

# Jiahong Wu

## List of Publications by Year in descending order

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131  
papers

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87888

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docs citations

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times ranked

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citing authors

#	ARTICLE	IF	CITATIONS
1	Mild Ill-Posedness in $L^q$ for 2D Resistive MHD Equations Near a Background Magnetic Field. International Mathematics Research Notices, 2023, 2023, 4839-4868.	1.0	4
2	Stability and exponential decay for magnetohydrodynamic equations. Proceedings of the Royal Society of Edinburgh Section A: Mathematics, 2023, 153, 853-880.	1.2	1
3	Sharp decay estimates for Oldroyd-B model with only fractional stress tensor diffusion. Journal of Functional Analysis, 2022, 282, 109332.	1.4	7
4	Global well-posedness and time decay for 2D Oldroyd-B-type fluids in periodic domains with dissipation in the velocity equation only. Nonlinear Analysis: Real World Applications, 2022, 66, 103513.	1.7	2
5	Global regularity for the generalized incompressible Oldroyd-B model with only stress tensor dissipation in critical Besov spaces. Journal of Differential Equations, 2022, 316, 641-686.	2.2	7
6	Stabilizing effect of magnetic field on the 2D ideal magnetohydrodynamic flow with mixed partial damping. Calculus of Variations and Partial Differential Equations, 2022, 61, .	1.7	4
7	Optimal decay for the 3D anisotropic Boussinesq equations near the hydrostatic balance. Calculus of Variations and Partial Differential Equations, 2022, 61, 1.	1.7	7
8	Stability and large-time behavior for the 2D Boussinesq system with horizontal dissipation and vertical thermal diffusion. Nonlinear Differential Equations and Applications, 2022, 29, 1.	0.8	8
9	High Reynolds number and high Weissenberg number Oldroyd-B model with dissipation. Journal of Evolution Equations, 2021, 21, 2787-2806.	1.1	9
10	Global regularity for 2D fractional magneto-micropolar equations. Mathematische Zeitschrift, 2021, 297, 775-802.	0.9	18
11	Unique weak solutions of the $d$ -dimensional micropolar equation with fractional dissipation. Mathematical Methods in the Applied Sciences, 2021, 44, 345-377.	2.3	2
12	Stability and large-time behavior of the 2D Boussinesq equations with partial dissipation. Journal of Differential Equations, 2021, 271, 764-796.	2.2	23
13	Global solutions of 3D incompressible MHD system with mixed partial dissipation and magnetic diffusion near an equilibrium. Advances in Mathematics, 2021, 377, 107466.	1.1	58
14	Influence of a background magnetic field on a 2D magnetohydrodynamic flow. Nonlinearity, 2021, 34, 2527-2562.	1.4	20
15	Stability and exponential decay for the 2D anisotropic Boussinesq equations with horizontal dissipation. Calculus of Variations and Partial Differential Equations, 2021, 60, 1.	1.7	23
16	Stability and optimal decay for a system of 3D anisotropic Boussinesq equations. Nonlinearity, 2021, 34, 5456-5484.	1.4	14
17	Stability and Exponential Decay for the 2D Anisotropic Navier-Stokes Equations with Horizontal Dissipation. Journal of Mathematical Fluid Mechanics, 2021, 23, 1.	1.0	11
18	Optimal Decay Estimates for 2D Boussinesq Equations with Partial Dissipation. Journal of Nonlinear Science, 2021, 31, 1.	2.1	12

