# Anthony J Guttmann

List of Publications by Year
in descending order

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

| # | Article | IF | Citations |
|---|---------|-----|-----------|
| 1 | Vicious walkers, friendly walkers and Young tableaux: II. With a wall. Journal of Physics A, 2000, 33, 8835-8866. | 1.6 | 99 |
| 2 | On a new method of series analysis in lattice statistics. Journal of Physics A: General Physics, 1972, 5, L81-L84. | 0.8 | 90 |
| 3 | Vicious walkers and Young tableaux I: without walls. Journal of Physics A, 1998, 31, 8123-8135. | 1.6 | 85 |
| 4 | The Susceptibility of the Square Lattice Ising Model: New Developments. Journal of Statistical Physics, 2001, 102, 795-841. | 1.2 | 85 |
| 5 | Statistics of lattice animals (polyominoes) and polygons. Journal of Physics A, 2000, 33, L257-L263. | 1.6 | 78 |
| 6 | The asymptotic behaviour of selfavoiding walks and returns on a lattice. Journal of Physics A: General Physics, 1972, 5, 653-660. | 0.8 | 77 |
| 7 | Lattice Green's functions in all dimensions. Journal of Physics A: Mathematical and Theoretical, 2010, 43, 305205. | 2.1 | 71 |
| 8 | Self-avoiding polygons on the square lattice. Journal of Physics A, 1999, 32, 4867-4876. | 1.6 | 69 |
| 9 | Lattice-lattice scaling and the generalized law of corresponding states. Journal of Physics C: Solid State Physics, 1971, 4, 1994-2008. | 1.5 | 67 |
| 10 | Critical Behavior of then-Vector Model with a Free Surface. Physical Review Letters, 1980, 45, 1581-1583. | 7.8 | 60 |
| 11 | Vicious walkers and directed polymer networks in general dimensions. Physical Review E, 1995, 52, 5849-5862. | 2.1 | 60 |
| 12 | Poland–Scheraga Models and the DNA Denaturation Transition. Journal of Statistical Physics, 2004, 115, 925-947. | 1.2 | 60 |
| 13 | Critical Behavior of the Two-Dimensional Ising Susceptibility. Physical Review Letters, 2001, 86, 4120-4123. | 7.8 | 47 |
| 14 | Correction-to-Scaling Exponents for Two-Dimensional Self-Avoiding Walks. Journal of Statistical Physics, 2005, 120, 1037-1100. | 1.2 | 45 |
| 15 | Low-temperature series for the Ising model. Journal of Physics C: Solid State Physics, 1970, 3, 1652-1660. | 1.5 | 43 |
| 16 | Role of Conformational Entropy in Force-Induced Biopolymer Unfolding. Physical Review Letters, 2007, 98, 128101. | 7.8 | 40 |
| 17 | Critical exponent for the loop erased self-avoiding walk by Monte Carlo methods. Journal of Statistical Physics, 1990, 59, 1-9. | 1.2 | 39 |
| 18 | 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 |

