

# Bin Han

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/4602908/publications.pdf>

Version: 2024-02-01

82  
papers

3,262  
citations

159585

30  
h-index

149698

56  
g-index

82  
all docs

82  
docs citations

82  
times ranked

582  
citing authors

#	ARTICLE	IF	CITATIONS
1	Analysis and Convergence of Hermite Subdivision Schemes. Foundations of Computational Mathematics, 2023, 23, 165-218.	2.5	3
2	Multivariate quasi-tight framelets with high balancing orders derived from any compactly supported refinable vector functions. Science China Mathematics, 2022, 65, 81-110.	1.7	4
3	A high order compact finite difference scheme for elliptic interface problems with discontinuous and high-contrast coefficients. Applied Mathematics and Computation, 2022, 431, 127314.	2.2	3
4	Compactly supported quasi-tight multiframelets with high balancing orders and compact framelet transforms. Applied and Computational Harmonic Analysis, 2021, 51, 295-332.	2.2	10
5	Wavelets on intervals derived from arbitrary compactly supported biorthogonal multiwavelets. Applied and Computational Harmonic Analysis, 2021, 53, 270-331.	2.2	7
6	Dirac assisted tree method for 1D heterogeneous Helmholtz equations with arbitrary variable wave numbers. Computers and Mathematics With Applications, 2021, 97, 416-438.	2.7	4
7	Sixth order compact finite difference schemes for Poisson interface problems with singular sources. Computers and Mathematics With Applications, 2021, 99, 2-25.	2.7	16
8	Numerical solution of the viscous Burgers's equation using Localized Differential Quadrature method. Partial Differential Equations in Applied Mathematics, 2021, 4, 100044.	2.4	3
9	Quasi-tight framelets with high vanishing moments derived from arbitrary refinable functions. Applied and Computational Harmonic Analysis, 2020, 49, 123-151.	2.2	8
10	Generalized matrix spectral factorization and quasi-tight framelets with a minimum number of generators. Mathematics of Computation, 2020, 89, 2867-2911.	2.1	6
11	Gibbs Phenomenon of Framelet Expansions and Quasi-projection Approximation. Journal of Fourier Analysis and Applications, 2019, 25, 2923-2956.	1.0	2
12	Directional compactly supported box spline tight framelets with simple geometric structure. Applied Mathematics Letters, 2019, 91, 213-219.	2.7	8
13	Derivative-orthogonal Riesz wavelets in Sobolev spaces with applications to differential equations. Applied and Computational Harmonic Analysis, 2019, 47, 759-794.	2.2	9
14	Construction of wavelets and framelets on a bounded interval. Analysis and Applications, 2018, 16, 807-849.	2.2	12
15	IMAGE INPAINTING FROM PARTIAL NOISY DATA BY DIRECTIONAL COMPLEX TIGHT FRAMELETS. ANZIAM Journal, 2017, 58, 247-255.	0.2	3
16	Biorthogonal multiwavelets on the interval for numerical solutions of Burgers's equation. Journal of Computational and Applied Mathematics, 2017, 317, 510-534.	2.0	27
17	Robustness properties of dimensionality reduction with Gaussian random matrices. Science China Mathematics, 2017, 60, 1753-1778.	1.7	2
18	Homogeneous wavelets and framelets with the refinable structure. Science China Mathematics, 2017, 60, 2173-2198.	1.7	20

#	ARTICLE	IF	CITATIONS
19	Exploring wavelet applications in civil engineering. KSCE Journal of Civil Engineering, 2017, 21, 1076-1086.	1.9	17
20	Discrete Framelet Transforms. Applied and Numerical Harmonic Analysis, 2017, , 1-66.	0.3	0
21	Analysis of Refinable Vector Functions. Applied and Numerical Harmonic Analysis, 2017, , 371-483.	0.3	0
22	Applications of Framelets and Wavelets. Applied and Numerical Harmonic Analysis, 2017, , 579-666.	0.3	8
23	Wavelet Filter Banks. Applied and Numerical Harmonic Analysis, 2017, , 67-151.	0.3	1
24	Framelet Filter Banks. Applied and Numerical Harmonic Analysis, 2017, , 153-244.	0.3	0
25	Analysis of Affine Systems and Dual Framelets. Applied and Numerical Harmonic Analysis, 2017, , 245-370.	0.3	0
26	Framelets and Wavelets Derived from Refinable Functions. Applied and Numerical Harmonic Analysis, 2017, , 485-577.	0.3	0
27	Symmetric canonical quincunx tight framelets with high vanishing moments and smoothness. Mathematics of Computation, 2017, 87, 347-379.	2.1	21
28	Framelets and Wavelets. Applied and Numerical Harmonic Analysis, 2017, , .	0.3	50
29	Stability of the elastic net estimator. Journal of Complexity, 2016, 32, 20-39.	1.3	18
30	Directional tensor product complex tight framelets with low redundancy. Applied and Computational Harmonic Analysis, 2016, 41, 603-637.	2.2	28
31	On linear independence of integer shifts of compactly supported distributions. Journal of Approximation Theory, 2016, 201, 1-6.	0.8	8
32	Adaptive frame-based color image denoising. Applied and Computational Harmonic Analysis, 2016, 41, 54-74.	2.2	8
33	Removal of Mixed Gaussian and Impulse Noise Using Directional Tensor Product Complex Tight Framelets. Journal of Mathematical Imaging and Vision, 2016, 54, 64-77.	1.3	17
34	Stable recovery of analysis based approaches. Applied and Computational Harmonic Analysis, 2015, 39, 161-172.	2.2	22
35	Compactly Supported Tensor Product Complex Tight Framelets with Directionality. SIAM Journal on Mathematical Analysis, 2015, 47, 2464-2494.	1.9	14
36	Tensor Product Complex Tight Framelets with Increasing Directionality. SIAM Journal on Imaging Sciences, 2014, 7, 997-1034.	2.2	48

