

# Ruibin B Zhang

## List of Publications by Year in descending order

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109  
papers

1,498  
citations

331670  
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414414  
32  
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all docs

110  
docs citations

110  
times ranked

326  
citing authors

#	ARTICLE	IF	CITATIONS
1	Cohomology of Lie superalgebras and their generalizations. <i>Journal of Mathematical Physics</i> , 1998, 39, 5024-5061.	1.1	98
2	Finite dimensional irreducible representations of the quantum supergroup $U_q(gl(m/n))$ . <i>Journal of Mathematical Physics</i> , 1993, 34, 1236-1254.	1.1	74
3	QUANTUM SUPERGROUPS AND SOLUTIONS OF THE YANG-BAXTER EQUATION. <i>Modern Physics Letters A</i> , 1990, 05, 831-840.	1.2	72
4	Quantum group invariants and link polynomials. <i>Communications in Mathematical Physics</i> , 1991, 137, 13-27.	2.2	51
5	The Brauer category and invariant theory. <i>Journal of the European Mathematical Society</i> , 2015, 17, 2311-2351.	1.4	41
6	The $gl(M N)$ super Yangian and its finite-dimensional representations. <i>Letters in Mathematical Physics</i> , 1996, 37, 419-434.	1.1	40
7	Classification of all star irreps of $gl(m-n)$ . <i>Journal of Mathematical Physics</i> , 1990, 31, 2552-2559.	1.1	37
8	Generalized Gel'fand invariants and characteristic identities for quantum groups. <i>Journal of Mathematical Physics</i> , 1991, 32, 2298-2303.	1.1	37
9	The second fundamental theorem of invariant theory for the orthogonal group. <i>Annals of Mathematics</i> , 2012, 176, 2031-2054.	4.2	36
10	Strongly multiplicity free modules for Lie algebras and quantum groups. <i>Journal of Algebra</i> , 2006, 306, 138-174.	0.7	35
11	Finite-dimensional representations of $U_q(osp(1/2n))$ and its connection with quantum $so(2n+1)$ . <i>Letters in Mathematical Physics</i> , 1992, 25, 317-325.	1.1	34
12	On Maps Preserving Zero Jordan Products. <i>Monatshefte Fur Mathematik</i> , 2006, 149, 91-101.	0.9	30
13	Structure and Representations of the Quantum General Linear Supergroup. <i>Communications in Mathematical Physics</i> , 1998, 195, 525-547.	2.2	29
14	Super duality and Kazhdan-Lusztig polynomials. <i>Transactions of the American Mathematical Society</i> , 2008, 360, 5883-5924.	0.9	29
15	Universal L operator and invariants of the quantum supergroup $U_q(gl(m/n))$ . <i>Journal of Mathematical Physics</i> , 1992, 33, 1970-1979.	1.1	28
16	Representations of super Yangian. <i>Journal of Mathematical Physics</i> , 1995, 36, 3854-3865.	1.1	25
17	Title is missing!. <i>Letters in Mathematical Physics</i> , 1999, 47, 49-61.	1.1	25
18	Solutions of the graded classical Yang-Baxter equation and integrable models. <i>Journal of Physics A</i> , 1991, 24, 1185-1197.	1.6	24

