

# Domingo Barrera

## List of Publications by Year in descending order

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52  
papers

472  
citations

687363

13  
h-index

839539

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62  
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times ranked

213  
citing authors

#	ARTICLE	IF	CITATIONS
1	A novel construction of B-spline-like bases for a family of many knot spline spaces and their application to quasi-interpolation. <i>Journal of Computational and Applied Mathematics</i> , 2022, 404, 113761.	2.0	4
2	A new approach to deal with $></math> cubic splines and its application to super-convergent quasi-interpolation. Mathematics and Computers in Simulation, 2022, 194, 401-415.$	2.4	1
3	On numerical solution of Fredholm and Hammerstein integral equations via Nyström method and Gaussian quadrature rules for splines. <i>Applied Numerical Mathematics</i> , 2022, 174, 71-88.	2.1	6
4	Variability estimation in resistive switching devices, a numerical and kinetic Monte Carlo perspective. <i>Microelectronic Engineering</i> , 2022, 257, 111736.	2.4	15
5	Superconvergent Nyström and Degenerate Kernel Methods for Integro-Differential Equations. <i>Mathematics</i> , 2022, 10, 893.	2.2	1
6	C1-Quartic Butterfly-Spline Interpolation on Type-1 Triangulations. <i>Springer Proceedings in Mathematics and Statistics</i> , 2021, , 11-26.	0.2	0
7	On nonpolynomial monotonicity-preserving $C^1$ spline interpolation. <i>Computational and Mathematical Methods</i> , 2021, 3, e1160.	0.8	4
8	Quasi-Interpolation in a Space of $C^2$ Sextic Splines over Powell-Sabin Triangulations. <i>Mathematics</i> , 2021, 9, 2276.	2.2	2
9	Non-Uniform Spline Quasi-Interpolation to Extract the Series Resistance in Resistive Switching Memristors for Compact Modeling Purposes. <i>Mathematics</i> , 2021, 9, 2159.	2.2	9
10	A geometric characterization of Powell-Sabin triangulations allowing the construction of $C^2$ quartic splines. <i>Computers and Mathematics With Applications</i> , 2021, 100, 30-40.	2.7	1
11	Non-uniform quasi-interpolation for solving Hammerstein integral equations. <i>International Journal of Computer Mathematics</i> , 2020, 97, 72-84.	1.8	11
12	A trivariate near-best blending quadratic quasi-interpolant. <i>Mathematics and Computers in Simulation</i> , 2020, 176, 25-35.	4.4	3
13	A quasi-interpolation product integration based method for solving Love's integral equation with a very small parameter. <i>Mathematics and Computers in Simulation</i> , 2020, 172, 213-223.	4.4	4
14	Uniform algebraic hyperbolic spline quasi-interpolant based on mean integral values. <i>Computational and Mathematical Methods</i> , 2020, , e1123.	0.8	2
15	Quasi-interpolation by $C^2$ quartic splines on type-1 triangulations. <i>Journal of Computational and Applied Mathematics</i> , 2019, 349, 209-219.	2.0	9
16	Point and differential $C^1$ quasi-interpolation on three direction meshes. <i>Journal of Computational and Applied Mathematics</i> , 2019, 354, 373-389.	2.0	1
17	A spline quasi-interpolation based method to obtain the reset voltage in Resistive RAMs in the charge-flux domain. <i>Journal of Computational and Applied Mathematics</i> , 2019, 354, 326-333.	2.0	7
18	Two methods based on bivariate spline quasi-interpolants for solving Fredholm integral equations. <i>Applied Numerical Mathematics</i> , 2018, 127, 78-94.	2.1	13

