Doron Zeilberger

List of Publications by Year
in descending order

117 papers	3,347 citations	257101 24 h-index	174990 52 g-index
121 all docs	121 docs citations	121 times ranked	752 citing authors

#	Article	IF	Citations
1	Tweaking the Beukers integrals in search of more miraculous irrationality proofs a la ApÃ©ry. Ramanujan Journal, 2022, 58, 973-994.	0.4	2
2	A multi-computational exploration of some games of pure chance. Journal of Symbolic Computation, 2021, 104, 38-68.	0.5	0
3	Automatic discovery of irrationality proofs and irrationality measures. International Journal of Number Theory, 2021, 17, 815-825.	0.2	7
4	Increasing consecutive patterns in words. Journal of Algebraic Combinatorics, 2020, 51, 89-101.	0.4	2
5	Two Definite Integrals That Are Definitely (and Surprisingly!) Equal. Mathematical Intelligencer, 2020, 42, 10-11.	0.1	1
6	The irrationality measure of Ï€ is at most 7.103205334137â€¦. Moscow Journal of Combinatorics and Number Theory, 2020, 9, 407-419.	0.2	5
7	Untying the Gordian Knot via Experimental Mathematics. Texts and Monographs in Symbolic Computation, 2020, , 387-410.	0.4	0
8	Numerical and Symbolic Studies of the Peaceable Queens Problem. Experimental Mathematics, 2019, , 1-11.	0.5	0
9	D.H. Lehmerâ€™s Tridiagonal Determinant: An Ã‰tude in (Andrews-Inspired) Experimental Mathematics. Annals of Combinatorics, 2019, 23, 717-724.	0.3	2
10	An Experimental Mathematics Approach to the Area Statistic of Parking Functions. Mathematical Intelligencer, 2019, 41, 1-8.	0.1	1
11	A Simple Rederivation of Onsagerâ€™s Solution of the 2D Ising Model Using Experimental Mathematics. Mathematical Intelligencer, 2019, 41, 1-6.	0.1	2
12	A combinatorial-probabilistic analysis of bitcoin attacks. Journal of Difference Equations and Applications, 2019, 25, 56-63.	0.7	4
13	Factorization of C-Finite Sequences. Springer Proceedings in Mathematics and Statistics, 2018, , 131-147.	0.1	1
14	Using the â€œFreshmanâ€²s Dreamâ€•to Prove Combinatorial Congruences. American Mathematical Monthly, 2017, 124, 597.	0.2	11
15	Explicit expressions for the expectation, variance and higher moments of the size of a (2$<i>n</i>$ + 1,) Tj ETQq1 1 0.784314 rgBT /Overl 2017, 23, 1241-1254.	0.7	8
16	Integrals Involving Rudinâ€“Shapiro Polynomials and Sketch of a Proof of Saffariâ€™s Conjecture. Springer Proceedings in Mathematics and Statistics, 2017, , 253-265.	0.1	6
17	Automated discovery and proof of congruence theorems for partial sums of combinatorial sequences. Journal of Difference Equations and Applications, 2016, 22, 780-788.	0.7	13
18	The (Ordinary) Generating Functions Enumerating 123-Avoiding Words with r Occurrences of Each of 1, 2, . . . , n Are Always Algebraic. Annals of Combinatorics, 2016, 20, 387-396.	0.3	2

