Jerzy Jurkiewicz

List of Publications by Year
in descending order

138	5,299	94433	91884
papers	citations	37	69
		h-index	g-index

138	138	138	1069
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	CDT Quantum Toroidal Spacetimes: An Overview. Universe, 2021, 7, 79.	2.5	14
2	Properties of dynamical fractal geometries in the model of causal dynamical triangulations. Physical Review D, 2021, 103, .	4.7	5
3	Cosmic voids and filaments from quantum gravity. European Physical Journal C, 2021, 81, 1.	3.9	5
4	Scalar fields in causal dynamical triangulations. Classical and Quantum Gravity, 2021, 38, 195030.	4.0	6
5	Matter-Driven Change of Spacetime Topology. Physical Review Letters, 2021, 127, 161301.	7.8	6
6	Renormalization in Quantum Theories of Geometry. Frontiers in Physics, 2020, 8, .	2.1	19
7	The higher-order phase transition in toroidal CDT. Journal of High Energy Physics, 2020, 2020, 1.	4.7	8
8	Critical phenomena in causal dynamical triangulations. Classical and Quantum Gravity, 2019, 36, 224001.	4.0	7
9	Towards an UV fixed point in CDT gravity. Journal of High Energy Physics, 2019, 2019, 1.	4.7	10
10	Pseudo-Cartesian coordinates in a model of Causal Dynamical Triangulations. Nuclear Physics B, 2019, 943, 114626.	2.5	7
11	The phase structure of causal dynamical triangulations with toroidal spatial topology. Journal of High Energy Physics, 2018, 2018, 1.	4.7	21
12	Four-dimensional CDT with toroidal topology. Nuclear Physics B, 2017, 922, 226-246.	2.5	24
13	Characteristics of the new phase in CDT. European Physical Journal C, 2017, 77, 152.	3.9	28
14	New higher-order transition in causal dynamical triangulations. Physical Review D, 2017, 95, .	4.7	24
15	Recent results in CDT quantum gravity. , 2017, , .		3
16	Impact of topology in causal dynamical triangulations quantum gravity. Physical Review D, 2016, 94, .	4.7	22
17	Searching for a continuum limit in causal dynamical triangulation quantum gravity. Physical Review D, 2016, 93, .	4.7	18
18	Exploring the new phase transition of CDT. Journal of High Energy Physics, 2016, 2016, 1.	4.7	15

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19	Signature change of the metric in CDT quantum gravity?. Journal of High Energy Physics, 2015, 2015, 1.	4.7	26
20	Wilson loops in nonperturbative quantum gravity. Physical Review D, 2015, 92, .	4.7	9
21	Comparison of eigeninference based on one- and two-point Green's functions. Physical Review E, 2015, 92, 022111.	2.1	1
22	A c= 1 phase transition in two-dimensional CDT/Horavaâ€"Lifshitz gravity?. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2015, 743, 435-439.	4.1	7
23	The microscopic structure of 2D CDT coupled to matter. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2015, 746, 359-364.	4.1	7
24	The spectral dimension in 2D CDT gravity coupled to scalar fields. Modern Physics Letters A, 2015, 30, 1550077.	1.2	5
25	Evidence for asymptotic safety from dimensional reduction in causal dynamical triangulations. Journal of High Energy Physics, 2015, 2015, 1.	4.7	37
26	CAUSAL DYNAMICAL TRIANGULATIONS AND THE SEARCH FOR A THEORY OF QUANTUM GRAVITY. , 2015, , .		1
27	Renormalization group flow in CDT. Classical and Quantum Gravity, 2014, 31, 165003.	4.0	51
28	The effective action in 4-dim CDT. The transfer matrix approach. Journal of High Energy Physics, 2014, 2014, 1.	4.7	28
29	Quantum Gravity via Causal Dynamical Triangulations. , 2014, , 723-741.		14
30	Euclidian 4d quantum gravity with a non-trivial measure term. Journal of High Energy Physics, 2013, 2013, 1.	4.7	32
31	CAUSAL DYNAMICAL TRIANGULATIONS AND THE SEARCH FOR A THEORY OF QUANTUM GRAVITY. International Journal of Modern Physics D, 2013, 22, 1330019.	2.1	18
32	The transfer matrix in four dimensional causal dynamical triangulations. , 2013, , .		3
33	Quantum spacetime, from a practitioner's point of view. , 2013, , .		3
34	Causal dynamical triangulations and the quest for quantum gravity. , 2012, , 321-337.		10
35	The transfer matrix in four-dimensional CDT. Journal of High Energy Physics, 2012, 2012, 1.	4.7	18
36	Second- and first-order phase transitions in causal dynamical triangulations. Physical Review D, 2012, 85, .	4.7	61

