Walter Van Assche

List of Publications by Year
in descending order

137	2,988	186209	223716
papers	citations	28	46
		h-index	g-index

153	153	153	507
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Orthogonal polynomials, Toda lattices and Painlevé equations. Physica D: Nonlinear Phenomena, 2022, 434, 133214.	1.3	5
2	Chebyshev polynomials in the 16th century. Journal of Approximation Theory, 2022, , 105767.	0.5	1
3	Zero Distribution of Orthogonal Polynomials on a q-Lattice. Constructive Approximation, 2021, 54, 117-144.	1.8	3
4	Special issue OPSFA15: orthogonal polynomials, special functions and applications. Integral Transforms and Special Functions, 2021, 32, 333-335.	0.8	0
5	Jacobi–Angelesco Multiple Orthogonal Polynomials on an r-Star. Constructive Approximation, 2020, 51, 353-381.	1.8	5
6	Three-fold symmetric Hahn-classical multiple orthogonal polynomials. Analysis and Applications, 2020, 18, 271-332.	1.2	8
7	Laguerre–Angelesco multiple orthogonal polynomials on an r-star. Journal of Approximation Theory, 2020, 250, 105324.	0.5	5
8	Multiple Askey–Wilson polynomials and related basic hypergeometric multiple orthogonal polynomials. Transactions of the American Mathematical Society, 2020, 373, 8289-8312.	0.5	0
9	General Orthogonal Polynomials. , 2020, , 16-50.		0
10	Jacobi and Related Polynomials. , 2020, , 51-99.		0
11	Recursively Defined Polynomials. , 2020, , 100-118.		0
12	Wilson and Related Polynomials. , 2020, , 119-128.		0
13	Discrete Orthogonal Polynomials. , 2020, , 129-156.		0
14	Some q-Orthogonal Polynomials. , 2020, , 157-177.		0
15	The Askey–Wilson Family of Polynomials. , 2020, , 178-198.		0
16	Orthogonal Polynomials on the Unit Circle. , 2020, , 199-241.		0
17	Zeros of Orthogonal Polynomials. , 2020, , 242-268.		0
18	The Moment Problem. , 2020, , 269-306.		1

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19	Matrix-Valued Orthogonal Polynomials and Differential Equations. , 2020, , 307-333.		0
20	Some Families of Matrix-Valued Jacobi Orthogonal Polynomials. , 2020, , 334-356.		0
21	Orthogonal and Multiple Orthogonal Polynomials, Random Matrices, and Painlevé Equations. Tutorials, Schools, and Workshops in the Mathematical Sciences, 2020, , 629-683.	0.3	4
22	Alpert Multiwavelets and Legendre--Angelesco Multiple Orthogonal Polynomials. SIAM Journal on Mathematical Analysis, 2017, 49, 626-645.	0.9	5
23	Majorization results for zeros of orthogonal polynomials. Proceedings of the American Mathematical Society, 2017, 145, 3849-3863.	0.4	0
24	Hermite–Padé Approximants for a Pair of Cauchy Transforms with Overlapping Symmetric Supports. Communications on Pure and Applied Mathematics, 2017, 70, 444-510.	1.2	11
25	Discrete integrable systems generated by Hermite-Padé approximants. Nonlinearity, 2016, 29, 1487-1506.	0.6	17
26	Mehler-Heine asymptotics for multiple orthogonal polynomials. Proceedings of the American Mathematical Society, 2016, 145, 303-314.	0.4	10
27	Unique positive solution for an alternative discrete Painlevé I equation. Journal of Difference Equations and Applications, 2016, 22, 656-675.	0.7	11
28	Asymptotic zero distribution of Jacobi-Piñeiro and multiple Laguerre polynomials. Journal of Approximation Theory, 2016, 205, 114-132.	0.5	11
29	WHAT IS...A Multiple Orthogonal Polynomial?. Notices of the American Mathematical Society, 2016, 63, 1029-1031.	0.1	12
30	Multiple orthogonal polynomials associated with an exponential cubic weight. Journal of Approximation Theory, 2015, 190, 1-25.	0.5	16
31	A tribute to Dick Askey. Journal of Approximation Theory, 2015, 193, 1-3.	0.5	2
32	Orthogonal polynomials for Minkowski's question mark function. Journal of Computational and Applied Mathematics, 2015, 284, 171-183.	1.1	3
33	Hyperelliptic uniformization of algebraic curves of the third order. Journal of Computational and Applied Mathematics, 2015, 284, 38-49.	1.1	12
34	Computing recurrence coefficients of multiple orthogonal polynomials. Numerical Algorithms, 2015, 70, 519-543.	1.1	12
35	A family of nonlinear difference equations: Existence, uniqueness, and asymptotic behavior of positive solutions. Journal of Approximation Theory, 2015, 193, 39-55.	0.5	12
36	Variations of Stieltjes–Wigert and q-Laguerre polynomials and their recurrence coefficients. Journal of Approximation Theory, 2015, 193, 56-73.	0.5	6

