

Francisco ArÃ¡ndiga

List of Publications by Year in descending order

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papers

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52
all docs

52
docs citations

52
times ranked

341
citing authors

#	ARTICLE	IF	CITATIONS
1	Monotone cubic spline interpolation for functions with a strong gradient. Applied Numerical Mathematics, 2022, 172, 591-607.	1.2	4
2	Adaptive interpolation with maximum order close to discontinuities. Applied Mathematics and Computation, 2022, 418, 126795.	1.4	0
3	A Spatial-Temporal Model for the Evolution of the COVID-19 Pandemic in Spain Including Mobility. Mathematics, 2020, 8, 1677.	1.1	26
4	On the reconstruction of discontinuous functions using multiquadric RBF-WENO local interpolation techniques. Mathematics and Computers in Simulation, 2020, 176, 4-24.	2.4	8
5	Adaptive rational interpolation for cell-average. Applied Mathematics Letters, 2020, 107, 106393.	1.5	1
6	Third-order accurate monotone cubic Hermite interpolants. Applied Mathematics Letters, 2019, 94, 73-79.	1.5	5
7	Adaptive rational interpolation for point values. Journal of Computational and Applied Mathematics, 2019, 349, 212-224.	1.1	4
8	Generalizing the ENO-DB2p transform using the inverse wavelet transform. Numerical Algorithms, 2017, 74, 175-198.	1.1	0
9	Non-separable local polynomial regression cell-average multiresolution operators. Application to compression of images. Journal of the Franklin Institute, 2016, 353, 670-687.	1.9	0
10	The PCHIP subdivision scheme. Applied Mathematics and Computation, 2016, 272, 28-40.	1.4	8
11	Non-consistent cell-average multiresolution operators with application to image processing. Applied Mathematics and Computation, 2016, 272, 208-222.	1.4	0
12	A nonlinear algorithm for monotone piecewise bicubic interpolation. Applied Mathematics and Computation, 2016, 272, 100-113.	1.4	14
13	Reconstructions that Combine Cell Average Interpolation with Least Squares Fitting. Applied Mathematics and Information Sciences, 2016, 10, 173-184.	0.7	0
14	Cell average image transform algorithms with exact error control. Numerical Algorithms, 2015, 69, 75-93.	1.1	0
15	Reconstructions that combine interpolation with least squares fitting. Applied Numerical Mathematics, 2015, 97, 30-41.	1.2	8
16	Non-linear Local Polynomial Regression Multiresolution Methods Using ℓ^1 -norm Minimization with Application to Signal Processing. Lecture Notes in Computer Science, 2015, , 16-31.	1.0	0
17	Weights Design For Maximal Order WENO Schemes. Journal of Scientific Computing, 2014, 60, 641-659.	1.1	22
18	Cell-average multiresolution based on local polynomial regression. Application to image processing. Applied Mathematics and Computation, 2014, 245, 1-16.	1.4	9

