Itzhak Roditi

List of Publications by Year
in descending order

132	3,080	182225	223390
papers	citations	30 h-index	49 g-index

132	132	132	2993
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Î²-Variational autoencoder as an entanglement classifier. Physics Letters, Section A: General, Atomic and Solid State Physics, 2021, 417, 127697.	0.9	3
2	An exact solution method for the enumeration of connected Feynman diagrams. Journal of Physics A: Mathematical and Theoretical, 2020, 53, 245203.	0.7	1
3	A recursive enumeration of connected Feynman diagrams with an arbitrary number of external legs in the fermionic non-relativistic interacting gas. Journal of Physics A: Mathematical and Theoretical, 2019, 52, 345401.	0.7	4
4	Entanglement between two spatially separated ultracold interacting Fermi gases. Physical Review A, 2019, 99, .	1.0	12
5	Molecular interferometers: effects of Pauli principle on entangled-enhanced precision measurements. New Journal of Physics, 2019, 21, 123011.	1.2	0
6	Intrinsic bounds of a two-qudit random evolution. Physical Review A, 2018, 97, .	1.0	3
7	A combinatorial matrix approach for the generation of vacuum Feynman graphs multiplicities in phi^{4} theory. Journal of Physics A: Mathematical and Theoretical, 2018, 51, 395202.	0.7	3
8	Composite-boson approach to molecular Bose-Einstein condensates in mixtures of ultracold Fermi gases. Physical Review A, 2017, 95, .	1.0	10
9	Metastability of Bose and Fermi gases on the upper branch. Physical Review A, 2016, 94, .	1.0	0
10	Experimental realization of the Yang-Baxter Equation via NMR interferometry. Scientific Reports, 2016, 6, 20789.	1.6	23
11	High Resolution non-Markovianity in NMR. Scientific Reports, 2016, 6, 33945.	1.6	31
12	Spin Squeezing in a Quadrupolar Nuclei NMR System. Physical Review Letters, 2015, 114, 043604.	2.9	46
13	Variational approach to thermal masses in compactified models. Journal of High Energy Physics, 2015, 2015, 1.	1.6	0
14	Bethe states for the two-site Boseâ€“Hubbard model: A binomial approach. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2015, 746, 186-189.	1.5	4
15	Virial coefficients for trapped Bose and Fermi gases beyond the unitary limit: An<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi>S</mml:mi></mml:math>-matrix approach. Physical Review A, 2014, 90, .	1.0	4
16	A geometric wave function for a few interacting bosons in a harmonic trap. Physics Letters, Section A: General, Atomic and Solid State Physics, 2014, 378, 1065-1070.	0.9	22
17	A bosonic multi-state two-well model. Journal of Physics A: Mathematical and Theoretical, 2013, 46, 265206.	0.7	2
18	Classical bifurcation in a quadrupolar NMR system. Physical Review A, 2013, 87, .	1.0	23