#	ARTICLE	IF	CITATIONS
37	Symmetric tight framelet filter banks with three high-pass filters. <i>Applied and Computational Harmonic Analysis</i> , 2014, 37, 140-161.	2.2	23
38	Algorithm for constructing symmetric dual framelet filter banks. <i>Mathematics of Computation</i> , 2014, 84, 767-801.	2.1	23
39	Matrix splitting with symmetry and symmetric tight framelet filter banks with two high-pass filters. <i>Applied and Computational Harmonic Analysis</i> , 2013, 35, 200-227.	2.2	30
40	Properties of Discrete Framelet Transforms. <i>Mathematical Modelling of Natural Phenomena</i> , 2013, 8, 18-47.	2.4	43
41	Algorithms for matrix extension and orthogonal wavelet filter banks over algebraic number fields. <i>Mathematics of Computation</i> , 2012, 82, 459-490.	2.1	18
42	A dual-chain approach for bottom-up construction of wavelet filters with any integer dilation. <i>Applied and Computational Harmonic Analysis</i> , 2012, 33, 204-225.	2.2	14
43	Nonhomogeneous wavelet systems in high dimensions. <i>Applied and Computational Harmonic Analysis</i> , 2012, 32, 169-196.	2.2	79
44	Symmetric orthogonal filters and wavelets with linear-phase moments. <i>Journal of Computational and Applied Mathematics</i> , 2011, 236, 482-503.	2.0	27
45	Symmetric orthonormal complex wavelets with masks of arbitrarily high linear-phase moments and sum rules. <i>Advances in Computational Mathematics</i> , 2010, 32, 209-237.	1.6	33
46	Pairs of frequency-based nonhomogeneous dual wavelet frames in the distribution space. <i>Applied and Computational Harmonic Analysis</i> , 2010, 29, 330-353.	2.2	68
47	Matrix Extension with Symmetry and Its Application to Symmetric Orthonormal Multiwavelets. <i>SIAM Journal on Mathematical Analysis</i> , 2010, 42, 2297-2317.	1.9	29
48	Analysis and Construction of Multivariate Interpolating Refinable Function Vectors. <i>Acta Applicandae Mathematicae</i> , 2009, 107, 143-171.	1.0	17
49	Dual multiwavelet frames with high balancing order and compact fast frame transform. <i>Applied and Computational Harmonic Analysis</i> , 2009, 26, 14-42.	2.2	64
50	Matrix Extension with Symmetry and Applications to Symmetric Orthonormal Complex M-wavelets. <i>Journal of Fourier Analysis and Applications</i> , 2009, 15, 684-705.	1.0	37
51	Dual Wavelet Frames and Riesz Bases in Sobolev Spaces. <i>Constructive Approximation</i> , 2009, 29, 369-406.	3.0	77
52	The structure of balanced multivariate biorthogonal multiwavelets and dual multiframelets. <i>Mathematics of Computation</i> , 2009, 79, 917-951.	2.1	26
53	Wavelet bi-frames with few generators from multivariate refinable functions. <i>Applied and Computational Harmonic Analysis</i> , 2008, 25, 407-414.	2.2	61
54	Refinable Functions and Cascade Algorithms in Weighted Spaces with Hölder Continuous Masks. <i>SIAM Journal on Mathematical Analysis</i> , 2008, 40, 70-102.	1.9	39

