

# Qingtang Jiang

## List of Publications by Year in descending order

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71  
papers

1,401  
citations

361413

20  
h-index

377865

34  
g-index

72  
all docs

72  
docs citations

72  
times ranked

476  
citing authors

#	ARTICLE	IF	CITATIONS
1	Adaptive short-time Fourier transform and synchrosqueezing transform for non-stationary signal separation. <i>Signal Processing</i> , 2020, 166, 107231.	3.7	106
2	Multivariate matrix refinable functions with arbitrary matrix dilation. <i>Transactions of the American Mathematical Society</i> , 1999, 351, 2407-2438.	0.9	87
3	Instantaneous frequency estimation based on synchrosqueezing wavelet transform. <i>Signal Processing</i> , 2017, 138, 167-181.	3.7	79
4	On the design of multifilter banks and orthonormal multiwavelet bases. <i>IEEE Transactions on Signal Processing</i> , 1998, 46, 3292-3303.	5.3	71
5	Spectral Analysis of the Transition Operator and Its Applications to Smoothness Analysis of Wavelets. <i>SIAM Journal on Matrix Analysis and Applications</i> , 2003, 24, 1071-1109.	1.4	70
6	Orthogonal multiwavelets with optimum time-frequency resolution. <i>IEEE Transactions on Signal Processing</i> , 1998, 46, 830-844.	5.3	63
7	On the Regularity of Matrix Refinable Functions. <i>SIAM Journal on Mathematical Analysis</i> , 1998, 29, 1157-1176.	1.9	61
8	Parameterizations of Masks for Tight Affine Frames with Two Symmetric/Antisymmetric Generators. <i>Advances in Computational Mathematics</i> , 2003, 18, 247-268.	1.6	52
9	On Existence and Weak Stability of Matrix Refinable Functions. <i>Constructive Approximation</i> , 1999, 15, 337-353.	3.0	50
10	Construction of Biorthogonal Multiwavelets Using the Lifting Scheme. <i>Applied and Computational Harmonic Analysis</i> , 2000, 9, 336-352.	2.2	50
11	Adaptive synchrosqueezing transform with a time-varying parameter for non-stationary signal separation. <i>Applied and Computational Harmonic Analysis</i> , 2020, 49, 1075-1106.	2.2	46
12	Image Restoration: Wavelet Frame Shrinkage, Nonlinear Evolution PDEs, and Beyond. <i>Multiscale Modeling and Simulation</i> , 2017, 15, 606-660.	1.6	43
13	Triangular 3-subdivision schemes: the regular case. <i>Journal of Computational and Applied Mathematics</i> , 2003, 156, 47-75.	2.0	34
14	Surface subdivision schemes generated by refinable bivariate spline function vectors. <i>Applied and Computational Harmonic Analysis</i> , 2003, 15, 147-162.	2.2	33
15	Balanced multi-wavelets in $\mathbb{R}^s$ . <i>Mathematics of Computation</i> , 2004, 74, 1323-1345.	2.1	30
16	Distributional Solutions of Nonhomogeneous Discrete and Continuous Refinement Equations. <i>SIAM Journal on Mathematical Analysis</i> , 2000, 32, 420-434.	1.9	27
17	An empirical signal separation algorithm for multicomponent signals based on linear time-frequency analysis. <i>Mechanical Systems and Signal Processing</i> , 2019, 121, 791-809.	8.0	22
18	Matrix-valued symmetric templates for interpolatory surface subdivisions. <i>Applied and Computational Harmonic Analysis</i> , 2005, 19, 303-339.	2.2	21