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37	Zero distribution of polynomials satisfying a differential-difference equation. Analysis and Applications, 2014, 12, 635-666.	1.2	6
38	Gaussâ€"type quadrature. , 2014, , 35-49.		0
39	Recurrence coefficients of generalized Charlier polynomials and the fifth PainlevÃ© equation. Proceedings of the American Mathematical Society, 2013, 141, 551-562.	0.4	20
40	OPSFAâ€™11. Journal of Approximation Theory, 2013, 170, 1-2.	0.5	0
41	Asymptotics for the ratio and the zeros of multiple Charlier polynomials. Journal of Approximation Theory, 2013, 170, 3-20.	0.5	0
42	Ladder operators and differential equations for multiple orthogonal polynomials. Journal of Physics A: Mathematical and Theoretical, 2013, 46, 205204.	0.7	9
43	The generalized Krawtchouk polynomials and the fifth PainlevÃ© equation. Journal of Difference Equations and Applications, 2013, 19, 1437-1451.	0.7	8
44	The recurrence coefficients of semi-classical Laguerre polynomials and the fourth PainlevÃ© equation. Journal of Physics A: Mathematical and Theoretical, 2012, 45, 205201.	0.7	46
45	Orthogonal Polynomials on a Bi-lattice. Constructive Approximation, 2012, 36, 215-242.	1.8	21
46	Asymptotics for the ratio and the zeros of multiple Charlier polynomials. Journal of Approximation Theory, 2012, 164, 823-840.	0.5	4
47	Interlacing properties of zeros of multiple orthogonal polynomials. Journal of Mathematical Analysis and Applications, 2012, 389, 429-438.	0.5	22
48	Recurrence coefficients of generalized Meixner polynomials and PainlevÃ© equations. Journal of Physics A: Mathematical and Theoretical, 2011, 44, 035202.	0.7	21
49	Hermite-PadÃ© Rational Approximation to Irrational Numbers. Computational Methods and Function Theory, 2011, 10, 585-602.	0.8	2
50	Nearest neighbor recurrence relations for multiple orthogonal polynomials. Journal of Approximation Theory, 2011, 163, 1427-1448.	0.5	61
51	Orthogonal polynomials, special functions, and applications. Journal of Approximation Theory, 2011, 163, 813.	0.5	1
52	Asymptotics of Hermite-Pade Rational Approximants for Two Analytic Functions with Separated Pairs of Branch Points (Case of Genus 0). International Mathematics Research Papers, 2010, , .	0.3	24
53	Joseph L. Ullman (1923â€"1995). Journal of Approximation Theory, 2010, 162, 639-645.	0.5	0
54	Mellin transforms for multiple Jacobiâ€"PiÃ±eiro polynomials and a <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si1.gif" display="inline" overflow="scroll"><mml:mi>q</mml:mi></mml:math>-analogue. Journal of Approximation Theory, 2010, 162, 782-806.	0.5	6

