Elias Berriochoa

List of Publications by Year
in descending order

53 papers	165 citations	1307594 7 h-index	1372567 10 g-index
54 all docs	54 docs citations	54 times ranked	50 citing authors

#	Article	IF	Citations
1	Strong Asymptotics for the Continuous Sobolev Orthogonal Polynomials on the Unit Circle. Journal of Approximation Theory, 1999, 100, 381-391.	0.8	11
2	Algorithms for solving Hermite interpolation problems using the Fast Fourier Transform. Journal of Computational and Applied Mathematics, 2010, 235, 882-894.	2.0	11
3	Shooting out the slate: working with flaked arrowheads made on thin-layered rocks. Journal of Archaeological Science, 2011, 38, 1939-1948.	2.4	11
4	Connection between orthogonal polynomials on the unit circle and bounded interval. Journal of Computational and Applied Mathematics, 2005, 177, 205-223.	2.0	10
5	Gibbs phenomenon in the Hermite interpolation on the circle. Applied Mathematics and Computation, 2015, 253, 274-286.	2.2	9
6	Some improvements to the Hermiteâ€“FejÃ©r interpolation on the circle and bounded interval. Computers and Mathematics With Applications, 2011, 61, 1228-1240.	2.7	8
7	Lebesgue Sobolev orthogonality on the unit circle. Journal of Computational and Applied Mathematics, 1998, 96, 27-34.	2.0	7
8	A family of Sobolev orthogonal polynomials on the unit circle. Journal of Computational and Applied Mathematics, 1999, 105, 163-173.	2.0	7
9	A characterization of the four Chebyshev orthogonal families. International Journal of Mathematics and Mathematical Sciences, 2005, 2005, 2071-2079.	0.7	7
10	A new numerical quadrature formula on the unit circle. Numerical Algorithms, 2007, 44, 391-401.	1.9	5
11	An Extension of FejÃ©râ€™s Condition for Hermite Interpolation. Complex Analysis and Operator Theory, 2012, 6, 651-664.	0.6	5
12	Rate of Convergence of Hermite-FejÃ©r Interpolation on the Unit Circle. Journal of Applied Mathematics, 2013, 2013, 1-8.	0.9	5
13	Gibbsâ€“Wilbraham phenomenon on Lagrange interpolation based on analytic weights on the unit circle. Journal of Computational and Applied Mathematics, 2020, 365, 112376.	2.0	5
14	Strong asymptotics inside the unit disk for Sobolev orthogonal polynomials. Computers and Mathematics With Applications, 2002, 44, 253-261.	2.7	4
15	On the Strong Asymptotics for Sobolev Orthogonal Polynomials on the Circle. Constructive Approximation, 2003, 19, 299-307.	3.0	4
16	An interpolation problem on the circle between Lagrange and Hermite problems. Journal of Approximation Theory, 2017, 215, 118-144.	0.8	4
17	Polynomials with minimal norm and new results in SzegÅ‘s theory. Complex Variables and Elliptic Equations, 2000, 43, 151-167.	0.2	3
18	Algorithms and convergence for Hermite interpolation based on extended Chebyshev nodal systems. Applied Mathematics and Computation, 2014, 234, 223-236.	2.2	3