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19	Spontaneous symmetry restoration in a field theory at finite chemical potential in a toroidal topology. Physical Review D, 2012, 86, .	1.6	10
20	Two interacting fermions in a one-dimensional harmonic trap: Matching the Bethe ansatz and variational approaches. Physical Review A, 2012, 86, .	1.0	19
21	Quantum Bose and Fermi gases with large negative scattering length in the two-body<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>S</mml:mi></mml:math>-matrix approximation. Physical Review A, 2012, 86, .	1.0	4
22	First-order phase transition for a field theory at finite chemical potential in a toroidal topology. Europhysics Letters, 2012, 98, 41001.	0.7	5
23	Quantum phase transitions in Boseâ€“Einstein condensates from a Bethe ansatz perspective. Nuclear Physics B, 2012, 856, 698-715.	0.9	18
24	Vacuum polarization for compactified QED4+1in a magnetic flux background. Physical Review A, 2010, 81, .	1.0	14
25	Conventions spreading in open-ended systems. New Journal of Physics, 2009, 11, 023018.	1.2	12
26	Classical and quantum analysis of a heterotriatomic molecular Bose-Einstein-condensate model. Physical Review A, 2009, 79, .	1.0	5
27	Dual path integral representation for finite temperature quantum field theory. Physical Review D, 2008, 77, .	1.6	1
28	EXISTENCE OF ASYMPTOTIC EXPANSIONS IN NONCOMMUTATIVE QUANTUM FIELD THEORIES. Reviews in Mathematical Physics, 2008, 20, 933-949.	0.7	1
29	ASYMPTOTIC EXPANSIONS OF FEYNMAN AMPLITUDES IN A GENERIC COVARIANT GAUGE. International Journal of Modern Physics A, 2008, 23, 1089-1103.	0.5	2
30	Exactly solvable models for tri-atomic molecular Boseâ€“Einstein condensates. Journal of Physics A: Mathematical and Theoretical, 2008, 41, 295003.	0.7	2
31	Evolution of biodiversity and sympatric speciation through competition in a unimodal distribution of resources. Physica A: Statistical Mechanics and Its Applications, 2007, 376, 378-386.	1.2	12
32	The Gaussian effective potential and stochastic partial differential equations. Physica A: Statistical Mechanics and Its Applications, 2007, 385, 137-147.	1.2	1
33	Critical temperature for first-order phase transitions in confined systems. European Physical Journal B, 2007, 60, 353-362.	0.6	6
34	Gauge fluctuations and transition temperature for superconducting wires. Physica A: Statistical Mechanics and Its Applications, 2006, 359, 455-468.	1.2	3
35	First-order phase transitions in superconducting films: A Euclidean model. Physical Review B, 2006, 73,	1.1	15
36	Vacuum polarization in <mml: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:sb="http://www.elsevier.com/xml/common/struct-bib/dtd" xmlns:ce="http://www.elsevier.com/x	1.5	4

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37	Sharp gene pool transition in a population affected by phenotype-based selective hunting. European Physical Journal B, 2005, 45, 529-532.	0.6	4
38	Gauge fluctuations in superconducting films. European Physical Journal B, 2004, 37, 515-522.	0.6	12
39	Magnetization plateau and quantum phase transitions in a spin-orbital model. European Physical Journal B, 2004, 38, 535-539.	0.6	4
40	Exact solution and magnetic properties of an anisotropic spin ladder. European Physical Journal B, 2004, 41, 67-74.	0.6	4
41	Scaling properties of the Penna model. European Physical Journal B, 2004, 42, 431-434.	0.6	7
42	A minimal size for granular superconductors. Physica A: Statistical Mechanics and Its Applications, 2004, 331, 99-108.	1.2	3
43	Quantum superalgebras at roots of unity and non-Abelian symmetries of integrable models. Journal of Physics A, 2002, 35, 5115-5137.	1.6	2
44	Exact solution for the Bariev model with boundary fields. Nuclear Physics B, 2001, 596, 525-547.	0.9	13
45	Integrable open boundary conditions for the Bariev model of three coupled XY spin chains. Nuclear Physics B, 2001, 612, 461-478.	0.9	4
46	Quantum spin ladder systems associated withsu(2|2). Journal of Physics A, 2001, 34, L25-L29.	1.6	9
47	Integrable open supersymmetric U model with boundary impurity. Physics Letters, Section A: General, Atomic and Solid State Physics, 2000, 271, 198-206.	0.9	1
48	BETHE ANSATZ SOLUTION OF THE CLOSED ANISOTROPIC SUPERSYMMETRIC U MODEL WITH QUANTUM SUPERSYMMETRY. Modern Physics Letters A, 2000, 15, 133-143.	0.5	2
49	Title is missing!. Modern Physics Letters A, 2000, 15, 133.	0.5	1
50	Integrable systems and quantum groups. Brazilian Journal of Physics, 2000, 30, .	0.7	6
51	New integrable model of correlated electrons with off-diagonal long-range order fromso(5) symmetry. Journal of Physics A, 1999, 32, L441-L445.	1.6	3
52	A family of nonextensive entropies. Physics Letters, Section A: General, Atomic and Solid State Physics, 1998, 246, 399-402.	0.9	128
53	Nonextensive thermostatistics and deformed structures. Physics Letters, Section A: General, Atomic and Solid State Physics, 1998, 242, 296-300.	0.9	19
54	Integrable multiparametric quantum spin chains. Journal of Physics A, 1998, 31, 687-695.	1.6	20

