuclear Physics B, 2008, 798, 402-422.	2.5	1
56	q-deformed $su(2 2)$ boundary S-matrices via the ZF algebra. Journal of High Energy Physics, 2008, 2008, 096-096.	4.7	11
57	The Zamolodchikov-Faddeev algebra for open strings attached to giant gravitons. Journal of High Energy Physics, 2008, 2008, 059-059.	4.7	24
58	Open-chain transfer matrices for AdS/CFT. Journal of High Energy Physics, 2008, 2008, 085-085.	4.7	15
59	Analytical Bethe ansatz for the open AdS/CFT $SU(1 1)$ spin chain. Journal of High Energy Physics, 2008, 2008, 025-025.	4.7	4
60	$\mathfrak{psl}(2, \mathbb{C})$ super Chern-Simons theory S -matrix and all-loop Bethe ansatz equations. Journal of High Energy Physics, 2008, 2008, 010-010.	4.7	104
61	A complete Bethe ansatz solution for the open spin- s XXZ chain with general integrable boundary terms. Journal of Statistical Mechanics: Theory and Experiment, 2007, 2007, P09009-P09009.	2.3	29
62	Boundary energy of the general open XXZ chain at roots of unity. Journal of High Energy Physics, 2007, 2007, 038-038.	4.7	5
63	Finite size effects in the spin-1 XXZ and supersymmetric sine-Gordon models with Dirichlet boundary conditions. Nuclear Physics B, 2007, 767, 250-294.	2.5	16
64	Exact solution of the open XXZ chain with general integrable boundary terms at roots of unity. Journal of Statistical Mechanics: Theory and Experiment, 2006, 2006, P08006-P08006.	2.3	41
65	Boundary Energy of the Open XXZ Chain from New Exact Solutions. Annales Henri Poincare, 2006, 7, 1429-1448.	4.1	72
66	Boundary Energy of the Open XXZ Chain from New Exact Solutions. Annales Henri Poincare, 2006, 7, 1429-1448.	1.7	10
67	INTEGRABILITY + SUPERSYMMETRY + BOUNDARY: LIFE ON THE EDGE IS NOT SO DULL AFTER ALL!. , 2006, , .		1
68	Bethe Ansatz for the Open XXZ Chain from Functional Relations at Roots of Unity. , 2006, , .		0
69	Generalized Q -relations and the open XXZ chain. Journal of Statistical Mechanics: Theory and Experiment, 2005, 2005, P08002-P08002.	2.3	6
70	Bethe ansatz derived from the functional relations of the open XXZ chain for new special cases. Journal of Statistical Mechanics: Theory and Experiment, 2005, 2005, P05007.	2.3	16
71	NLIE for hole excited states in the sine-Gordon model with two boundaries. Nuclear Physics B, 2005, 714, 307-335.	2.5	18
72	Addendum to "Bethe ansatz derived from the functional relations of the open XXZ chain for new special cases". Journal of Statistical Mechanics: Theory and Experiment, 2005, 2005, P11004-P11004.	2.3	5

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73	Bethe ansatz solution of the open XXZ chain with nondiagonal boundary terms. Journal of Physics A, 2004, 37, 433-440.	1.6	135
74	Finite size effects in the XXZ and sine-Gordon models with two boundaries. Nuclear Physics B, 2004, 676, 637-658.	2.5	31
75	Addendum to Completeness of the Bethe Ansatz solution of the open XXZ chain with nondiagonal boundary terms. Journal of Physics A, 2004, 37, 1945-1946.	1.6	30
76	Functional Relations and Bethe Ansatz for the XXZ Chain. Journal of Statistical Physics, 2003, 111, 1363-1376.	1.2	115
77	Completeness of the Bethe Ansatz solution of the open XXZ chain with nondiagonal boundary terms. Journal of Physics A, 2003, 36, 11391-11401.	1.6	82
78	SUPERSYMMETRY IN THE BOUNDARY TRICRITICAL ISING FIELD THEORY. International Journal of Modern Physics A, 2002, 17, 3809-3826.	1.5	17
79	Solutions of the boundary Yang-Baxter equation for arbitrary spin. Journal of Physics A, 2002, 35, L341-L348.	1.6	19
