Anthony J Guttmann

List of Publications by Year
in descending order

87 papers	1,902 citations	257450 24 h-index	276875 41 g-index
89 all docs	89 docs citations	89 times ranked	536 citing authors

#	Article	IF	Citations
1	Statistical Mechanics of Confined Polymer Networks. Journal of Statistical Physics, 2020, 180, 1061-1094.	1.2	3
2	Two-dimensional interacting self-avoiding walks: new estimates for critical temperatures and exponents. Journal of Physics A: Mathematical and Theoretical, 2020, 53, 165002.	2.1	5
3	New scaling laws for self-avoiding walks: bridges and worms. Journal of Statistical Mechanics: Theory and Experiment, 2019, 2019, 104010.	2.3	3
4	Numerical studies of Thompsonâ€™s group F and related groups. International Journal of Algebra and Computation, 2019, 29, 179-243.	0.5	3
5	Counting planar Eulerian orientations. European Journal of Combinatorics, 2018, 71, 73-98.	0.8	2
6	1324-avoiding permutations revisited. Advances in Applied Mathematics, 2018, 96, 312-333.	0.7	7
7	Permutations sortable by deques and by two stacks in parallel. European Journal of Combinatorics, 2017, 59, 71-95.	0.8	1
8	Permutations sortable by two stacks in series. Advances in Applied Mathematics, 2017, 83, 81-96.	0.7	2
9	On the growth constant for square-lattice self-avoiding walks. Journal of Physics A: Mathematical and Theoretical, 2016, 49, 494004.	2.1	14
10	Is the full susceptibility of the square-lattice Ising model a differentially algebraic function?. Journal of Physics A: Mathematical and Theoretical, 2016, 49, 504002.	2.1	3
11	Series extension: predicting approximate series coefficients from a finite number of exact coefficients. Journal of Physics A: Mathematical and Theoretical, 2016, 49, 415002.	2.1	12
12	Compressed self-avoiding walks, bridges and polygons. Journal of Physics A: Mathematical and Theoretical, 2015, 48, 454001.	2.1	22
13	On 1324-avoiding permutations. Advances in Applied Mathematics, 2015, 64, 50-69.	0.7	13
14	Analysis of series expansions for non-algebraic singularities. Journal of Physics A: Mathematical and Theoretical, 2015, 48, 045209.	2.1	12
15	The Critical Fugacity for Surface Adsorption of Self-Avoiding Walks on the Honeycomb Lattice is $${1+sqrt{2}}$$ 1 + 2. Communications in Mathematical Physics, 2014, 326, 727-754.	2.2	21
16	Self-avoiding walks in a rectangle. Journal of Engineering Mathematics, 2014, 84, 201-208.	1.2	2
17	Pulling adsorbed self-avoiding walks from a surface. Journal of Physics A: Mathematical and Theoretical, 2014, 47, 015004.	2.1	20
18	A series test of the scaling limit of self-avoiding walks. Journal of Physics A: Mathematical and Theoretical, 2013, 46, 435004.	2.1	1

