

# Jiahong Wu

## List of Publications by Year in descending order

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#	ARTICLE	IF	CITATIONS
1	Global regularity for the 2D MHD equations with mixed partial dissipation and magnetic diffusion. <i>Advances in Mathematics</i> , 2011, 226, 1803-1822.	1.1	297
2	Behavior of Solutions of 2D Quasi-Geostrophic Equations. <i>SIAM Journal on Mathematical Analysis</i> , 1999, 30, 937-948.	1.9	281
3	Generalized MHD equations. <i>Journal of Differential Equations</i> , 2003, 195, 284-312.	2.2	262
4	Two regularity criteria for the 3D MHD equations. <i>Journal of Differential Equations</i> , 2010, 248, 2263-2274.	2.2	235
5	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
6	Regularity Criteria for the Generalized MHD Equations. <i>Communications in Partial Differential Equations</i> , 2008, 33, 285-306.	2.2	161
7	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
8	Global Regularity for a Class of Generalized Magnetohydrodynamic Equations. <i>Journal of Mathematical Fluid Mechanics</i> , 2011, 13, 295-305.	1.0	143
9	Lower Bounds for an Integral Involving Fractional Laplacians and the Generalized Navier-Stokes Equations in Besov Spaces. <i>Communications in Mathematical Physics</i> , 2006, 263, 803-831.	2.2	135
10	The 2D Incompressible Magnetohydrodynamics Equations with only Magnetic Diffusion. <i>SIAM Journal on Mathematical Analysis</i> , 2014, 46, 588-602.	1.9	132
11	The 2D MHD equations with horizontal dissipation and horizontal magnetic diffusion. <i>Journal of Differential Equations</i> , 2013, 254, 2661-2681.	2.2	127
12	Generalized surface quasi-geostrophic equations with singular velocities. <i>Communications on Pure and Applied Mathematics</i> , 2012, 65, 1037-1066.	3.1	106
13	Global regularity results for the 2D Boussinesq equations with vertical dissipation. <i>Journal of Differential Equations</i> , 2011, 251, 1637-1655.	2.2	94
14	Global well-posedness and large-time decay for the 2D micropolar equations. <i>Journal of Differential Equations</i> , 2017, 262, 3488-3523.	2.2	86
15	Regularity of Hölder continuous solutions of the supercritical quasi-geostrophic equation. <i>Annales De L'Institut Henri Poincare (C) Analyse Non Lineaire</i> , 2008, 25, 1103-1110.	1.4	84
16	Inviscid limit for vortex patches. <i>Nonlinearity</i> , 1995, 8, 735-742.	1.4	82
17	Local Well-Posedness for the Hall-MHD Equations with Fractional Magnetic Diffusion. <i>Journal of Mathematical Fluid Mechanics</i> , 2015, 17, 627-638.	1.0	80
18	Global Small Solution to the 2D MHD System with a Velocity Damping Term. <i>SIAM Journal on Mathematical Analysis</i> , 2015, 47, 2630-2656.	1.9	80

