Shu Wang

List of Publications by Year
in descending order

83 papers	809 citations	687363 13 h-index	526287 27 g-index
83 all docs	83 docs citations	83 times ranked	225 citing authors

#	Article	IF	Citations
1	The Convergence of the Navierâ€“Stokesâ€“Poisson System to the Incompressible Euler Equations. Communications in Partial Differential Equations, 2006, 31, 571-591.	2.2	123
2	Quasineutral Limit of Eulerâ€“Poisson System with and without Viscosity. Communications in Partial Differential Equations, 2005, 29, 419-456.	2.2	97
3	The asymptotic behavior of globally smooth solutions of the multidimensional isentropic hydrodynamic model for semiconductors. Journal of Differential Equations, 2003, 192, 111-133.	2.2	75
4	Convergence of Compressible Eulerâ€“Maxwell Equations to Incompressible Euler Equations. Communications in Partial Differential Equations, 2008, 33, 349-376.	2.2	65
5	Convergence of Compressible Euler-Maxwell Equations to Compressible Euler-Poisson Equations*. Chinese Annals of Mathematics Series B, 2007, 28, 583-602.	0.4	45
6	Quasi-neutral Limit of the Drift Diffusion Models for Semiconductors: The Case of General Sign-Changing Doping Profile. SIAM Journal on Mathematical Analysis, 2006, 37, 1854-1889.	1.9	31
7	Convergence of the Navierâ€“Stokesâ€“Poisson system to the incompressible Navierâ€“Stokes equations. Journal of Mathematical Physics, 2008, 49, .	1.1	30
8	Kleinâ€Gordonâ€Zakharov system in energy space: Blowâ€up profile and subsonic limit. Mathematical Methods in the Applied Sciences, 2019, 42, 3211-3221.	2.3	27
9	Global existence and asymptotic decay of solutions to the non-isentropic Eulerâ€“Maxwell system. Mathematical Models and Methods in Applied Sciences, 2014, 24, 2851-2884.	3.3	24
10	Asymptotic behavior of global smooth solutions for full compressible Navierâ€“Stokesâ€“Maxwell equations. Nonlinear Analysis: Real World Applications, 2014, 19, 105-116.	1.7	22
11	On Finite Time Singularity and Global Regularity of an Axisymmetric Model for the 3D Euler Equations. Archive for Rational Mechanics and Analysis, 2014, 212, 683-706.	2.4	19
12	Boundary layer problem and zero viscosity-diffusion limit of the incompressible magnetohydrodynamic system with no-slip boundary conditions. Journal of Differential Equations, 2017, 263, 4723-4749.	2.2	16
13	QUASINEUTRAL LIMIT OF THE MULTI-DIMENSIONAL DRIFT-DIFFUSION-POISSON MODELS FOR SEMICONDUCTORS WITH PN-JUNCTIONS. Mathematical Models and Methods in Applied Sciences, 2006, 16, 537-557.	3.3	13
14	Rate of convergence from the Navierâ€“Stokesâ€“Poisson system to the incompressible Euler equations. Journal of Mathematical Physics, 2009, 50, 013533.	1.1	13
15	The Mixed Layer Problem and Quasi-Neutral Limit of the Drift-Diffusion Model for Semiconductors. SIAM Journal on Mathematical Analysis, 2012, 44, 699-717.	1.9	11
16	Stability of nonâ€constant steadyâ€state solutions for nonâ€isentropic Eulerâ€“Maxwell system with a temperature damping term. Mathematical Methods in the Applied Sciences, 2016, 39, 2514-2528.	2.3	11
17	Convergence of the Vlasov-Poisson-Fokker-Planck system to the incompressible Euler equations. Science in China Series A: Mathematics, 2006, 49, 255-266.	0.5	10
18	On Singularity Formation of a Nonlinear Nonlocal System. Archive for Rational Mechanics and Analysis, 2011, 199, 117-144.	2.4	10

