Yan Guo

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/12012569/publications.pdf

Version: 2024-02-01

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	Decay of Dissipative Equations and Negative Sobolev Spaces. Communications in Partial Differential Equations, 2012, 37, 2165-2208.	2.2	229
2	The Landau Equation in a Periodic Box. Communications in Mathematical Physics, 2002, 231, 391-434.	2.2	218
3	The Vlasov-Maxwell-Boltzmann system near Maxwellians. Inventiones Mathematicae, 2003, 153, 593-630.	2.5	197
4	The Vlasov-Poisson-Boltzmann system near Maxwellians. Communications on Pure and Applied Mathematics, 2002, 55, 1104-1135.	3.1	196
5	The Boltzmann equation in the whole space. Indiana University Mathematics Journal, 2004, 53, 1081-1094.	0.9	194
6	Decay and Continuity of the Boltzmann Equation in Bounded Domains. Archive for Rational Mechanics and Analysis, 2010, 197, 713-809.	2.4	160
7	Exponential Decay for Soft Potentials near Maxwellian. Archive for Rational Mechanics and Analysis, 2008, 187, 287-339.	2.4	146
8	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
9	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
10	Almost Exponential Decay Near Maxwellian. Communications in Partial Differential Equations, 2006, 31, 417-429.	2.2	127
11	Instability of periodic BGK equilibria. Communications on Pure and Applied Mathematics, 1995, 48, 861-894.	3.1	123
12	A note on Prandtl boundary layers. Communications on Pure and Applied Mathematics, 2011, 64, 1416-1438.	3.1	106
13	Boltzmann diffusive limit beyond the Navier-Stokes approximation. Communications on Pure and Applied Mathematics, 2006, 59, 626-687.	3.1	102
14	Global Smooth Ion Dynamics in the Euler-Poisson System. Communications in Mathematical Physics, 2011, 303, 89-125.	2.2	91
15	Stability of Semiconductor States with Insulating and Contact Boundary Conditions. Archive for Rational Mechanics and Analysis, 2006, 179, 1-30.	2.4	82
16	Almost Exponential Decay of Periodic Viscous Surface Waves without Surface Tension. Archive for Rational Mechanics and Analysis, 2013, 207, 459-531.	2.4	79
17	Nonlinear instability of double-humped equilibria. Annales De L'Institut Henri Poincare (C) Analyse Non Lineaire, 1995, 12, 339-352.	1.4	76
18	The Vlasov-Poisson-Boltzmann System Near Vacuum. Communications in Mathematical Physics, 2001, 218, 293-313.	2.2	74

#	Article	IF	Citations
19	Stable Steady States in Stellar Dynamics. Archive for Rational Mechanics and Analysis, 1999, 147, 225-243.	2.4	73
20	Regularity of the Boltzmann equation in convex domains. Inventiones Mathematicae, 2017, 207, 115-290.	2.5	73
21	Stability of the Relativistic Maxwellian in a Collisional Plasma. Communications in Mathematical Physics, 2004, 251, 263-320.	2.2	71
22	Global weak solutions of the Vlasov-Maxwell system with boundary conditions. Communications in Mathematical Physics, 1993, 154, 245-263.	2.2	70
23	Title is missing!. Indiana University Mathematics Journal, 1994, 43, 255.	0.9	70
24	Decay of viscous surface waves without surface tension in horizontally infinite domains. Analysis and PDE, 2013, 6, 1429-1533.	1.4	68
25	Local well-posedness of the viscous surface wave problem without surface tension. Analysis and PDE, 2013, 6, 287-369.	1.4	68
26	Isotropic Steady States in Galactic Dynamics. Communications in Mathematical Physics, 2001, 219, 607-629.	2.2	63
27	Singular solutions of the Vlasov-Maxwell system on a half line. Archive for Rational Mechanics and Analysis, 1995, 131, 241-304.	2.4	55
28	Stationary Solutions to the Boltzmann Equation in the Hydrodynamic Limit. Annals of PDE, 2018, 4, 1.	1.8	54
29	Global Hilbert Expansion for the Vlasov-Poisson-Boltzmann System. Communications in Mathematical Physics, 2010, 299, 469-501.	2.2	45
30	Prandtl Boundary Layer Expansions of Steady Navierâ€“Stokes Flows Over a Moving Plate. Annals of PDE, 2017, 3, 1.	1.8	45
31	Spectral stability of Prandtl boundary layers: An overview. Analysis (Germany), 2015, 35, 343-355.	0.4	44
32	Dynamics near Unstable, Interfacial Fluids. Communications in Mathematical Physics, 2007, 270, 635-689.	2.2	41
33	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
34	Momentum Regularity and Stability of the Relativistic Vlasov-Maxwell-Boltzmann System. Communications in Mathematical Physics, 2012, 310, 649-673.	2.2	39
35	Numerical study on Landau damping. Physica D: Nonlinear Phenomena, 2001, 157, 322-333.	2.8	37
36	KdV Limit of the Eulerâ€“Poisson System. Archive for Rational Mechanics and Analysis, 2014, 211, 673-710.	2.4	33

