Yan Guo

List of Publications by Year
in descending order

79 papers	4,051 citations	109321 35 h-index	118850 62 g-index
83 all docs	83 docs citations	83 times ranked	647 citing authors

#	Article	IF	Citations
1	Kinetic Fokker-Planck and Landau equations with specular reflection boundary condition. Kinetic and Related Models, 2022, 15, 467.	0.9	3
2	Continued Gravitational Collapse for Newtonian Stars. Archive for Rational Mechanics and Analysis, 2021, 239, 431-552.	2.4	15
3	Regularity and Expansion for Steady Prandtl Equations. Communications in Mathematical Physics, 2021, 382, 1403-1447.	2.2	14
4	Hilbert Expansion of the Boltzmann Equation with Specular Boundary Condition in Half-Space. Archive for Rational Mechanics and Analysis, 2021, 241, 231-309.	2.4	11
5	Global Hilbert Expansion for the Relativistic Vlasov–Maxwell–Boltzmann System. Communications in Mathematical Physics, 2021, 384, 341-401.	2.2	8
6	Larson–Penston Self-similar Gravitational Collapse. Communications in Mathematical Physics, 2021, 386, 1551-1601.	2.2	8
7	The Landau Equation with the Specular Reflection Boundary Condition. Archive for Rational Mechanics and Analysis, 2020, 236, 1389-1454.	2.4	27
8	An L^2 to L^∞ Framework for the Landau Equation. Peking Mathematical Journal, 2020, 3, 131-202.	1.2	23
9	Linear instability of Z-pinch in plasma: Viscous case. Mathematical Models and Methods in Applied Sciences, 2020, 30, 2827-2908.	3.3	1
10	Stationary Solutions to the Boltzmann Equation in the Hydrodynamic Limit. Annals of PDE, 2018, 4, 1.	1.8	54
11	Stability of Contact Lines in Fluids: 2D Stokes Flow. Archive for Rational Mechanics and Analysis, 2018, 227, 767-854.	2.4	13
12	Regularity of the Boltzmann equation in convex domains. Inventiones Mathematicae, 2017, 207, 115-290.	2.5	73
13	Regularity of Milne problem with geometric correction in 3D. Mathematical Models and Methods in Applied Sciences, 2017, 27, 453-524.	3.3	10
14	Prandtl Boundary Layer Expansions of Steady Navier–Stokes Flows Over a Moving Plate. Annals of PDE, 2017, 3, 1.	1.8	45
15	The Existence of Stable BGK Waves. Communications in Mathematical Physics, 2017, 352, 1121-1152.	2.2	3
16	Incompressible hydrodynamic approximation with viscous heating to the Boltzmann equation. Mathematical Models and Methods in Applied Sciences, 2017, 27, 2261-2296.	3.3	3
17	Geometric Correction in Diffusive Limit of Neutron Transport Equation in 2D Convex Domains. Archive for Rational Mechanics and Analysis, 2017, 226, 321-403.	2.4	13
18	Absence of Shocks for One Dimensional Euler–Poisson System. Archive for Rational Mechanics and Analysis, 2017, 223, 1057-1121.	2.4	15

