Der-Chen Chang

List of Publications by Year
in descending order

137 papers	1,199 citations	471509 17 h-index	580821 25 g-index
142 all docs	142 docs citations	142 times ranked	402 citing authors

#	Article	IF	Citations
1	Hardy spaces, BMO, and boundary value problems for the Laplacian on a smooth domain in $\mathbf{R^N}$. Transactions of the American Mathematical Society, 1999, 351, 1605-1661.	0.9	83
2	Pharmacological Role of Functionalized Gold Nanoparticles in Disease Applications. Molecules, 2022, 27, 1551.	3.8	45
3	Heat Kernels for Elliptic and Sub-elliptic Operators. Applied and Numerical Harmonic Analysis, 2011, , .	0.3	36
4	Littlewood-Paley Characterizations of Hardy-Type Spaces Associated with Ball Quasi-Banach Function Spaces. Complex Analysis and Operator Theory, 2020, 14, 1.	0.6	34
5	A note on weighted Bergman spaces and the Cesaro Operator. Nagoya Mathematical Journal, 2000, 159, 25-43.	0.8	33
6	Chrysin alleviates imiquimod-induced psoriasis-like skin inflammation and reduces the release of CCL20 and antimicrobial peptides. Scientific Reports, 2020, 10, 2932.	3.3	31
7	Effect of Neferine on DNCB-Induced Atopic Dermatitis in HaCaT Cells and BALB/c Mice. International Journal of Molecular Sciences, 2021, 22, 8237.	4.1	26
8	The Inhibitory Effects of Gold Nanoparticles on VEGF-A-Induced Cell Migration in Choroid-Retina Endothelial Cells. International Journal of Molecular Sciences, 2020, 21, 109.	4.1	24
9	Geometric analysis on quaternion â„•type groups. Journal of Geometric Analysis, 2006, 16, 265-294.	1.0	23
10	Sub-Lorentzian geometry on anti-de Sitter space. Journal Des Mathematiques Pures Et Appliquees, 2008, 90, 82-110.	1.6	21
11	Estimates for powers of sub-Laplacian on the non-isotropic Heisenberg group. Journal of Geometric Analysis, 2000, 10, 653-678.	1.0	20
12	Fundamental solutions for hermite and subelliptic operators. Journal D'Analyse Mathematique, 2006, 100, 223-248.	0.8	19
13	SubRiemannian Geometry on the Sphere ?3. Canadian Journal of Mathematics, 2009, 61, 721-739.	0.6	18
14	Endpoint boundedness of commutators on spaces of homogeneous type. Applicable Analysis, 2017, 96, 2408-2433.	1.3	18
15	Addendum to the Paper â€œA note on Weighted bergman Spaces and the cesaro operatorâ€• Nagoya Mathematical Journal, 2005, 180, 77-90.	0.8	17
16	Anti-Allergic and Anti-Inflammatory Effects of Neferine on RBL-2H3 Cells. International Journal of Molecular Sciences, 2021, 22, 10994.	4.1	17
17	Sub-Riemannian Geodesics on the 3-D Sphere. Complex Analysis and Operator Theory, 2009, 3, 361-377.	0.6	16
18	Real-variable characterizations of Musielak-Orlicz-Hardy spaces associated with SchrÃ¶dinger operators on domains. Mathematical Methods in the Applied Sciences, 2016, 39, 533-569.	2.3	16

