JesÃºs M Carnicer

List of Publications by Year
in descending order

41 papers	623 citations	758635 12 h-index	610482 24 g-index
41 all docs	41 docs citations	41 times ranked	166 citing authors

#	Article	IF	Citations
1	Shape preserving representations and optimality of the Bernstein basis. Advances in Computational Mathematics, 1993, 1, 173-196.	0.8	151
2	Totally positive bases for shape preserving curve design and optimality of B-splines. Computer Aided Geometric Design, 1994, 11, 633-654.	0.5	117
3	Critical Length for Design Purposes and Extended Chebyshev Spaces. Constructive Approximation, 2003, 20, 55-71.	1.8	71
4	Least supported bases and local linear independence. Numerische Mathematik, 1994, 67, 289-301.	0.9	23
5	Convexity preserving interpolation and Powell-Sabin elements. Computer Aided Geometric Design, 1992, 9, 279-289.	0.5	22
6	Generation of lattices of points for bivariate interpolation. Numerical Algorithms, 2005, 39, 69-79.	1.1	18
7	On the progressive iteration approximation property and alternative iterations. Computer Aided Geometric Design, 2011, 28, 523-526.	0.5	17
8	Optimal stability of the Lagrange formula and conditioning of the Newton formula. Journal of Approximation Theory, 2019, 238, 52-66.	0.5	17
9	Interpolation lattices in several variables. Numerische Mathematik, 2006, 102, 559-581.	0.9	16
10	On the Critical Lengths of Cycloidal Spaces. Constructive Approximation, 2014, 39, 573-583.	1.8	14
11	Classification of Bivariate Configurations with Simple Lagrange Interpolation Formulae. Advances in Computational Mathematics, 2004, 20, 5-16.	0.8	13
12	Interpolation on lattices generated by cubic pencils. Advances in Computational Mathematics, 2006, 24, 113-130.	0.8	13
13	Weighted interpolation for equidistant nodes. Numerical Algorithms, 2010, 55, 223-232.	1.1	12
14	Richardson method and totally nonnegative linear systems. Linear Algebra and Its Applications, 2010, 433, 2010-2017.	0.4	12
15	Piecewise linear interpolants to Lagrange and Hermite convex scattered data. Numerical Algorithms, 1996, 13, 345-364.	1.1	11
16	Representing circles with five control points. Computer Aided Geometric Design, 2003, 20, 501-511.	0.5	9
17	Convexity preserving scattered data interpolation using Powellâ€“Sabin elements. Computer Aided Geometric Design, 2009, 26, 779-796.	0.5	9
18	Progressive iteration approximation and the geometric algorithm. CAD Computer Aided Design, 2012, 44, 143-145.	1.4	9

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19	Multivariate convexity preserving interpolation by smooth functions. Advances in Computational Mathematics, 1995, 3, 395-404.	0.8	8
20	Critical lengths of cycloidal spaces are zeros of Bessel functions. Calcolo, 2017, 54, 1521-1531.	0.6	8
21	Central orderings for the Newton interpolation formula. BIT Numerical Mathematics, 2019, 59, 371-386.	1.0	7
22	Generalized principal lattices and cubic pencils. Numerical Algorithms, 2007, 44, 133-145.	1.1	6
23	Interpolation on the disk. Numerical Algorithms, 2014, 66, 1-16.	1.1	6
24	Greville abscissae of totally positive bases. Computer Aided Geometric Design, 2016, 48, 60-74.	0.5	4
25	Optimal interval length for the collocation of the Newton interpolation basis. Numerical Algorithms, 2019, 82, 895-908.	1.1	4
26	Inverse central ordering for the Newton interpolation formula. Numerical Algorithms, 2022, 90, 1691-1713.	1.1	4
27	Cubic pencils of lines and bivariate interpolation. Journal of Computational and Applied Mathematics, 2008, 219, 370-382.	1.1	3
28	Configurations of nodes with defects greater than three. Journal of Computational and Applied Mathematics, 2010, 233, 1640-1648.	1.1	3
29	Interpolation with symmetric polynomials. Numerical Algorithms, 2017, 74, 1-18.	1.1	3
30	Roundoff errors for polynomial evaluation by a family of formulae. Computing (Vienna/New York), 2008, 82, 199-215.	3.2	2
31	Classification of sets satisfying the geometric characterization. Numerical Algorithms, 2009, 50, 145-154.	1.1	2
32	Richardsonâ€™s iterative method for surface interpolation. BIT Numerical Mathematics, 2013, 53, 385.	1.0	2
33	Extensions of planar GC sets and syzygy matrices. Advances in Computational Mathematics, 2019, 45, 655-673.	0.8	2
34	A Newton formula for generalized Berzolari-Radon sets. Advances in Computational Mathematics, 2015, 41, 373-386.	0.8	1
35	Multivariate polynomial interpolation using even and odd polynomials. BIT Numerical Mathematics, 2018, 58, 27-49.	1.0	1
36	A totally positive basis for circle approximations. Revista De La Real Academia De Ciencias Exactas, Fisicas Y Naturales - Serie A: Matematicas, 2019, 113, 3383-3397.	0.6	1

#	Article	IF	Citations
37	Conditioning of polynomial Fourier sums. Calcolo, 2019, 56, 1.	0.6	1
38	Stability properties of disk polynomials. Numerical Algorithms, 2021, 87, 119-135.	1.1	1
39	Some Recent Advances in Multivariate Polynomial Interpolation. AIP Conference Proceedings, 2007, , .	0.3	0
40	Interpolation mixing hyperbolic functions and polynomials. Rocky Mountain Journal of Mathematics, 2018, 48, .	0.2	0
41	Radonâ€™s construction and matrix relations generating syzygies. Monatshefte Fur Mathematik, 2020, 192, 311-332.	0.5	0