#	Article	IF	Citations
19	The Boltzmann equation with weakly inhomogeneous data in bounded domain. Journal of Functional Analysis, 2017, 272, 2038-2057.	1.4	5
20	Existence and BV-Regularity for Neutron Transport Equation in NonConvex Domain. SIAM Journal on Mathematical Analysis, 2016, 48, 3467-3495.	1.9	1
21	Asymptotic stability of the Boltzmann equation with Maxwell boundary conditions. Journal of Differential Equations, 2016, 261, 7000-7079.	2.2	21
22	Asymptotic Analysis of Transport Equation in Annulus. Journal of Statistical Physics, 2016, 165, 585-644.	1.2	10
23	Boundary layer problems for the two-dimensional compressible Navierâ€"Stokes equations. Analysis and Applications, 2016, 14, 1-37.	2.2	14
24	Spectral stability of Prandtl boundary layers: An overview. Analysis (Germany), 2015, 35, 343-355.	0.4	44
25	Geometric Correction for Diffusive Expansion of Steady Neutron Transport Equation. Communications in Mathematical Physics, 2015, 336, 1473-1553.	2.2	33
26	Global solutions of certain plasma fluid models in three-dimension. Journal of Mathematical Physics, 2014, 55, .	1.1	18
27	KdV Limit of the Eulerâ€"Poisson System. Archive for Rational Mechanics and Analysis, 2014, 211, 673-710.	2.4	33
28	Almost Exponential Decay of Periodic Viscous Surface Waves without Surface Tension. Archive for Rational Mechanics and Analysis, 2013, 207, 459-531.	2.4	79
29	Decay of viscous surface waves without surface tension in horizontally infinite domains. Analysis and PDE, 2013, 6, 1429-1533.	1.4	68
30	Local well-posedness of the viscous surface wave problem without surface tension. Analysis and PDE, 2013, 6, 287-369.	1.4	68
31	Stability of a Vlasov-Boltzmann binary mixture at the phase transition on an interval. Kinetic and Related Models, 2013, 6, 761-787.	0.9	2
32	Nonlinear Partial Differential Equations. , 2012, , .		10
33	Decay of Dissipative Equations and Negative Sobolev Spaces. Communications in Partial Differential Equations, 2012, 37, 2165-2208.	2.2	229
34	Momentum Regularity and Stability of the Relativistic Vlasov-Maxwell-Boltzmann System. Communications in Mathematical Physics, 2012, 310, 649-673.	2.2	39
35	The Boltzmann Equation in Bounded Domains. , 2012, , 101-115.		0
36	Global Smooth Ion Dynamics in the Euler-Poisson System. Communications in Mathematical Physics, 2011, 303, 89-125.	2.2	91

#	Article	IF	Citations
37	A note on Prandtl boundary layers. Communications on Pure and Applied Mathematics, 2011, 64, 1416-1438.	3.1	106
38	Validity of the Boltzmann equation with an external force. Kinetic and Related Models, 2011, 4, 499-515.	0.9	1
39	Acoustic limit for the Boltzmann equation in optimal scaling. Communications on Pure and Applied Mathematics, 2010, 63, 337-361.	3.1	23
40	Decay and Continuity of the Boltzmann Equation in Bounded Domains. Archive for Rational Mechanics and Analysis, 2010, 197, 713-809.	2.4	160
41	Global Hilbert Expansion for the Vlasov-Poisson-Boltzmann System. Communications in Mathematical Physics, 2010, 299, 469-501.	2.2	45
42	Pattern formation (I): The Keller–Segel model. Journal of Differential Equations, 2010, 249, 1519-1530.	2.2	24
43	Stability in the Stefan Problem with Surface Tension (I). Communications in Partial Differential Equations, 2010, 35, 201-244.	2.2	14
44	Critical Rayleigh number in Rayleigh-Bénard convection. Quarterly of Applied Mathematics, 2009, 68, 149-160.	0.7	9
45	Exponential Decay for Soft Potentials near Maxwellian. Archive for Rational Mechanics and Analysis, 2008, 187, 287-339.	2.4	146
46	Unstable and Stable Galaxy Models. Communications in Mathematical Physics, 2008, 279, 789-813.	2.2	25
47	Pattern formation (II): The Turing Instability. Proceedings of the American Mathematical Society, 2007, 135, 2855-2867.	0.8	10
48	Dynamics near Unstable, Interfacial Fluids. Communications in Mathematical Physics, 2007, 270, 635-689.	2.2	41
49	A Non-Variational Approach to Nonlinear Stability in Stellar Dynamics Applied to the King Model. Communications in Mathematical Physics, 2007, 271, 489-509.	2.2	40
50	Stability of Semiconductor States with Insulating and Contact Boundary Conditions. Archive for Rational Mechanics and Analysis, 2006, 179, 1-30.	2.4	82
51	Boltzmann diffusive limit beyond the Navier-Stokes approximation. Communications on Pure and Applied Mathematics, 2006, 59, 626-687.	3.1	102
52	Almost Exponential Decay Near Maxwellian. Communications in Partial Differential Equations, 2006, 31, 417-429.	2.2	127
53	Dynamics Near an Unstable Kirchhoff Ellipse. Communications in Mathematical Physics, 2004, 245, 297-354.	2.2	26
54	Stability of the Relativistic Maxwellian in a Collisional Plasma. Communications in Mathematical Physics, 2004, 251, 263-320.	2.2	71