#	Article	IF	Citations
19	Fourier transform of anisotropic mixed-norm Hardy spaces. Frontiers of Mathematics in China, 2021, 16, 119-139.	0.7	16
20	Analysis and Applications of Extended Kantorovichâ€"Krylov Method. Applicable Analysis, 2003, 82, 713-740.	1.3	15
21	Geometric analysis on <i>H</i> â€type groups related to division algebras. Mathematische Nachrichten, 2009, 282, 44-68.	0.8	15
22	On the Cauchyâ€"SzegÃ¶ Kernel for Quaternion Siegel Upper Half-Space. Complex Analysis and Operator Theory, 2013, 7, 1623-1654.	0.6	15
23	Endpoint estimates of linear commutators on Hardy spaces over spaces of homogeneous type. Mathematical Methods in the Applied Sciences, 2018, 41, 5951-5984.	2.3	15
24	Chrysin Inhibits High Glucose-Induced Migration on Chorioretinal Endothelial Cells via VEGF and VEGFR Down-Regulation. International Journal of Molecular Sciences, 2020, 21, 5541.	4.1	15
25	Fourier transform of Hardy spaces associated with ball quasi-Banach function spaces*. Applicable Analysis, 2022, 101, 3825-3840.	1.3	15
26	Sobolev and Lipschitz estimates for weighted Bergman projections. Nagoya Mathematical Journal, 1997, 147, 147-178.	0.8	14
27	Estimates for spectral projection operators of the sub-laplacian on the heisenberg group. Journal D'Analyse Mathematique, 1997, 71, 315-347.	0.8	14
28	Quaternion H-type group and differential operator $\hat{I}$" $\hat{I}$». Science in China Series A: Mathematics, 2008, 51, 523-540.	0.5	14
29	Hopf fibration: Geodesics and distances. Journal of Geometry and Physics, 2011, 61, 986-1000.	1.4	14
30	The edge algebra structure of the Zaremba problem. Journal of Pseudo-Differential Operators and Applications, 2014, 5, 69-155.	0.7	14
31	A zeta function associated to the sub-laplacian on the unit sphere in â,,N. Journal D'Analyse Mathematique, 2002, 86, 25-48.	0.8	13
32	On a Step 2(k + 1) sub-Riemannian manifold. Journal of Geometric Analysis, 2004, 14, 1-18.	1.0	13
33	Gradient estimates via rearrangements for solutions of some SchrÃ¶dinger equations. Analysis and Applications, 2018, 16, 339-361.	2.2	13
34	Anisotropic quaternion Carnot groups: Geometric analysis and Green function. Advances in Applied Mathematics, 2007, 39, 345-394.	0.7	12
35	Quercetin inhibits histamine-induced calcium influx in human keratinocyte via histamine H4 receptors. International Immunopharmacology, 2021, 96, 107620.	3.8	12
36	A note on wronskians and linear dependence of entire functions in. Complex Variables and Elliptic Equations, 1994, 24, 131-144.	0.2	11

#	Article	IF	Citations
37	Description of Entire Solutions of Eiconal Type Equations. Canadian Mathematical Bulletin, 2012, 55, 249-259.	0.5	11
38	Estimates for second-order Riesz transforms associated with magnetic Schrödinger operators on Musielak-Orlicz-Hardy spaces. Applicable Analysis, 2014, 93, 2519-2545.	1.3	11
39	REAL AND COMPLEX HAMILTONIAN MECHANICS ON SOME SUBRIEMANNIAN MANIFOLDS. Asian Journal of Mathematics, 2004, 8, 137-160.	0.3	11
40	A Morera type theorem for L^2 functions in the Heisenberg group. Journal D'Analyse Mathematique, 1991, 57, 282-296.	0.8	10
41	Quantisation on a manifold with singular edge. Journal of Pseudo-Differential Operators and Applications, 2013, 4, 317-343.	0.7	10
42	Real interpolation of weighted tent spaces. Applicable Analysis, 2016, 95, 2415-2443.	1.3	10
43	Littlewood-Paley Characterizations of Hajłasz-Sobolev and Triebel-Lizorkin Spaces via Averages on Balls. Potential Analysis, 2017, 46, 227-259.	0.9	10
44	Analysis of Bending Vibration of Rectangular Plates Using Two-Dimensional Plate Modes. Journal of Aircraft, 2005, 42, 542-550.	2.4	9
45	Geometric analysis on generalized Hermite operators. Advances in Applied Mathematics, 2011, 47, 710-771.	0.7	9
46	Lp Results for the Pompeiu Problem with Moments on the Heisenberg Group. Journal of Fourier Analysis and Applications, 2004, 10, 545-571.	1.0	8
47	Laguerre calculus and Paneitz operator on the Heisenberg group. Science in China Series A: Mathematics, 2009, 52, 2549-2569.	0.5	7
48	SubRiemannian Geodesics in the Grushin Plane. Journal of Geometric Analysis, 2012, 22, 800-826.	1.0	7
49	Integrability conditions for Heisenberg and Grushin-type distributions. Analysis and Mathematical Physics, 2014, 4, 99-114.	1.3	7
50	Anti-Proliferative and Anti-Migratory Activities of Hispidulin on Human Melanoma A2058 Cells. Biomolecules, 2021, 11, 1039.	4.0	7
51	Commutation properties and lipschitz estimates for the Bergman and Szegö projections. Mathematische Zeitschrift, 1996, 223, 275-302.	0.9	6
52	Moment versions of the Morera problem in Cn andÂHn. Advances in Applied Mathematics, 2003, 31, 273-300.	0.7	6
53	Analysis of Sandwich Plates with Viscoelastic Damping Using Two-Dimensional Plate Modes. AIAA Journal, 2003, 41, 924-932.	2.6	6
54	Pompeiu Problem on Product of Heisenberg Groups. Complex Analysis and Operator Theory, 2010, 4, 619-683.	0.6	6