#	ARTICLE	IF	CITATIONS
19	Stability of Couette flow for 2D Boussinesq system with vertical dissipation. Journal of Functional Analysis, 2021, 281, 109255.	1.4	31
20	The resistive magnetohydrodynamic equation near an equilibrium. Journal of Differential Equations, 2020, 268, 1854-1871.	2.2	20
21	The Littlewood-Paley decomposition for periodic functions and applications to the Boussinesq equations. Analysis and Applications, 2020, 18, 639-682.	2.2	7
22	Unique weak solutions of the magnetohydrodynamic equations with fractional dissipation. ZAMM Zeitschrift Fur Angewandte Mathematik Und Mechanik, 2020, 100, e201900290.	1.6	2
23	Stability of perturbations near a background magnetic field of the 2D incompressible MHD equations with mixed partial dissipation. Journal of Functional Analysis, 2020, 279, 108519.	1.4	33
24	Stability Near Hydrostatic Equilibrium to the 2D Boussinesq Equations Without Thermal Diffusion. Archive for Rational Mechanics and Analysis, 2020, 237, 585-630.	2.4	46
25	Global Regularity of the Three-Dimensional Fractional Micropolar Equations. Journal of Mathematical Fluid Mechanics, 2020, 22, 1.	1.0	15
26	2D tropical climate model with fractional dissipation and without thermal diffusion. Communications in Mathematical Sciences, 2020, 18, 259-292.	1.0	12
27	On the degenerate boussinesq equations on surfaces. Journal of Geometric Mechanics, 2020, 12, 107-140.	0.8	1
28	Unique weak solutions of the non-resistive magnetohydrodynamic equations with fractional dissipation. Communications in Mathematical Sciences, 2020, 18, 987-1022.	1.0	10
29	The 3D incompressible magnetohydrodynamic equations with fractional partial dissipation. Journal of Differential Equations, 2019, 266, 630-652.	2.2	28
30	Global Regularity for the 2D MHD Equations with Partial Hyper-resistivity. International Mathematics Research Notices, 2019, 2019, 4261-4280.	1.0	32
31	An approximating approach for boundary control of optimal mixing via Navier-Stokes flows. Journal of Differential Equations, 2019, 267, 5809-5850.	2.2	3
32	A class of global large solutions to the magnetohydrodynamic equations with fractional dissipation. Zeitschrift Fur Angewandte Mathematik Und Physik, 2019, 70, 1.	1.4	10
33	Stability of hydrostatic equilibrium to the 2D Boussinesq systems with partial dissipation. Applied Mathematics Letters, 2019, 98, 392-397.	2.7	11
34	A global regularity result for the 2D Boussinesq equations with critical dissipation. Journal D'Analyse Mathematique, 2019, 137, 269-290.	0.8	22
35	The D incompressible Navier-Stokes equations with partial hyperdissipation. Mathematische Nachrichten, 2019, 292, 1823-1836.	0.8	20
36	The 2D Boussinesq equations with vertical dissipation and linear stability of shear flows. Journal of Differential Equations, 2019, 267, 1731-1747.	2.2	24

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37	Stability for a system of the 2D magnetohydrodynamic equations with partial dissipation. Applied Mathematics Letters, 2019, 94, 244-249.	2.7	9
38	Global well-posedness for the 2D fractional Boussinesq Equations in the subcritical case. Pacific Journal of Mathematics, 2019, 298, 233-255.	0.5	1
39	A class of large solutions to the supercritical surface quasi-geostrophic equation. Nonlinearity, 2019, 32, 5049-5059.	1.4	2
40	Global Regularity for a 2D Tropical Climate Model with Fractional Dissipation. Journal of Nonlinear Science, 2019, 29, 511-550.	2.1	20
41	Global regularity for a class of 2D generalized tropical climate models. Journal of Differential Equations, 2019, 266, 6346-6382.	2.2	17
42	Minimizing Geo-Distributed Interactive Service Cost With Multiple Cloud Service Providers. IEEE Access, 2019, 7, 3320-3335.	4.2	1
43	Global regularity results for the climate model with fractional dissipation. Discrete and Continuous Dynamical Systems - Series B, 2019, 24, 211-229.	0.9	14
44	Uniqueness of weak solutions to the Boussinesq equations without thermal diffusion. Communications in Mathematical Sciences, 2019, 17, 1595-1624.	1.0	6
45	Stability and decay rates for a variant of the 2D Boussinesq-Bard system. Communications in Mathematical Sciences, 2019, 17, 2325-2352.	1.0	11
46	EC3: Cutting Cooling Energy Consumption Through Weather-Aware Geo-Scheduling Across Multiple Datacenters. IEEE Access, 2018, 6, 2028-2038.	4.2	4
47	The 2D Boussinesq equations with fractional horizontal dissipation and thermal diffusion. Journal Des Mathematiques Pures Et Appliquees, 2018, 115, 187-217.	1.6	19
48	Long time behavior of the two-dimensional Boussinesq equations without buoyancy diffusion. Physica D: Nonlinear Phenomena, 2018, 376-377, 144-159.	2.8	72
49	Partially dissipative 2D Boussinesq equations with Navier type boundary conditions. Physica D: Nonlinear Phenomena, 2018, 376-377, 39-48.	2.8	20
50	Global Regularity and Time Decay for the 2D Magnetohydrodynamic Equations with Fractional Dissipation and Partial Magnetic Diffusion. Journal of Mathematical Fluid Mechanics, 2018, 20, 1541-1565.	1.0	46
51	Boundary Control for Optimal Mixing via Navier-Stokes Flows. SIAM Journal on Control and Optimization, 2018, 56, 2768-2801.	2.1	8
52	Global regularity for the 2D micropolar equations with fractional dissipation. Discrete and Continuous Dynamical Systems, 2018, 38, 4133-4162.	0.9	25
53	The 3D incompressible Boussinesq equations with fractional partial dissipation. Communications in Mathematical Sciences, 2018, 16, 617-633.	1.0	10
54	Global small solutions to the compressible 2D magnetohydrodynamic system without magnetic diffusion. Advances in Mathematics, 2017, 310, 759-888.	1.1	60

