

# Jean Avan

## List of Publications by Year in descending order

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84  
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394421  
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g-index

86  
all docs

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docs citations

86  
times ranked

280  
citing authors

#	ARTICLE	IF	CITATIONS
1	Classical integrability and higher symmetries of collective string field theory. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1991, 266, 35-41.	4.1	109
2	Classical R-matrix structure for the Calogero model. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1993, 303, 33-37.	4.1	74
3	The Gervais-Neveu-Felder equation and the quantum Calogero-Moser systems. Communications in Mathematical Physics, 1996, 178, 281-299.	2.2	73
4	Quantum integrability and exact eigenstates of the collective string field theory. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1991, 272, 17-24.	4.1	52
5	Modified algebraic Bethe ansatz for XXZ chain on the segment “ III ” Proof. Nuclear Physics B, 2015, 899, 229-246.	2.5	49
6	General boundary conditions for the and open spin chains. Journal of Statistical Mechanics: Theory and Experiment, 2004, 2004, P08005.	2.3	45
7	R-matrix presentation for super-Yangians $\mathcal{Y}(\mathfrak{osp}(m 2n))$ . Journal of Mathematical Physics, 2003, 44, 302-308.	1.1	38
8	Exact Yangian symmetry in the classical Euler-Calogero-Moser model. Physics Letters, Section A: General, Atomic and Solid State Physics, 1994, 188, 263-271.	2.1	37
9	The r-matrix structure of the Euler-Calogero-Moser model. Physics Letters, Section A: General, Atomic and Solid State Physics, 1994, 186, 114-118.	2.1	37
10	Classification of reflection matrices related to (super-)Yangians and application to open spin chain models. Nuclear Physics B, 2003, 668, 469-505.	2.5	30
11	Pair production via crossed lasers. Physical Review D, 2001, 63, .	4.7	26
12	Bethe ansatz equations and exact S matrices for the $\mathfrak{osp}(M 2n)$ open super-spin chain. Nuclear Physics B, 2004, 687, 257-278.	2.5	26
13	Liouville integrable defects: the non-linear Schrödinger paradigm. Journal of High Energy Physics, 2012, 2012, 1.	4.7	26
14	Classical solutions by inverse scattering transformation in any number of dimensions. I. The gap equation and the effective action. Physical Review D, 1984, 29, 2891-2903.	4.7	25
15	Lagrangian and Hamiltonian structures in an integrable hierarchy and space-time duality. Nuclear Physics B, 2016, 902, 415-439.	2.5	25
16	The sine-Gordon model with integrable defects revisited. Journal of High Energy Physics, 2012, 2012, 1.	4.7	24
17	Graded R-matrices for integrable systems. Nuclear Physics B, 1991, 352, 215-249.	2.5	23
18	Collective field theory of the matrix-vector models. Nuclear Physics B, 1996, 469, 287-301.	2.5	22

#	ARTICLE	IF	CITATIONS
19	Algebraic structures and eigenstates for integrable collective field theories. Communications in Mathematical Physics, 1992, 150, 149-166.	2.2	21
20	STRING FIELD ACTIONS FROM $\hat{W}$ . Modern Physics Letters A, 1992, 07, 357-370.	1.2	18
21	Alternative Lax structures for the classical and quantum Neumann model. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1991, 268, 209-216.	4.1	17
22	Deformed $\hat{W}_N$ Algebras from Elliptic $sl(N)$ Algebras. Communications in Mathematical Physics, 1999, 199, 697-728.	2.2	17
23	Integrable boundary conditions and modified Lax equations. Nuclear Physics B, 2008, 800, 591-612.	2.5	15
24	Boundary Lax pairs for the Toda field theories. Nuclear Physics B, 2009, 821, 481-505.	2.5	14
25	Classical solutions by inverse scattering transformation in any number of dimensions. II. Instantons and large orders of the $1/N$ series for the $(1+1)2$ theory in $1/2$ dimensions ( $1 \leq n \leq 4$ ). Physical Review D, 1984, 29, 2904-2915.	1.7	13
26	Nontrivial generalizations of the Schwinger pair production result. Physical Review D, 2003, 67, .	4.7	13
27	Reflection $k$ -matrices related to Temperley-Lieb R-matrices. Theoretical and Mathematical Physics(Russian Federation), 2011, 169, 1530-1538.	0.9	13
28	The classical r-matrix for the relativistic Ruijsenaars-Schneider system. Physics Letters, Section A: General, Atomic and Solid State Physics, 1996, 212, 50-54.	2.1	12
29	Construction of Dynamical Quadratic Algebras. Letters in Mathematical Physics, 2004, 67, 1-11.	1.1	12
30	Systematic classical continuum limits of integrable spin chains and emerging novel dualities. Nuclear Physics B, 2010, 840, 469-490.	2.5	12
31	From Hamiltonian to zero curvature formulation for classical integrable boundary conditions. Journal of Physics A: Mathematical and Theoretical, 2018, 51, 30LT01.	2.1	12
32	$1/N$ series for quantum anharmonic oscillator eigenvalues and green functions. Nuclear Physics B, 1984, 237, 159-175.	2.5	11
33	Yangian-invariant field theory of matrix-vector models. Nuclear Physics B, 1997, 486, 650-672.	2.5	10
34	Poisson structures on the center of the elliptic algebra. Physics Letters, Section A: General, Atomic and Solid State Physics, 1997, 235, 323-334.	2.1	10
35	New $q,p(sl(2))$ algebras from the elliptic algebra $q,p((2)c)$ . Physics Letters, Section A: General, Atomic and Solid State Physics, 1998, 239, 27-35.	2.1	10
36	$\hat{W}$ currents in three-dimensional Toda theory. Physics Letters, Section A: General, Atomic and Solid State Physics, 1992, 168, 363-369.	2.1	9