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37	Pseudo-topological transitions in 2D gravity models coupled to massless scalar fields. Nuclear Physics B, 2012, 863, 421-434.	2.5	14
38	Nonperturbative quantum gravity. Physics Reports, 2012, 519, 127-210.	25.6	312
39	The semiclassical limit of causal dynamical triangulations. Nuclear Physics B, 2011, 849, 144-165.	2.5	60
40	Quantum gravity, from the entropy of geometries. Europhysics News, 2011, 42, 25-28.	0.3	0
41	Second-Order Phase Transition in Causal Dynamical Triangulations. Physical Review Letters, 2011, 107, 211303.	7.8	93
42	Applying free random variables to random matrix analysis of financial data. Part I: The Gaussian case. Quantitative Finance, 2011, 11, 1103-1124.	1.7	28
43	Deriving spacetime from first principles. Annalen Der Physik, 2010, 19, 186-195.	2.4	8
44	CDT meets HoÅ™avaâ€"Lifshitz gravity. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2010, 690, 413-419.	4.1	76
45	Geometry of the quantum universe. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2010, 690, 420-426.	4.1	26
46	Random walkers versus random crowds: Diffusion of large matrices. Chemical Physics, 2010, 375, 380-385.	1.9	2
47	Quantum Gravity as Sum over Spacetimes. Lecture Notes in Physics, 2010, , 59-124.	0.7	34
48	Quantum Gravity: the art of building spacetime. , 2009, , 341-359.		19
49	The Self-Organizing Quantum Universe. Scientific American, 2008, 299, 42-49.	1.0	29
50	Nonperturbative quantum de Sitter universe. Physical Review D, 2008, 78, .	4.7	106
51	THE SELF-ORGANIZED DE SITTER UNIVERSE. International Journal of Modern Physics D, 2008, 17, 2515-2520.	2.1	9
52	Planckian Birth of a Quantum de Sitter Universe. Physical Review Letters, 2008, 100, 091304.	7.8	116
53	THE EMERGENCE OF (EUCLIDEAN) DE SITTER SPACE-TIME. , 2008, , .		3
54	Free random LÃ©vy and Wigner-LÃ©vy matrices. Physical Review E, 2007, 75, 051126.	2.1	24

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55	The universe from scratch. Contemporary Physics, 2006, 47, 103-117.	1.8	95
56	Correlated Wishart matrices and critical horizons. European Physical Journal B, 2006, 49, 319-323.	1.5	14
57	On diffusion of large matrices. New Journal of Physics, 2005, 7, 54-54.	2.9	6
58	Semiclassical universe from first principles. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2005, 607, 205-213.	4.1	96
59	The Spectral Dimension of the Universe is Scale Dependent. Physical Review Letters, 2005, 95, 171301.	7.8	380
60	Reconstructing the Universe. Physical Review D, 2005, 72, .	4.7	276
61	Spectral moments of correlated Wishart matrices. Physical Review E, 2005, 71, 026111.	2.1	46
62	Perturbing general uncorrelated networks. Physical Review E, 2004, 70, 026106.	2.1	22
63	Network transitivity and matrix models. Physical Review E, 2004, 69, 026106.	2.1	51
64	Signal and noise in correlation matrix. Physica A: Statistical Mechanics and Its Applications, 2004, 343, 295-310.	2.6	75
65	Free LÃ©vy matrices and financial correlations. Physica A: Statistical Mechanics and Its Applications, 2004, 343, 694-700.	2.6	15
66	Signal and noise in financial correlation matrices. Physica A: Statistical Mechanics and Its Applications, 2004, 344, 67-72.	2.6	40
67	Renormalization of 3d quantum gravity from matrix models. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2004, 581, 255-262.	4.1	19
68	Statistical mechanics of random graphs. Physica A: Statistical Mechanics and Its Applications, 2004, 344, 56-61.	2.6	7
69	Emergence of a 4D World from Causal Quantum Gravity. Physical Review Letters, 2004, 93, 131301.	7.8	301
70	Infinite products of large random matrices and matrix-valued diffusion. Nuclear Physics B, 2003, 670, 479-507.	2.5	42
71	Tree networks with causal structure. Physical Review E, 2003, 67, 066106.	2.1	22
72	Wealth condensation in pareto macroeconomies. Physical Review E, 2002, 65, 026102.	2.1	93

