

# Joab R Winkler

## List of Publications by Year in descending order

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35  
papers

261  
citations

933447

10  
h-index

1058476

14  
g-index

35  
all docs

35  
docs citations

35  
times ranked

71  
citing authors

#	ARTICLE	IF	CITATIONS
1	A companion matrix resultant for Bernstein polynomials. <i>Linear Algebra and Its Applications</i> , 2003, 362, 153-175.	0.9	24
2	Structured total least norm and approximate GCDs of inexact polynomials. <i>Journal of Computational and Applied Mathematics</i> , 2008, 215, 1-13.	2.0	20
3	Two methods for the calculation of the degree of an approximate greatest common divisor of two inexact polynomials. <i>Calcolo</i> , 2012, 49, 241-267.	1.1	16
4	A non-linear structure preserving matrix method for the low rank approximation of the Sylvester resultant matrix. <i>Journal of Computational and Applied Mathematics</i> , 2010, 234, 3226-3242.	2.0	15
5	An improved non-linear method for the computation of a structured low rank approximation of the Sylvester resultant matrix. <i>Journal of Computational and Applied Mathematics</i> , 2013, 237, 253-268.	2.0	15
6	Resultant matrices and the computation of the degree of an approximate greatest common divisor of two inexact Bernstein basis polynomials. <i>Computer Aided Geometric Design</i> , 2013, 30, 410-429.	1.2	14
7	A resultant matrix for scaled Bernstein polynomials. <i>Linear Algebra and Its Applications</i> , 2000, 319, 179-191.	0.9	13
8	The transformation of the companion matrix resultant between the power and Bernstein polynomial bases. <i>Applied Numerical Mathematics</i> , 2004, 48, 113-126.	2.1	11
9	Structured matrix methods for CAGD: an application to computing the resultant of polynomials in the Bernstein basis. <i>Numerical Linear Algebra With Applications</i> , 2005, 12, 685-698.	1.6	11
10	Tikhonov regularisation in standard form for polynomial basis conversion. <i>Applied Mathematical Modelling</i> , 1997, 21, 651-662.	4.2	10
11	Condition numbers of a nearly singular simple root of a polynomial. <i>Applied Numerical Mathematics</i> , 2001, 38, 275-285.	2.1	10
12	The calculation of the degree of an approximate greatest common divisor of two polynomials. <i>Journal of Computational and Applied Mathematics</i> , 2011, 235, 1587-1603.	2.0	10
13	The computation of multiple roots of a polynomial. <i>Journal of Computational and Applied Mathematics</i> , 2012, 236, 3478-3497.	2.0	9
14	A non-linear structure-preserving matrix method for the computation of the coefficients of an approximate greatest common divisor of two Bernstein polynomials. <i>Journal of Computational and Applied Mathematics</i> , 2017, 320, 221-241.	2.0	9
15	The computation of the degree of an approximate greatest common divisor of two Bernstein polynomials. <i>Applied Numerical Mathematics</i> , 2017, 111, 17-35.	2.1	9
16	Polynomial basis conversion made stable by truncated singular value decomposition. <i>Applied Mathematical Modelling</i> , 1997, 21, 557-568.	4.2	8
17	The application of regularisation to variable selection in statistical modelling. <i>Journal of Computational and Applied Mathematics</i> , 2022, 404, 113884.	2.0	8
18	A unified approach to resultant matrices for Bernstein basis polynomials. <i>Computer Aided Geometric Design</i> , 2008, 25, 529-541.	1.2	6

#	ARTICLE	IF	CITATIONS
19	Structured matrix methods for the computation of multiple roots of a polynomial. Journal of Computational and Applied Mathematics, 2014, 272, 449-467.	2.0	6
20	Condition estimation for regression and feature selection. Journal of Computational and Applied Mathematics, 2020, 373, 112212.	2.0	6
21	Properties of the Companion Matrix Resultant for Bernstein Polynomials. , 2002, , 185-198.		5
22	High Order Terms for Condition Estimation of Univariate Polynomials. SIAM Journal of Scientific Computing, 2006, 28, 1420-1436.	2.8	4
23	Polynomial computations for blind image deconvolution. Linear Algebra and Its Applications, 2016, 502, 77-103.	0.9	4
24	A comparison of the average case numerical condition of the power and bernstein polynomial bases. International Journal of Computer Mathematics, 2001, 77, 583-602.	1.8	3
25	The numerical condition of univariate and bivariate degree elevated Bernstein polynomials. Journal of Computational and Applied Mathematics, 2006, 191, 32-49.	2.0	3
26	The computation of the degree of the greatest common divisor of three Bernstein basis polynomials. Journal of Computational and Applied Mathematics, 2020, 373, 112373.	2.0	3
27	Numerical and Algebraic Properties of Bernstein Basis Resultant Matrices. , 2005, , 107-118.		2
28	The Sylvester and Bézout Resultant Matrices for Blind Image Deconvolution. Journal of Mathematical Imaging and Vision, 2018, 60, 1284-1305.	1.3	2
29	An approximate factorisation of three bivariate Bernstein basis polynomials defined in a triangular domain. Journal of Computational and Applied Mathematics, 2021, 390, 113381.	2.0	2
30	A Class of Bernstein Polynomials that Satisfy Descartes's Rule of Signs Exactly. , 2000, , 424-437.		1
31	Backward Errors and Condition Numbers of Regular and Singular Points on Algebraic Curves. Lecture Notes in Computer Science, 2005, , 413-433.	1.3	1
32	The Sylvester Resultant Matrix and Image Deblurring. Lecture Notes in Computer Science, 2015, , 461-490.	1.3	1
33	A structure-preserving matrix method for the deconvolution of two Bernstein basis polynomials. Computer Aided Geometric Design, 2014, 31, 317-328.	1.2	0
34	The computation of the greatest common divisor of three bivariate Bernstein polynomials defined in a rectangular domain. Applied Numerical Mathematics, 2021, 166, 348-368.	2.1	0
35	A Comparison of Condition Numbers for the Full Rank Least Squares Problem. Lecture Notes in Computer Science, 2005, , 296-318.	1.3	0