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19	Gauss rules associated with nearly singular weights. Applied Numerical Mathematics, 2015, 91, 1-10.	2.1	3
20	Convergence of Hermite interpolants on the circle using two derivatives. Journal of Computational and Applied Mathematics, 2015, 284, 58-68.	2.0	3
21	Gibbsâ€"Wilbraham oscillation related to an Hermite interpolation problem on the unit circle. Journal of Computational and Applied Mathematics, 2018, 344, 657-675.	2.0	3
22	Mechanical Models for Hermite Interpolation on the Unit Circle. Mathematics, 2021, 9, 1043.	2.2	3
23	Nodal systems with maximal domain of exactness for Gaussian quadrature formulas. Journal of Computational and Applied Mathematics, 2008, 212, 272-281.	2.0	2
24	Characterizing the measures on the unit circle with exact quadrature formulas in the space of polynomials. Computers and Mathematics With Applications, 2009, 58, 1370-1382.	2.7	2
25	Chebyshev series method for computing weighted quadrature formulas. Applied Mathematics and Computation, 2011, 218, 4437-4447.	2.2	2
26	About measures and nodal systems for which the Hermite interpolants uniformly converge to continuous functions on the circle and interval. Applied Mathematics and Computation, 2011, 218, 4813-4813.	2.2	2
27	On the asymptotic constant for the rate of Hermiteâ€"FejÃ©r convergence on Chebyshev nodes. Acta Mathematica Hungarica, 2015, 147, 32-45.	0.5	2
28	SzegÅ' transformation and zeros of analytic perturbations of Chebyshev weights. Journal of Mathematical Analysis and Applications, 2019, 470, 571-583.	1.0	2
29	Classical Lagrange Interpolation Based on General Nodal Systems at Perturbed Roots of Unity. Mathematics, 2020, 8, 498.	2.2	2
30	A SYSTEM OF BIORTHOGONAL TRIGONOMETRIC POLYNOMIALS. , 2007, , .		2
31	The Gibbsâ€"Wilbraham phenomenon in the approximation of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" id="d1e870" altimg="si5.svg"><mml:mrow><mml:mo>|</mml:mo><mml:mi>x</mml:mi><mml:mo>|</mml:mo></mml:mrow></mml:math> by using Lagrange interpolation on the Chebyshevâ€"Lobatto nodal systems. Journal of Computational and Applied Mathematics, 2022, 414, 114403.	2.0	2
32	Bernstein-szegÃ¶-lebesgue sobolev orthogonal polynomials on the unit circle. Journal of Difference Equations and Applications, 2000, 6, 719-737.	1.1	1
33	Extension inside the disk of asymptotics for Sobolev orthogonal polynomials. Computers and Mathematics With Applications, 2003, 46, 1263-1272.	2.7	1
34	A necessary condition for the extension of SzegÅ''s asymptotics inside the disk in the Sobolev case. Journal of Computational and Applied Mathematics, 2003, 153, 73-78.	2.0	1
35	Asymptotic properties of Chebyshevâ€"Sobolev orthogonal polynomials. Journal of Computational and Applied Mathematics, 2005, 178, 63-74.	2.0	1
36	Connections between Interval and Unit Circle for Sobolev Orthogonal Polynomials. Strong Asymptotics on the Real Line. Acta Applicandae Mathematicae, 2005, 86, 221-236.	1.0	1

#	Article	IF	Citations
37	Quasi-orthogonality properties and orthogonality with respect to the Chebyshev perturbation of a Bernstein measure. Integral Transforms and Special Functions, 2006, 17, 485-497.	1.2	1
38	About a system of anti-periodic trigonometric functions. Computers and Mathematics With Applications, 2008, 56, 1526-1537.	2.7	1
39	Characterizing curves satisfying the Gaussâ€“Christoffel theorem. Journal of Computational and Applied Mathematics, 2009, 233, 630-633.	2.0	1
40	About Nodal Systems for Lagrange Interpolation on the Circle. Journal of Applied Mathematics, 2012, 2012, 1-11.	0.9	1
41	Asymptotic constants for the error of Hermite-FejÃ©r interpolation on the unit circle. Electronic Notes in Discrete Mathematics, 2013, 43, 397-400.	0.4	1
42	Modified Gauss rules for approximate calculation of some strongly singular integrals. Electronic Notes in Discrete Mathematics, 2013, 43, 411-416.	0.4	1
43	Hermite Interpolation on the Unit Circle Considering up to the Second Derivative. ISRN Mathematical Analysis, 2014, 2014, 1-10.	0.4	1
44	Algorithms, Convergence and Rate of Convergence for an Interpolation Model Between Lagrange and Hermite. Results in Mathematics, 2018, 73, 1.	0.8	1
45	A study of the generalized Christoffel functions with applications. Methods and Applications of Analysis, 1999, 6, 327-336.	0.5	1
46	Title is missing!. Acta Applicandae Mathematicae, 2000, 61, 81-86.	1.0	0
47	Differential properties for Sobolev orthogonality on the unit circle. Journal of Computational and Applied Mathematics, 2001, 133, 231-239.	2.0	0
48	Differential properties for a class of Sobolev orthogonal polynomials. Journal of Computational and Applied Mathematics, 2002, 146, 361-372.	2.0	0
49	Asymptotics on the support for sobolev orthogonal polynomials on a bounded interval. Computers and Mathematics With Applications, 2005, 50, 381-391.	2.7	0
50	Complex measures having quadrature formulae with optimal exactness. Acta Mathematica Hungarica, 2010, 126, 51-64.	0.5	0
51	A bi-orthogonal system of trigonometric functions. Integral Transforms and Special Functions, 2010, 21, 57-74.	1.2	0
52	Quadrature rules for polynomial modifications of Bernstein measures exact for analytic functions. Integral Transforms and Special Functions, 2010, 21, 409-422.	1.2	0
53	A note on the rate of convergence for Chebyshev-Lobatto and Radau systems. Open Mathematics, 2016, 14, 156-166.	1.0	0