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55	Global well-posedness and large-time decay for the 2D micropolar equations. Journal of Differential Equations, 2017, 262, 3488-3523.	2.2	86
56	Global Regularity for Several Incompressible Fluid Models with Partial Dissipation. Journal of Mathematical Fluid Mechanics, 2017, 19, 423-444.	1.0	13
57	On the initial- and boundary-value problem for 2D micropolar equations with only angular velocity dissipation. Zeitschrift Fur Angewandte Mathematik Und Physik, 2017, 68, 1.	1.4	12
58	Global regularity results for the 2D Boussinesq equations with partial dissipation. Journal of Differential Equations, 2016, 260, 1893-1917.	2.2	61
59	Regularity criteria for the 2D Boussinesq equations with supercritical dissipation. Communications in Mathematical Sciences, 2016, 14, 1999-2022.	1.0	17
60	Regularity results for the 2D Boussinesq equations with critical or supercritical dissipation. Communications in Mathematical Sciences, 2016, 14, 1963-1997.	1.0	34
61	Well-posedness of the two-dimensional generalized Benjamin-Bona-Mahony equation on the upper half plane. Discrete and Continuous Dynamical Systems - Series B, 2016, 21, 763-779.	0.9	0
62	Viscous approximation and weak solutions of the 3D axisymmetric Euler equations. Mathematical Methods in the Applied Sciences, 2015, 38, 548-558.	2.3	6
63	Local Well-Posedness for the Hall-MHD Equations with Fractional Magnetic Diffusion. Journal of Mathematical Fluid Mechanics, 2015, 17, 627-638.	1.0	80
64	The 2D magnetohydrodynamic equations with magnetic diffusion. Nonlinearity, 2015, 28, 3935-3955.	1.4	57
65	Global Small Solution to the 2D MHD System with a Velocity Damping Term. SIAM Journal on Mathematical Analysis, 2015, 47, 2630-2656.	1.9	80
66	Global Smooth Solutions to the n-Dimensional Damped Models of Incompressible Fluid Mechanics with Small Initial Datum. Journal of Nonlinear Science, 2015, 25, 157-192.	2.1	32
67	Blowup in stagnation-point form solutions of the inviscid 2d Boussinesq equations. Journal of Differential Equations, 2015, 259, 3559-3576.	2.2	14
68	Eventual Regularity of the Two-Dimensional Boussinesq Equations with Supercritical Dissipation. Journal of Nonlinear Science, 2015, 25, 37-58.	2.1	26
69	Analyticity of Lagrangian trajectories for well posed inviscid incompressible fluid models. Advances in Mathematics, 2015, 285, 352-393.	1.1	29
70	Well-posedness and inviscid limits of the Boussinesq equations with fractional Laplacian dissipation. Nonlinearity, 2014, 27, 2215-2232.	1.4	26
71	The 2D Incompressible Magnetohydrodynamics Equations with only Magnetic Diffusion. SIAM Journal on Mathematical Analysis, 2014, 46, 588-602.	1.9	132
72	The Two-Dimensional Incompressible Boussinesq Equations with General Critical Dissipation. SIAM Journal on Mathematical Analysis, 2014, 46, 3426-3454.	1.9	71