#	ARTICLE	IF	CITATIONS
19	Identities in character tables ofSn. Journal of Difference Equations and Applications, 2016, 22, 272-279.	0.7	1
20	On the asymptotic statistics of the number of occurrences of multiple permutation patterns. Electronic Journal of Combinatorics, 2015, 6, 117-143.	0.1	16
21	A Short Proof of McDougallâ€™s Circle Theorem. American Mathematical Monthly, 2014, 121, 263.	0.2	2
22	How to generate as many Somos-like miracles as you wish[â€]. Journal of Difference Equations and Applications, 2014, 20, 852-858.	0.7	6
23	A case study in meta-automation: automatic generation of congruence automata for combinatorial sequences. Journal of Difference Equations and Applications, 2014, 20, 973-988.	0.7	9
24	How to gamble if you're in a hurry. Journal of Difference Equations and Applications, 2013, 19, 520-526.	0.7	0
25	The C-finite ansatz. Ramanujan Journal, 2013, 31, 23-32.	0.4	12
26	Using Noonanâ€"Zeilberger Functional Equations to enumerate (in polynomial time!) generalized Wilf classes. Advances in Applied Mathematics, 2013, 50, 356-366.	0.4	4
27	Zeroless arithmetic: representing integers ONLY using ONE. Journal of Difference Equations and Applications, 2013, 19, 1921-1926.	0.7	2
28	Rademacher's infinite partial fraction conjecture is (almost certainly) false. Journal of Difference Equations and Applications, 2013, 19, 680-689.	0.7	5
29	Automatic Generation of Theorems and Proofs on Enumerating Consecutive-Wilf Classes. , 2013, , 121-138.		3
30	A new algorithm for proving global asymptotic stability of rational difference equations. Journal of Difference Equations and Applications, 2012, 18, 1853-1873.	0.7	2
31	Teaching the computer how to discover(!) and then prove(!!) (all by itself(!!!)) analogues of Collatz's notorious 3xâ€,+â€,1 conjecture. Journal of Difference Equations and Applications, 2011, 17, 375-386.	0.7	0
32	The 1958 Pekeris-Accad-WEIZAC Ground-Breaking Collaboration that Computed Ground States of Two-Electron Atoms (and its 2010 Redux). Mathematical Intelligencer, 2011, 33, 52-57.	0.1	4
33	A symbolic computation approach to a problem involving multivariate Poisson distributions. Advances in Applied Mathematics, 2010, 44, 359-377.	0.4	56
34	A symbolic finite-state approach for automated proving of theorems in combinatorial game theory. Journal of Difference Equations and Applications, 2009, 15, 111-118.	0.7	2
35	Proof of Ira Gessel's lattice path conjecture. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 11502-11505.	3.3	33
36	A Translation Method for Finding Combinatorial Bijections. Annals of Combinatorics, 2009, 13, 383-402.	0.3	3

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37	The Automatic Central Limit Theorems Generator (and Much More!). , 2009, , 165-174.		6
38	Using Rota's Umbral calculus to enumerate Stanley's P-partitions. Advances in Applied Mathematics, 2008, 41, 206-213.	0.4	4
39	Experiments with a Positivity-Preserving Operator. Experimental Mathematics, 2008, 17, 341-345.	0.5	2
40	The quasi-holonomic ansatz and restricted lattice walks. Journal of Difference Equations and Applications, 2008, 14, 1119-1126.	0.7	11
41	The Holonomic Ansatz I. Foundations and Applications to Lattice Path Counting. Annals of Combinatorics, 2007, 11, 227-239.	0.3	5
42	The Holonomic Ansatz II. Automatic Discovery(!) And Proof(!!) of Holonomic Determinant Evaluations. Annals of Combinatorics, 2007, 11, 241-247.	0.3	17
43	An Enquiry Concerning Human (and Computer!) [Mathematical] Understanding. , 2007, , 383-410.		4
44	FIVE APPLICATIONS OF WILF-ZEILBERGER THEORY TO ENUMERATION AND PROBABILITY. , 2007, , .		0
45	Disturbing the Dyson Conjecture (in a GOOD Way). Experimental Mathematics, 2006, 15, 187-191.	0.5	12
46	A proof of Andrews' q-Dyson conjecture. Discrete Mathematics, 2006, 306, 1039-1059.	0.4	22
47	A fast algorithm for proving terminating hypergeometric identities. Discrete Mathematics, 2006, 306, 1072-1075.	0.4	3
48	Multi-variable Zeilberger and Almkvist–Zeilberger algorithms and the sharpening of Wilf–Zeilberger theory. Advances in Applied Mathematics, 2006, 37, 139-152.	0.4	90
49	The quantum MacMahon Master Theorem. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 13928-13931.	3.3	31
50	Sharp upper bounds for the orders of the recurrences output by the Zeilberger and ‹mml:math altimg="si1.gif" display="inline" 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.elsevie. Journal of S	0.5	30
51	Deconstructing the Zeilberger algorithm€. Journal of Difference Equations and Applications, 2005, 11, 851-856.	0.7	1
52	Chomp, Recurrences and Chaos(?). Journal of Difference Equations and Applications, 2004, 10, 1281-1293.	0.7	10
53	On Fraenkel's N-Heap Wythoff's Conjectures. Annals of Combinatorics, 2004, 8, 225-238.	0.3	12
54	Symbolic Moment Calculus I: Foundations and Permutation Pattern Statistics. Annals of Combinatorics, 2004, 8, 369-378.	0.3	12