80	Solving the open XXZ spin chain with nondiagonal boundary terms at roots of unity. Nuclear Physics B, 2002, 622, 615-632.	2.5	91
81	TBA boundary flows in the tricritical Ising field theory. Nuclear Physics B, 2002, 647, 433-470.	2.5	13
82	Boundary Quantum Group Generators of Type A. Letters in Mathematical Physics, 2002, 62, 83-89.	1.1	32
83	The scaling supersymmetric Yang-Lee model with boundary. Nuclear Physics B, 2001, 594, 660-684.	2.5	15
84	The boundary supersymmetric sine-Gordon model revisited. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2001, 509, 183-188.	4.1	38
85	The boundary N=2 supersymmetric sine-Gordon model. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2001, 516, 376-382.	4.1	8
86	Boundary S matrices with N=2 supersymmetry. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2001, 516, 161-164.	4.1	7
87	Bethe ansatz solution of the open XXspin chain with non-diagonal boundary terms. Journal of Physics A, 2001, 34, 9993-10003.	1.6	27
88	Consistent superconformal boundary states. Journal of Physics A, 2001, 34, 6509-6524.	1.6	21
89	Nonstandard coproducts and the Izergin-Korepin open spin chain. Journal of Physics A, 2000, 33, L21-L26.	1.6	12
90	Exact solution of the supersymmetric sinh-Gordon model with boundary. Nuclear Physics B, 2000, 586, 611-640.	2.5	18

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91	Direct calculation of breather S matrices. Journal of Physics A, 1999, 32, 3663-3680.	1.6	14
92	NEW AND OLD SYMMETRIES OF INTEGRABLE SPIN CHAINS. International Journal of Modern Physics B, 1999, 13, 3943-3952.	2.0	1
93	Soliton S matrices for the critical chain. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1999, 462, 121-131.	4.1	13
94	A SPIN CHAIN PRIMER. International Journal of Modern Physics B, 1999, 13, 2973-2985.	2.0	34
95	Bulk and boundary S-matrices for the SU(N) chain. Nuclear Physics B, 1998, 521, 547-572.	2.5	47
96	Duality and quantum-algebra symmetry of the $AN\hat{=}1(1)$ open spin chain with diagonal boundary fields. Nuclear Physics B, 1998, 530, 641-664.	2.5	39
97	Discrete symmetries and S-matrix of the XXZ chain. Journal of Physics A, 1998, 31, L621-L627.	1.6	10
98	Boundary S-matrix for the XXZ chain. Journal of Physics A, 1998, 31, 53-59.	1.6	6
99	FRACTIONAL-SPIN INTEGRALS OF MOTION FOR THE BOUNDARY SINE-GORDON MODEL AT THE FREE FERMION POINT. International Journal of Modern Physics A, 1998, 13, 2747-2764.	1.5	47
100	Simplified calculation of boundary S matrices. Journal of Physics A, 1997, 30, L507-L512.	1.6	16
101	Factorization of Multiparticle Scattering in the Heisenberg Spin Chain. Modern Physics Letters A, 1997, 12, 2591-2598.	1.2	6
102	SPECTRUM OF THE TRANSFER MATRIX FOR THE $U_q(B_n)$ -INVARIANT $A_{2n}^{(2)}$ OPEN SPIN CHAIN. International Journal of Modern Physics A, 1995, 10, 1937-1952.	1.5	19
103	SCALAR KINKS. , 1995, , 25-37.		0
104	Thermodynamics of integrable chains with alternating spins. Physical Review B, 1994, 49, 13223-13226.	3.2	57
105	SCALAR KINKS. International Journal of Modern Physics B, 1994, 08, 3473-3485.	2.0	22
106	Low-temperature thermodynamics of $A_2(2)$ and $su(3)$ -invariant integrable spin chains. Nuclear Physics B, 1993, 406, 681-707.	2.5	24
107	ADDENDUM: INTEGRABILITY OF OPEN SPIN CHAINS WITH QUANTUM ALGEBRA SYMMETRY. International Journal of Modern Physics A, 1992, 07, 5657-5659.	1.5	56
108	Analytical Bethe Ansatz for quantum-algebra-invariant spin chains. Nuclear Physics B, 1992, 372, 597-621.	2.5	99

