

Yuan Xu

List of Publications by Year in descending order

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93
papers

2,741
citations

279798

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39
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97
all docs

97
docs citations

97
times ranked

703
citing authors

#	ARTICLE	IF	CITATIONS
1	Orthogonal Polynomials on Planar Cubic Curves. Foundations of Computational Mathematics, 2023, 23, 1-31.	2.5	5
2	Hahn polynomials for hypergeometric distribution. Advances in Applied Mathematics, 2022, 139, 102364.	0.7	2
3	Orthogonal structure on a quadratic curve. IMA Journal of Numerical Analysis, 2021, 41, 206-246.	2.9	12
4	Orthogonal structure and orthogonal series in and on a double cone or a hyperboloid. Transactions of the American Mathematical Society, 2021, 374, 3603-3657.	0.9	9
5	Laguerre Expansions on Conic Domains. Journal of Fourier Analysis and Applications, 2021, 27, 1.	1.0	1
6	Non-homogeneous wave equation on a cone. Integral Transforms and Special Functions, 2021, 32, 604-619.	1.2	2
7	Intertwining operator associated to symmetric groups and summability on the unit sphere. Journal of Approximation Theory, 2021, 272, 105649.	0.8	1
8	Approximation and localized polynomial frame on conic domains. Journal of Functional Analysis, 2021, 281, 109257.	1.4	8
9	Gaussian Bounds for the Weighted Heat Kernels on the Interval, Ball, and Simplex. Constructive Approximation, 2020, 51, 73-122.	3.0	9
10	Intertwining Operators Associated with Dihedral Groups. Constructive Approximation, 2020, 52, 395-422.	3.0	3
11	Orthogonal polynomials in and on a quadratic surface of revolution. Mathematics of Computation, 2020, 89, 2847-2865.	2.1	12
12	Hahn polynomials on polyhedra and quantum integrability. Advances in Mathematics, 2020, 364, 107032.	1.1	7
13	Orthogonal Polynomials and Fourier Orthogonal Series on a Cone. Journal of Fourier Analysis and Applications, 2020, 26, 1.	1.0	13
14	Orthogonal Structure on a Wedge and on the Boundary of a Square. Foundations of Computational Mathematics, 2019, 19, 561-589.	2.5	10
15	Wronskians of Fourier and Laplace transforms. Transactions of the American Mathematical Society, 2019, 372, 4107-4125.	0.9	1
16	Best polynomial approximation on the triangle. Journal of Approximation Theory, 2019, 241, 63-78.	0.8	1
17	Approximation by Polynomials in Sobolev Spaces with Jacobi Weight. Journal of Fourier Analysis and Applications, 2018, 24, 1438-1459.	1.0	7
18	Best polynomial approximation on the unit ball. IMA Journal of Numerical Analysis, 2018, 38, 1209-1228.	2.9	2

#	ARTICLE	IF	CITATIONS
19	Connection coefficients for classical orthogonal polynomials of several variables. <i>Advances in Mathematics</i> , 2017, 310, 290-326.	1.1	9
20	Minimal cubature rules and polynomial interpolation in two variables II. <i>Journal of Approximation Theory</i> , 2017, 214, 49-68.	0.8	7
21	Approximation and Orthogonality in Sobolev Spaces on a Triangle. <i>Constructive Approximation</i> , 2017, 46, 349-434.	3.0	15
22	Slater determinants of orthogonal polynomials. <i>Journal of Mathematical Analysis and Applications</i> , 2016, 435, 1552-1572.	1.0	2
23	Generalized Characteristic Polynomials and Gaussian Cubature Rules. <i>SIAM Journal on Matrix Analysis and Applications</i> , 2015, 36, 1129-1142.	1.4	2
24	Uncertainty principle on weighted spheres, balls and simplexes. <i>Journal of Approximation Theory</i> , 2015, 192, 193-214.	0.8	5
25	Sobolev orthogonal polynomials on product domains. <i>Journal of Computational and Applied Mathematics</i> , 2015, 284, 202-215.	2.0	13
26	Complex versus real orthogonal polynomials of two variables. <i>Integral Transforms and Special Functions</i> , 2015, 26, 134-151.	1.2	7
27	An integral identity with applications in orthogonal polynomials. <i>Proceedings of the American Mathematical Society</i> , 2015, 143, 5253-5263.	0.8	5
28	Hahn, Jacobi, and Krawtchouk polynomials of several variables. <i>Journal of Approximation Theory</i> , 2015, 195, 19-42.	0.8	11
29	On Sobolev orthogonal polynomials. , 2015, 33, 308-352.		98
30	Spectral Approximation on the Unit Ball. <i>SIAM Journal on Numerical Analysis</i> , 2014, 52, 2647-2675.	2.3	34
31	The Hardyâ€™Rellich Inequality and Uncertainty Principle on the Sphere. <i>Constructive Approximation</i> , 2014, 40, 141-171.	3.0	11
32	Weighted Sobolev orthogonal polynomials on the unit ball. <i>Journal of Approximation Theory</i> , 2013, 171, 84-104.	0.8	18
33	Approximation Theory and Harmonic Analysis on Spheres and Balls. <i>Springer Monographs in Mathematics</i> , 2013, , .	0.2	211
34	A solvable mixed charge ensemble on the line: global results. <i>Probability Theory and Related Fields</i> , 2013, 155, 127-164.	1.8	8
35	Sobolev Orthogonal Polynomials on a Simplex. <i>International Mathematics Research Notices</i> , 2013, 2013, 3087-3131.	1.0	12
36	Orthogonal Polynomials and Expansions for a Family of Weight Functions in Two Variables. <i>Constructive Approximation</i> , 2012, 36, 161-190.	3.0	8