#	ARTICLE	IF	CITATIONS
55	Characterization of Riesz bases of wavelets generated from multiresolution analysis. <i>Applied and Computational Harmonic Analysis</i> , 2007, 23, 321-345.	2.2	27
56	Analysis of optimal bivariate symmetric refinable Hermite interpolants. <i>Communications on Pure and Applied Analysis</i> , 2007, 6, 689-718.	0.8	17
57	Wavelets with Short Support. <i>SIAM Journal on Mathematical Analysis</i> , 2006, 38, 530-556.	1.9	57
58	Solutions in Sobolev spaces of vector refinement equations with a general dilation matrix. <i>Advances in Computational Mathematics</i> , 2006, 24, 375-403.	1.6	29
59	Riesz multiwavelet bases. <i>Applied and Computational Harmonic Analysis</i> , 2006, 20, 161-183.	2.2	18
60	Dyadic Hermite interpolation on a square mesh. <i>Computer Aided Geometric Design</i> , 2005, 22, 727-752.	1.2	6
61	Symmetric MRA tight wavelet frames with three generators and high vanishing moments. <i>Applied and Computational Harmonic Analysis</i> , 2005, 18, 67-93.	2.2	63
62	Splitting a Matrix of Laurent Polynomials with Symmetry and its Application to Symmetric Framelet Filter Banks. <i>SIAM Journal on Matrix Analysis and Applications</i> , 2004, 26, 97-124.	1.4	43
63	Noninterpolatory Hermite subdivision schemes. <i>Mathematics of Computation</i> , 2004, 74, 1345-1368.	2.1	34
64	Pairs of Dual Wavelet Frames from Any Two Refinable Functions. <i>Constructive Approximation</i> , 2004, 20, 325-352.	3.0	107
65	A hybrid quantization scheme for image compression. <i>Image and Vision Computing</i> , 2004, 22, 203-213.	4.5	7
66	Vector cascade algorithms and refinable function vectors in Sobolev spaces. <i>Journal of Approximation Theory</i> , 2003, 124, 44-88.	0.8	132
67	Compactly supported tight wavelet frames and orthonormal wavelets of exponential decay with a general dilation matrix. <i>Journal of Computational and Applied Mathematics</i> , 2003, 155, 43-67.	2.0	98
68	Framelets: MRA-based constructions of wavelet frames. <i>Applied and Computational Harmonic Analysis</i> , 2003, 14, 1-46.	2.2	605
69	Design of Hermite Subdivision Schemes Aided by Spectral Radius Optimization. <i>SIAM Journal of Scientific Computing</i> , 2003, 25, 643-656.	2.8	14
70	Computing the Smoothness Exponent of a Symmetric Multivariate Refinable Function. <i>SIAM Journal on Matrix Analysis and Applications</i> , 2003, 24, 693-714.	1.4	82
71	Multiwavelet Frames from Refinable Function Vectors. <i>Advances in Computational Mathematics</i> , 2003, 18, 211-245.	1.6	61
72	Multivariate refinable Hermite interpolant. <i>Mathematics of Computation</i> , 2003, 73, 1913-1936.	2.1	38

#	ARTICLE	IF	CITATIONS
73	Multiwavelets on the Interval. Applied and Computational Harmonic Analysis, 2002, 12, 100-127.	2.2	43
74	The Canonical Dual Frame of a Wavelet Frame. Applied and Computational Harmonic Analysis, 2002, 12, 269-285.	2.2	63
75	Approximation Properties and Construction of Hermite Interpolants and Biorthogonal Multiwavelets. Journal of Approximation Theory, 2001, 110, 18-53.	0.8	80
76	Construction of multivariate biorthogonal wavelets with arbitrary vanishing moments. Advances in Computational Mathematics, 2000, 13, 131-165.	1.6	43
77	Analysis and Construction of Optimal Multivariate Biorthogonal Wavelets with Compact Support. SIAM Journal on Mathematical Analysis, 2000, 31, 274-304.	1.9	59
78	Symmetric orthonormal scaling functions and wavelets with dilation factor 4. Advances in Computational Mathematics, 1998, 8, 221-247.	1.6	58
79	Multivariate Refinement Equations and Convergence of Subdivision Schemes. SIAM Journal on Mathematical Analysis, 1998, 29, 1177-1199.	1.9	161
80	An improved lattice vector quantization scheme for wavelet compression. IEEE Transactions on Signal Processing, 1998, 46, 239-243.	5.3	30
81	On Dual Wavelet Tight Frames. Applied and Computational Harmonic Analysis, 1997, 4, 380-413.	2.2	172
82	Microlocal Analysis and Characterization of Sobolev Wavefront Sets Using Shearlets. Constructive Approximation, 0, , 1.	3.0	0