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55	*q*-Discrete Painlevé equations for recurrence coefficients of modified *q*-Freud orthogonal polynomials. Journal of Difference Equations and Applications, 2010, 16, 37-53.	0.7	20
56	Discrete Painlevé equations for recurrence coefficients of semiclassical Laguerre polynomials. Proceedings of the American Mathematical Society, 2010, 138, 1317-1331.	0.4	34
57	Irrationality proof of a q-extension of Î¶(2) using little q-Jacobi polynomials. Acta Arithmetica, 2009, 138, 165-178.	0.2	6
58	Multiple Orthogonal Polynomials on the Unit Circle. Constructive Approximation, 2008, 28, 173-197.	1.8	4
59	Asymptotic zero distribution for a class of multiple orthogonal polynomials. Transactions of the American Mathematical Society, 2008, 360, 5571-5588.	0.5	29
60	Leonhard Euler and a q-analogue of the logarithm. Proceedings of the American Mathematical Society, 2008, 137, 1663-1676.	0.4	8
61	Discrete Painlevé equations for recurrence coefficients of orthogonal polynomials. , 2007, , .		41
62	Type II Hermiteâ€"Padé approximation to the exponential function. Journal of Computational and Applied Mathematics, 2007, 207, 227-244.	1.1	12
63	Irrationality of <mml:math altimg="si1.gif" 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.elsevier.com/xml/common/struct-bib/dtd"	0.2	13
64	Rakhmanov's theorem for orthogonal matrix polynomials on the unit circle. Journal of Approximation Theory, 2007, 146, 227-242.	0.5	21
65	Multiple Wilson and Jacobiâ€"Piñeiro polynomials. Journal of Approximation Theory, 2005, 132, 155-181.	0.5	22
66	Multiple little <mml:math altimg="si1.gif" 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.elsevier.com/xml/common/struct-bib/dtd" xmlns:ce="http://www.elsevier.com/x	1.1	16
67	Gaussian quadrature for multiple orthogonal polynomials. Journal of Computational and Applied Mathematics, 2005, 178, 131-145.	1.1	24
68	Quadratic Hermiteâ€"Padé Approximation to the Exponential Function: A Riemannâ€"Hilbert Approach. Constructive Approximation, 2005, 21, 351-412.	1.8	34
69	Scalar and matrix Riemannâ€"Hilbert approach to the strong asymptotics of Padé approximants and complex orthogonal polynomials with varying weight. Journal of Approximation Theory, 2004, 129, 129-166.	0.5	53
70	WKB and Turning Point Theory for Second-order Difference Equations. , 2004, , 101-138.		7
71	Difference Equations for Multiple Charlier and Meixner Polynomials. , 2004, , 549-557.		5
72	Asymptotics of multiple orthogonal polynomials associated with the modified Bessel functions of the first kind. Journal of Computational and Applied Mathematics, 2003, 153, 141-149.	1.1	23

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73	Some discrete multiple orthogonal polynomials. Journal of Computational and Applied Mathematics, 2003, 153, 19-45.	1.1	79
74	Asymptotique des approximants de Hermite–Padé quadratiques de la fonction exponentielle et problèmes de Riemann–Hilbert. Comptes Rendus Mathematique, 2003, 336, 893-896.	0.1	13
75	Para-Orthogonal Polynomials in Frequency Analysis. Rocky Mountain Journal of Mathematics, 2003, 33, 629.	0.2	15
76	Analysis of Non-Linear Recurrence Relations for the Recurrence Coefficients of Generalized Charlier Polynomials. Journal of Nonlinear Mathematical Physics, 2003, 10, 231.	0.8	20
77	Multiple orthogonal polynomials for classical weights. Transactions of the American Mathematical Society, 2003, 355, 3887-3914.	0.5	125
78	Strong Asymptotics for Relativistic Hermite Polynomials. Rocky Mountain Journal of Mathematics, 2003, 33, 489.	0.2	4
79	Blumenthal's Theorem for Laurent Orthogonal Polynomials. Journal of Approximation Theory, 2002, 117, 255-278.	0.5	14
80	Erratum to "Weighted Zero Distribution For Polynomials Orthogonal on an Infinite Interval". SIAM Journal on Mathematical Analysis, 2001, 32, 1169-1170.	0.9	3
81	Some classical multiple orthogonal polynomials. Journal of Computational and Applied Mathematics, 2001, 127, 317-347.	1.1	107
82	Some properties of multiple orthogonal polynomials associated with Macdonald functions. Journal of Computational and Applied Mathematics, 2001, 133, 253-261.	1.1	18
83	Little q-Legendre Polynomials and Irrationality of Certain Lambert Series. Ramanujan Journal, 2001, 5, 295-310.	0.4	26
84	Lamé differential equations and electrostatics. Proceedings of the American Mathematical Society, 2000, 128, 3621-3628.	0.4	24
85	Functionals of Gegenbauer polynomials and D-dimensional hydrogenic momentum expectation values. Journal of Mathematical Physics, 2000, 41, 6600-6613.	0.5	32
86	Multiple orthogonal polynomials associated with macdonald functions. Integral Transforms and Special Functions, 2000, 9, 229-244.	0.8	50
87	Extremal Polynomials on Discrete Sets. Proceedings of the London Mathematical Society, 1999, 79, 191-221.	0.6	27
88	Perturbation of Orthogonal Polynomials on an Arc of the Unit Circle, II. Journal of Approximation Theory, 1999, 96, 1-32.	0.5	27
89	The Asymptotic Zero Distribution of Orthogonal Polynomials with Varying Recurrence Coefficients. Journal of Approximation Theory, 1999, 99, 167-197.	0.5	107
90	Entropic integrals of hyperspherical harmonics and spatial entropy of D-dimensional central potentials. Journal of Mathematical Physics, 1999, 40, 5675-5686.	0.5	41