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19	The 2D Boussinesq equations with vertical viscosity and vertical diffusivity. <i>Journal of Differential Equations</i> , 2010, 249, 1078-1088.	2.2	77
20	Global Solutions of the 2D Dissipative Quasi-Geostrophic Equation in Besov Spaces. <i>SIAM Journal on Mathematical Analysis</i> , 2005, 36, 1014-1030.	1.9	75
21	Inviscid Models Generalizing the Two-dimensional Euler and the Surface Quasi-geostrophic Equations. <i>Archive for Rational Mechanics and Analysis</i> , 2011, 202, 35-62.	2.4	75
22	Viscous and inviscid magneto-hydrodynamics equations. <i>Journal D'Analyse Mathematique</i> , 1997, 73, 251-265.	0.8	74
23	Long time behavior of the two-dimensional Boussinesq equations without buoyancy diffusion. <i>Physica D: Nonlinear Phenomena</i> , 2018, 376-377, 144-159.	2.8	72
24	The Two-Dimensional Incompressible Boussinesq Equations with General Critical Dissipation. <i>SIAM Journal on Mathematical Analysis</i> , 2014, 46, 3426-3454.	1.9	71
25	The generalized incompressible Navier-Stokes equations in Besov spaces. <i>Dynamics of Partial Differential Equations</i> , 2004, 1, 381-400.	0.9	63
26	Global regularity results for the 2D Boussinesq equations with partial dissipation. <i>Journal of Differential Equations</i> , 2016, 260, 1893-1917.	2.2	61
27	Hölder continuity of solutions of supercritical dissipative hydrodynamic transport equations. <i>Annales De L'Institut Henri Poincare (C) Analyse Non Lineaire</i> , 2009, 26, 159-180.	1.4	60
28	Global small solutions to the compressible 2D magnetohydrodynamic system without magnetic diffusion. <i>Advances in Mathematics</i> , 2017, 310, 759-888.	1.1	60
29	Global solutions of 3D incompressible MHD system with mixed partial dissipation and magnetic diffusion near an equilibrium. <i>Advances in Mathematics</i> , 2021, 377, 107466.	1.1	58
30	The 2D magnetohydrodynamic equations with magnetic diffusion. <i>Nonlinearity</i> , 2015, 28, 3935-3955.	1.4	57
31	Low regularity solutions of two fifth-order KDV type equations. <i>Journal D'Analyse Mathematique</i> , 2009, 107, 221-238.	0.8	51
32	The two-dimensional quasi-geostrophic equation with critical or supercritical dissipation. <i>Nonlinearity</i> , 2005, 18, 139-154.	1.4	48
33	THE QUASI-GEOSTROPHIC EQUATION AND ITS TWO REGULARIZATIONS. <i>Communications in Partial Differential Equations</i> , 2002, 27, 1161-1181.	2.2	46
34	Global Regularity and Time Decay for the 2D Magnetohydrodynamic Equations with Fractional Dissipation and Partial Magnetic Diffusion. <i>Journal of Mathematical Fluid Mechanics</i> , 2018, 20, 1541-1565.	1.0	46
35	Stability Near Hydrostatic Equilibrium to the 2D Boussinesq Equations Without Thermal Diffusion. <i>Archive for Rational Mechanics and Analysis</i> , 2020, 237, 585-630.	2.4	46
36	Vanishing viscosity limit for the 3D magnetohydrodynamic system with a slip boundary condition. <i>Journal of Functional Analysis</i> , 2009, 257, 3375-3394.	1.4	45

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37	The 2D Boussinesq equations with logarithmically supercritical velocities. <i>Advances in Mathematics</i> , 2012, 230, 1618-1645.	1.1	43
38	New Numerical Results for the Surface Quasi-Geostrophic Equation. <i>Journal of Scientific Computing</i> , 2012, 50, 1-28.	2.3	39
39	Solutions of the 2D quasi-geostrophic equation in Hölder spaces. <i>Nonlinear Analysis: Theory, Methods &amp; Applications</i> , 2005, 62, 579-594.	1.1	38
40	Quasi-geostrophic-type equations with initial data in Morrey spaces. <i>Nonlinearity</i> , 1997, 10, 1409-1420.	1.4	37
41	Small global solutions to the damped two-dimensional Boussinesq equations. <i>Journal of Differential Equations</i> , 2014, 256, 3594-3613.	2.2	37
42	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
43	A Dual-Petrov-Galerkin Method for the Kawahara-Type Equations. <i>Journal of Scientific Computing</i> , 2008, 34, 48-63.	2.3	36
44	Regularity results for the 2D Boussinesq equations with critical or supercritical dissipation. <i>Communications in Mathematical Sciences</i> , 2016, 14, 1963-1997.	1.0	34
45	Stability of perturbations near a background magnetic field of the 2D incompressible MHD equations with mixed partial dissipation. <i>Journal of Functional Analysis</i> , 2020, 279, 108519.	1.4	33
46	Global Smooth Solutions to the n-Dimensional Damped Models of Incompressible Fluid Mechanics with Small Initial Datum. <i>Journal of Nonlinear Science</i> , 2015, 25, 157-192.	2.1	32
47	Global Regularity for the 2D MHD Equations with Partial Hyper-resistivity. <i>International Mathematics Research Notices</i> , 2019, 2019, 4261-4280.	1.0	32
48	Existence and uniqueness results for the 2-D dissipative quasi-geostrophic equation. <i>Nonlinear Analysis: Theory, Methods &amp; Applications</i> , 2007, 67, 3013-3036.	1.1	31
49	Stability of Couette flow for 2D Boussinesq system with vertical dissipation. <i>Journal of Functional Analysis</i> , 2021, 281, 109255.	1.4	31
50	The Zero-Viscosity Limit of the 2D Navier-Stokes Equations. <i>Studies in Applied Mathematics</i> , 2002, 109, 265-278.	2.4	30
51	Analyticity of Lagrangian trajectories for well posed inviscid incompressible fluid models. <i>Advances in Mathematics</i> , 2015, 285, 352-393.	1.1	29
52	The 3D incompressible magnetohydrodynamic equations with fractional partial dissipation. <i>Journal of Differential Equations</i> , 2019, 266, 630-652.	2.2	28
53	The Inviscid Limit of the Complex Ginzburg-Landau Equation. <i>Journal of Differential Equations</i> , 1998, 142, 413-433.	2.2	27
54	Well-posedness and inviscid limits of the Boussinesq equations with fractional Laplacian dissipation. <i>Nonlinearity</i> , 2014, 27, 2215-2232.	1.4	26