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109	INTEGRABILITY OF OPEN SPIN CHAINS WITH QUANTUM ALGEBRA SYMMETRY. International Journal of Modern Physics A, 1991, 06, 5231-5248.	1.5	118
110	QUANTUM ALGEBRA STRUCTURE OF EXACTLY SOLUBLE QUANTUM SPIN CHAINS. Modern Physics Letters A, 1991, 06, 2497-2508.	1.2	59
111	Unitarity and irrationality for the quantum algebra $Uq[SU(2)]$. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1990, 246, 412-416.	4.1	7
112	Bethe ansatz solution of the Fateev-Zamolodchikov quantum spin chain with boundary terms. Physics Letters, Section A: General, Atomic and Solid State Physics, 1990, 147, 70-78.	2.1	111
113	Riemann-double construction for spinning string propagators. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1989, 224, 265-272.	4.1	1
114	Do supermembranes contain massless particles?. Nuclear Physics B, 1988, 309, 317-329.	2.5	24
115	Critical dimensions for chiral bosons. Physical Review D, 1988, 37, 3067-3069.	4.7	42
116	Non-Abelian bosonization: Current correlation functions. Physical Review D, 1987, 35, 3239-3248.	4.7	19
117	Non-Abelian bosonization: Stress-energy correlation functions. Physical Review D, 1987, 36, 551-561.	4.7	8
118	Nonabelian bosonization, triality, and superstring theory. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1986, 178, 207-210.	4.1	11
119	Chern-Simons terms and Bosonic strings. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1986, 171, 195-198.	4.1	30
120	String models with twisted currents. Physical Review D, 1986, 34, 1129-1135.	4.7	5
121	Non-Abelian symmetries from higher dimensions in string theories. Physical Review D, 1986, 33, 3670-3677.	4.7	18
122	Low-energy limit of strings. Physical Review D, 1985, 32, 3201-3207.	4.7	88
123	New compactifications on Calabi-Yau manifolds. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1985, 158, 311-315.	4.1	21
124	Comment on "Quantum Effects on Four-Dimensional Space-Time Symmetries". Physical Review Letters, 1985, 54, 1458-1458.	7.8	0
125	Calculating heat kernels. Physical Review D, 1985, 31, 3291-3292.	4.7	54
126	Magnetic monopoles from antisymmetric tensor gauge fields. Physical Review D, 1985, 31, 1921-1924.	4.7	114

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127	Supersymmetric skyrmions in four dimensions. Nuclear Physics B, 1985, 249, 93-130.	2.5	42
128	Einstein gravity as the low energy effective theory of Weyl gravity. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1984, 136, 33-37.	4.1	22
129	Gauge invariance versus masslessness in de Sitter spaces. Annals of Physics, 1984, 154, 396-420.	2.8	247
130	Evaluating fermion determinants through the chiral anomaly. Annals of Physics, 1984, 158, 67-77.	2.8	55
131	Anomalous propagation of gauge fields in conformally flat spaces. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1983, 132, 321-324.	4.1	122
132	Remarks on quantized Yang-Mills theory in 26 dimensions. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1983, 128, 177-178.	4.1	8
133	Electric-magnetic duality of conformal gravitation. Physics Letters, Section A: General, Atomic and Solid State Physics, 1983, 97, 329-332.	2.1	12
134	Approaches to a non-abelian antisymmetric tensor gauge field theory. Nuclear Physics B, 1983, 212, 301-320.	2.5	19
135	Duality and the Polyakov N-point Green's function. Physical Review D, 1982, 25, 2706-2708.	4.7	7
136	Unified geometry of antisymmetric tensor gauge fields and gravity. Nuclear Physics B, 1982, 199, 482-494.	2.5	42
137	A new formulation of the string action. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1981, 105, 457-461.	4.1	6