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91	A Birth and Death Process Related to the Rogers–Ramanujan Continued Fraction. Journal of Mathematical Analysis and Applications, 1998, 224, 297-315.	0.5	16
92	Tau-Function Constructions of the Recurrence Coefficients of Orthogonal Polynomials. Advances in Applied Mathematics, 1998, 20, 141-168.	0.4	10
93	Information entropy of classical orthogonal polynomials and their application to the harmonic oscillator and Coulomb potentials. Methods and Applications of Analysis, 1997, 4, 91-110.	0.1	47
94	Orthogonal matrix polynomials and applications. Journal of Computational and Applied Mathematics, 1996, 66, 27-52.	1.1	83
95	Upward Extension of the Jacobi Matrix for Orthogonal Polynomials. Journal of Approximation Theory, 1996, 86, 335-357.	0.5	32
96	Compact Jacobi matrices : from Stieltjes to Krein and $M(a, b)$. Annales De La Faculté Des Sciences De Toulouse, 1996, S5, 195-215.	0.3	13
97	Entropy of orthogonal polynomials with Freud weights and information entropies of the harmonic oscillator potential. Journal of Mathematical Physics, 1995, 36, 4106-4118.	0.5	53
98	Criterion for the resolvent set of nonsymmetric tridiagonal operators. Proceedings of the American Mathematical Society, 1995, 123, 2423-2430.	0.4	28
99	Perturbation of Orthogonal Polynomials on an Arc of the Unit Circle. Journal of Approximation Theory, 1995, 83, 392-422.	0.5	53
100	Weak convergence of orthogonal polynomials. Indagationes Mathematicae, 1995, 6, 7-23.	0.2	13
101	Relative asymptotics for polynomials orthogonal with respect to a discrete Sobolev inner product. Constructive Approximation, 1995, 11, 107-137.	1.8	74
102	Orthogonal polynomials and laurent polynomials related to the Hahn-Extonq-Bessel function. Constructive Approximation, 1995, 11, 477-512.	1.8	16
103	The impact of Stieltjes' work on continued fractions and orthogonal polynomials: additional material. Journal of Computational and Applied Mathematics, 1995, 65, 419-447.	1.1	45
104	Orthogonal matrix polynomials and higher-order recurrence relations. Linear Algebra and Its Applications, 1995, 219, 261-280.	0.4	131
105	Remarks on the (C, -1)-Summability of the Distribution of Zeros of Orthogonal Polynomials. Proceedings of the American Mathematical Society, 1994, 122, 759.	0.4	0
106	Polynomial interpolation and Gaussian quadrature for matrix-valued functions. Linear Algebra and Its Applications, 1994, 207, 71-114.	0.4	62
107	Christoffel functions and Turán determinants on several intervals. Journal of Computational and Applied Mathematics, 1993, 48, 207-223.	1.1	13
108	Quadrature formulas based on rational interpolation. Mathematics of Computation, 1993, 61, 765-783.	1.1	30