#	Article	IF	Citations
55	On the Hodge-type decomposition and cohomology groups of k-Cauchy–Fueter complexes over domains in the quaternionic space. Journal of Geometry and Physics, 2016, 107, 15-34.	1.4	6
56	Utilizing Recent Climate Data in Eastern Texas to Calculate Trends in Measures of Aridity and Estimate Changes in Watering Demand for Landscape Preservation. Journal of Applied Meteorology and Climatology, 2020, 59, 143-152.	1.5	6
57	Nontriviality of Riesz–Morrey spaces. Applicable Analysis, 2022, 101, 6548-6572.	1.3	6
58	The Anti-Inflammatory Effect of Hydrogen Gas Inhalation and Its Influence on Laser-Induced Choroidal Neovascularization in a Mouse Model of Neovascular Age-Related Macular Degeneration. International Journal of Molecular Sciences, 2021, 22, 12049.	4.1	6
59	On the Recursive Sequence $x_{n+1} = \alpha + (\beta x_n^{-1})/(1 + g(x_n))$. Applicable Analysis, 2003, 82, 145-156.	1.3	5
60	The Heat Kernel for Kolmogorov Type Operators and Its Applications. Journal of Fourier Analysis and Applications, 2009, 15, 816-838.	1.0	5
61	Boundedness of fractional integrals on weighted Orlicz–Hardy spaces. Mathematical Methods in the Applied Sciences, 2013, 36, 2069-2085.	2.3	5
62	Corner Boundary Value Problems. Complex Analysis and Operator Theory, 2015, 9, 1157-1210.	0.6	5
63	Integrability conditions on Engel-type manifolds. Analysis and Mathematical Physics, 2015, 5, 217-231.	1.3	5
64	Characterizations of Sobolev spaces associated to operators satisfying off–diagonal estimates on balls. Mathematical Methods in the Applied Sciences, 2017, 40, 2907-2929.	2.3	5
65	Boundedness of paraproducts on spaces of homogeneous type II. Applicable Analysis, 2022, 101, 2170-2196.	1.3	5
66	The geometry on a step 3 Grushin model. Applicable Analysis, 2005, 84, 111-129.	1.3	4
67	Laguerre expansion on the Heisenberg group and Fourier-Bessel transform on $\mathbb{R}^n$. Science in China Series A: Mathematics, 2006, 49, 1722-1739.	0.5	4
68	Tauberian theorem for m-spherical transforms on the Heisenberg group. Mathematische Nachrichten, 2007, 280, 815-837.	0.8	4
69	Boundedness of Generalized Riesz Transforms on Orlicz–Hardy Spaces Associated to Operators. Integral Equations and Operator Theory, 2013, 76, 225-283.	0.8	4
70	Geometric Analysis on Ornstein–Uhlenbeck Operators with Quadratic Potentials. Journal of Geometric Analysis, 2014, 24, 1211-1232.	1.0	4
71	Newton's method for variational inequality problems: Smale's point estimate theory under the γ-condition. Applicable Analysis, 2015, 94, 44-55.	1.3	4
72	Ellipticity on spaces with higher singularities. Science China Mathematics, 2017, 60, 2053-2076.	1.7	4