#	ARTICLE	IF	CITATIONS
19	An integral arising from the chiralsl(n) Potts model. Journal of Physics A: Mathematical and Theoretical, 2013, 46, 045202.	2.1	0
20	A numerical adaptation of self-avoiding walk identities from the honeycomb to other 2D lattices. Journal of Physics A: Mathematical and Theoretical, 2012, 45, 035201.	2.1	1
21	Off-critical parafermions and the winding angle distribution of the O(n) model. Journal of Physics A: Mathematical and Theoretical, 2012, 45, 275002.	2.1	1
22	Some New Self-avoiding Walk and Polygon Models. Fundamenta Informaticae, 2012, 117, 19-33.	0.4	4
23	Spanning tree generating functions and Mahler measures. Journal of Physics A: Mathematical and Theoretical, 2012, 45, 494001.	2.1	18
24	Two-dimensional self-avoiding walks and polymer adsorption: critical fugacity estimates. Journal of Physics A: Mathematical and Theoretical, 2012, 45, 055208.	2.1	5
25	The Ising Susceptibility Scaling Function. Journal of Statistical Physics, 2011, 145, 549-590.	1.2	31
26	The enumeration of prudent polygons by area and its unusual asymptotics. Journal of Combinatorial Theory - Series A, 2011, 118, 2261-2290.	0.8	4
27	The unusual asymptotics of three-sided prudent polygons. Journal of Physics A: Mathematical and Theoretical, 2010, 43, 342001.	2.1	4
28	Lattice Green's functions in all dimensions. Journal of Physics A: Mathematical and Theoretical, 2010, 43, 305205.	2.1	71
29	Form factor expansions in the 2D Ising model and PainlevÃ© VI. Nuclear Physics B, 2010, 838, 391-412.	2.5	10
30	Polyominoes with nearly convex columns: An undirected model. Glasnik Matematicki, 2010, 45, 325-436.	0.3	0
31	Two generalizations of column-convex polygons. Journal of Physics A: Mathematical and Theoretical, 2009, 42, 485003.	2.1	1
32	Prudent walks and polygons. Journal of Physics A: Mathematical and Theoretical, 2009, 42, 095205.	2.1	12
33	High order Fuchsian equations for the square lattice Ising model: ilde{chi}^{(5)}. Journal of Physics A: Mathematical and Theoretical, 2009, 42, 275209.	2.1	23
34	Concepts of Entropy and Their Applications. Entropy, 2009, 11, 59-61.	2.2	5
35	Modeling force-induced bio-polymer unfolding. Journal of Mathematical Chemistry, 2009, 45, 223-237.	1.5	8
36	Lattice Green functions and Calabiâ€“Yau differential equations. Journal of Physics A: Mathematical and Theoretical, 2009, 42, 232001.	2.1	18

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37	History and Introduction to Polygon Models and Polyominoes. Lecture Notes in Physics, 2009, , 1-21.	0.7	5
38	Effect of Confinement: Polygons in Strips, Slabs and Rectangles. Lecture Notes in Physics, 2009, , 235-246.	0.7	2
39	Appendix: Series Data and Growth Constant, Amplitude and Exponent Estimates. Lecture Notes in Physics, 2009, , 469-482.	0.7	1
40	Why Are So Many Problems Unsolved?. Lecture Notes in Physics, 2009, , 79-91.	0.7	2
41	Series Analysis. Lecture Notes in Physics, 2009, , 181-202.	0.7	10
42	Experimental mathematics on the magnetic susceptibility of the square lattice Ising model. Journal of Physics A: Mathematical and Theoretical, 2008, 41, 455202.	2.1	36
43	Prudent Self-Avoiding Walks. Entropy, 2008, 10, 309-318.	2.2	8
44	Role of Conformational Entropy in Force-Induced Biopolymer Unfolding. Physical Review Letters, 2007, 98, 128101.	7.8	40
45	Some solvable, and as yet unsolvable, polygon and walk models. Journal of Physics: Conference Series, 2006, 42, 98-110.	0.4	1
46	The perimeter generating function of punctured staircase polygons. Journal of Physics A, 2006, 39, 3871-3882.	1.6	9
47	Exact Solution of Two Planar Polygon Models. , 2006, , .		0
48	The analytic structure of lattice models â€" why canâ€™t we solve most models?. Pramana - Journal of Physics, 2005, 64, 829-846.	1.8	1
49	Correction-to-Scaling Exponents for Two-Dimensional Self-Avoiding Walks. Journal of Statistical Physics, 2005, 120, 1037-1100.	1.2	45
50	Self-avoiding walks and trails on the 3.122 lattice. Journal of Physics A, 2005, 38, 543-554.	1.6	4
51	Self-avoiding walks in constrained and random geometries: Series studies. , 2005, , 59-101.		7
52	Polandâ€“Scheraga Models and the DNA Denaturation Transition. Journal of Statistical Physics, 2004, 115, 925-947.	1.2	60
53	Vicious Walkers, Friendly Walkers, and Young Tableaux. III. Between Two Walls. Journal of Statistical Physics, 2003, 110, 1069-1086.	1.2	24
54	On the number of hexagonal polyominoes. Theoretical Computer Science, 2003, 307, 433-453.	0.9	10