#	ARTICLE	IF	CITATIONS
19	Quantum double construction for graded Hopf algebras. <i>Bulletin of the Australian Mathematical Society</i> , 1993, 47, 353-375.	0.5	24
20	Character formula for infinite-dimensional unitarizable modules of the general linear superalgebra. <i>Journal of Algebra</i> , 2004, 273, 780-805.	0.7	23
21	Differential equations in vertex algebras and simple modules for the Lie algebra of vector fields on a torus. <i>Advances in Mathematics</i> , 2008, 218, 1972-2004.	1.1	23
22	A Quantum Analogue of the First Fundamental Theorem of Classical Invariant Theory. <i>Communications in Mathematical Physics</i> , 2011, 301, 131-174.	2.2	22
23	Braid group representations arising from quantum supergroups with arbitrary q and link polynomials. <i>Journal of Mathematical Physics</i> , 1992, 33, 3918-3930.	1.1	21
24	Universal R matrices and invariants of quantum supergroups. <i>Journal of Mathematical Physics</i> , 1991, 32, 3261-3267.	1.1	20
25	Howe duality and the quantum general linear group. <i>Proceedings of the American Mathematical Society</i> , 2002, 131, 2681-2692.	0.8	20
26	Multiplicity Free Actions of Quantum Groups and Generalized Howe Duality. <i>Letters in Mathematical Physics</i> , 2003, 64, 255-272.	1.1	19
27	Title is missing!. <i>International Mathematics Research Notices</i> , 2004, 2004, 31.	1.0	19
28	The First Fundamental Theorem of Invariant Theory for the Orthosymplectic Supergroup. <i>Communications in Mathematical Physics</i> , 2017, 349, 661-702.	2.2	19
29	LIE BI-SUPERALGEBRAS AND THE GRADED CLASSICAL YANG-BAXTER EQUATION. <i>Reviews in Mathematical Physics</i> , 1991, 03, 223-240.	1.7	18
30	Positive energy unitary irreducible representations of the superalgebras $osp(1 2n)$ . <i>Physics of Atomic Nuclei</i> , 2005, 68, 1660-1669.	0.4	18
31	Riemannian geometry of noncommutative surfaces. <i>Journal of Mathematical Physics</i> , 2008, 49, .	1.1	18
32	GEOMETRY OF QUANTUM HOMOGENEOUS VECTOR BUNDLES AND REPRESENTATION THEORY OF QUANTUM GROUPS I. <i>Reviews in Mathematical Physics</i> , 1999, 11, 533-552.	1.7	17
33	The general linear supergroup and its Hopf superalgebra of regular functions. <i>Journal of Algebra</i> , 2002, 254, 44-83.	0.7	17
34	Classification of all star and grade star irreps of $gl(n-1)$ . <i>Journal of Mathematical Physics</i> , 1990, 31, 1524-1534.	1.1	16
35	QUANTUM SUPERGROUPS, LINK POLYNOMIALS AND REPRESENTATION OF THE BRAID GENERATOR. <i>Reviews in Mathematical Physics</i> , 1993, 05, 345-361.	1.7	16
36	Noncommutative fields and actions of twisted Poincaré algebra. <i>Journal of Mathematical Physics</i> , 2008, 49, 042302.	1.1	16

#	ARTICLE	IF	CITATIONS
37	Graded representations of the Temperley-Lieb algebra, quantum supergroups, and the Jones polynomial. <i>Journal of Mathematical Physics</i> , 1991, 32, 2605-2613.	1.1	15
38	Cohomology of Lie superalgebras $m n$ and $2 2$ . <i>Proceedings of the London Mathematical Society</i> , 2007, 94, 91-136.	1.3	15
39	Orthosymplectic Lie Superalgebras in Superspace Analogues of Quantum Kepler Problems. <i>Communications in Mathematical Physics</i> , 2008, 280, 545-562.	2.2	14
40	Generalized Gelfand invariants of quantum groups. <i>Journal of Physics A</i> , 1991, 24, 937-943.	1.6	13
41	Grassmannian Kaluza-Klein theory and the standard model. <i>Physical Review D</i> , 1988, 38, 2490-2497.	4.7	12
42	Quantum deformations of Schwarzschild and Schwarzschild-de Sitter spacetimes. <i>Classical and Quantum Gravity</i> , 2009, 26, 085014.	4.0	12
43	A Temperley-Lieb Analogue for the BMW Algebra. , 2010, , 155-190.		12
44	Finite-dimensional representations of $U_q(C(n+1))$ at arbitrary $q$ . <i>Journal of Physics A</i> , 1993, 26, 7041-7059.	1.6	11
45	The quantum super-Yangian and Casimir operators of $U_q(gl(M N))$ . <i>Letters in Mathematical Physics</i> , 1995, 33, 263-272.	1.1	11
46	Seiberg-Witten Monopoles in Three Dimensions. <i>Letters in Mathematical Physics</i> , 1997, 39, 213-228.	1.1	11
47	Symmetrizable quantum affine superalgebras and their representations. <i>Journal of Mathematical Physics</i> , 1997, 38, 535-543.	1.1	10
48	Invariant integration on classical and quantum Lie supergroups. <i>Journal of Mathematical Physics</i> , 2001, 42, 3871-3897.	1.1	10
49	Generalized MICZ-Kepler problems and unitary highest weight modules. <i>Journal of Mathematical Physics</i> , 2011, 52, .	1.1	10
50	Classification of star and grade-star representations of $C(n+1)$ . <i>Journal of Mathematical Physics</i> , 1990, 31, 1889-1897.	1.1	9
51	Integration on Lie supergroups: A Hopf superalgebra approach. <i>Journal of Algebra</i> , 2005, 292, 324-342.	0.7	9
52	Unitary highest weight representations of quantum general linear superalgebra. <i>Journal of Algebra</i> , 2009, 321, 3568-3593.	0.7	9
53	Exact solutions of noncommutative vacuum Einstein field equations and plane-fronted gravitational waves. <i>European Physical Journal C</i> , 2009, 64, 439.	3.9	9
54	Detecting cohomology for Lie superalgebras. <i>Advances in Mathematics</i> , 2011, 228, 2098-2115.	1.1	9