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55	Eventual Regularity of the Two-Dimensional Boussinesq Equations with Supercritical Dissipation. <i>Journal of Nonlinear Science</i> , 2015, 25, 37-58.	2.1	26
56	Global regularity for the 2D micropolar equations with fractional dissipation. <i>Discrete and Continuous Dynamical Systems</i> , 2018, 38, 4133-4162.	0.9	25
57	The 2D Boussinesq equations with vertical dissipation and linear stability of shear flows. <i>Journal of Differential Equations</i> , 2019, 267, 1731-1747.	2.2	24
58	Stability and large-time behavior of the 2D Boussinesq equations with partial dissipation. <i>Journal of Differential Equations</i> , 2021, 271, 764-796.	2.2	23
59	Stability and exponential decay for the 2D anisotropic Boussinesq equations with horizontal dissipation. <i>Calculus of Variations and Partial Differential Equations</i> , 2021, 60, 1.	1.7	23
60	A global regularity result for the 2D Boussinesq equations with critical dissipation. <i>Journal D'Analyse Mathématique</i> , 2019, 137, 269-290.	0.8	22
61	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
62	Generalized 2D Euler-Boussinesq equations with a singular velocity. <i>Journal of Differential Equations</i> , 2014, 257, 82-108.	2.2	21
63	Partially dissipative 2D Boussinesq equations with Navier type boundary conditions. <i>Physica D: Nonlinear Phenomena</i> , 2018, 376-377, 39-48.	2.8	20
64	The D incompressible Navier-Stokes equations with partial hyperdissipation. <i>Mathematische Nachrichten</i> , 2019, 292, 1823-1836.	0.8	20
65	Global Regularity for a 2D Tropical Climate Model with Fractional Dissipation. <i>Journal of Nonlinear Science</i> , 2019, 29, 511-550.	2.1	20
66	The resistive magnetohydrodynamic equation near an equilibrium. <i>Journal of Differential Equations</i> , 2020, 268, 1854-1871.	2.2	20
67	Influence of a background magnetic field on a 2D magnetohydrodynamic flow. <i>Nonlinearity</i> , 2021, 34, 2527-2562.	1.4	20
68	The 2D Boussinesq equations with fractional horizontal dissipation and thermal diffusion. <i>Journal Des Mathématiques Pures Et Appliquées</i> , 2018, 115, 187-217.	1.6	19
69	Global regularity for 2D fractional magneto-micropolar equations. <i>Mathematische Zeitschrift</i> , 2021, 297, 775-802.	0.9	18
70	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
71	The 2D dissipative quasi-geostrophic equation. <i>Applied Mathematics Letters</i> , 2002, 15, 925-930.	2.7	17
72	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