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19	Positive Solution of a Nonlinear Fractional Differential Equation Involving Caputo Derivative. Discrete Dynamics in Nature and Society, 2012, 2012, 1-16.	0.9	9
20	Stability of non-constant equilibrium solutions for two-fluid Eulerâ€“Maxwell systems. Nonlinear Analysis: Real World Applications, 2015, 26, 372-390.	1.7	9
21	Oscillation of partial population model with diffusion and delay. Applied Mathematics Letters, 2009, 22, 1793-1797.	2.7	8
22	Quasi-neutral limit and the boundary layer problem of Planck-Nernst-Poisson-Navier-Stokes equations for electro-hydrodynamics. Journal of Differential Equations, 2019, 267, 3475-3523.	2.2	8
23	Initial-boundary value problem for 2D micropolar equations without angular viscosity. Communications in Mathematical Sciences, 2018, 16, 2147-2165.	1.0	8
24	Convergence of compressible Navier-Stokes-Maxwell equations to incompressible Navier-Stokes equations. Science China Mathematics, 2014, 57, 2153-2162.	1.7	7
25	Low Mach number limit of non-isentropic magnetohydrodynamic equations in a bounded domain. Nonlinear Analysis: Theory, Methods & Applications, 2014, 105, 102-119.	1.1	7
26	Global Asymptotic Stability of 3-Species Mutualism Models with Diffusion and Delay Effects. Discrete Dynamics in Nature and Society, 2009, 2009, 1-20.	0.9	6
27	SOME PERIODIC AND BLOW-UP SOLUTIONS FOR LANDAUâ€“LIFSHITZ EQUATION. Modern Physics Letters A, 2011, 26, 2437-2452.	1.2	6
28	Zero viscosity and diffusion vanishing limit of the incompressible magnetohydrodynamic system with perfectly conducting wall. Nonlinear Analysis: Real World Applications, 2015, 24, 50-60.	1.7	6
29	Quasineutral limit for the compressible quantum Navierâ€“Stokesâ€“Maxwell equations. Communications in Mathematical Sciences, 2018, 16, 363-391.	1.0	6
30	Rigorous derivation of incompressible type Euler equations from non-isentropic Eulerâ€“Maxwell equations. Nonlinear Analysis: Theory, Methods & Applications, 2010, 73, 3613-3625.	1.1	5
31	Asymptotic Stability for a Class of Nonlinear Difference Equations. Discrete Dynamics in Nature and Society, 2010, 2010, 1-10.	0.9	5
32	Two blowup solutions for the inhomogeneous isotropic Landauâ€“Lifshitz equation. Journal of Mathematical Analysis and Applications, 2014, 409, 74-83.	1.0	5
33	Existence of global weak solutions for the high frequency and small displacement oscillation fluidâ€“structure interaction systems. Mathematical Methods in the Applied Sciences, 2021, 44, 3249-3259.	2.3	5
34	Asymptotic decay of bipolar isentropic/non-isentropic compressible Navier-Stokes-Maxwell systems. Journal of Differential Equations, 2021, 301, 471-542.	2.2	5
35	Convergence of compressible Eulerâ€“Poisson system to incompressible Euler equations. Applied Mathematics and Computation, 2010, 216, 3408-3418.	2.2	4
36	Stability of non-constant steady-state solutions for bipolar non-isentropic Eulerâ€“Maxwell equations with damping terms. Zeitschrift Fur Angewandte Mathematik Und Physik, 2016, 67, 1.	1.4	4