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55	The Collector?s Brotherhood Problem using the Newman-Shepp symbolic method. Algebra Universalis, 2003, 49, 387-395.	0.2	14
56	Refined Restricted Permutations. Annals of Combinatorics, 2002, 6, 427-444.	0.3	28
57	ENCAPSULATE!. , 2002, , .		0
58	Three-Rowed CHOMP. Advances in Applied Mathematics, 2001, 26, 168-179.	0.4	17
59	Babsonâ€"SteingrÄ±Ìmsson Statistics are Indeed Mahonian (and Sometimes Even Eulerâ€"Mahonian). Advances in Applied Mathematics, 2001, 27, 390-404.	0.4	11
60	The Gouldenâ€"Jackson Cluster Method for Cyclic Words. Advances in Applied Mathematics, 2000, 25, 228-232.	0.4	6
61	The Umbral Transfer-Matrix Method. I. Foundations. Journal of Combinatorial Theory - Series A, 2000, 91, 451-463.	0.5	25
62	The Gouldenâ€"Jackson cluster method: extensions, applications and implementations. Journal of Difference Equations and Applications, 1999, 5, 355-377.	0.7	64
63	Automated counting of lego towers. Journal of Difference Equations and Applications, 1999, 5, 323-333.	0.7	3
64	A Combinatorial Proof of Bassâ€™s Evaluations of the Ihara-Selberg Zeta Function for Graphs. Transactions of the American Mathematical Society, 1999, 351, 2257-2274.	0.5	84
65	A Pentagonal Number Sieve. Journal of Combinatorial Theory - Series A, 1998, 82, 186-192.	0.5	20
66	Enumeration Schemes and, more importantly, their automatic generation. Annals of Combinatorics, 1998, 2, 185-195.	0.3	27
67	Curing the andrews syndrome. Journal of Difference Equations and Applications, 1998, 4, 299-310.	0.7	9
68	How to do Monthly Problems With Your Computer. American Mathematical Monthly, 1997, 104, 505-519.	0.2	12
69	Proof of a conjecture on multisets of hook numbers. Annals of Combinatorics, 1997, 1, 391-394.	0.3	7
70	How joe gillis discovered combinatorial special function theory. Mathematical Intelligencer, 1995, 17, 65-66.	0.1	1
71	The J.C.P. miller recurrence for exponentiating a polynomial, and its q- analog. Journal of Difference Equations and Applications, 1995, 1, 57-60.	0.7	11
72	A WZ PROOF OF RAMANUJANâ€™S FORMULA FOR Ï€. , 1995, , 107-108.		8

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73	Proof of a q-analog of a constant term identity conjectured by forrester. Journal of Combinatorial Theory - Series A, 1994, 66, 311-312.	0.5	4
74	Theorems for a price: tomorrow's semi-rigorous mathematical culture. Mathematical Intelligencer, 1994, 16, 11-18.	0.1	24
75	Towards a WZ Evolution of the Mehta Integral. SIAM Journal on Mathematical Analysis, 1994, 25, 812-814.	0.9	2
76	Identities in search of identity. Theoretical Computer Science, 1993, 117, 23-38.	0.5	5
77	A Short Proof of Jacobi's Formula for the Number of Representations of an Integer as a Sum of Four Squares. American Mathematical Monthly, 1993, 100, 274.	0.2	14
78	Rational function certification of multisum/integral/"q"-identities. Bulletin of the American Mathematical Society, 1992, 27, 148-153.	0.8	16
79	An algorithmic proof theory for hypergeometric (ordinary and "q") multisum/integral identities. Inventiones Mathematicae, 1992, 108, 575-633.	1.3	276
80	Random walk in a Weyl chamber. Proceedings of the American Mathematical Society, 1992, 115, 27-31.	0.4	83
81	The method of creative telescoping. Journal of Symbolic Computation, 1991, 11, 195-204.	0.5	298
82	A maple program that finds, and proves, recurrences and differential equations satisfied by hyperexponential definite integrals. SIGSAM Bulletin: A Quarterly Publication of the Special Interest Group on Symbolic & Algebraic Manipulation, 1991, 25, 14-17.	0.3	4
83	Denert's Permutation Statistic Is Indeed Euler-Mahonian. Studies in Applied Mathematics, 1990, 83, 31-59.	1.1	68
84	The method of differentiating under the integral sign. Journal of Symbolic Computation, 1990, 10, 571-591.	0.5	111
85	A fast algorithm for proving terminating hypergeometric identities. Discrete Mathematics, 1990, 80, 207-211.	0.4	179
86	A Stembridge-Stanton style elementary proof of the Habsieger-Kadell q-Morris identity. Discrete Mathematics, 1990, 79, 313-322.	0.4	17
87	A holonomic systems approach to special functions identities. Journal of Computational and Applied Mathematics, 1990, 32, 321-368.	1.1	352
88	A 21st century proof of Dougall's hypergeometric sum identity. Journal of Mathematical Analysis and Applications, 1990, 147, 610-611.	0.5	6
89	Towards computerized proofs of identities. Bulletin of the American Mathematical Society, 1990, 23, 77-83.	0.8	22
90	Rational functions certify combinatorial identities. Journal of the American Mathematical Society, 1990, 3, 147-147.	1.9	106