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73	Global regularity for a class of 2D generalized tropical climate models. <i>Journal of Differential Equations</i> , 2019, 266, 6346-6382.	2.2	17
74	Regularity criteria for the 2D Boussinesq equations with supercritical dissipation. <i>Communications in Mathematical Sciences</i> , 2016, 14, 1999-2022.	1.0	17
75	Global Regularity of the Three-Dimensional Fractional Micropolar Equations. <i>Journal of Mathematical Fluid Mechanics</i> , 2020, 22, 1.	1.0	15
76	Temporal growth and eventual periodicity for dispersive wave equations in a quarter plane. <i>Discrete and Continuous Dynamical Systems</i> , 2009, 23, 1141-1168.	0.9	15
77	Blowup in stagnation-point form solutions of the inviscid 2d Boussinesq equations. <i>Journal of Differential Equations</i> , 2015, 259, 3559-3576.	2.2	14
78	Stability and optimal decay for a system of 3D anisotropic Boussinesq equations. <i>Nonlinearity</i> , 2021, 34, 5456-5484.	1.4	14
79	Global regularity results for the climate model with fractional dissipation. <i>Discrete and Continuous Dynamical Systems - Series B</i> , 2019, 24, 211-229.	0.9	14
80	The Kawahara equation in weighted Sobolev spaces. <i>Nonlinearity</i> , 2008, 21, 1489-1505.	1.4	13
81	Global Regularity for Several Incompressible Fluid Models with Partial Dissipation. <i>Journal of Mathematical Fluid Mechanics</i> , 2017, 19, 423-444.	1.0	13
82	Well-posedness of a semilinear heat equation with weak initial data. <i>Journal of Fourier Analysis and Applications</i> , 1998, 4, 629-642.	1.0	12
83	Eventual periodicity for the KdV equation on a half-line. <i>Physica D: Nonlinear Phenomena</i> , 2007, 227, 105-119.	2.8	12
84	Logarithmically regularized inviscid models in borderline sobolev spaces. <i>Journal of Mathematical Physics</i> , 2012, 53, .	1.1	12
85	On the initial- and boundary-value problem for 2D micropolar equations with only angular velocity dissipation. <i>Zeitschrift Fur Angewandte Mathematik Und Physik</i> , 2017, 68, 1.	1.4	12
86	Optimal Decay Estimates for 2D Boussinesq Equations with Partial Dissipation. <i>Journal of Nonlinear Science</i> , 2021, 31, 1.	2.1	12
87	2D tropical climate model with fractional dissipation and without thermal diffusion. <i>Communications in Mathematical Sciences</i> , 2020, 18, 259-292.	1.0	12
88	The complex KdV equation with or without dissipation. <i>Discrete and Continuous Dynamical Systems - Series B</i> , 2005, 5, 489-512.	0.9	11
89	Stability of hydrostatic equilibrium to the 2D Boussinesq systems with partial dissipation. <i>Applied Mathematics Letters</i> , 2019, 98, 392-397.	2.7	11
90	Stability and Exponential Decay for the 2D Anisotropic Navier–Stokes Equations with Horizontal Dissipation. <i>Journal of Mathematical Fluid Mechanics</i> , 2021, 23, 1.	1.0	11

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91	Stability and decay rates for a variant of the 2D Boussinesq-Bénard system. <i>Communications in Mathematical Sciences</i> , 2019, 17, 2325-2352.	1.0	11
92	A class of global large solutions to the magnetohydrodynamic equations with fractional dissipation. <i>Zeitschrift Fur Angewandte Mathematik Und Physik</i> , 2019, 70, 1.	1.4	10
93	The 3D incompressible Boussinesq equations with fractional partial dissipation. <i>Communications in Mathematical Sciences</i> , 2018, 16, 617-633.	1.0	10
94	Unique weak solutions of the non-resistive magnetohydrodynamic equations with fractional dissipation. <i>Communications in Mathematical Sciences</i> , 2020, 18, 987-1022.	1.0	10
95	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
96	Stability for a system of the 2D magnetohydrodynamic equations with partial dissipation. <i>Applied Mathematics Letters</i> , 2019, 94, 244-249.	2.7	9
97	High Reynolds number and high Weissenberg number Oldroyd-B model with dissipation. <i>Journal of Evolution Equations</i> , 2021, 21, 2787-2806.	1.1	9
98	Boundary Control for Optimal Mixing via Navier-Stokes Flows. <i>SIAM Journal on Control and Optimization</i> , 2018, 56, 2768-2801.	2.1	8
99	Stability and large-time behavior for the 2D Boussinesq system with horizontal dissipation and vertical thermal diffusion. <i>Nonlinear Differential Equations and Applications</i> , 2022, 29, 1.	0.8	8
100	The Littlewood-Paley decomposition for periodic functions and applications to the Boussinesq equations. <i>Analysis and Applications</i> , 2020, 18, 639-682.	2.2	7
101	A dual-Petrov-Galerkin method for two integrable fifth-order KdV type equations. <i>Discrete and Continuous Dynamical Systems</i> , 2010, 26, 1525-1536.	0.9	7
102	Sharp decay estimates for Oldroyd-B model with only fractional stress tensor diffusion. <i>Journal of Functional Analysis</i> , 2022, 282, 109332.	1.4	7
103	Global regularity for the generalized incompressible Oldroyd-B model with only stress tensor dissipation in critical Besov spaces. <i>Journal of Differential Equations</i> , 2022, 316, 641-686.	2.2	7
104	Optimal decay for the 3D anisotropic Boussinesq equations near the hydrostatic balance. <i>Calculus of Variations and Partial Differential Equations</i> , 2022, 61, 1.	1.7	7
105	A new solution representation for the BBM equation in a quarter plane and the eventual periodicity. <i>Nonlinearity</i> , 2009, 22, 1927-1944.	1.4	6
106	Viscous approximation and weak solutions of the 3D axisymmetric Euler equations. <i>Mathematical Methods in the Applied Sciences</i> , 2015, 38, 548-558.	2.3	6
107	Uniqueness of weak solutions to the Boussinesq equations without thermal diffusion. <i>Communications in Mathematical Sciences</i> , 2019, 17, 1595-1624.	1.0	6
108	Zero-Dissipation Limit for Nonlinear Waves. <i>ESAIM: Mathematical Modelling and Numerical Analysis</i> , 2000, 34, 275-301.	1.9	4