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73	Free random Lévy matrices. Physical Review E, 2002, 65, 021106.	2.1	34
74	A Lorentzian cure for Euclidean troubles. Nuclear Physics, Section B, Proceedings Supplements, 2002, 106-107, 977-979.	0.4	28
75	3d Lorentzian, dynamically triangulated quantum gravity. Nuclear Physics, Section B, Proceedings Supplements, 2002, 106-107, 980-982.	0.4	17
76	Nonperturbative 3D Lorentzian quantum gravity. Physical Review D, 2001, 64, .	4.7	80
77	Dynamically triangulating Lorentzian quantum gravity. Nuclear Physics B, 2001, 610, 347-382.	2.5	203
78	Free random Lévy variables and financial probabilities. Physica A: Statistical Mechanics and Its Applications, 2001, 299, 181-187.	2.6	7
79	Computer simulations of 3-d Lorentzian quantum gravity. Nuclear Physics, Section B, Proceedings Supplements, 2001, 94, 689-692.	0.4	9
80	Lorentzian 3d gravity with wormholes via matrix models. Journal of High Energy Physics, 2001, 2001, 022-022.	4.7	37
81	Nonperturbative Lorentzian Path Integral for Gravity. Physical Review Letters, 2000, 85, 924-927.	7.8	149
82	Lorentzian and Euclidean Quantum Gravity — Analytical and Numerical Results. , 2000, , 381-450.		11
83	Abelian gauge fields coupled to simplicial quantum gravity. Journal of High Energy Physics, 1999, 1999, 016-016.	4.7	25
84	Wilson fermions on a randomly triangulated manifold. Physical Review D, 1999, 60, .	4.7	7
85	Correlation functions and critical behaviour on fluctuating geometries. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1998, 421, 86-92.	4.1	2
86	Branched polymers with loops. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1997, 392, 291-297.	4.1	20
87	Dirac spectrum in QCD and quark masses. Nuclear Physics B, 1996, 478, 605-626.	2.5	36
88	Renormalisation group flow in an exactly solvable model with fluctuating geometry. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1996, 379, 93-98.	4.1	3
89	Simplicial quantum gravity on a computer. Computer Physics Communications, 1995, 85, 278-292.	7.5	6
90	Search for scaling dimensions for random surfaces with c = 1. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1995, 342, 58-65.	4.1	5

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91	Computational ergodicity of S4. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1995, 345, 435-440.	4.1	8
92	A random surface theory with non-trivial Î³string. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1995, 341, 286-292.	4.1	0
93	Intrinsic geometry of c=1 random surfaces. Nuclear Physics, Section B, Proceedings Supplements, 1995, 42, 701-703.	0.4	0
94	Computational ergodicity in simplicial quantum gravity. Nuclear Physics, Section B, Proceedings Supplements, 1995, 42, 704-706.	0.4	0
95	Dynamical triangulations, a gateway to quantum gravity?. Journal of Mathematical Physics, 1995, 36, 6299-6339.	1.1	20
96	Scaling in four-dimensional quantum gravity. Nuclear Physics B, 1995, 451, 643-676.	2.5	73
97	On the fractal structure of two-dimensional quantum gravity. Nuclear Physics B, 1995, 454, 313-342.	2.5	115
98	Z2 GAUGE MATTER COUPLED TO 4-D SIMPLICIAL QUANTUM GRAVITY. Modern Physics Letters A, 1994, 09, 2527-2541.	1.2	13
99	Effective sampling of random surfaces by baby universe surgery. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1994, 325, 337-346.	4.1	23
100	On the exponential bound in four dimensional simplicial gravity. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1994, 335, 355-358.	4.1	22
101	Observing 4d baby universes in quantum gravity. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1993, 305, 208-213.	4.1	43
102	Simplical gravity and random surfaces. Nuclear Physics, Section B, Proceedings Supplements, 1993, 30, 108-121.	0.4	5
103	Three-dimensional simplicial quantum gravity coupled to Ising matter. Nuclear Physics, Section B, Proceedings Supplements, 1993, 30, 771-774.	0.4	5
104	The theory of dynamical random surfaces with extrinsic curvature. Nuclear Physics B, 1993, 393, 571-600.	2.5	76
105	Quantum gravity, dynamical triangulations and higher-derivative regularization. Nuclear Physics B, 1993, 393, 601-629.	2.5	54
106	Four-dimensional dynamically triangulated gravity coupled to matter. Physical Review D, 1993, 48, 3695-3703.	4.7	14
107	3D quantum gravity coupled to matter. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1992, 297, 253-260.	4.1	11
108	Four-dimensional simplicial quantum gravity. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1992, 278, 42-50.	4.1	159

