

Walter Gautschi

List of Publications by Year in descending order

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48
papers

2,063
citations

706676

14
h-index

371746

37
g-index

53
all docs

53
docs citations

53
times ranked

1058
citing authors

#	ARTICLE	IF	CITATIONS
1	Orthogonal polynomials relative to weight functions of Prudnikov type. Numerical Algorithms, 2022, 90, 263-270.	1.1	1
2	Orthogonal polynomials relative to a generalized Marchenko–Pastur probability measure. Numerical Algorithms, 2021, 88, 1233.	1.1	1
3	On the zeros of subrange Jacobi polynomials. Numerical Algorithms, 2018, 79, 759-768.	1.1	1
4	On the Ismail–Letessier–Askey Monotonicity Conjecture for Zeros of Ultraspherical Polynomials. , 2018, , 251-266.		0
5	A Discrete Top-Down Markov Problem in Approximation Theory. , 2018, , 267-289.		0
6	Polynomials orthogonal with respect to cardinal B-spline weight functions. Numerical Algorithms, 2017, 76, 1099-1107.	1.1	0
7	Polynomials orthogonal with respect to exponential integrals. Numerical Algorithms, 2015, 70, 215-226.	1.1	3
8	High-precision Gauss–Turán quadrature rules for Laguerre and Hermite weight functions. Numerical Algorithms, 2014, 67, 59-72.	1.1	4
9	Neutralizing nearby singularities in numerical quadrature. Numerical Algorithms, 2013, 64, 417-425.	1.1	2
10	Repeated modifications of orthogonal polynomials by linear divisors. Numerical Algorithms, 2013, 63, 369-383.	1.1	4
11	Sub-range Jacobi polynomials. Numerical Algorithms, 2012, 61, 649-657.	1.1	7
12	Numerical integration over the square in the presence of algebraic/logarithmic singularities with an application to aerodynamics. Numerical Algorithms, 2012, 61, 275-290.	1.1	7
13	Optimally scaled and optimally conditioned Vandermonde and Vandermonde-like matrices. BIT Numerical Mathematics, 2011, 51, 103-125.	1.0	20
14	The Lambert W-functions and some of their integrals: a case study of high-precision computation. Numerical Algorithms, 2011, 57, 27-34.	1.1	9
15	Remark on “New conjectured inequalities for zeros of Jacobi polynomials” by Walter Gautschi, Numer. Algorithms 50:293–296 (2009). Numerical Algorithms, 2011, 57, 511-511.	1.1	1
16	Gauss quadrature routines for two classes of logarithmic weight functions. Numerical Algorithms, 2010, 55, 265-277.	1.1	15
17	On conjectured inequalities for zeros of Jacobi polynomials. Numerical Algorithms, 2009, 50, 93-96.	1.1	3
18	New conjectured inequalities for zeros of Jacobi polynomials. Numerical Algorithms, 2009, 50, 293-296.	1.1	2

#	ARTICLE	IF	CITATIONS
19	Variable-precision recurrence coefficients for nonstandard orthogonal polynomials. Numerical Algorithms, 2009, 52, 409-418.	1.1	6
20	The numerical evaluation of a challenging integral. Numerical Algorithms, 2008, 49, 187-194.	1.1	6
21	On a conjectured inequality for the largest zero of Jacobi polynomials. Numerical Algorithms, 2008, 49, 195-198.	1.1	7
22	Luigi Gatteschi's work on asymptotics of special functions and their zeros. Numerical Algorithms, 2008, 49, 11-31.	1.1	27
23	A guided tour through my bibliography. Numerical Algorithms, 2007, 45, 11-35.	1.1	1
24	Conjectured inequalities for Jacobi polynomials and their largest zeros. Numerical Algorithms, 2007, 45, 217-230.	1.1	8
25	Computing the Kontorovich-Lebedev Integral Transforms and their Inverses. BIT Numerical Mathematics, 2006, 46, 21-40.	1.0	8
26	Orthogonal polynomials (in Matlab). Journal of Computational and Applied Mathematics, 2005, 178, 215-234.	1.1	65
27	A historical note on Gauss-Kronrod quadrature. Numerische Mathematik, 2005, 100, 483-484.	0.9	9
28	Numerical Quadrature Computation of the Macdonald Function for Complex Orders. BIT Numerical Mathematics, 2005, 45, 593-603.	1.0	5
29	Generalized Gauss-Radau and Gauss-Lobatto Formulae. BIT Numerical Mathematics, 2004, 44, 711-720.	1.0	15
30	Orthogonal Polynomials. , 2004, , .		584
31	Computation of Bessel and Airy Functions and of Related Gaussian Quadrature Formulae. BIT Numerical Mathematics, 2002, 42, 110-118.	1.0	10
32	Barycentric formulae for cardinal (SINC-) interpolants by Jean-Paul Berrut. Numerische Mathematik, 2001, 87, 791-792.	0.9	8
33	Computing the Hilbert Transform of the Generalized Laguerre and Hermite Weight Functions. BIT Numerical Mathematics, 2001, 41, 490-503.	1.0	12
34	Quadrature rules for rational functions. Numerische Mathematik, 2000, 86, 617-633.	0.9	17
35	Ostrowski and the ostrowski prize. Mathematical Intelligencer, 1998, 20, 32-34.	0.1	2
36	A set of orthogonal polynomials induced by a given orthogonal polynomial. Aequationes Mathematicae, 1993, 46, 174-198.	0.4	22

#	ARTICLE	IF	CITATIONS
37	Vandermonde matrices on the circle: Spectral properties and conditioning. <i>Numerische Mathematik</i> , 1990, 57, 577-591.	0.9	24
38	Computational Aspects of Orthogonal Polynomials. , 1990, , 181-216.		34
39	Gaussian quadrature involving Einstein and Fermi functions with an application to summation of series. <i>Mathematics of Computation</i> , 1985, 44, 177-190.	1.1	35
40	On Generating Orthogonal Polynomials. <i>SIAM Journal on Scientific and Statistical Computing</i> , 1982, 3, 289-317.	1.5	316
41	Error behavior in optimal relaxation methods. <i>Zeitschrift Fur Angewandte Mathematik Und Physik</i> , 1982, 33, 24-35.	0.7	3
42	A Computational Procedure for Incomplete Gamma Functions. <i>ACM Transactions on Mathematical Software</i> , 1979, 5, 466-481.	1.6	74
43	Algorithm 521: Repeated Integrals of the Coerror Function [S15]. <i>ACM Transactions on Mathematical Software</i> , 1977, 3, 301-302.	1.6	5
44	Evaluation of Repeated Integrals of the Coerror Function. <i>ACM Transactions on Mathematical Software</i> , 1977, 3, 240-252.	1.6	9
45	Optimally conditioned Vandermonde matrices. <i>Numerische Mathematik</i> , 1975, 24, 1-12.	0.9	37
46	On the condition of algebraic equations. <i>Numerische Mathematik</i> , 1973, 21, 405-424.	0.9	39
47	Algorithms: Algorithm 331: Gaussian quadrature formulas. <i>Communications of the ACM</i> , 1968, 11, 432-436.	3.3	21
48	Computational Aspects of Three-Term Recurrence Relations. <i>SIAM Review</i> , 1967, 9, 24-82.	4.2	549