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55	BETHE ANSATZ SOLUTION OF THE ANISOTROPIC CORRELATED ELECTRON MODEL ASSOCIATED WITH THE TEMPERLEYâ€“LIEB ALGEBRA. International Journal of Modern Physics A, 1998, 13, 4309-4324.	0.5	1
56	Anisotropic Correlated Electron Model Associated with the Temperleyâ€“Lieb Algebra. Modern Physics Letters A, 1997, 12, 1035-1040.	0.5	5
57	INTEGRABLE MULTIPARAMETRIC SU(N) CHAIN. Modern Physics Letters A, 1996, 11, 987-993.	0.5	6
58	A DEFORMED BOSE-EINSTEIN GAS NEAR q=1. Modern Physics Letters B, 1996, 10, 717-722.	1.0	1
59	The role of the central element in the quantum algebra underlying the twisted XXZ chain. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1995, 354, 389-395.	1.5	3
60	THE QUANTUM ALGEBRAIC STRUCTURE OF THE TWISTED XXZ CHAIN. Modern Physics Letters A, 1995, 10, 419-424.	0.5	8
61	VIRIAL EXPANSION FOR AN Îµ-DEFORMED SYSTEM. Modern Physics Letters B, 1995, 09, 607-610.	1.0	6
62	Î½-DIMENSIONAL IDEAL QUANTUM q-GAS: BOSE-EINSTEIN CONDENSATION AND Î»-POINT TRANSITION. International Journal of Modern Physics B, 1994, 08, 3281-3298.	1.0	7
63	Deformed systems at finite temperature. Physica A: Statistical Mechanics and Its Applications, 1994, 206, 253-266.	1.2	6
64	Î»-point transition in quantum q-gases. Physics Letters, Section A: General, Atomic and Solid State Physics, 1994, 188, 11-15.	0.9	49
65	Production rate and decay lifetime measurements ofB s 0 mesons at LEP usingD s and? mesons. Zeitschrift FÃ¼r Physik C-Particles and Fields, 1994, 61, 407-419.	1.5	12
66	A measurement of the tau lifetime. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1993, 302, 356-368.	1.5	17
67	A measurement of the mean lifetimes of charged and neutral B-hadrons. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1993, 312, 253-266.	1.5	15
68	Measurement of Î›b production and lifetime in Z0 hadronic decays. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1993, 311, 379-390.	1.5	26
69	Determination of Î±S from the scaling violation in the fragmentation functions in e+eâ^' annihilation. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1993, 311, 408-424.	1.5	41
70	A study of B0â^'0 mixing using semileptonic decays of B hadrons produced from Z0. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1993, 301, 145-154.	1.5	16
71	Limits on the production of scalar leptoquarks from Z0 decays at LEP. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1993, 316, 620-630.	1.5	29
72	Measurement of inclusive production of light meson resonances in hadronic decays of the Z0. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1993, 298, 236-246.	1.5	29