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73	Small global solutions to the damped two-dimensional Boussinesq equations. <i>Journal of Differential Equations</i> , 2014, 256, 3594-3613.	2.2	37
74	Global existence and decay of smooth solution for the 2-D MHD equations without magnetic diffusion. <i>Journal of Functional Analysis</i> , 2014, 267, 503-541.	1.4	167
75	An Incompressible 2D Didactic Model with Singularity and Explicit Solutions of the 2D Boussinesq Equations. <i>Journal of Mathematical Fluid Mechanics</i> , 2014, 16, 473-480.	1.0	17
76	Global well-posedness for a class of 2D Boussinesq systems with fractional dissipation. <i>Journal of Differential Equations</i> , 2014, 257, 4188-4213.	2.2	37
77	Generalized 2D Euler-Boussinesq equations with a singular velocity. <i>Journal of Differential Equations</i> , 2014, 257, 82-108.	2.2	21
78	Global Regularity for the Two-Dimensional Anisotropic Boussinesq Equations with Vertical Dissipation. <i>Archive for Rational Mechanics and Analysis</i> , 2013, 208, 985-1004.	2.4	159
79	The 2D MHD equations with horizontal dissipation and horizontal magnetic diffusion. <i>Journal of Differential Equations</i> , 2013, 254, 2661-2681.	2.2	127
80	The generalized Buckley-Leverett and the regularized Buckley-Leverett equations. <i>Journal of Mathematical Physics</i> , 2012, 53, .	1.1	3
81	Logarithmically regularized inviscid models in borderline sobolev spaces. <i>Journal of Mathematical Physics</i> , 2012, 53, .	1.1	12
82	Vanishing viscosity limits for the degenerate lake equations with Navier boundary conditions. <i>Nonlinearity</i> , 2012, 25, 641-655.	1.4	2
83	Deformation and Symmetry in the Inviscid SQG and the 3D Euler Equations. <i>Journal of Nonlinear Science</i> , 2012, 22, 665-688.	2.1	9
84	Firm behavioral response to multiple sources of risky cash flow. <i>Applied Mathematics Letters</i> , 2012, 25, 1389-1393.	2.7	0
85	Fifth-order complex Korteweg-de Vries-type equations. <i>Journal of Physics A: Mathematical and Theoretical</i> , 2012, 45, 205202.	2.1	2
86	Dissipative Models Generalizing the 2D Navier-Stokes and the Surface Quasi-Geostrophic Equations. <i>Indiana University Mathematics Journal</i> , 2012, 61, 1997-2018.	0.9	21
87	Generalized surface quasi-geostrophic equations with singular velocities. <i>Communications on Pure and Applied Mathematics</i> , 2012, 65, 1037-1066.	3.1	106
88	The 2D Boussinesq equations with logarithmically supercritical velocities. <i>Advances in Mathematics</i> , 2012, 230, 1618-1645.	1.1	43
89	A study on the global regularity for a model of the 3D axisymmetric Navier-Stokes equations. <i>Nonlinear Analysis: Theory, Methods &amp; Applications</i> , 2012, 75, 3092-3098.	1.1	1
90	New Numerical Results for the Surface Quasi-Geostrophic Equation. <i>Journal of Scientific Computing</i> , 2012, 50, 1-28.	2.3	39

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91	Global Regularity for a Class of Generalized Magnetohydrodynamic Equations. Journal of Mathematical Fluid Mechanics, 2011, 13, 295-305.	1.0	143
92	Inviscid Models Generalizing the Two-dimensional Euler and the Surface Quasi-geostrophic Equations. Archive for Rational Mechanics and Analysis, 2011, 202, 35-62.	2.4	75
93	Global regularity for the 2D MHD equations with mixed partial dissipation and magnetic diffusion. Advances in Mathematics, 2011, 226, 1803-1822.	1.1	297
94	Firm behavior under illiquidity risk. Applied Mathematics Letters, 2011, 24, 709-713.	2.7	1
95	Global regularity results for the 2D Boussinesq equations with vertical dissipation. Journal of Differential Equations, 2011, 251, 1637-1655.	2.2	94
96	Complex-Valued Burgers and KdV-Burgers Equations. Journal of Nonlinear Science, 2010, 20, 341-360.	2.1	2
97	Two regularity criteria for the 3D MHD equations. Journal of Differential Equations, 2010, 248, 2263-2274.	2.2	235
98	The 2D Boussinesq equations with vertical viscosity and vertical diffusivity. Journal of Differential Equations, 2010, 249, 1078-1088.	2.2	77
99	A dual-Petrov-Galerkin method for two integrable fifth-order KdV type equations. Discrete and Continuous Dynamical Systems, 2010, 26, 1525-1536.	0.9	7
100	A new solution representation for the BBM equation in a quarter plane and the eventual periodicity. Nonlinearity, 2009, 22, 1927-1944.	1.4	6
101	Hölder continuity of solutions of supercritical dissipative hydrodynamic transport equations. Annales De L'Institut Henri Poincare (C) Analyse Non Lineaire, 2009, 26, 159-180.	1.4	60
102	Low regularity solutions of two fifth-order KDV type equations. Journal D'Analyse Mathematique, 2009, 107, 221-238.	0.8	51
103	Vanishing viscosity limit for the 3D magnetohydrodynamic system with a slip boundary condition. Journal of Functional Analysis, 2009, 257, 3375-3394.	1.4	45
104	Temporal growth and eventual periodicity for dispersive wave equations in a quarter plane. Discrete and Continuous Dynamical Systems, 2009, 23, 1141-1168.	0.9	15
105	A Dual-Petrov-Galerkin Method for the Kawahara-Type Equations. Journal of Scientific Computing, 2008, 34, 48-63.	2.3	36
106	Regularity of Hölder continuous solutions of the supercritical quasi-geostrophic equation. Annales De L'Institut Henri Poincare (C) Analyse Non Lineaire, 2008, 25, 1103-1110.	1.4	84
107	The Kawahara equation in weighted Sobolev spaces. Nonlinearity, 2008, 21, 1489-1505.	1.4	13
108	Regularity Criteria for the Generalized MHD Equations. Communications in Partial Differential Equations, 2008, 33, 285-306.	2.2	161