#	Article	IF	Citations
37	Geometric Correction for Diffusive Expansion of Steady Neutron Transport Equation. Communications in Mathematical Physics, 2015, 336, 1473-1553.	2.2	33
38	Existence and stability of Camm type steady states in galactic dynamics. Indiana University Mathematics Journal, 1999, 48, 0-0.	0.9	29
39	Compactness via symmetrization. Journal of Functional Analysis, 2004, 214, 40-73.	1.4	28
40	The Landau Equation with the Specular Reflection Boundary Condition. Archive for Rational Mechanics and Analysis, 2020, 236, 1389-1454.	2.4	27
41	Dynamics Near an Unstable Kirchhoff Ellipse. Communications in Mathematical Physics, 2004, 245, 297-354.	2.2	26
42	Unstable and Stable Galaxy Models. Communications in Mathematical Physics, 2008, 279, 789-813.	2.2	25
43	Pattern formation (I): The Kellerâ€“Segel model. Journal of Differential Equations, 2010, 249, 1519-1530.	2.2	24
44	Unstable BGK Solitary Waves and Collisionless Shocks. Communications in Mathematical Physics, 1998, 195, 267-293.	2.2	23
45	Acoustic limit for the Boltzmann equation in optimal scaling. Communications on Pure and Applied Mathematics, 2010, 63, 337-361.	3.1	23
46	An $$L^2$$ to $$L^infty $$ Framework for the Landau Equation. Peking Mathematical Journal, 2020, 3, 131-202.	1.2	23
47	Stable magnetic equilibria in collisionless plasmas. Communications on Pure and Applied Mathematics, 1997, 50, 891-933.	3.1	21
48	Asymptotic stability of the Boltzmann equation with Maxwell boundary conditions. Journal of Differential Equations, 2016, 261, 7000-7079.	2.2	21
49	Unstable Oscillatory-Tail Waves in Collisionless Plasmas. SIAM Journal on Mathematical Analysis, 1999, 30, 1076-1114.	1.9	20
50	Global solutions of certain plasma fluid models in three-dimension. Journal of Mathematical Physics, 2014, 55, .	1.1	18
51	Stable Magnetic Equilibria in a Symmetric Collisionless Plasma. Communications in Mathematical Physics, 1999, 200, 211-247.	2.2	16
52	Absence of Shocks for One Dimensional Eulerâ€“Poisson System. Archive for Rational Mechanics and Analysis, 2017, 223, 1057-1121.	2.4	15
53	Continued Gravitational Collapse for Newtonian Stars. Archive for Rational Mechanics and Analysis, 2021, 239, 431-552.	2.4	15
54	Stability in the Stefan Problem with Surface Tension (I). Communications in Partial Differential Equations, 2010, 35, 201-244.	2.2	14

#	Article	IF	Citations
55	Regularity and Expansion for Steady Prandtl Equations. Communications in Mathematical Physics, 2021, 382, 1403-1447.	2.2	14
56	Boundary layer problems for the two-dimensional compressible Navierâ€“Stokes equations. Analysis and Applications, 2016, 14, 1-37.	2.2	14
57	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
58	Stability of Contact Lines in Fluids: 2D Stokes Flow. Archive for Rational Mechanics and Analysis, 2018, 227, 767-854.	2.4	13
59	Magnetically created instability in a collisionless plasma. Journal Des Mathematiques Pures Et Appliquees, 2000, 79, 975-1009.	1.6	12
60	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
61	Pattern formation (II): The Turing Instability. Proceedings of the American Mathematical Society, 2007, 135, 2855-2867.	0.8	10
62	Nonlinear Partial Differential Equations. , 2012, , .		10
63	Asymptotic Analysis of Transport Equation in Annulus. Journal of Statistical Physics, 2016, 165, 585-644.	1.2	10
64	Regularity of Milne problem with geometric correction in 3D. Mathematical Models and Methods in Applied Sciences, 2017, 27, 453-524.	3.3	10
65	Critical Rayleigh number in Rayleigh-BÃ©nard convection. Quarterly of Applied Mathematics, 2009, 68, 149-160.	0.7	9
66	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
67	Reactive dissolution instability driven by chemical diffusion with applications to harzburgite reactive dissolution. Geophysical Research Letters, 2003, 30, .	4.0	8
68	Global Hilbert Expansion for the Relativistic Vlasovâ€“Maxwellâ€“Boltzmann System. Communications in Mathematical Physics, 2021, 384, 341-401.	2.2	8
69	Larsonâ€“Penston Self-similar Gravitational Collapse. Communications in Mathematical Physics, 2021, 386, 1551-1601.	2.2	8
70	Stable magnetic equilibria in collisionless plasmas. Communications on Pure and Applied Mathematics, 1997, 50, 891-933.	3.1	7
71	The Boltzmann equation with weakly inhomogeneous data in bounded domain. Journal of Functional Analysis, 2017, 272, 2038-2057.	1.4	5
72	The Existence of Stable BGK Waves. Communications in Mathematical Physics, 2017, 352, 1121-1152.	2.2	3

#	Article	IF	Citations
73	Incompressible hydrodynamic approximation with viscous heating to the Boltzmann equation. Mathematical Models and Methods in Applied Sciences, 2017, 27, 2261-2296.	3.3	3
74	Kinetic Fokker-Planck and Landau equations with specular reflection boundary condition. Kinetic and Related Models, 2022, 15, 467.	0.9	3
75	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
76	Existence and BV-Regularity for Neutron Transport Equation in NonConvex Domain. SIAM Journal on Mathematical Analysis, 2016, 48, 3467-3495.	1.9	1
77	Linear instability of Z-pinch in plasma: Viscous case. Mathematical Models and Methods in Applied Sciences, 2020, 30, 2827-2908.	3.3	1
78	Validity of the Boltzmann equation with an external force. Kinetic and Related Models, 2011, 4, 499-515.	0.9	1
79	The Boltzmann Equation in Bounded Domains. , 2012, , 101-115.		0