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37	Observable algebras for the rational and trigonometric Euler-Calogero-Moser Models. Physics Letters, Section A: General, Atomic and Solid State Physics, 1995, 198, 183-194.	2.1	9
38	Central extensions of classical and quantum $q$ -Virasoro algebras. Physics Letters, Section A: General, Atomic and Solid State Physics, 1999, 251, 13-24.	2.1	9
39	Interacting theory of collective and topological fields in 2 dimensions. Nuclear Physics B, 1993, 397, 672-702.	2.5	8
40	Commuting quantum traces for quadratic algebras. Journal of Mathematical Physics, 2005, 46, 083516.	1.1	8
41	Poisson structures of Calogero-Moser and Ruijsenaars-Schneider models. Journal of Physics A: Mathematical and Theoretical, 2010, 43, 185201.	2.1	8
42	On the origin of dual Lax pairs and their $\langle mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" id="mml1" display="block" altimg="s11.gif">\langle mml:mi>r</mml:mi></mml:math>$ -matrix structure. Journal of Geometry and Physics, 2017, 120, 106-128.	1.4	8
43	The quasi-abelian limit. European Physical Journal C, 2000, 13, 699-709.	3.9	7
44	Temperley-Lieb R-matrices from generalized Hadamard matrices. Theoretical and Mathematical Physics(Russian Federation), 2014, 178, 223-238.	0.9	7
45	Integrable extensions of the rational and trigonometric AN Calogero-Moser potentials. Physics Letters, Section A: General, Atomic and Solid State Physics, 1994, 185, 293-303.	2.1	6
46	Towards a cladistics of double Yangians and elliptic algebras*. Journal of Physics A, 2000, 33, 6279-6309.	1.6	6
47	Parametrization of semi-dynamical quantum reflection algebra. Journal of Physics A: Mathematical and Theoretical, 2007, 40, 2709-2731.	2.1	6
48	Boundary Lax pairs from non-ultra-local Poisson algebras. Journal of Mathematical Physics, 2009, 50, 113512.	1.1	6
49	Instantons of two-dimensional fermionic effective actions by inverse scattering transformation. Communications in Mathematical Physics, 1985, 102, 463-496.	2.2	5
50	Commuting quantum traces: the case of reflection algebras. Journal of Physics A, 2004, 37, 1603-1615.	1.6	5
51	Spin chains from dynamical quadratic algebras. Journal of Statistical Mechanics: Theory and Experiment, 2005, 2005, P03005.	2.3	5
52	Deformed Virasoro Algebras from Elliptic Quantum Algebras. Communications in Mathematical Physics, 2017, 354, 753-773.	2.2	5
53	From rational to trigonometric R-matrices. Physics Letters, Section A: General, Atomic and Solid State Physics, 1991, 156, 61-68.	2.1	4
54	Universal Construction of $\mathcal{W}_{q,p}$ Algebras. Communications in Mathematical Physics, 1999, 202, 445-461.	2.2	4