#	ARTICLE	IF	CITATIONS
55	Character and Dimension Formulae for Queer Lie Superalgebra. Communications in Mathematical Physics, 2015, 333, 1465-1481.	2.2	9
56	Quantum superalgebra representations on cohomology groups of non-commutative bundles. Journal of Pure and Applied Algebra, 2004, 191, 285-314.	0.6	8
57	On Endomorphisms of Quantum Tensor Space. Letters in Mathematical Physics, 2008, 86, 209-227. Generalised Verma modules for the orthosymplectic Lie superalgebra <math altimg="si1.gif" overflow="scroll" xmlns:xocs="http://www.elsevier.com/xml/xocs/dtd" xmlns:xs="http://www.w3.org/2001/XMLSchema" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns="http://www.elsevier.com/xml/ja/dtd" xmlns:ja="http://www.elsevier.com/xml/ja/dtd" xmlns:mml="http://www.w3.org/1998/Math/MathML" xmlns:tb="http://www.elsevier.com/xml/common/table/dtd" xmlns:bs="http://www.elsevier.com/xml/co	1.1	8
58	Quasi-finite modules for Lie superalgebras of infinite rank. Transactions of the American Mathematical Society, 2005, 358, 403-439.	0.7	8
60	Unitary representations of basic classical Lie superalgebras. Letters in Mathematical Physics, 1990, 20, 221-229.	1.1	7
61	Eigenvalues of Casimir invariants of $U_q(\mathfrak{gl}(m n))$ . Journal of Mathematical Physics, 1993, 34, 6016-6024.	1.1	7
62	On irreducibility of tensor products of evaluation modules for the quantum affine algebra. Journal of Physics A, 2004, 37, 2385-2399.	1.6	7
63	Resolution of the $GL(3) \times O(3)$ state labelling problem via the $O(3)$ -invariant Bethe subalgebra of the twisted Yangian. Journal of Physics A, 2005, 38, L219-L226.	1.6	7
64	Dual canonical bases for the quantum general linear supergroup. Journal of Algebra, 2006, 304, 1026-1058.	0.7	7
65	Borelic pairs for stratified algebras. Advances in Mathematics, 2019, 345, 53-115.	1.1	7
66	Serre presentations of Lie superalgebras. Springer INdAM Series, 2014, , 235-280.	0.5	7
67	A two-parameter quantization of $sl(2 1)$ and its finite-dimensional representations. Journal of Physics A, 1994, 27, 817-829.	1.6	6
68	Multiparameter link invariants from quantum supergroups. Journal of Mathematical Physics, 1994, 35, 1377-1386.	1.1	6
69	A Fock space approach to representation theory of $osp(2 2n)$ . Transformation Groups, 2007, 12, 209-225.	0.7	6
70	Cellularity of certain quantum endomorphism algebras. Pacific Journal of Mathematics, 2015, 279, 11-35.	0.5	6
71	Invariants of the orthosymplectic Lie superalgebra and super Pfaffians. Mathematische Zeitschrift, 2017, 286, 893-917.	0.9	6
72	Schwinger models in arbitrary gauges and at finite temperature. Journal of Physics G: Nuclear Physics, 1987, 13, L93-L96.	0.8	5

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73	En">The Second Cohomology of $\mathfrak{sl}(m 1)$ with Coefficients in its Enveloping Algebra is Trivial. Letters in Mathematical Physics, 1999, 47, 33-48.	1.1	5
74	Quantum enveloping superalgebras and link invariants. Journal of Mathematical Physics, 2002, 43, 2029-2048.	1.1	5
75	Geometry and representations of the quantum supergroup $OSP_q(1 2n)$ . Journal of Mathematical Physics, 1999, 40, 3175-3190.	1.1	4
76	Quantum Group Actions on the Cuntz Algebra. Annales Henri Poincare, 2000, 1, 1097-1122.	1.7	4
77	Spherical functions on homogeneous superspaces. Journal of Mathematical Physics, 2005, 46, 043513.	1.1	4
78	Gravitational collapse of spherically symmetric stars in noncommutative general relativity. European Physical Journal C, 2010, 69, 271-279.	3.9	4
79	Invariants of the quantum supergroup $U_q(\mathfrak{gl}(m 1))$ . Journal of Physics A, 1991, 24, L1327-L1332.	1.6	3
80	Quantum groups at odd roots of unity and topological invariants of 3-manifolds. Communications in Mathematical Physics, 1996, 182, 619-636.	2.2	3
81	LICKORISH INVARIANT AND QUANTUM $OSP(1 2)$ . Modern Physics Letters A, 1996, 11, 2397-2406.	1.2	3
82	Bott-Borel-Weil construction for quantum supergroup $U_q(\mathfrak{gl}(m n))$ . Journal of Mathematical Physics, 1997, 38, 3863-3884.	1.1	3
83	Dual Canonical Bases for the Quantum Special Linear Group and Invariant Subalgebras. Letters in Mathematical Physics, 2005, 73, 165-181.	1.1	3
84	<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si1.gif" overflow="scroll"><mml:mi mathvariant="fraktur">u</mml:mi></mml:math>-Cohomology formula for unitarizable modules over general linear superalgebras. Journal of Algebra, 2011, 327, 50-70.	0.7	3
85	Generalised Jantzen filtration of exceptional Lie superalgebras. Israel Journal of Mathematics, 2016, 212, 635-676.	0.8	3
86	First fundamental theorems of invariant theory for quantum supergroups. European Journal of Mathematics, 2020, 6, 928-976.	0.5	3
87	Stochastic quantization and random surface approach to Polyakov string theory. Physical Review D, 1987, 35, 3906-3914.	4.7	2
88	Multiparameter dependent solutions of the Yang-Baxter equation. Journal of Physics A, 1991, 24, L535-L543.	1.6	2
89	A two-parameter quantization of $osp(4 2)$ . Journal of Physics A, 1992, 25, L991-L995.	1.6	2
90	Vector coherent state realization of representations of the affine Lie algebra. Journal of Physics A, 1997, 30, 6545-6551.	1.6	2