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109	Local well-posedness and local (in space) regularity results for the complex Kortewegâ€“de Vries equation. Proceedings of the Royal Society of Edinburgh Section A: Mathematics, 2007, 137, 203-223.	1.2	3
110	Existence and uniqueness results for the 2-D dissipative quasi-geostrophic equation. Nonlinear Analysis: Theory, Methods & Applications, 2007, 67, 3013-3036.	1.1	31
111	Eventual periodicity for the KdV equation on a half-line. Physica D: Nonlinear Phenomena, 2007, 227, 105-119.	2.8	12
112	Lower Bounds for an Integral Involving Fractional Laplacians and the Generalized Navier-Stokes Equations in Besov Spaces. Communications in Mathematical Physics, 2006, 263, 803-831.	2.2	135
113	The effect of dissipation on solutions of the complex KdV equation. Mathematics and Computers in Simulation, 2005, 69, 589-599.	4.4	4
114	Solutions of the 2D quasi-geostrophic equation in HÃ“lder spaces. Nonlinear Analysis: Theory, Methods & Applications, 2005, 62, 579-594.	1.1	38
115	Global Solutions of the 2D Dissipative Quasi-Geostrophic Equation in Besov Spaces. SIAM Journal on Mathematical Analysis, 2005, 36, 1014-1030.	1.9	75
116	The two-dimensional quasi-geostrophic equation with critical or supercritical dissipation. Nonlinearity, 2005, 18, 139-154.	1.4	48
117	The complex KdV equation with or without dissipation. Discrete and Continuous Dynamical Systems - Series B, 2005, 5, 489-512.	0.9	11
118	The generalized incompressible Navier-Stokes equations in Besov spaces. Dynamics of Partial Differential Equations, 2004, 1, 381-400.	0.9	63
119	Generalized MHD equations. Journal of Differential Equations, 2003, 195, 284-312.	2.2	262
120	THE QUASI-GEOSTROPHIC EQUATION AND ITS TWO REGULARIZATIONS. Communications in Partial Differential Equations, 2002, 27, 1161-1181.	2.2	46
121	The 2D dissipative quasi-geostrophic equation. Applied Mathematics Letters, 2002, 15, 925-930.	2.7	17
122	The Zeroâ€“viscosity Limit of the 2D Navierâ€“Stokes Equations. Studies in Applied Mathematics, 2002, 109, 265-278.	2.4	30
123	Zero-Dissipation Limit for Nonlinear Waves. ESAIM: Mathematical Modelling and Numerical Analysis, 2000, 34, 275-301.	1.9	4
124	Behavior of Solutions of 2D Quasi-Geostrophic Equations. SIAM Journal on Mathematical Analysis, 1999, 30, 937-948.	1.9	281
125	The Inviscid Limit of the Complex Ginzburgâ€“Landau Equation. Journal of Differential Equations, 1998, 142, 413-433.	2.2	27
126	Well-posedness of a semilinear heat equation with weak initial data. Journal of Fourier Analysis and Applications, 1998, 4, 629-642.	1.0	12



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127	Statistical solutions of the Navier–Stokes equations on the phase space of vorticity and the inviscid limits. <i>Journal of Mathematical Physics</i> , 1997, 38, 3031-3045.	1.1	17
128	Quasi-geostrophic-type equations with initial data in Morrey spaces. <i>Nonlinearity</i> , 1997, 10, 1409-1420.	1.4	37
129	Viscous and inviscid magneto-hydrodynamics equations. <i>Journal D'Analyse Mathematique</i> , 1997, 73, 251-265.	0.8	74
130	Inviscid limit for vortex patches. <i>Nonlinearity</i> , 1995, 8, 735-742.	1.4	82
131	Stability of 3D perturbations near a special 2D solution to the rotating Boussinesq equations. <i>Studies in Applied Mathematics</i> , 0, , .	2.4	2