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55	On the Quasi-Hopf Structure of Deformed Double Yangians. Letters in Mathematical Physics, 2000, 51, 193-204.	1.1	4
56	A New Dynamical Reflection Algebra and Related Quantum Integrable Systems. Letters in Mathematical Physics, 2012, 101, 85-101.	1.1	4
57	Quantization and Dynamisation of Trace-Poisson Brackets. Communications in Mathematical Physics, 2016, 341, 263-287.	2.2	4
58	DEFORMED DOUBLE YANGIAN STRUCTURES. Reviews in Mathematical Physics, 2000, 12, 945-963.	1.7	3
59	Did the ever dead outnumber the living and when? A birth-and-death approach. Physica A: Statistical Mechanics and Its Applications, 2015, 419, 277-292.	2.6	3
60	Structures in BCN Ruijsenaars-Schneider models. Journal of Mathematical Physics, 2002, 43, 403-416.	1.1	2
61	C (2) N+1 Ruijsenaars-Schneider Models. Letters in Mathematical Physics, 2002, 60, 177-189.	1.1	2
62	Classification of the Solutions of Constant Rational Semi-Dynamical Reflection Equations. Annales Henri Poincaré, 2006, 7, 1463-1476.	1.7	2
63	The sine-Gordon model in the presence of defects. Journal of Physics: Conference Series, 2013, 411, 012003.	0.4	2
64	On extreme events for non-spatial and spatial branching Brownian motions. Physica D: Nonlinear Phenomena, 2015, 298-299, 13-20.	2.8	2
65	Dynamical centers for the elliptic quantum algebra \$ \text{ewcommand}{elpb}[1]{{\{\mathcal{B}\}}_{q,\lambda}(\widehat{gl}_{\#1})_c} \text{ewcommand}{e}{{\{m\}}_{elpb[2]}} \$. Journal of Physics A: Mathematical and Theoretical, 2017, 50, 394002.	2.1	2
66	Scattering matrices in the \$ \mathfrak{sl}_m(\text{sfseries}{3}) \$ twisted Yangian. Journal of Statistical Mechanics: Theory and Experiment, 2015, 2015, P02007.	2.3	2
67	Rational Calogero-Moser Model: Explicit Form and r-Matrix of the Second Poisson Structure. Symmetry, Integrability and Geometry: Methods and Applications (SIGMA), 2012, , .	0.5	2
68	Collective hamiltonians with Kac-Moody algebraic conditions. Nuclear Physics B, 1995, 439, 679-691.	2.5	1
69	From quantum to elliptic algebras. European Physical Journal D, 1997, 47, 1083-1092.	0.4	1
70	On elliptic algebras and double Yangians. European Physical Journal D, 2000, 50, 5-10.	0.4	1
71	On \$ \mathfrak{osp}(M 2n) \$ Integrable Open Spin Chains. European Physical Journal D, 2004, 54, 1153-1158.	0.4	1
72	The semi-dynamical reflection equation: solutions and structure matrices. Journal of Physics A: Mathematical and Theoretical, 2008, 41, 194001.	2.1	1

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73	Reflection matrices from Hadamard-type Temperley-Lieb R-matrices. <i>Theoretical and Mathematical Physics</i> (Russian Federation), 2014, 179, 387-394.	0.9	1
74	The $\mathfrak{sl}_N$ twisted Yangian: bulk-boundary scattering and defects. <i>Journal of Statistical Mechanics: Theory and Experiment</i> , 2015, 2015, P05024.	2.3	1
75	Classification of Non-Affine Non-Hecke Dynamical R-Matrices. <i>Symmetry, Integrability and Geometry: Methods and Applications (SIGMA)</i> , 2012, .	0.5	1
76	Algebraic structure of classical integrability for complex sine-Gordon. <i>SciPost Physics</i> , 2020, 8, .	4.9	1
77	The CP N=1 1/N-action by inverse scattering transformation in angular momentum. <i>Communications in Mathematical Physics</i> , 1986, 106, 289-319.	2.2	0
78	q-deformed W-algebras and elliptic algebras. <i>European Physical Journal D</i> , 1998, 48, 1291-1299.	0.4	0
79	Yangians, quantum groups and solutions of the quantum dynamical Yang-Baxter equation. <i>European Physical Journal D</i> , 2001, 51, 1254-1259.	0.4	0
80	Yangian and Quantum Universal Solutions of Gervais-Neveu-Felder Equations. <i>Communications in Mathematical Physics</i> , 2002, 226, 183-203.	2.2	0
81	Sugawara and Vertex Operator Constructions for Deformed Virasoro Algebras. <i>Annales Henri Poincaré</i> , 2006, 7, 1327-1349.	1.7	0
82	On Calogero-Fransoise-type Lax matrices and their dynamical r-matrices. <i>Journal of Mathematical Physics</i> , 2009, 50, 072701.	1.1	0
83	Scattering in Twisted Yangians. <i>Journal of Physics: Conference Series</i> , 2016, 670, 012007.	0.4	0
84	Integrable quantum spin chains and their classical continuous counterparts. , 2011, .	0	0