#	ARTICLE	IF	CITATIONS
19	Signal Denoising with Harten's Multiresolution Using Interpolation and Least Squares Fitting. SEMA SIMAI Springer Series, 2014, , 137-145.	0.4	0
20	On the Order of Nonuniform Monotone Cubic Hermite Interpolants. SIAM Journal on Numerical Analysis, 2013, 51, 2613-2633.	1.1	8
21	Learning-based multiresolution transforms with application to image compression. Signal Processing, 2013, 93, 2474-2484.	2.1	7
22	Generalized wavelets design using Kernel methods. Application to signal processing. Journal of Computational and Applied Mathematics, 2013, 250, 1-15.	1.1	9
23	A new class of non-linear monotone Hermite interpolants. Advances in Computational Mathematics, 2013, 39, 289-309.	0.8	6
24	Lossless and near-lossless image compression based on multiresolution analysis. Journal of Computational and Applied Mathematics, 2013, 242, 70-81.	1.1	10
25	Non-separable two-dimensional weighted ENO interpolation. Applied Numerical Mathematics, 2012, 62, 975-987.	1.2	2
26	Design of Multiresolution Operators Using Statistical Learning Tools: Application to Compression of Signals. Lecture Notes in Computer Science, 2012, , 94-108.	1.0	1
27	Weighted-Power p Nonlinear Subdivision Schemes. Lecture Notes in Computer Science, 2012, , 109-129.	1.0	2
28	Analysis of WENO Schemes for Full and Global Accuracy. SIAM Journal on Numerical Analysis, 2011, 49, 893-915.	1.1	91
29	Point-Value WENO Multiresolution Applications to Stable Image Compression. Journal of Scientific Computing, 2010, 43, 158-182.	1.1	40
30	Edge detection insensitive to changes of illumination in the image. Image and Vision Computing, 2010, 28, 553-562.	2.7	17
31	Approximation of piecewise smooth functions and images by edge-adapted (ENO-EA) nonlinear multiresolution techniques. Applied and Computational Harmonic Analysis, 2008, 24, 225-250.	1.1	50
32	Stability Through Synchronization in Nonlinear Multiscale Transformations. SIAM Journal of Scientific Computing, 2007, 29, 265-289.	1.3	19
33	Vector cell-average multiresolution based on Hermite interpolation. Advances in Computational Mathematics, 2007, 28, 1-22.	0.8	6
34	Image compression based on a multi-directional map-dependent algorithm. Applied and Computational Harmonic Analysis, 2007, 23, 181-197.	1.1	11
35	Cell-Average Multiwavelets Based on Hermite Interpolation. , 2006, , 654-661.		0
36	Lossless and near-lossless image compression based on multiresolution analysis. , 2005, , .		1

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37	Interpolation and Approximation of Piecewise Smooth Functions. SIAM Journal on Numerical Analysis, 2005, 43, 41-57.	1.1	45
38	Discrete multiresolution based on hermite interpolation: computing derivatives. Communications in Nonlinear Science and Numerical Simulation, 2004, 9, 263-273.	1.7	17
39	Weighted ENO interpolation and applications. Communications in Nonlinear Science and Numerical Simulation, 2004, 9, 187-195.	1.7	20
40	Morse Description and Geometric Encoding of Digital Elevation Maps. IEEE Transactions on Image Processing, 2004, 13, 1245-1262.	6.0	25
41	Adaptive interpolation of images. Signal Processing, 2003, 83, 459-464.	2.1	27
42	Morse Description and Geometric Encoding of Digital Elevation Maps. , 2003, , 303-312.		1
43	Tensor product multiresolution analysis with error control for compact image representation. Signal Processing, 2002, 82, 587-608.	2.1	63
44	Data Compression with ENO Schemes: A Case Study. Applied and Computational Harmonic Analysis, 2001, 11, 273-288.	1.1	51
45	Nonlinear multiscale decompositions: The approach of A. Harten. Numerical Algorithms, 2000, 23, 175-216.	1.1	116
46	Multiresolution Based on Weighted Averages of the Hat Function I: Linear Reconstruction Techniques. SIAM Journal on Numerical Analysis, 1998, 36, 160-203.	1.1	41
47	Multiresolution Based on Weighted Averages of the Hat Function II: Nonlinear Reconstruction Techniques. SIAM Journal of Scientific Computing, 1998, 20, 1053-1093.	1.3	28
48	Multiresolution Standard Form of a Matrix. SIAM Journal on Numerical Analysis, 1996, 33, 417-434.	1.1	10
49	Multiresolution approach to the approximation of the leading eigenelements of some neutron transport operators. Transport Theory and Statistical Physics, 1996, 25, 121-149.	0.4	1
50	Fast Multiresolution Algorithms for Solving Linear Equations: A Comparative Study. SIAM Journal of Scientific Computing, 1995, 16, 581-600.	1.3	7
51	Approximations of positive operators and continuity of the spectral radius II. Mathematische Zeitschrift, 1992, 209, 547-558.	0.4	3