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|---|---------|-----|-----------|
| 19 | 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 |
| 20 | On the Number of Benzenoid Hydrocarbons. Journal of Chemical Information and Computer Sciences, 2002, 42, 456-466. | 2.8 | 34 |
| 21 | 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 |
| 22 | On the area of square lattice polygons. Journal of Statistical Physics, 1990, 58, 475-484. | 1.2 | 31 |
| 23 | Staircase polygons, elliptic integrals, Heun functions, and lattice Green functions. Physical Review E, 1993, 47, R2233-R2236. | 2.1 | 31 |
| 24 | The Ising Susceptibility Scaling Function. Journal of Statistical Physics, 2011, 145, 549-590. | 1.2 | 31 |
| 25 | Enumeration of three-dimensional convex polygons. Annals of Combinatorics, 1997, 1, 27-53. | 0.6 | 25 |
| 26 | 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 |
| 27 | Vicious Walkers, Friendly Walkers, and Young Tableaux. III. Between Two Walls. Journal of Statistical Physics, 2003, 110, 1069-1086. | 1.2 | 24 |
| 28 | High order Fuchsian equations for the square lattice Ising model: $\tilde{\chi}^{(5)}$. Journal of Physics A: Mathematical and Theoretical, 2009, 42, 275209. | 2.1 | 23 |
| 29 | Compressed self-avoiding walks, bridges and polygons. Journal of Physics A: Mathematical and Theoretical, 2015, 48, 454001. | 2.1 | 22 |
| 30 | 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 |
| 31 | Susceptibility amplitudes for the three- and four-state Potts models. Physica A: Statistical Mechanics and Its Applications, 2003, 321, 90-107. | 2.6 | 20 |
| 32 | Pulling adsorbed self-avoiding walks from a surface. Journal of Physics A: Mathematical and Theoretical, 2014, 47, 015004. | 2.1 | 20 |
| 33 | Determination of Critical Behavior in Lattice Statistics from Series Expansions. I. Physical Review, 1968, 172, 554-558. | 2.7 | 18 |
| 34 | Lattice Green functions and Calabi–Yau differential equations. Journal of Physics A: Mathematical and Theoretical, 2009, 42, 232001. | 2.1 | 18 |
| 35 | Spanning tree generating functions and Mahler measures. Journal of Physics A: Mathematical and Theoretical, 2012, 45, 494001. | 2.1 | 18 |
| 36 | Lattice paths: vicious walkers and friendly walkers. Journal of Statistical Planning and Inference, 2002, 101, 107-131. | 0.6 | 17 |

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|---|---------|-----|-----------|
| 37 | Series expansions of the percolation probability on the directed triangular lattice. Journal of Physics A, 1996, 29, 497-517. | 1.6 | 16 |
| 38 | The Potts model on KagomÃ© and honeycomb lattices. Journal of Physics A, 1997, 30, 8067-8083. | 1.6 | 16 |
| 39 | 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 |
| 40 | The number of three-choice polygons. Mathematical and Computer Modelling, 1997, 26, 51-58. | 2.0 | 14 |
| 41 | On the growth constant for square-lattice self-avoiding walks. Journal of Physics A: Mathematical and Theoretical, 2016, 49, 494004. | 2.1 | 14 |
| 42 | Punctured polygons and polyominoes on the square lattice. Journal of Physics A, 2000, 33, 1735-1764. | 1.6 | 13 |
| 43 | On 1324-avoiding permutations. Advances in Applied Mathematics, 2015, 64, 50-69. | 0.7 | 13 |
| 44 | Prudent walks and polygons. Journal of Physics A: Mathematical and Theoretical, 2009, 42, 095205. | 2.1 | 12 |
| 45 | Analysis of series expansions for non-algebraic singularities. Journal of Physics A: Mathematical and Theoretical, 2015, 48, 045209. | 2.1 | 12 |
| 46 | 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 |
| 47 | Self-avoiding walks and polygons on non-Euclidean lattices. Journal of Physics A, 1996, 29, 7485-7500. | 1.6 | 11 |
| 48 | The phase transition of the 3-dimensional 3-state potts model. Nuclear Physics, Section B, Proceedings Supplements, 1990, 17, 328-330. | 0.4 | 10 |
| 49 | On the number of hexagonal polyominoes. Theoretical Computer Science, 2003, 307, 433-453. | 0.9 | 10 |
| 50 | Form factor expansions in the 2D Ising model and PainlevÃ© VI. Nuclear Physics B, 2010, 838, 391-412. | 2.5 | 10 |
| 51 | Series Analysis. Lecture Notes in Physics, 2009, , 181-202. | 0.7 | 10 |
| 52 | Critical exponents of plane meanders. Journal of Physics A, 2000, 33, L187-L192. | 1.6 | 9 |
| 53 | The perimeter generating function of punctured staircase polygons. Journal of Physics A, 2006, 39, 3871-3882. | 1.6 | 9 |
| 54 | Prudent Self-Avoiding Walks. Entropy, 2008, 10, 309-318. | 2.2 | 8 |

