

# Domingo Barrera

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/7202967/publications.pdf>

Version: 2024-02-01

52

papers

472

citations

687363

13

h-index

839539

18

g-index

62

all docs

62

docs citations

62

times ranked

213

citing authors

#	ARTICLE	IF	CITATIONS
1	et quasi-interpolants associated with <math altimg="si8.gif" overflow="scroll">xmns:xocs= "http://www.elsevier.com/xml/xocs/dtd" xmns:xs= "http://www.w3.org/2001/XMLSchema" xmns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmns="http://www.elsevier.com/xml/ja/dtd" xmns:ja="http://www.elsevier.com/xml/ja/dtd" xmns:mml="http://www.w3.org/1998/Math/MathML" xmns:tb="http://www.elsevier.com/xml/common/table/dtd" xmns:sb="http://www.elsevier.com/xml/common/struct-bib/dtd" xmns:ce="http://www.. Journal of Co An analytical model for square GAA MOSFETs including quantum effects. Solid-State Electronics, 2010, 54, 1463-1469.	2.0	30
2	A new parameter to characterize the charge transport regime in Ni/HfO <sub>2</sub> /Si-n + -based RRAMs. Solid-State Electronics, 2016, 118, 56-60.	1.4	28
3	On near-best discrete quasi-interpolation on a four-directional mesh. Journal of Computational and Applied Mathematics, 2010, 233, 1470-1477.	2.0	27
4	Near-Best Univariate Spline Discrete Quasi-Interpolants on Nonuniform Partitions. Constructive Approximation, 2008, 28, 237-251.	3.0	25
5	Near minimally normed spline quasi-interpolants on uniform partitions. Journal of Computational and Applied Mathematics, 2005, 181, 211-233.	2.0	23
6	A general method for constructing quasi-interpolants from B-splines. Journal of Computational and Applied Mathematics, 2010, 234, 1324-1337.	2.0	17
7	Minimal energy surfaces on Powellâ€“Sabin type triangulations. Applied Numerical Mathematics, 2008, 58, 635-645.	2.1	15
8	Variability estimation in resistive switching devices, a numerical and kinetic Monte Carlo perspective. Microelectronic Engineering, 2022, 257, 111736.	2.4	15
9	Minimal energy -surfaces on uniform Powell-Sabin type meshes. Mathematics and Computers in Simulation, 2008, 77, 161-169.	4.4	14
10	A general spline differential quadrature method based on quasi-interpolation. Journal of Computational and Applied Mathematics, 2015, 275, 465-479.	2.0	14
11	Bernsteinâ€“BÃ©zier representation and near-minimally normed discrete quasi-interpolation operators. Applied Numerical Mathematics, 2008, 58, 59-68.	2.1	13
12	Two methods based on bivariate spline quasi-interpolants for solving Fredholm integral equations. Applied Numerical Mathematics, 2018, 127, 78-94.	2.1	13
13	A homogeneity test based on empirical characteristic functions. Computational Statistics, 2001, 16, 255-270.	1.5	12
14	Optimal bivariate <math altimg="si28.gif" display="block">\mathcal{O}(\min(m_1, m_2))\text{-time algorithm for computing the optimal bivariate quasi-interpolation on a type-2 triangulation. Journal of Computational and Applied Mathematics, 2010, 234, 1100-1109.}	2.1	12
15	An Inversion-Charge Analytical Model for Square Gate-All-Around MOSFETs. IEEE Transactions on Electron Devices, 2011, 58, 2854-2861.	3.0	12
16	Increasing the approximation order of spline quasi-interpolants. Journal of Computational and Applied Mathematics, 2013, 252, 27-39.	2.0	12
17	Non-uniform quasi-interpolation for solving Hammerstein integral equations. International Journal of Computer Mathematics, 2020, 97, 72-84.	1.8	11