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109	Quadrature Formulas Based on Rational Interpolation. Mathematics of Computation, 1993, 61, 765.	1.1	16
110	The Impact of Stieltjes' Work on Continued Fractions and Orthogonal Polynomials. , 1993, , 5-37.		11
111	Compact perturbations of orthogonal polynomials. Pacific Journal of Mathematics, 1992, 153, 163-184.	0.2	23
112	Asymptotic Behaviour for Wall Polynomials and the Addition Formula for Little q-Legendre Polynomials. SIAM Journal on Mathematical Analysis, 1991, 22, 302-311.	0.9	10
113	The supports of measures associated with orthogonal polynomials and the spectra of the related self-adjoint operators. Rocky Mountain Journal of Mathematics, 1991, 21, 501.	0.2	36
114	Orthogonal polynomials, associated polynomials and functions of the second kind. Journal of Computational and Applied Mathematics, 1991, 37, 237-249.	1.1	65
115	Approximating the weight function for orthogonal polynomials on several intervals. Journal of Approximation Theory, 1991, 65, 341-371.	0.5	27
116	Relative asymptotics for orthogonal polynomials with unbounded recurrence coefficients. Journal of Approximation Theory, 1990, 62, 47-69.	0.5	18
117	Pollaczek polynomials and summability methods. Journal of Mathematical Analysis and Applications, 1990, 147, 498-505.	0.5	5
118	Norm behavior and zero distribution for orthogonal polynomials with nonsymmetric weights. Constructive Approximation, 1989, 5, 329-345.	1.8	11
119	Sieved orthogonal polynomials and discrete measures with jumps dense in an interval. Proceedings of the American Mathematical Society, 1989, 106, 163-163.	0.4	36
120	Sieved Orthogonal Polynomials and Discrete Measures with Jumps Dense in an Interval. Proceedings of the American Mathematical Society, 1989, 106, 163.	0.4	7
121	Asymptotics for orthogonal polynomials with regularly varying recurrence coefficients. Rocky Mountain Journal of Mathematics, 1989, 19, .	0.2	27
122	On the asymptotic distribution of eigenvalues of banded matrices. Constructive Approximation, 1988, 4, 403-417.	1.8	16
123	Asymptotic properties of orthogonal polynomials from their recurrence formula, II. Journal of Approximation Theory, 1988, 52, 322-338.	0.5	20
124	Asymptotics for orthogonal polynomials on and off the essential spectrum. Journal of Approximation Theory, 1988, 55, 220-231.	0.5	20
125	Eigenvalues of Toeplitz matrices associated with orthogonal polynomials. Journal of Approximation Theory, 1987, 51, 360-371.	0.5	4
126	The ratio of q-like orthogonal polynomials. Journal of Mathematical Analysis and Applications, 1987, 128, 535-547.	0.5	15

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127	Orthogonal polynomials with asymptotically periodic recurrence coefficients. Journal of Approximation Theory, 1986, 46, 251-283.	0.5	100
128	An Asymptotic Problem (Pierre Barrucand). SIAM Review, 1986, 28, 234-238.	4.2	0
129	Products of 2 Ã— 2 stochastic matrices with random entries. Journal of Applied Probability, 1986, 23, 1019-1024.	0.4	1
130	Asymptotic properties of orthogonal polynomials from their recurrence formula, I. Journal of Approximation Theory, 1985, 44, 258-276.	0.5	24
131	Some results on the asymptotic distribution of the zeros of orthogonal polynomials. Journal of Computational and Applied Mathematics, 1985, 12-13, 615-623.	1.1	6
132	Probabilistic proofs of asymptotic formulas for some classical polynomials. Mathematical Proceedings of the Cambridge Philosophical Society, 1985, 97, 499-510.	0.3	19
133	Weighted Zero Distribution for Polynomials Orthogonal on an Infinite Interval. SIAM Journal on Mathematical Analysis, 1985, 16, 1317-1334.	0.9	15
134	Multidimensional Toda Lattices: Continuous and Discrete Time. Symmetry, Integrability and Geometry: Methods and Applications (SIGMA), 0, , .	0.5	9
135	Discrete Orthogonal Polynomials with Hypergeometric Weights and PainlevÃ© VI. Symmetry, Integrability and Geometry: Methods and Applications (SIGMA), 0, , .	0.5	3
136	Solution of an Open Problem about Two Families of Orthogonal Polynomials. Symmetry, Integrability and Geometry: Methods and Applications (SIGMA), 0, , .	0.5	5
137	Multiple Hermite polynomials and simultaneous Gaussian quadrature. Electronic Transactions on Numerical Analysis, 0, 50, 182-198.	0.0	3