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109	Critical properties of the dynamical random surface with extrinsic curvature. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1992, 275, 295-303.	4.1	41
110	Universality of dynamically triangulated random surfaces in one-dimensional target space. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1992, 279, 41-46.	4.1	1
111	Swendsen-Wang dynamics for the Potts model on a dynamically triangulated random surface. Computer Physics Communications, 1992, 70, 510-520.	7.5	2
112	Measuring the string tension in random surface models with extrinsic curvature. Computer Physics Communications, 1992, 70, 59-68.	7.5	3
113	Intermittency and clustering in the 1D lattice gas model. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1991, 265, 133-136.	4.1	5
114	Chaotic behaviour in one-matrix models. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1991, 261, 260-268.	4.1	11
115	Regularization of one-matrix models. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1990, 245, 178-184.	4.1	68
116	Multiloop correlators for two-dimensional quantum gravity. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1990, 251, 517-524.	4.1	229
117	A comment on the nonperturbative d=1 string theory. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1990, 243, 373-377.	4.1	8
118	Classification of networks of automata by dynamical mean-field theory. Journal of Physics A, 1990, 23, 3073-3081.	1.6	10
119	Ising spins on a dynamically triangulated random surface. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1988, 213, 511-515.	4.1	41
120	Ising model on a random lattice with a topology of a torus. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1988, 214, 425-428.	4.1	3
121	Critical exponents in a model of dynamically triangulated random surfaces. Nuclear Physics B, 1987, 290, 218-230.	2.5	46
122	Ground State Metamorphosis for Yang-Mills Fields on a Finite Periodic Lattice. , 1987, , 339-358.		3
123	A grand-canonical ensemble of randomly triangulated surfaces. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1986, 177, 89-92.	4.1	44
124	A numerical study of discrete euclidean polyakov surfaces. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1986, 168, 273-278.	4.1	64
125	Weak-coupling universality in SU(3) mixed actions: Theory versus high-statistics simulation. Physical Review D, 1985, 32, 1044-1047.	4.7	0
126	Zero-momentum contribution to wilson loops in periodic boxes. Nuclear Physics B, 1985, 262, 67-94.	2.5	51

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127	Lattice gauge theory with Higgs matter field in the adjoint representation. Physical Review D, 1984, 29, 2982-2985.	4.7	15
128	On the size of a Polyakov surface. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1984, 148, 148-152.	4.1	24
129	corrections in two-dimensional lattice gauge system with mixed action. Nuclear Physics B, 1984, 242, 62-68.	2.5	4
130	Large-N universality of variant actions. Nuclear Physics B, 1984, 233, 457-476.	2.5	11
131	Phase structure of U(Nâ†'âˆž) gauge theory on a two-dimensional lattice for a broad class of variant actions. Nuclear Physics B, 1983, 220, 167-184.	2.5	54
132	How to eliminate the phase transition in Wadia's model of gauge theory on a lattice. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1982, 115, 143-144.	4.1	4
133	Twist as a Probe for Phase Structure. Physica Scripta, 1981, 23, 1022-1031.	2.5	59
134	On a new formulation of the continuum Heisenberg spin system in a space of arbitrary dimensionality. Physica A: Statistical Mechanics and Its Applications, 1980, 103, 573-585.	2.6	9
135	Local order parameter in twisted gauge fields. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1980, 92, 312-314.	4.1	20
136	On the structure of nonleading logarithms. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1980, 92, 160-162.	4.1	0
137	Convergence properties of the PadÃ© approximants on a lattice. Nuclear Physics B, 1978, 145, 445-458.	2.5	5
138	PadÃ© approximants on a lattice. Nuclear Physics B, 1978, 135, 416-428.	2.5	12