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37	Vanishing cross-diffusion limit in a Kellerâ€“Segel system with additional cross-diffusion. Nonlinear Analysis: Theory, Methods & Applications, 2020, 192, 111698.	1.1	4
38	Stability of planar rarefaction wave to the 3D bipolar Vlasovâ€“Poissonâ€“Boltzmann system. Mathematical Models and Methods in Applied Sciences, 2020, 30, 23-104.	3.3	4
39	Quasi-neutral limit of the drift-diffusion model for semiconductors with general sign-changing doping profile. Science in China Series A: Mathematics, 2008, 51, 1619-1630.	0.5	3
40	Stability of Non-constant Equilibrium Solutions for Bipolar Full Compressible Navierâ€“Stokesâ€“Maxwell Systems. Journal of Nonlinear Science, 2018, 28, 2187-2215.	2.1	3
41	Initial layer and incompressible limit for Eulerâ€“Poisson equation in nonthermal plasma. Mathematical Models and Methods in Applied Sciences, 2019, 29, 1733-1751.	3.3	3
42	The Global Well-Posedness for Large Amplitude Smooth Solutions for 3D Incompressible Navierâ€“Stokes and Euler Equations Based on a Class of Variant Spherical Coordinates. Mathematics, 2020, 8, 1195.	2.2	3
43	Stability of Non-constant Equilibrium Solutions for Compressible Viscous and Diffusive MHD Equations with the Coulomb Force. Journal of Dynamics and Differential Equations, 2021, 33, 985-1021.	1.9	3
44	Convergence of the Vlasovâ€“Poissonâ€“Boltzmann System to the Incompressible Euler Equations. Acta Mathematica Sinica, English Series, 2007, 23, 761-768.	0.6	2
45	Convergence of the Eulerâ€“Maxwell two-fluid system to compressible Euler equations. Journal of Mathematical Analysis and Applications, 2014, 417, 889-903.	1.0	2
46	Existence of BPS vortices in string theory. Mathematical Methods in the Applied Sciences, 2018, 41, 4244-4258.	2.3	2
47	Stability of non-constant equilibrium solutions for two-fluid non-isentropic Euler-Maxwell systems arising in plasmas. Journal of Mathematical Physics, 2018, 59, 073105.	1.1	2
48	Viscosity vanishing limit of the nonlinear pipe magnetohydrodynamic flow with diffusion. Mathematical Methods in the Applied Sciences, 2019, 42, 161-174.	2.3	2
49	Boundary layer problem of MHD system with non-characteristic perfect conducting wall. Applicable Analysis, 2019, 98, 516-535.	1.3	2
50	Stability of Non-constant Equilibrium Solutions for the Full Compressible Navierâ€“Stokesâ€“Maxwell System. Journal of Mathematical Fluid Mechanics, 2021, 23, 1.	1.0	2
51	Convergence to Steady-States of Compressible Navierâ€“Stokesâ€“Maxwell Equations. Journal of Nonlinear Science, 2022, 32, 1.	2.1	2
52	On the 3D Incompressible Boussinesq Equations in a Class of Variant Spherical Coordinates. Journal of Function Spaces, 2022, 2022, 1-12.	0.9	2
53	Asymptotic limits of compressible Euler-Maxwell system in plasma physics. Proceedings in Applied Mathematics and Mechanics, 2007, 7, 1041005-1041006.	0.2	1
54	Quasi-neutral limit to the driftâ€“diffusion models for semiconductors with physical contact-insulating boundary conditions and the general sign-changing doping profile. Nonlinear Analysis: Theory, Methods & Applications, 2010, 72, 3612-3626.	1.1	1