#	Article	IF	Citations
73	Global solution to initial boundary value problem for gas dynamics in thermal nonequilibrium. Journal of Differential Equations, 2018, 265, 1875-1893.	2.2	4
74	Relations Between Product and Flag Hardy Spaces. Journal of Geometric Analysis, 2021, 31, 6601-6623.	1.0	4
75	A CR Analogue of Yau€™s Conjecture on Pseudoharmonic Functions of Polynomial Growth. Canadian Journal of Mathematics, 2019, 71, 1367-1394.	0.6	4
76	Boundedness of paraproducts on spaces of homogeneous type I. Applicable Analysis, 2022, 101, 2144-2169.	1.3	4
77	Generalized Hamilton€"Jacobi Equation and Heat Kernel on Step Two Nilpotent Lie Groups. , 2009, , 49-76.		4
78	Anti-Inflammatory Effects of Cycloheterophyllin on Dinitrochlorobenzene-Induced Atopic Dermatitis in HaCaT Cells and BALB/c Mice. Molecules, 2022, 27, 2610.	3.8	4
79	Commutation properties and lipschitz estimates for the Bergman and Szegö projections. Mathematische Zeitschrift, 1996, 223, 275-302.	0.9	3
80	The uniqueness problem and meromorphic solutions of partial differential equations. Journal D'Analyse Mathematique, 1999, 77, 51-68.	0.8	3
81	Heat kernels for a class of degenerate elliptic operators using stochastic method. Complex Variables and Elliptic Equations, 2012, 57, 155-168.	0.8	3
82	The Laguerre calculus on the nilpotent Lie groups of step two. Journal of Mathematical Analysis and Applications, 2019, 475, 1855-1882.	1.0	3
83	MOMENT CONDITIONS FOR POMPEIU PROBLEM EXTENDED TO GENERAL RADIAL SURFACES. , 2002, , .		3
84	Nonholonomic Systems and Sub-Riemannian Geometry. Communications in Information and Systems, 2010, 10, 293-316.	0.5	3
85	Mathematical analysis of pricing of lookback performance options. Applicable Analysis, 2003, 82, 937-959.	1.3	2
86	Hausdorff operator on the unit polydisk in. Complex Variables and Elliptic Equations, 2006, 51, 329-345.	0.8	2
87	Heat Kernels for Differential Operators with Radical Function Coefficients. Taiwanese Journal of Mathematics, 2011, 15, .	0.4	2
88	THE POSITIVITY OF THE HEAT KERNEL ON HEISENBERG GROUP. Analysis and Applications, 2013, 11, 1350019.	2.2	2
89	Poincaré's lemma on the Heisenberg group. Advances in Applied Mathematics, 2014, 60, 90-102.	0.7	2
90	Ball Average Characterizations of Variable Besov-type Spaces. Taiwanese Journal of Mathematics, 2019, 23, .	0.4	2

#	Article	IF	Citations
91	On an initial boundary value problem for gas dynamics in thermal nonequilibrium. Journal of Mathematical Physics, 2019, 60, 121505.	1.1	2
92	The heat kernel of sub-Laplace operator on nilpotent Lie groups of step two. Applicable Analysis, 2021, 100, 17-36.	1.3	2
93	Utilizing homogenized observation records and reconstructed time series data to estimate recent trends in Mid-Atlantic soil moisture scarcity. Theoretical and Applied Climatology, 2021, 143, 1063-1076.	2.8	2
94	Analysis on Regular Corner Spaces. Journal of Geometric Analysis, 2021, 31, 9199-9240.	1.0	2
95	Inhibition of UVA Damage on Human Skin Dermis Fibroblasts by the Isoflavonoid Intermediate Deoxybenzoin-3A. Chemical Research in Toxicology, 2021, 34, 1133-1139.	3.3	2
96	Corner Operators with Symbol Hierarchies. Advances in Applied Clifford Algebras, 2021, 31, 1.	1.0	2
97	Exact Bounds and Approximating Solutions to the Fredholm Integral Equations of Chandrasekhar Type. Taiwanese Journal of Mathematics, 2019, 23, .	0.4	2
98	POMPEIU PROBLEM FOR SETS OF HIGHER CODIMENSION IN EUCLIDEAN AND HEISENBERG SETTINGS. Taiwanese Journal of Mathematics, 2008, 12, .	0.4	2
99	Determining a surface breaking crack from steady-state electrical boundary measurements-numerical results. Inverse Problems in Science and Engineering, 1997, 5, 279-308.	0.5	1
100	An identity related to the riesz transforms on the heisenberg group. Complex Variables and Elliptic Equations, 2000, 40, 395-421.	0.2	1
101	A Difference Equation Arising from Logistic Population Growth. Applicable Analysis, 2004, 83, 579-598.	1.3	1
102	Geometric analysis on a family of pseudoconvex hypersurfaces. Complex Variables and Elliptic Equations, 2005, 50, 803-835.	0.2	1
103	Mathematical analysis of the two-color partial rainbow options. Applicable Analysis, 2005, 84, 737-757.	1.3	1
104	Geometric analysis on quaternion anisotropic Carnot groups. Doklady Mathematics, 2008, 77, 124-129.	0.6	1
105	Generalized Calderón–Zygmund operators on homogeneous groups and applications. Applicable Analysis, 2008, 87, 531-554.	1.3	1
106	Geometric mechanics on product Heisenberg groups. Applicable Analysis, 2009, 88, 243-283.	1.3	1
107	Trace of heat kernel, spectral zeta function and isospectral problem for sub-laplacians. Science in China Series A: Mathematics, 2009, 52, 2570-2589.	0.5	1
108	Mathematical modelling and analysis of Asian options with stochastic strike price. Applicable Analysis, 2012, 91, 91-104.	1.3	1