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37	Minimal cubature rules and polynomial interpolation in two variables. <i>Journal of Approximation Theory</i> , 2012, 164, 6-30.	0.8	8
38	Decomposition of spaces of distributions induced by tensor product bases. <i>Journal of Functional Analysis</i> , 2012, 263, 1147-1197.	1.4	13
39	Discrete Fourier Analysis on Fundamental Domain and Simplex of A d Lattice in d-Variables. <i>Journal of Fourier Analysis and Applications</i> , 2010, 16, 383-433.	1.0	40
40	Sub-exponentially localized kernels and frames induced by orthogonal expansions. <i>Mathematische Zeitschrift</i> , 2010, 264, 361-397.	0.9	26
41	Fourier Series and Approximation on Hexagonal and Triangular Domains. <i>Constructive Approximation</i> , 2010, 31, 115-138.	3.0	23
42	Discrete Fourier analysis with lattices on planar domains. <i>Numerical Algorithms</i> , 2010, 55, 279-300.	1.9	5
43	Orthogonal polynomials in several variables for measures with mass points. <i>Numerical Algorithms</i> , 2010, 55, 245-264.	1.9	8
44	Borislav D. Bojanov: 18 November 1944–8 April 2009. <i>Journal of Approximation Theory</i> , 2010, 162, 1739-1765.	0.8	0
45	Moduli of smoothness and approximation on the unit sphere and the unit ball. <i>Advances in Mathematics</i> , 2010, 224, 1233-1310.	1.1	21
46	New cubature formulae and hyperinterpolation in three variables. <i>BIT Numerical Mathematics</i> , 2009, 49, 55-73.	2.0	16
47	Cesàro Means of Orthogonal Expansions in Several Variables. <i>Constructive Approximation</i> , 2009, 29, 129-155.	3.0	21
48	On a Two-Variable Class of Bernstein–Szegő Measures. <i>Constructive Approximation</i> , 2009, 30, 71-91.	3.0	6
49	Decomposition of Triebel–Lizorkin and Besov spaces in the context of Laguerre expansions. <i>Journal of Functional Analysis</i> , 2009, 256, 1137-1188.	1.4	19
50	Cesàro means of Jacobi expansions on the parabolic biangle. <i>Journal of Approximation Theory</i> , 2009, 159, 167-179.	0.8	7
51	Orthogonal polynomials and partial differential equations on the unit ball. <i>Proceedings of the American Mathematical Society</i> , 2009, 137, 2979-2979.	0.8	14
52	Decomposition of Spaces of Distributions Induced by Hermite Expansions. <i>Journal of Fourier Analysis and Applications</i> , 2008, 14, 372-414.	1.0	33
53	Localized Polynomial Frames on the Ball. <i>Constructive Approximation</i> , 2008, 27, 121-148.	3.0	46
54	Sobolev orthogonal polynomials defined via gradient on the unit ball. <i>Journal of Approximation Theory</i> , 2008, 152, 52-65.	0.8	24