#	ARTICLE	IF	CITATIONS
19	Trivariate near-best blending spline quasi-interpolation operators. Numerical Algorithms, 2018, 78, 217-241.	1.9	5
20	Hermite spline interpolation on a three direction mesh from Powell's Sabin and Hsieh's Clough's Tocher finite elements. Journal of Computational and Applied Mathematics, 2017, 318, 565-579.	2.0	2
21	Polynomial pattern finding in scattered data. Journal of Computational and Applied Mathematics, 2017, 318, 107-116.	2.0	4
22	On the construction of trivariate near-best quasi-interpolants based on $\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si121.gif" display="inline" overflow="scroll" \rangle \langle \text{mml:msup} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mi} \rangle C \langle \text{mml:mi} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mn} \rangle 2 \langle \text{mml:mn} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mn} \rangle 9 \langle \text{mml:mn} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mn} \rangle 1$ quartic splines on type-6 tetrahedral partitions. Journal of Computational and Applied Mathematics, 2017, 311, 252-261.	2.0	9
23	Minimizing B-spline knots in representative road axis from GPS points cloud. Mathematical Methods in the Applied Sciences, 2016, 39, 4773-4779.	2.3	3
24	A fitted B-spline method to derive a representative 3D axis from a set of multiple road traces. Geocarto International, 2016, 31, 832-844.	3.5	6
25	A new parameter to characterize the charge transport regime in Ni/HfO <sub>2</sub> /Si-n <sup>+</sup> -based RRAMs. Solid-State Electronics, 2016, 118, 56-60.	1.4	28
26	Inferring Mean Road Axis from Big Data: Sorted Points Cloud Belonging to Traces. Advances in Intelligent Systems and Computing, 2015, , 443-453.	0.6	2
27	A general spline differential quadrature method based on quasi-interpolation. Journal of Computational and Applied Mathematics, 2015, 275, 465-479.	2.0	14
28	On spline-based differential quadrature. Journal of Computational and Applied Mathematics, 2015, 275, 272-280.	2.0	6
29	Close-range photogrammetry applied to the documentation of cultural heritage using telescopic and wide-angle lenses. Imaging Science Journal, 2014, 62, 387-394.	0.5	6
30	Increasing the approximation order of spline quasi-interpolants. Journal of Computational and Applied Mathematics, 2013, 252, 27-39.	2.0	12
31	A second look at the interpolatory background of the Euler's Maclaurin quadrature formula. Applied Mathematics and Computation, 2013, 220, 608-615.	2.2	0
32	Construction techniques for multivariate modified quasi-interpolants with high approximation order. Computers and Mathematics With Applications, 2013, 65, 29-41.	2.7	4
33	An Inversion-Charge Analytical Model for Square Gate-All-Around MOSFETs. IEEE Transactions on Electron Devices, 2011, 58, 2854-2861.	3.0	12
34	An analytical model for square GAA MOSFETs including quantum effects. Solid-State Electronics, 2010, 54, 1463-1469.	1.4	28
35	On near-best discrete quasi-interpolation on a four-directional mesh. Journal of Computational and Applied Mathematics, 2010, 233, 1470-1477.	2.0	27
36	Filling polygonal holes with minimal energy surfaces on Powell's Sabin type triangulations. Journal of Computational and Applied Mathematics, 2010, 234, 1058-1068.	2.0	9

#	ARTICLE	IF	CITATIONS
37	Optimal bivariate $C^1$ cubic quasi-interpolation on a type-2 triangulation. Journal of Computational and Applied Mathematics, 2010, 234, 1188-1199.	2.0	12
38	A general method for constructing quasi-interpolants from B-splines. Journal of Computational and Applied Mathematics, 2010, 234, 1324-1337.	2.0	17
39	A homogeneity test for bivariate random variables. Computational Statistics, 2009, 24, 513-531.	1.5	3
40	Minimizing the quasi-interpolation error for bivariate discrete quasi-interpolants. Journal of Computational and Applied Mathematics, 2009, 224, 250-268.	2.0	9
41	Near-best operators based on a quartic spline on the uniform four-directional mesh. Mathematics and Computers in Simulation, 2008, 77, 151-160.	4.4	9
42	Near-Best Univariate Spline Discrete Quasi-Interpolants on Nonuniform Partitions. Constructive Approximation, 2008, 28, 237-251.	3.0	25
43	Minimal energy $C^1$ -surfaces on uniform Powell-Sabin type meshes. Mathematics and Computers in Simulation, 2008, 77, 161-169.	4.4	14
44	A recursive method for computing interpolants. Journal of Computational and Applied Mathematics, 2008, 216, 435-450.	2.0	1
45	Minimal energy $C^1$ -surfaces on uniform Powell-Sabin type meshes for noisy data. Journal of Computational and Applied Mathematics, 2008, 218, 592-602.	2.0	10
46	Bernstein-Bézier representation and near-minimally normed discrete quasi-interpolation operators. Applied Numerical Mathematics, 2008, 58, 59-68.	2.1	13
47	Minimal energy surfaces on Powell-Sabin type triangulations. Applied Numerical Mathematics, 2008, 58, 635-645.	2.1	15
48	Subdivision Scheme of Quartic Bivariate Splines on a Four-Directional Mesh. ESAIM: Proceedings and Surveys, 2007, 20, 16-28.	0.4	1
49	Near minimally normed spline quasi-interpolants on uniform partitions. Journal of Computational and Applied Mathematics, 2005, 181, 211-233.	2.0	23
50	Near-best quasi-interpolants associated with $C^1$ surfaces on uniform Powell-Sabin type meshes. Journal of Computational and Applied Mathematics, 2005, 181, 235-250.	2.0	30
51	A homogeneity test based on empirical characteristic functions. Computational Statistics, 2001, 16, 255-270.	1.5	12
52	A mixed hyperbolic/trigonometric non-stationary subdivision scheme for arbitrary topology meshes. Mathematical Methods in the Applied Sciences, 0, , .	2.3	0