#	Article	IF	Citations
55	Compactness via symmetrization. Journal of Functional Analysis, 2004, 214, 40-73.	1.4	28
56	The Boltzmann equation in the whole space. Indiana University Mathematics Journal, 2004, 53, 1081-1094.	0.9	194
57	Classical Solutions to the Boltzmann Equation for Molecules with an Angular Cutoff. Archive for Rational Mechanics and Analysis, 2003, 169, 305-353.	2.4	129
58	The Vlasov-Maxwell-Boltzmann system near Maxwellians. Inventiones Mathematicae, 2003, 153, 593-630.	2.5	197
59	Reactive dissolution instability driven by chemical diffusion with applications to harzburgite reactive dissolution. Geophysical Research Letters, 2003, 30, .	4.0	8
60	The Vlasov-Poisson-Boltzmann system near Maxwellians. Communications on Pure and Applied Mathematics, 2002, 55, 1104-1135.	3.1	196
61	The Landau Equation in a Periodic Box. Communications in Mathematical Physics, 2002, 231, 391-434.	2.2	218
62	The Vlasov-Poisson-Boltzmann System Near Vacuum. Communications in Mathematical Physics, 2001, 218, 293-313.	2.2	74
63	Isotropic Steady States in Galactic Dynamics. Communications in Mathematical Physics, 2001, 219, 607-629.	2.2	63
64	Numerical study on Landau damping. Physica D: Nonlinear Phenomena, 2001, 157, 322-333.	2.8	37
65	Magnetically created instability in a collisionless plasma. Journal Des Mathematiques Pures Et Appliquees, 2000, 79, 975-1009.	1.6	12
66	Existence and stability of Camm type steady states in galactic dynamics. Indiana University Mathematics Journal, 1999, 48, 0-0.	0.9	29
67	Stable Steady States in Stellar Dynamics. Archive for Rational Mechanics and Analysis, 1999, 147, 225-243.	2.4	73
68	Stable Magnetic Equilibria in a Symmetric Collisionless Plasma. Communications in Mathematical Physics, 1999, 200, 211-247.	2.2	16
69	Unstable Oscillatory-Tail Waves in Collisionless Plasmas. SIAM Journal on Mathematical Analysis, 1999, 30, 1076-1114.	1.9	20
70	Smooth Irrotational Flows in the Large to the Euler-Poisson System in R 3+1. Communications in Mathematical Physics, 1998, 195, 249-265.	2.2	140
71	Unstable BGK Solitary Waves and Collisionless Shocks. Communications in Mathematical Physics, 1998, 195, 267-293.	2.2	23
72	Stable magnetic equilibria in collisionless plasmas. Communications on Pure and Applied Mathematics, 1997, 50, 891-933.	3.1	21

#	ARTICLE	IF	CITATIONS
73	A remark on the instability of symmetric vortices with large coupling constant. Communications on Pure and Applied Mathematics, 1997, 50, 1295-1300.	3.1	8
74	Stable magnetic equilibria in collisionless plasmas. Communications on Pure and Applied Mathematics, 1997, 50, 891-933.	3.1	7
75	Nonlinear instability of double-humped equilibria. Annales De L'Institut Henri Poincare (C) Analyse Non Lineaire, 1995, 12, 339-352.	1.4	76
76	Instability of periodic BGK equilibria. Communications on Pure and Applied Mathematics, 1995, 48, 861-894.	3.1	123
77	Singular solutions of the Vlasov-Maxwell system on a half line. Archive for Rational Mechanics and Analysis, 1995, 131, 241-304.	2.4	55
78	Title is missing!. Indiana University Mathematics Journal, 1994, 43, 255.	0.9	70
79	Global weak solutions of the Vlasov-Maxwell system with boundary conditions. Communications in Mathematical Physics, 1993, 154, 245-263.	2.2	70