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55	Susceptibility amplitudes for the three- and four-state Potts models. Physica A: Statistical Mechanics and Its Applications, 2003, 321, 90-107.	2.6	20
56	On the Number of Benzenoid Hydrocarbons. Journal of Chemical Information and Computer Sciences, 2002, 42, 456-466.	2.8	34
57	Lattice paths: vicious walkers and friendly walkers. Journal of Statistical Planning and Inference, 2002, 101, 107-131.	0.6	17
58	The Susceptibility of the Square Lattice Ising Model: New Developments. Journal of Statistical Physics, 2001, 102, 795-841.	1.2	85
59	Polygonal polyominoes on the square lattice. Journal of Physics A, 2001, 34, 3721-3733.	1.6	4
60	Critical Behavior of the Two-Dimensional Ising Susceptibility. Physical Review Letters, 2001, 86, 4120-4123.	7.8	47
61	Vicious walkers, friendly walkers and Young tableaux: II. With a wall. Journal of Physics A, 2000, 33, 8835-8866.	1.6	99
62	Critical exponents of plane meanders. Journal of Physics A, 2000, 33, L187-L192.	1.6	9
63	Statistics of lattice animals (polyominoes) and polygons. Journal of Physics A, 2000, 33, L257-L263.	1.6	78
64	Punctured polygons and polyominoes on the square lattice. Journal of Physics A, 2000, 33, 1735-1764.	1.6	13
65	Self-avoiding polygons on the square lattice. Journal of Physics A, 1999, 32, 4867-4876.	1.6	69
66	Vicious walkers and Young tableaux I: without walls. Journal of Physics A, 1998, 31, 8123-8135.	1.6	85
67	Study of the Potts model on the honeycomb and triangular lattices: Low-temperature series and partition function zeros. Journal of Physics A, 1998, 31, 2287-2310.	1.6	36
68	The Potts model on KagomÃ© and honeycomb lattices. Journal of Physics A, 1997, 30, 8067-8083.	1.6	16
69	Enumeration of three-dimensional convex polygons. Annals of Combinatorics, 1997, 1, 27-53.	0.6	25
70	The number of three-choice polygons. Mathematical and Computer Modelling, 1997, 26, 51-58.	2.0	14
71	Self-avoiding walks and polygons on non-Euclidean lattices. Journal of Physics A, 1996, 29, 7485-7500.	1.6	11
72	Series expansions of the percolation probability on the directed triangular lattice. Journal of Physics A, 1996, 29, 497-517.	1.6	16

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73	Vicious walkers and directed polymer networks in general dimensions. Physical Review E, 1995, 52, 5849-5862.	2.1	60
74	Staircase polygons, elliptic integrals, Heun functions, and lattice Green functions. Physical Review E, 1993, 47, R2233-R2236.	2.1	31
75	Critical exponents of the three-dimensional classical plane-rotator model on the sc lattice from a high-temperature-series analysis. Physical Review B, 1993, 48, 13987-13990.	3.2	14
76	The phase transition of the 3-dimensional 3-state potts model. Nuclear Physics, Section B, Proceedings Supplements, 1990, 17, 328-330.	0.4	10
77	On the area of square lattice polygons. Journal of Statistical Physics, 1990, 58, 475-484.	1.2	31
78	Critical exponent for the loop erased self-avoiding walk by Monte Carlo methods. Journal of Statistical Physics, 1990, 59, 1-9.	1.2	39
79	Self-avoiding polygons â€" towards an exact solution?. Nuclear Physics, Section B, Proceedings Supplements, 1988, 5, 234-238.	0.4	1
80	Critical Behavior of then-Vector Model with a Free Surface. Physical Review Letters, 1980, 45, 1581-1583.	7.8	60
81	On a new method of series analysis in lattice statistics. Journal of Physics A: General Physics, 1972, 5, L81-L84.	0.8	90
82	The asymptotic behaviour of selfavoiding walks and returns on a lattice. Journal of Physics A: General Physics, 1972, 5, 653-660.	0.8	77
83	Lattice-lattice scaling and the generalized law of corresponding states. Journal of Physics C: Solid State Physics, 1971, 4, 1994-2008.	1.5	67
84	Low-temperature series for the Ising model. Journal of Physics C: Solid State Physics, 1970, 3, 1652-1660.	1.5	43
85	Determination of critical behaviour in lattice statistics from series expansions II. Journal of Physics C: Solid State Physics, 1969, 2, 1889-1899.	1.5	24
86	Determination of critical behaviour in lattice statistics from series expansions III. Journal of Physics C: Solid State Physics, 1969, 2, 1900-1907.	1.5	32
87	Determination of Critical Behavior in Lattice Statistics from Series Expansions. I. Physical Review, 1968, 172, 554-558.	2.7	18