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| 55 | Modeling force-induced bio-polymer unfolding. Journal of Mathematical Chemistry, 2009, 45, 223-237. | 1.5 | 8 |
| 56 | 1324-avoiding permutations revisited. Advances in Applied Mathematics, 2018, 96, 312-333. | 0.7 | 7 |
| 57 | Self-avoiding walks in constrained and random geometries: Series studies. , 2005, , 59-101. | | 7 |
| 58 | Concepts of Entropy and Their Applications. Entropy, 2009, 11, 59-61. | 2.2 | 5 |
| 59 | Two-dimensional self-avoiding walks and polymer adsorption: critical fugacity estimates. Journal of Physics A: Mathematical and Theoretical, 2012, 45, 055208. | 2.1 | 5 |
| 60 | 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 |
| 61 | History and Introduction to Polygon Models and Polyominoes. Lecture Notes in Physics, 2009, , 1-21. | 0.7 | 5 |
| 62 | Polygonal polyominoes on the square lattice. Journal of Physics A, 2001, 34, 3721-3733. | 1.6 | 4 |
| 63 | Self-avoiding walks and trails on the 3.122 lattice. Journal of Physics A, 2005, 38, 543-554. | 1.6 | 4 |
| 64 | The unusual asymptotics of three-sided prudent polygons. Journal of Physics A: Mathematical and Theoretical, 2010, 43, 342001. | 2.1 | 4 |
| 65 | The enumeration of prudent polygons by area and its unusual asymptotics. Journal of Combinatorial Theory - Series A, 2011, 118, 2261-2290. | 0.8 | 4 |
| 66 | Some New Self-avoiding Walk and Polygon Models. Fundamenta Informaticae, 2012, 117, 19-33. | 0.4 | 4 |
| 67 | 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 |
| 68 | New scaling laws for self-avoiding walks: bridges and worms. Journal of Statistical Mechanics: Theory and Experiment, 2019, 2019, 104010. | 2.3 | 3 |
| 69 | Numerical studies of Thompson's group F and related groups. International Journal of Algebra and Computation, 2019, 29, 179-243. | 0.5 | 3 |
| 70 | Statistical Mechanics of Confined Polymer Networks. Journal of Statistical Physics, 2020, 180, 1061-1094. | 1.2 | 3 |
| 71 | Self-avoiding walks in a rectangle. Journal of Engineering Mathematics, 2014, 84, 201-208. | 1.2 | 2 |
| 72 | Permutations sortable by two stacks in series. Advances in Applied Mathematics, 2017, 83, 81-96. | 0.7 | 2 |

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|---|---------|-----|-----------|
| 73 | Counting planar Eulerian orientations. European Journal of Combinatorics, 2018, 71, 73-98. | 0.8 | 2 |
| 74 | Effect of Confinement: Polygons in Strips, Slabs and Rectangles. Lecture Notes in Physics, 2009, , 235-246. | 0.7 | 2 |
| 75 | Why Are So Many Problems Unsolved?. Lecture Notes in Physics, 2009, , 79-91. | 0.7 | 2 |
| 76 | Self-avoiding polygons â€" towards an exact solution?. Nuclear Physics, Section B, Proceedings Supplements, 1988, 5, 234-238. | 0.4 | 1 |
| 77 | 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 |
| 78 | Some solvable, and as yet unsolvable, polygon and walk models. Journal of Physics: Conference Series, 2006, 42, 98-110. | 0.4 | 1 |
| 79 | Two generalizations of column-convex polygons. Journal of Physics A: Mathematical and Theoretical, 2009, 42, 485003. | 2.1 | 1 |
| 80 | 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 |
| 81 | 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 |
| 82 | A series test of the scaling limit of self-avoiding walks. Journal of Physics A: Mathematical and Theoretical, 2013, 46, 435004. | 2.1 | 1 |
| 83 | Permutations sortable by deques and by two stacks in parallel. European Journal of Combinatorics, 2017, 59, 71-95. | 0.8 | 1 |
| 84 | Appendix: Series Data and Growth Constant, Amplitude and Exponent Estimates. Lecture Notes in Physics, 2009, , 469-482. | 0.7 | 1 |
| 85 | An integral arising from the chiralsl(n) Potts model. Journal of Physics A: Mathematical and Theoretical, 2013, 46, 045202. | 2.1 | 0 |
| 86 | Exact Solution of Two Planar Polygon Models. , 2006, , . | | 0 |
| 87 | Polyominoes with nearly convex columns: An undirected model. Glasnik Matematicki, 2010, 45, 325-436. | 0.3 | 0 |