#	ARTICLE	IF	CITATIONS
19	Multiscale representation of surfaces by tight wavelet frames with applications to denoising. Applied and Computational Harmonic Analysis, 2016, 41, 561-589.	2.2	21
20	Symmetric canonical quincunx tight framelets with high vanishing moments and smoothness. Mathematics of Computation, 2017, 87, 347-379.	2.1	21
21	Time-scale-chirp_rate operator for recovery of non-stationary signal components with crossover instantaneous frequency curves. Applied and Computational Harmonic Analysis, 2021, 54, 323-344.	2.2	21
22	Convergence of cascade algorithms associated with nonhomogeneous refinement equations. Proceedings of the American Mathematical Society, 2000, 129, 415-427.	0.8	20
23	Analysis of adaptive short-time Fourier transform-based synchrosqueezing transform. Analysis and Applications, 2021, 19, 71-105.	2.2	18
24	Analysis of an adaptive short-time Fourier transform-based multicomponent signal separation method derived from linear chirp local approximation. Journal of Computational and Applied Mathematics, 2021, 396, 113607.	2.0	18
25	Signal separation based on adaptive continuous wavelet-like transform and analysis. Applied and Computational Harmonic Analysis, 2021, 53, 151-179.	2.2	17
26	A chirplet transform-based mode retrieval method for multicomponent signals with crossover instantaneous frequencies. , 2022, 120, 103262.		17
27	Toeplitz and Hankel type operators on the upper half-plane. Integral Equations and Operator Theory, 1992, 15, 744-767.	0.8	16
28	Applied Mathematics. , 2013, , .		16
29	Biorthogonal wavelets with 4-fold axial symmetry for quadrilateral surface multiresolution processing. Advances in Computational Mathematics, 2011, 34, 127-165.	1.6	13
30	BIORTHOGONAL WAVELETS WITH SIX-FOLD AXIAL SYMMETRY FOR HEXAGONAL DATA AND TRIANGLE SURFACE MULTIREOLUTION PROCESSING. International Journal of Wavelets, Multiresolution and Information Processing, 2011, 09, 773-812.	1.3	13
31	From extension of Loop's approximation scheme to interpolatory subdivisions. Computer Aided Geometric Design, 2008, 25, 96-115.	1.2	12
32	Parametrizations of symmetric orthogonal multifilter banks with different filter lengths. Linear Algebra and Its Applications, 2000, 311, 79-96.	0.9	11
33	Symmetric Paraunitary Matrix Extension and Parametrization of Symmetric Orthogonal Multifilter Banks. SIAM Journal on Matrix Analysis and Applications, 2001, 23, 167-186.	1.4	11
34	Matrix-valued subdivision schemes for generating surfaces with extraordinary vertices. Computer Aided Geometric Design, 2006, 23, 419-438.	1.2	11
35	Orthogonal and Biorthogonal FIR Hexagonal Filter Banks With Sixfold Symmetry. IEEE Transactions on Signal Processing, 2008, 56, 5861-5873.	5.3	11
36	Analysis of adaptive synchrosqueezing transform with a time-varying parameter. Advances in Computational Mathematics, 2020, 46, 1.	1.6	11

#	ARTICLE	IF	CITATIONS
37	Nonlocal low-rank regularized two-phase approach for mixed noise removal. Inverse Problems, 2021, 37, 085001.	2.0	11
38	FIR Filter Banks for Hexagonal Data Processing. IEEE Transactions on Image Processing, 2008, 17, 1512-1521.	9.8	10
39	Highly symmetric bi-frames for triangle surface multiresolution processing. Applied and Computational Harmonic Analysis, 2011, 31, 370-391.	2.2	10
40	Deep-learning Hopping Capture Model for Automatic Modulation Classification of Wireless Communication Signals. IEEE Transactions on Aerospace and Electronic Systems, 2022, , 1-12.	4.7	10
41	Interpolatory quad/triangle subdivision schemes for surface design. Computer Aided Geometric Design, 2009, 26, 904-922.	1.2	9
42	Wavelet bi-frames with uniform symmetry for curve multiresolution processing. Journal of Computational and Applied Mathematics, 2011, 235, 1653-1675.	2.0	9
43	Tight wavelet frames in low dimensions with canonical filters. Journal of Approximation Theory, 2015, 196, 55-78.	0.8	8
44	Rician noise removal via weighted nuclear norm penalization. Applied and Computational Harmonic Analysis, 2021, 53, 180-198.	2.2	8
45	Hexagonal tight frame filter banks with idealized high-pass filters. Advances in Computational Mathematics, 2009, 31, 215-236.	1.0	7
46	Hexagonal tight frame filter banks with idealized high-pass filters. Advances in Computational Mathematics, 2009, 31, 215-236.	1.6	7
47	Bi-frames with 4-fold axial symmetry for quadrilateral surface multiresolution processing. Journal of Computational and Applied Mathematics, 2010, 234, 3303-3325.	2.0	7
48	Refinable bivariate quartic $C^2$ -splines for multi-level data representation and surface display. Mathematics of Computation, 2004, 74, 1369-1391.	2.1	7
49	Direct Signal Separation via Extraction of Local Frequencies With Adaptive Time-Varying Parameters. IEEE Transactions on Signal Processing, 2022, 70, 2321-2333.	5.3	7
50	Refinable bivariate quartic and quintic $C^1$ -splines for multi-level data representation and surface display. Mathematics of Computation, 2004, 74, 1369-1391.	2.0	6
51	Correspondence between frame shrinkage and high-order nonlinear diffusion. Applied Numerical Mathematics, 2012, 62, 51-66.	2.1	6
52	Highly symmetric 3-refinement Bi-frames for surface multiresolution processing. Applied Numerical Mathematics, 2017, 118, 1-18.	2.1	6
53	Synchrosqueezing transform meets $C^1$ -stable distribution: An adaptive fractional lower-order SST for instantaneous frequency estimation and non-stationary signal recovery. Signal Processing, 2022, , 108683.	3.7	6
54	Orthogonal and Biorthogonal $C^1$ -Refinement Wavelets for Hexagonal Data Processing. IEEE Transactions on Signal Processing, 2009, 57, 4304-4313.	5.3	5