#	ARTICLE	IF	CITATIONS
19	Minimal energy $\langle \text{mml:math} \text{ xmlns:mml="http://www.w3.org/1998/Math/MathML"} \text{ altimg="si131.gif" overflow="scroll" } \rangle \langle \text{mml:msup} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mi} \rangle C \langle / \text{mml:mi} \rangle \langle / \text{mml:mrow} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mi} \rangle r \langle / \text{mml:mi} \rangle \langle / \text{mml:mrow} \rangle \langle / \text{mml:math} \rangle$ on uniform Powellâ€“Sabin-type meshes for noisy data. <i>Journal of Computational and Applied Mathematics</i> , 2008, 218, 592-602.	2.0	10
20	Near-best operators based on a quartic spline on the uniform four-directional mesh. <i>Mathematics and Computers in Simulation</i> , 2008, 77, 151-160.	4.4	9
21	Minimizing the quasi-interpolation error for bivariate discrete quasi-interpolants. <i>Journal of Computational and Applied Mathematics</i> , 2009, 224, 250-268.	2.0	9
22	Filling polygonal holes with minimal energy surfaces on Powellâ€“Sabin type triangulations. <i>Journal of Computational and Applied Mathematics</i> , 2010, 234, 1058-1068.	2.0	9
23	On the construction of trivariate near-best quasi-interpolants based on $\langle \text{mml:math} \text{ xmlns:mml="http://www.w3.org/1998/Math/MathML"} \text{ altimg="si121.gif" display="inline" } \rangle \langle \text{mml:msup} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mi} \rangle C \langle / \text{mml:mi} \rangle \langle / \text{mml:mrow} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mn} \rangle 2 \langle / \text{mml:mn} \rangle \langle / \text{mml:mrow} \rangle \langle / \text{mml:math} \rangle$ quartic splines on type-6 tetrahedral partitions. <i>Journal of Computational and Applied Mathematics</i> , Quasi-interpolation by $\langle \text{mml:math} \text{ xmlns:mml="http://www.w3.org/1998/Math/MathML"} \text{ id="mml288" display="inline" overflow="scroll" altimg="si57.gif" } \rangle \langle \text{mml:msup} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mi} \rangle C \langle / \text{mml:mi} \rangle \langle / \text{mml:mrow} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mn} \rangle 1 \langle / \text{mml:mn} \rangle \langle / \text{mml:mrow} \rangle \langle / \text{mml:math} \rangle$ quartic splines on type-1 triangulations. <i>Journal of Computational and Applied Mathematics</i> , 2019, 349, 225-238.	2.0	9
24	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
25	Point and differential $\langle \text{mml:math} \text{ xmlns:mml="http://www.w3.org/1998/Math/MathML"} \text{ id="mml137" display="inline" overflow="scroll" altimg="si137.gif" } \rangle \langle \text{mml:msup} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mi} \rangle C \langle / \text{mml:mi} \rangle \langle / \text{mml:mrow} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mn} \rangle 1 \langle / \text{mml:mn} \rangle \langle / \text{mml:mrow} \rangle \langle / \text{mml:math} \rangle$ quasi-interpolation on three direction meshes. <i>Journal of Computational and Applied Mathematics</i> , 2019, 354, 373-389.	2.0	9
26	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
27	Close-range photogrammetry applied to the documentation of cultural heritage using telescopic and wide-angle lenses. <i>Imaging Science Journal</i> , 2014, 62, 387-394.	0.5	6
28	On spline-based differential quadrature. <i>Journal of Computational and Applied Mathematics</i> , 2015, 275, 272-280.	2.0	6
29	A fitted B-spline method to derive a representative 3D axis from a set of multiple road traces. <i>Geocarto International</i> , 2016, 31, 832-844.	3.5	6
30	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
31	Trivariate near-best blending spline quasi-interpolation operators. <i>Numerical Algorithms</i> , 2018, 78, 217-241.	1.9	5
32	Construction techniques for multivariate modified quasi-interpolants with high approximation order. <i>Computers and Mathematics With Applications</i> , 2013, 65, 29-41.	2.7	4
33	Polynomial pattern finding in scattered data. <i>Journal of Computational and Applied Mathematics</i> , 2017, 318, 107-116.	2.0	4
34	A quasi-interpolation product integration based method for solving Loveâ€™s integral equation with a very small parameter. <i>Mathematics and Computers in Simulation</i> , 2020, 172, 213-223.	4.4	4
35	On nonpolynomial monotonicity-preserving C 1 spline interpolation. <i>Computational and Mathematical Methods</i> , 2021, 3, e1160.	0.8	4