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55	The Numerical Convergence of the Landau-Lifshitz Equations and Its Simulation. Discrete Dynamics in Nature and Society, 2010, 2010, 1-13.	0.9	1
56	Some blowup solutions about two systems derived from Landauâ€“Lifshitzâ€“Gilbert equation. Applied Mathematical Modelling, 2013, 37, 4177-4188.	4.2	1
57	Blowup results for the KGS system with higher order Yukawa coupling. Journal of Mathematical Physics, 2015, 56, .	1.1	1
58	Stability of nonconstant steadyâ€state solutions for 2â€fluid nonisentropic Eulerâ€Poisson equations in semiconductor. Mathematical Methods in the Applied Sciences, 2018, 41, 3588-3604.	2.3	1
59	Diffusion vanishing limit of the nonlinear pipe Magnetohydrodynamic flow with fixed viscosity. Acta Mathematica Scientia, 2018, 38, 627-642.	1.0	1
60	Some limit analysis of a three dimensional viscous compressible capillary model for plasma. Mathematical Methods in the Applied Sciences, 2018, 41, 5535-5551.	2.3	1
61	Boundary layers associated with the 3-D Boussinesq system for Rayleighâ€“BÃ©nard convection. Applicable Analysis, 2020, 99, 2026-2044.	1.3	1
62	On the vanishing viscosity limit for a 3â€Ð system arising from the Kellerâ€Segel model. Mathematical Methods in the Applied Sciences, 2020, 43, 920-938.	2.3	1
63	The Regularity Criteria and the A Priori Estimate on the 3D Incompressible Navier-Stokes Equations in Orthogonal Curvilinear Coordinate Systems. Journal of Function Spaces, 2020, 2020, 1-9.	0.9	1
64	Global zero-relaxation limit of the non-isentropic Eulerâ€“Poisson system for ion dynamics. Asymptotic Analysis, 2020, 120, 301-318.	0.5	1
65	Blowup of smooth solutions to the isentropic compressible quantum hydrodynamic model. Mathematical Methods in the Applied Sciences, 2022, 45, 10917-10924.	2.3	1
66	The Non-Relativistic Limit of Radiation Hydrodynamics Equations Arising from Astrophysics. , 2009, , .		0
67	Quasi-neutral Limit of the Drift-Diffusion Models for Semiconductors with PN-Junctions. , 2009, , .		0
68	On the Inviscid Limit for the 2D Non-dissipative Quasi-geostrophic Equations. , 2009, , .		0
69	Global Regularity of Solutions of 2D Magnetohydrodynamic Equations with Fractional Power Diffusion. , 2010, , .		0
70	Blowup rate of isotropic anti-ferromagnetic equation near the equivariant data. Communications in Nonlinear Science and Numerical Simulation, 2013, 18, 2222-2239.	3.3	0
71	The perturbed problem on the boussinesq system of Rayleigh-BÃ©nard convection. Acta Mathematicae Applicatae Sinica, 2014, 30, 75-88.	0.7	0
72	Solutions to quasilinear hyperbolic conservation laws with initial discontinuities. Acta Mathematica Scientia, 2018, 38, 203-219.	1.0	0

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73	Initial layer problem of the Boussinesq system for Rayleigh-BÃ©nard convection with infinite Prandtl number limit. Open Mathematics, 2018, 16, 1145-1160.	1.0	0
74	Vanishing vertical limit of the incompressible combined viscosity and magnetic diffusion magnetohydrodynamic system. Mathematical Methods in the Applied Sciences, 2018, 41, 5015-5049.	2.3	0
75	The Boundary Layer Problem of MHD System with the Non-characteristic Dirichlet Boundary Condition for Velocity. Acta Applicandae Mathematicae, 2020, 169, 183-192.	1.0	0
76	Quasi-neutral limit and the initial layer problem of the drift-diffusion model. Acta Mathematica Scientia, 2020, 40, 1152-1170.	1.0	0
77	Global Weak Solutions to the Î±-Model Regularization for 3D Compressible Euler-Poisson Equations. Acta Mathematica Scientia, 2021, 41, 679-702.	1.0	0
78	The global convergence of non-isentropic Eulerâ€“Maxwell equations via Infinity-Ion-Mass limit. Zeitschrift Fur Angewandte Mathematik Und Physik, 2021, 72, 1.	1.4	0
79	The Convergence of Euler-Poisson System to the Incompressible Euler Equations. Series in Contemporary Applied Mathematics, 2010, , 225-257.	0.8	0
80	A Result on Global Solutions to 3D Complex Ginzburg-Landau Equation. Series in Contemporary Applied Mathematics, 2012, , 739-747.	0.8	0
81	Exact Configuration for 3D Ginzburg-Landau Equation Based on Some ODEs. Series in Contemporary Applied Mathematics, 2012, , 748-756.	0.8	0
82	Boundary layer analysis for a 2-D Keller-Segel model. Open Mathematics, 2020, 18, 1895-1914.	1.0	0
83	Hsiaoâ€™s PDE theory on semi-conductor and plasma and their applications. Methods and Applications of Analysis, 2021, 28, 249-264.	0.5	0