#	Article	IF	Citations
109	Global connectivity and optimization on an infinite step distribution. Advances in Applied Mathematics, 2013, 50, 634-644.	0.7	1
110	Heat kernel asymptotic expansions for the Heisenberg sub-Laplacian and the Grushin operator. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2015, 471, 20140943.	2.1	1
111	Integrability conditions on a sub-Riemannian structure on $$\mathbb {S}^3$$. Analysis and Mathematical Physics, 2017, 7, 9-18.	1.3	1
112	Periodic solutions for Hamiltonian equation associated with Gaussian potential. Analysis and Mathematical Physics, 2017, 7, 459-477.	1.3	1
113	Variational Analysis for Generalized Kolmogorov Operators. Journal of Geometric Analysis, 2018, 28, 2477-2502.	1.0	1
114	The utilization of a recursive algorithm to determine trends of soil moisture deficits in the Mid-Atlantic United States. Climatic Change, 2020, 163, 217-235.	3.6	1
115	Existence, uniqueness, and approximation solutions to linearized Chandrasekhar equation with sharp bounds. Analysis and Mathematical Physics, 2020, 10, 1.	1.3	1
116	CR Liâ€"Yau gradient estimate for Witten Laplacian via Bakryâ€"Emery pseudohermitian Ricci curvature. Asian Journal of Mathematics, 2018, 22, 223-256.	0.3	1
117	Heat kernels for a family of Grushin operators. Methods and Applications of Analysis, 2014, 21, 291-312.	0.5	1
118	Applications of the poincarÃ© inequality to extended Kantorovich method. Journal of Inequalities and Applications, 2006, 2006, 1-21.	1.1	0
119	Schrödinger equation with quartic potential and nonlinear filtering problem. , 2009, , .		0
120	Stochastic regression in terms of Brownian motion. Applicable Analysis, 2011, 90, 899-919.	1.3	0
121	Variational analysis and related topics: preface. Applicable Analysis, 2011, 90, 861-864.	1.3	0
122	Heat kernels for generalized Ornsteinâ€"Uhlenbeck operators. Applicable Analysis, 2014, 93, 2277-2311.	1.3	0
123	Initial Value Problem and the Heat Kernel for a Mixed Type Operator. Journal of Geometric Analysis, 2017, 27, 3285-3301.	1.0	0
124	PoincarÃ© Lemma on Quaternion-like Heisenberg Groups. Canadian Mathematical Bulletin, 2018, 61, 495-508.	0.5	0
125	Volterra operators in the edge-calculus. Analysis and Mathematical Physics, 2018, 8, 551-570.	1.3	0
126	Evolution equations and diffusion operators for demographic dynamics. Applicable Analysis, 2019, , 1-16.	1.3	0

#	ARTICLE	IF	CITATIONS
127	A NOTE ON GENERALIZED CESÃ€RO OPERATORS. , 2003, , .		0
128	SUBRIEMANNIAN GEOMETRY AND SUBELLIPTIC PARTIAL DIFFERENTIAL EQUATIONS. , 2004, , .		0
129	Geometric Analysis on SubRiemannian Manifolds. , 2005, , .		0
130	10.1007/s11472-008-1031-2. , 2010, 77, 124.		0
131	Deconvolution for the Pompeiu Problem on the Heisenberg Group, I. Springer Proceedings in Mathematics, 2012, , 61-94.	0.5	0
132	LP solutions to the parameterized Fredholm integral equations associated with Chandrasekhar kernels. Applicable Analysis, 0, , 1-18.	1.3	0
133	Construction of Frames on the Heisenberg Groups. Analysis and Geometry in Metric Spaces, 2020, 8, 382-395.	0.5	0
134	On Liâ€"Yau gradient estimate for sum of squares of vector fields up to higher step. Communications in Analysis and Geometry, 2020, 28, 565-606.	0.4	0
135	Methodology to quantify the role of intense precipitation runoff in soil moisture scarcity: a case study in the U.S. South from 1980-2020. J Agricultural Meteorology, 2022, 78, 78-87.	1.5	0
136	A twoâ€weight boundedness criterion on spaces of homogeneous type with its application to some elliptic boundary value problems. Mathematical Methods in the Applied Sciences, 0, , .	2.3	0
137	Vanishing theorem of Kohnâ€"Rossi cohomology class and rigidity of Sasakian space form. Pure and Applied Mathematics Quarterly, 2022, 18, 411-436.	0.4	0