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55	Decomposition of weighted Triebel-Lizorkin and Besov spaces on the ball. Proceedings of the London Mathematical Society, 2008, 97, 477-513.	1.3	35
56	Discrete Fourier Analysis, Cubature, and Interpolation on a Hexagon and a Triangle. SIAM Journal on Numerical Analysis, 2008, 46, 1653-1681.	2.3	53
57	Jacobi decomposition of weighted Triebel-Lizorkin and Besov spaces. Studia Mathematica, 2008, 186, 161-202.	0.7	19
58	Bivariate Lagrange interpolation at the Padua points: the ideal theory approach. Numerische Mathematik, 2007, 108, 43-57.	1.9	38
59	Image reconstruction by OPED algorithm with averaging. Numerical Algorithms, 2007, 45, 179-193.	1.9	8
60	Polynomial interpolation on the unit sphere II. Advances in Computational Mathematics, 2007, 26, 155-171.	1.6	10
61	Discrete orthogonal polynomials and difference equations of several variables. Advances in Mathematics, 2007, 212, 1-36.	1.1	33
62	A family of Sobolev orthogonal polynomials on the unit ball. Journal of Approximation Theory, 2006, 138, 232-241.	0.8	23
63	Bivariate Lagrange interpolation at the Padua points: The generating curve approach. Journal of Approximation Theory, 2006, 143, 15-25.	0.8	81
64	Almost Everywhere Convergence of Orthogonal Expansions of Several Variables. Constructive Approximation, 2005, 22, 67-93.	3.0	8
65	Localized Polynomial Frames on the Interval with Jacobi Weights. Journal of Fourier Analysis and Applications, 2005, 11, 557-575.	1.0	31
66	Convolution operator and maximal function for the Dunkl transform. Journal D'Analyse Mathématique, 2005, 97, 25-55.	0.8	162
67	On Polynomials of Least Deviation from Zero in Several Variables. Experimental Mathematics, 2004, 13, 103-112.	0.7	6
68	Polynomial Interpolation on the Unit Sphere and on the Unit Ball. Advances in Computational Mathematics, 2004, 20, 247-260.	1.6	17
69	Approximation by Means of h-Harmonic Polynomials on the Unit Sphere. Advances in Computational Mathematics, 2004, 21, 37-58.	1.6	7
70	On discrete orthogonal polynomials of several variables. Advances in Applied Mathematics, 2004, 33, 615-632.	0.7	42
71	Weighted Approximation of Functions on the Unit Sphere. Constructive Approximation, 2003, -1, 1-1.	3.0	19
72	Summability of orthogonal expansions of several variables. Journal of Approximation Theory, 2003, 122, 267-333.	0.8	19

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73	Orthogonal polynomials and summability in Fourier orthogonal series on spheres and on balls. Mathematical Proceedings of the Cambridge Philosophical Society, 2001, 131, .	0.4	11
74	A note on summability of multiple Laguerre expansions. Proceedings of the American Mathematical Society, 2000, 128, 3571-3578.	0.8	4
75	Title is missing!. Advances in Computational Mathematics, 2000, 12, 363-376.	1.6	15
76	Constructing cubature formulae by the method of reproducing kernel. Numerische Mathematik, 2000, 85, 155-173.	1.9	12
77	Harmonic Polynomials Associated With Reflection Groups. Canadian Mathematical Bulletin, 2000, 43, 496-507.	0.5	10
78	Funk-Hecke Formula for Orthogonal Polynomials on Spheres and on Balls. Bulletin of the London Mathematical Society, 2000, 32, 447-457.	0.8	29
79	A PRODUCT FORMULA FOR JACOBI POLYNOMIALS. , 2000, , .		3
80	Summability of Fourier orthogonal series for Jacobi weight on a ball in \mathbb{R}^d . Transactions of the American Mathematical Society, 1999, 351, 2439-2458.	0.9	67
81	Minimal cubature formulae for a family of radial weight functions. Advances in Computational Mathematics, 1998, 8, 367-380.	1.6	8
82	Intertwining Operator and h -Harmonics Associated With Reflection Groups. Canadian Journal of Mathematics, 1998, 50, 193-209.	0.6	9
83	Integration of the intertwining operator for h -harmonic polynomials associated to reflection groups. Proceedings of the American Mathematical Society, 1997, 125, 2963-2973.	0.8	50
84	l -1 summability of multiple Fourier integrals and positivity. Mathematical Proceedings of the Cambridge Philosophical Society, 1997, 122, 149-172.	0.4	40
85	Orthogonal Polynomials for a Family of Product Weight Functions on the Spheres. Canadian Journal of Mathematics, 1997, 49, 175-192.	0.6	54
86	Regular points for Lagrange interpolation on the unit disk. Numerical Algorithms, 1996, 12, 287-296.	1.9	13
87	Fejér means for multivariate fourier series. Mathematische Zeitschrift, 1996, 221, 449-465.	0.9	16
88	Lagrange Interpolation on Chebyshev Points of Two Variables. Journal of Approximation Theory, 1996, 87, 220-238.	0.8	58
89	Fejér means for multivariate Fourier series. Mathematische Zeitschrift, 1996, 221, 449-465.	0.9	20
90	On multivariate Hermite interpolation. Advances in Computational Mathematics, 1995, 4, 207-259.	1.6	33

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91	On bivariate Gaussian cubature formulae. Proceedings of the American Mathematical Society, 1994, 122, 833-841.	0.8	29
92	Constructive methods of approximation by ridge functions and radial functions. Numerical Algorithms, 1993, 4, 205-223.	1.9	25
93	Gaussian cubature and bivariate polynomial interpolation. Mathematics of Computation, 1992, 59, 547-547.	2.1	18