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73	A search for lepton flavour violation in Z0 decays. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1993, 298, 247-256.	1.5	9
74	Production of Î› and Î› correlations in the hadronic decays of the Z0. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1993, 318, 249-262.	1.5	45
75	The DELPHI Microvertex detector. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 1993, 328, 447-471.	0.7	71
76	Measurement of the triple-gluon vertex from 4-jet events at LEP. Zeitschrift FÃ¼r Physik C-Particles and Fields, 1993, 59, 357-368.	1.5	34
77	Determination of? s using the next-to-leading-log approximation of QCD. Zeitschrift FÃ¼r Physik C-Particles and Fields, 1993, 59, 21-33.	1.5	29
78	A measurement ofD meson production inZ 0 hadronic decays. Zeitschrift FÃ¼r Physik C-Particles and Fields, 1993, 59, 533-545.	1.5	27
79	A measurement ofB meson production and lifetime usingDl â^' events inZ 0 decays. Zeitschrift FÃ¼r Physik C-Particles and Fields, 1993, 57, 181-195.	1.5	29
80	Determination of Î±S for b quarks at the Z0 resonance. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1993, 307, 221-236.	1.5	19
81	Search for Z0 decays to two leptons and a charged particle-antiparticle pair. Nuclear Physics B, 1993, 403, 3-24.	0.9	7
82	Determination of 55-155-155-1in second order QCD from hadronicZ decays. Zeitschrift FÃ¼r Physik C-Particles and Fields, 1992, 54, 55-73.	1.5	36
83	Multiplicity dependence of mean transverse momentum in e+eâ^' annihilations at LEP energies. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1992, 276, 254-262.	1.5	6
84	A search for neutral Higgs particles in Z0 decays. Nuclear Physics B, 1992, 373, 3-34.	0.9	38
85	Multiplicity fluctuations in hadronic final states from the decay of the Z0. Nuclear Physics B, 1992, 386, 471-492.	0.9	23
86	Evidence for BS0 meson production in Z0 decays. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1992, 289, 199-210.	1.5	38
87	Measurement of the partial width of theZ 0 intob $$ar b$$ final states using their semi-leptonic decays. Zeitschrift FÃ¼r Physik C-Particles and Fields, 1992, 56, 47-61.	1.5	22
88	Charged particle multiplicity distributions for fixed number of jets inZ 0 hadronic decays. Zeitschrift FÃ¼r Physik C-Particles and Fields, 1992, 56, 63-75.	1.5	34
89	Search for excited charged leptons inZ 0 decays. Zeitschrift FÃ¼r Physik C-Particles and Fields, 1992, 53, 41-49.	1.5	16
90	Study of final state photons in hadronicZ 0 decay and limits on new phenomena. Zeitschrift FÃ¼r Physik C-Particles and Fields, 1992, 53, 555-565.	1.5	25

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91	Measurement of the average lifetime ofB hadrons. Zeitschrift FÃ¼r Physik C-Particles and Fields, 1992, 53, 567-580.	1.5	18
92	A study of the decays of tau leptons produced on theZ resonance at LEP. Zeitschrift FÃ¼r Physik C-Particles and Fields, 1992, 55, 555-567.	1.5	29
93	Bose-Einstein correlations in the hadronic decays of the Z0. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1992, 286, 201-210.	1.5	69
94	Searches for heavy neutrinos from Z decays. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1992, 274, 230-238.	1.5	22
95	A measurement of sin2Î¸w from the charge asymmetry of hadronic events at the Z0 peak. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1992, 277, 371-382.	1.5	27
96	Search for scalar leptoquarks from Z0 decays. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1992, 275, 222-230.	1.5	22
97	Production of strange particles in the hadronic decays of the Z0. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1992, 275, 231-242.	1.5	43
98	Measurement of the Z0 branching fraction to b quark pairs using the boosted sphericity product. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1992, 281, 383-393.	1.5	9
99	A measurement of the b forward-backward asymmetry using the semileptonic decay into muons. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1992, 276, 536-546.	1.5	21
100	Study of orientation of three-jet events in Z0 hadronic decays using the DELPHI detector. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1992, 274, 498-506.	1.5	13
101	Classification of the hadronic decays of the Z0 into b and c quark pairs using a neural network. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1992, 295, 383-395.	1.5	36
102	Determination of Z0 resonance parameters and couplings from its hadronic and leptonic decays. Nuclear Physics B, 1991, 367, 511-574.	0.9	65
103	The DELPHI detector at LEP. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 1991, 303, 233-276.	0.7	398
104	Charged particle multiplicity distributions inZ 0 hadronic decays. Zeitschrift FÃ¼r Physik C-Particles and Fields, 1991, 50, 185-194.	1.5	82
105	Charged particle multiplicity distributions in restricted rapidity intervals inZ 0 hadronic decays. Zeitschrift FÃ¼r Physik C-Particles and Fields, 1991, 52, 271-281.	1.5	52
106	Search for low mass Higgs bosons produced inZ 0 decays. Zeitschrift FÃ¼r Physik C-Particles and Fields, 1991, 51, 25-35.	1.5	17
107	Experimental study of the triple-gluon vertex. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1991, 255, 466-476.	1.5	41
108	The reaction e+eâ¯' â†' Î³Î³(Î³) at Z0 energies. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1991, 268, 296-304.	1.5	32