#	ARTICLE		IF	CITATIONS
91	Structure and representations on the quantum supergroup $\text{OSPq}(2 2n)$ . Journal of Mathematical Physics, 2000, 41, 6639-6656.		1.1	2
92	Quantum codes from Hadamard matrices. Linear and Multilinear Algebra, 2010, 58, 847-854.		1.0	2
93	PROJECTIVE MODULE DESCRIPTION OF EMBEDDED NONCOMMUTATIVE SPACES. Reviews in Mathematical Physics, 2010, 22, 507-531.		1.7	2
94	Invariant integration on orthosymplectic and unitary supergroups. Journal of Physics A: Mathematical and Theoretical, 2012, 45, 095204.		2.1	2
95	Equivariant vector bundles on quantum homogeneous spaces. Mathematical Research Letters, 2008, 15, 297-307.		0.5	2
96	Temperley-Lieb algebras at roots of unity, a fusion category and the Jones quotient. Mathematical Research Letters, 2019, 26, 121-158.		0.5	2
97	Induced module construction for highest-weight representations of $U_q(\mathfrak{gl}(n))$ at roots of unity. Journal of Physics A, 1994, 27, L861-L869.		1.6	1
98	Minimal uncertainty states for quantum groups. Journal of Physics A, 1997, 30, L313-L316.		1.6	1
99	Topological Invariants for Lens Spaces and Exceptional Quantum Groups. Letters in Mathematical Physics, 1997, 41, 1-11.		1.1	1
100	VECTOR COHERENT STATES FOR AFFINE SUPERALGEBRAS AND REPRESENTATIONS OF $\widehat{\mathfrak{m}} \mathfrak{l}_c\{\mathfrak{osp}\}(1 2)$ . Modern Physics Letters A, 1999, 14, 2419-2425.		1.2	1
101	Colored solutions of the Yang-Baxter equation from representations of $U_q\mathfrak{gl}(2)$ . Journal of Mathematical Physics, 2000, 41, 6529-6543.		1.1	1
102	Integrable representations of affine $A(m, n)$ and $C(m)$ superalgebras. Journal of Pure and Applied Algebra, 2016, 220, 1434-1450.		0.6	1
103	Invariants of the special orthogonal group and an enhanced Brauer category. L'Enseignement Mathematique, 2018, 63, 181-200.		0.1	1
104	Quantum correspondences of affine Lie superalgebras. Mathematical Research Letters, 2018, 25, 1009-1036.		0.5	1
105	Integrable representations of the quantum affine special linear superalgebra. Advances in Theoretical and Mathematical Physics, 2016, 20, 553-593.		0.6	1
106	THE SECOND FUNDAMENTAL THEOREM OF INVARIANT THEORY FOR THE ORTHOSYMPLECTIC SUPERGROUP. Nagoya Mathematical Journal, 2021, 242, 52-76.		0.8	1
107	Degenerate quantum general linear groups. Advances in Theoretical and Mathematical Physics, 2020, 24, 1375-1422.		0.6	1
108	Extended Poincaré supersymmetry in three dimensions and supersymmetric anyons. Journal of Mathematical Physics, 2012, 53, 072302.		1.1	0

# ARTICLE

IF CITATIONS

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| 109 | Characteristic Features of Vector Chaos. Australian Journal of Physics, 1989, 42, 113. | 0.6 | 0 |
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