#	ARTICLE	IF	CITATIONS
37	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
38	A homogeneity test for bivariate random variables. <i>Computational Statistics</i> , 2009, 24, 513-531.	1.5	3
39	Minimizing B-spline knots in representative road axis from GPS points cloud. <i>Mathematical Methods in the Applied Sciences</i> , 2016, 39, 4773-4779.	2.3	3
40	A trivariate near-best blending quadratic quasi-interpolant. <i>Mathematics and Computers in Simulation</i> , 2020, 176, 25-35.	4.4	3
41	A new approach to deal with $\langle \text{mml:math} \text{ xmlns:mml='http://www.w3.org/1998/Math/MathML'} \text{ display='block' id='d1e4605' altimg='si163.svg' } \rangle \langle \text{mml:msup} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mi} \rangle C \langle / \text{mml:mi} \rangle \langle / \text{mml:mrow} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mn} \rangle 2 \langle / \text{mml:mn} \rangle \langle / \text{mml:mrow} \rangle \langle / \text{mml:msup} \rangle$ cubic splines and its application to super-convergent quasi-interpolation. <i>Mathematics and Computers in Simulation</i> , 2022, 194, 101-115.	4.4	3
42	Inferring Mean Road Axis from Big Data: Sorted Points Cloud Belonging to Traces. <i>Advances in Intelligent Systems and Computing</i> , 2015, , 443-453.	0.6	2
43	Hermite spline interpolation on a three direction mesh from Powell-Sabin and Hsieh-Clough-Tocher finite elements. <i>Journal of Computational and Applied Mathematics</i> , 2017, 318, 565-579.	2.0	2
44	Uniform algebraic hyperbolic spline quasi-interpolant based on mean integral values. <i>Computational and Mathematical Methods</i> , 2020, , e1123.	0.8	2
45	Quasi-Interpolation in a Space of C2 Sextic Splines over Powell-Sabin Triangulations. <i>Mathematics</i> , 2021, 9, 2276.	2.2	2
46	Subdivision Scheme of Quartic Bivariate Splines on a Four-Directional Mesh. <i>ESAIM: Proceedings and Surveys</i> , 2007, 20, 16-28.	0.4	1
47	A recursive method for computing interpolants. <i>Journal of Computational and Applied Mathematics</i> , 2008, 216, 435-450.	2.0	1
48	A geometric characterization of Powell-Sabin triangulations allowing the construction of C2 quartic splines. <i>Computers and Mathematics With Applications</i> , 2021, 100, 30-40.	2.7	1
49	Superconvergent Nyström and Degenerate Kernel Methods for Integro-Differential Equations. <i>Mathematics</i> , 2022, 10, 893.	2.2	1
50	A second look at the interpolatory background of the Euler-Maclaurin quadrature formula. <i>Applied Mathematics and Computation</i> , 2013, 220, 608-615.	2.2	0
51	C1-Quartic Butterfly-Spline Interpolation on Type-1 Triangulations. <i>Springer Proceedings in Mathematics and Statistics</i> , 2021, , 11-26.	0.2	0
52	A mixed hyperbolic/trigonometric non-stationary subdivision scheme for arbitrary topology meshes. <i>Mathematical Methods in the Applied Sciences</i> , 0, , .	2.3	0