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55	Rician Noise Removal via a Learned Dictionary. <i>Mathematical Problems in Engineering</i> , 2019, 2019, 1-13.	1.1	5
56	Correspondence between multiwavelet shrinkage and nonlinear diffusion. <i>Journal of Computational and Applied Mathematics</i> , 2021, 382, 113074.	2.0	5
57	A NONLOCAL LOW-RANK REGULARIZATION METHOD FOR FRACTAL IMAGE CODING. <i>Fractals</i> , 2021, 29, 2150125.	3.7	5
58	A new nonlocal low-rank regularization method with applications to magnetic resonance image denoising. <i>Inverse Problems</i> , 2022, 38, 065012.	2.0	5
59	Two-sample test based on classification probability. <i>Statistical Analysis and Data Mining</i> , 2020, 13, 5-13.	2.8	4
60	Phase space, wavelet transform and Toeplitz-Hankel type operators. <i>Israel Journal of Mathematics</i> , 1995, 89, 157-171.	0.8	3
61	Admissible wavelets on the Siegel domain of type one. <i>Science in China Series A: Mathematics</i> , 1998, 41, 897-909.	0.5	3
62	Time-varying Parameter-based Synchrosqueezing Wavelet Transform with the Approximation of Cubic Phase Functions. , 2018, , .		3
63	Quad/triangle subdivision, nonhomogeneous refinement equation and polynomial reproduction. <i>Mathematics and Computers in Simulation</i> , 2012, 82, 2215-2237.	4.4	2
64	Instantaneous Frequency-Embedded Synchrosqueezing Transform for Signal Separation. <i>Frontiers in Applied Mathematics and Statistics</i> , 2022, 8, .	1.3	2
65	Compactly Supported Orthogonal and Biorthogonal $\sqrt{5}$ -Refinement Wavelets With 4-Fold Symmetry. <i>IEEE Transactions on Image Processing</i> , 2008, 17, 2053-2062.	9.8	1
66	Matrix-valued 4-point spline and 3-point non-spline interpolatory curve subdivision schemes. <i>Computer Aided Geometric Design</i> , 2009, 26, 797-809.	1.2	1
67	Toeplitz and Hankel type operators on an annulus. <i>Mathematika</i> , 1994, 41, 266-276.	0.5	0
68	Fourier transform of Bernstein-Bézier polynomials. <i>Journal of Mathematical Analysis and Applications</i> , 2007, 325, 294-304.	1.0	0
69	Tangents and curvatures of matrix-valued subdivision curves and their applications to curve design. <i>Applicable Analysis</i> , 2016, 95, 1671-1699.	1.3	0
70	Sparse representations with applications in imaging science, data analysis and beyond. <i>Applied and Computational Harmonic Analysis</i> , 2016, 41, 1-3.	2.2	0
71	A Tree-Based Multiscale Regression Method. <i>Frontiers in Applied Mathematics and Statistics</i> , 2018, 4, .	1.3	0