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91	Kathy O'Hara's Constructive Proof of the Unimodality of the Gaussian Polynomials. American Mathematical Monthly, 1989, 96, 590.	0.2	35
92	Generalized Rogers-Ramanujan bijections. Advances in Mathematics, 1989, 78, 42-75.	0.5	14
93	How likely is Polya's drunkard to stay in x? y?z?. Journal of Statistical Physics, 1989, 57, 1129-1135.	0.5	3
94	Six etudes in generating functions. International Journal of Computer Mathematics, 1989, 29, 201-215.	1.0	21
95	The Odlyzko conjecture and O'Hara's unimodality proof. Proceedings of the American Mathematical Society, 1989, 107, 39-39.	0.4	1
96	Identities. The IMA Volumes in Mathematics and Its Applications, 1989, , 35-44.	0.5	0
97	A Unified Approach to Macdonald's Root-System Conjectures. SIAM Journal on Mathematical Analysis, 1988, 19, 987-1013.	0.9	16
98	A Proof of the G_2 Case of Macdonald's Root System-Dyson Conjecture. SIAM Journal on Mathematical Analysis, 1987, 18, 880-883.	0.9	18
99	A q-Foata Proof of the q-Saalschütz Identity. European Journal of Combinatorics, 1987, 8, 461-463.	0.5	23
100	Enumerating totally clean words. Discrete Mathematics, 1987, 64, 313-315.	0.4	1
101	Resurrecting the asymptotics of linear recurrences. Journal of Mathematical Analysis and Applications, 1985, 111, 162-176.	0.5	105
102	A proof of Andrews' q-Dyson conjecture. Discrete Mathematics, 1985, 54, 201-224.	0.4	74
103	A combinatorial approach to matrix algebra. Discrete Mathematics, 1985, 56, 61-72.	0.4	61
104	Bijecting Euler's Partitions-Recurrence. American Mathematical Monthly, 1985, 92, 54-55.	0.2	21
105	Bijecting Euler's Partitions-Recurrence. American Mathematical Monthly, 1985, 92, 54.	0.2	17
106	Garsia and Milne's bijective proof of the inclusion-exclusion principle. Discrete Mathematics, 1984, 51, 109-110.	0.4	13
107	Andre's reflection proof generalized to the many-candidate ballot problem. Discrete Mathematics, 1983, 44, 325-326.	0.4	45
108	Sister Celine's technique and its generalizations. Journal of Mathematical Analysis and Applications, 1982, 85, 114-145.	0.5	34

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109	A combinatorial proof of Dyson's conjecture. Discrete Mathematics, 1982, 41, 317-321.	0.4	27
110	A short Rogers-Ramanujan bijection. Discrete Mathematics, 1982, 38, 313-315.	0.4	17
111	A Markov chain occurring in enzyme kinetics. Journal of Mathematical Biology, 1982, 15, 351-357.	0.8	19
112	Enumeration of words by their number of mistakes. Discrete Mathematics, 1981, 34, 89-91.	0.4	10
113	Partial difference equations in m1â©¾m2â©¾â‹â©¾mnâ©¾0 and their applications to combinatorics. Discrete Mathematics, 1980, 31, 65-77.	0.4	4
114	The Algebra of Linear Partial Difference Operators and Its Applications. SIAM Journal on Mathematical Analysis, 1980, 11, 919-932.	0.9	12
115	A new basis for discrete analytic polynomials. Journal of the Australian Mathematical Society, 1977, 23, 95-104.	0.3	7
116	A discrete analogue of the Paley-Wiener theorem for bounded analytic functions in a half plane. Journal of the Australian Mathematical Society, 1977, 23, 376-378.	0.3	0
117	Automatic conjecturing and proving of exact values of some infinite families of infinite continued fractions. Ramanujan Journal, 0, , 1.	0.4	1