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109	A measurement of the lifetime of the tau lepton. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1991, 267, 422-430.	1.5	17
110	A study of the reaction e+eâ^' â†' Î¼+Î¼â^' around the Z0 pole. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1991, 260, 240-248.	1.5	9
111	Search for pair production of neutral Higgs bosons in Z0 decays. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1990, 245, 276-288.	1.5	47
112	A study of intermittency in hadronic Z0 decays. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1990, 247, 137-147.	1.5	71
113	Search for scalar quarks in Z0 decays. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1990, 247, 148-156.	1.5	25
114	A search for sleptons and gauginos in Z0 decays. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1990, 247, 157-166.	1.5	61
115	A comparison of jet production rates on the Z0 resonance to perturbative QCD. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1990, 247, 167-176.	1.5	63
116	Measurement of the partial width of the decay of the Z0 into charm quark pairs. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1990, 252, 140-148.	1.5	20
117	Energy-energy correlations in hadronic final states from Z0 decays. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1990, 252, 149-158.	1.5	40
118	Study of the leptonic decays of the Z0 boson. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1990, 241, 425-434.	1.5	30
119	A precise measurement of the Z resonance parameters through its hadronic decays. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1990, 241, 435-448.	1.5	56
120	Search for heavy charged scalars in Z0 decays. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1990, 241, 449-458.	1.5	38
121	Search for the t and b' quarks in hadronic decays of the Z0 boson. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1990, 242, 536-546.	1.5	18
122	A new microstrip detector with double-sided readout. IEEE Transactions on Nuclear Science, 1990, 37, 1153-1161.	1.2	28
123	Search for light neutral Higgs particles produced in Z0-decays. Nuclear Physics B, 1990, 342, 1-14.	0.9	50
124	TWISTED VERTEX OPERATORS AND REPRESENTATIONS OF FINITE HEISENBERG GROUPS. International Journal of Modern Physics A, 1989, 04, 921-942.	0.5	4
125	Potts model on Sierpinski carpets and their relation to hypercubic lattices of non-integer dimensionality. Journal of Physics A, 1987, 20, 6001-6012.	1.6	12
126	Gaussian thermo field dynamics. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1986, 177, 85-88.	1.5	9

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127	Scalar fields at finite temperature: The gaussian effective potential approach. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1986, 169, 264-270.	1.5	28
128	Gaussian effective potential. III.Ï†6theory and bound states. Physical Review D, 1986, 33, 2305-2315.	1.6	72
129	A simpler version of the PMS application to perturbation theory. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1983, 126, 481-482.	1.5	8
130	A simple interpolation for high and low momentum transfers in QCD. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1983, 128, 445-447.	1.5	0
131	Ground-state energy of three-body Coulomb systems through hyperspherical harmonics. Journal of Physics B: Atomic and Molecular Physics, 1981, 14, L161-L166.	1.6	20
132	Quantum-classical correspondence of a system of interacting bosons in a triple-well potential. Quantum - the Open Journal for Quantum Science, 0, 5, 563.	0.0	6