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109	The effect of dissipation on solutions of the complex KdV equation. <i>Mathematics and Computers in Simulation</i> , 2005, 69, 589-599.	4.4	4
110	EC3: Cutting Cooling Energy Consumption Through Weather-Aware Geo-Scheduling Across Multiple Datacenters. <i>IEEE Access</i> , 2018, 6, 2028-2038.	4.2	4
111	Mild Ill-Posedness in $L^\infty$ for 2D Resistive MHD Equations Near a Background Magnetic Field. <i>International Mathematics Research Notices</i> , 2023, 2023, 4839-4868.	1.0	4
112	Stabilizing effect of magnetic field on the 2D ideal magnetohydrodynamic flow with mixed partial damping. <i>Calculus of Variations and Partial Differential Equations</i> , 2022, 61, .	1.7	4
113	Local well-posedness and local (in space) regularity results for the complex Kortewegâ€“de Vries equation. <i>Proceedings of the Royal Society of Edinburgh Section A: Mathematics</i> , 2007, 137, 203-223.	1.2	3
114	The generalized Buckley-Leverett and the regularized Buckley-Leverett equations. <i>Journal of Mathematical Physics</i> , 2012, 53, .	1.1	3
115	An approximating approach for boundary control of optimal mixing via Navier-Stokes flows. <i>Journal of Differential Equations</i> , 2019, 267, 5809-5850.	2.2	3
116	Complex-Valued Burgers and KdVâ€“Burgers Equations. <i>Journal of Nonlinear Science</i> , 2010, 20, 341-360.	2.1	2
117	Vanishing viscosity limits for the degenerate lake equations with Navier boundary conditions. <i>Nonlinearity</i> , 2012, 25, 641-655.	1.4	2
118	Fifth-order complex Kortewegâ€“de Vries-type equations. <i>Journal of Physics A: Mathematical and Theoretical</i> , 2012, 45, 205202.	2.1	2
119	A class of large solutions to the supercritical surface quasi-geostrophic equation. <i>Nonlinearity</i> , 2019, 32, 5049-5059.	1.4	2
120	Unique weak solutions of the magnetohydrodynamic equations with fractional dissipation. <i>ZAMM Zeitschrift Fur Angewandte Mathematik Und Mechanik</i> , 2020, 100, e201900290.	1.6	2
121	Unique weak solutions of the $d$ -dimensional micropolar equation with fractional dissipation. <i>Mathematical Methods in the Applied Sciences</i> , 2021, 44, 345-377.	2.3	2
122	Stability of 3D perturbations near a special 2D solution to the rotating Boussinesq equations. <i>Studies in Applied Mathematics</i> , 0, , .	2.4	2
123	Global well-posedness and time decay for 2D Oldroyd-B-type fluids in periodic domains with dissipation in the velocity equation only. <i>Nonlinear Analysis: Real World Applications</i> , 2022, 66, 103513.	1.7	2
124	Firm behavior under illiquidity risk. <i>Applied Mathematics Letters</i> , 2011, 24, 709-713.	2.7	1
125	A study on the global regularity for a model of the 3D axisymmetric Navierâ€“Stokes equations. <i>Nonlinear Analysis: Theory, Methods &amp; Applications</i> , 2012, 75, 3092-3098.	1.1	1
126	Global well-posedness for the 2D fractional Boussinesq Equations in the subcritical case. <i>Pacific Journal of Mathematics</i> , 2019, 298, 233-255.	0.5	1



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127	Minimizing Geo-Distributed Interactive Service Cost With Multiple Cloud Service Providers. IEEE Access, 2019, 7, 3320-3335.	4.2	1
128	On the degenerate boussinesq equations on surfaces. Journal of Geometric Mechanics, 2020, 12, 107-140.	0.8	1
129	Stability and exponential decay for magnetohydrodynamic equations. Proceedings of the Royal Society of Edinburgh Section A: Mathematics, 2023, 153, 853-880.	1.2	1
130	Firm behavioral response to multiple sources of risky cash flow. Applied Mathematics Letters, 2012, 25, 1389-1393.	2.7	0
131	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