Claude Bardos

List of Publications by Year in descending order

51 papers	3,185 citations	331670 21 h-index	189892 50 g-index
52 all docs	52 docs citations	52 times ranked	965 citing authors

#	Article	IF	Citations
1	Sharp Sufficient Conditions for the Observation, Control, and Stabilization of Waves from the Boundary. SIAM Journal on Control and Optimization, 1992, 30, 1024-1065.	2.1	1,030
2	Fluid dynamic limits of kinetic equations. I. Formal derivations. Journal of Statistical Physics, 1991, 63, 323-344.	1.2	369
3	Fluid dynamic limits of kinetic equations II convergence proofs for the boltzmann equation. Communications on Pure and Applied Mathematics, 1993, 46, 667-753.	3.1	276
4	The milne and kramers problems for the boltzmann equation of a hard sphere gas. Communications on Pure and Applied Mathematics, 1986, 39, 323-352.	3.1	157
5	ProblÃ¨mes aux limites pour les Ã©quations aux dÃ©rivÃ©es partielles du premier ordre Ã coefficients rÃ©els; thÃ©orÃ¨mes d'approximation; application Ã l'Ã©quation de transport. Annales Scientifiques De L'Ecole Normale Superieure, 1970, 3, 185-233.	0.8	137
6	THE CLASSICAL INCOMPRESSIBLE NAVIER-STOKES LIMIT OF THE BOLTZMANN EQUATION. Mathematical Models and Methods in Applied Sciences, 1991, 01, 235-257.	3.3	113
7	Weak coupling limit of the N-particle SchrÃ¶dinger equation. Methods and Applications of Analysis, 2000, 7, 275-294.	0.5	107
8	Mean field dynamics of fermions andÂtheÂtime-dependentÂHartreeâ€“Fock equation. Journal Des Mathematiques Pures Et Appliquees, 2003, 82, 665-683.	1.6	84
9	Euler equations for incompressible ideal fluids. Russian Mathematical Surveys, 2007, 62, 409-451.	0.6	79
10	The Acoustic Limit for the Boltzmann Equation. Archive for Rational Mechanics and Analysis, 2000, 153, 177-204.	2.4	74
11	Derivation of the SchrÃ¶dingerâ€“Poisson equation from the quantum -body problem. Comptes Rendus Mathematique, 2002, 334, 515-520.	0.3	74
12	Knudsen Layer for Gas Mixtures. Journal of Statistical Physics, 2003, 112, 629-655.	1.2	58
13	Onsagerâ€™s Conjecture for the Incompressible Euler Equations in Bounded Domains. Archive for Rational Mechanics and Analysis, 2018, 228, 197-207.	2.4	56
14	Control and Stabilization for the Wave Equation, Part III: Domain with Moving Boundary. SIAM Journal on Control and Optimization, 1981, 19, 123-138.	2.1	52
15	Half-Space Problems for the Boltzmann Equation: A Survey. Journal of Statistical Physics, 2006, 124, 275-300.	1.2	49
16	A nonlinear wave equation in a time dependent domain. Journal of Mathematical Analysis and Applications, 1973, 42, 29-60.	1.0	40
17	Onsagerâ€™s Conjecture with Physical Boundaries and an Application to the Vanishing Viscosity Limit. Communications in Mathematical Physics, 2019, 370, 291-310.	2.2	35
18	Loss of smoothness and energy conserving rough weak solutions for the $3d$ Euler equations. Discrete and Continuous Dynamical Systems - Series S, 2010, 3, 185-197.	1.1	31

#	Article	IF	Citations
19	Diffusion approximation for a Knudsen gas in a thin domain with accommodation on the boundary. Asymptotic Analysis, 1991, 3, 265-289.	0.5	30
20	Acoustic and Stokes limits for the Boltzmann equation. Comptes Rendus Mathematique, 1998, 327, 323-328.	0.5	30
21	A Vlasov equation with Dirac potential used in fusion plasmas. Journal of Mathematical Physics, 2012, 53, .	1.1	23
22	The Cauchy problem for the Vlasov-Dirac-Benney equation and related issues in fluid mechanics and semi-classical limits. Kinetic and Related Models, 2013, 6, 893-917.	0.9	23
23	Setting and Analysis of the Multi-configuration Time-dependent Hartreeâ€“Fock Equations. Archive for Rational Mechanics and Analysis, 2010, 198, 273-330.	2.4	21
24	A NOTE ON THE PROPAGATION OF BOUNDARY INDUCED DISCONTINUITIES IN KINETIC THEORY. Mathematical Models and Methods in Applied Sciences, 2001, 11, 1581-1595.	3.3	19
25	Stabilisation de l'Ã©quation des ondes au moyen d'un feedback portant sur la condition aux limites de Dirichlet. Asymptotic Analysis, 1991, 4, 285-291.	0.5	18
26	On the Extension of Onsagerâ€™s Conjecture for General Conservation Laws. Journal of Nonlinear Science, 2019, 29, 501-510.	2.1	17
27	Global regularity for a Birkhoffâ€“Rott- approximation of the dynamics of vortex sheets of the 2D Euler equations. Physica D: Nonlinear Phenomena, 2008, 237, 1905-1911.	2.8	14
28	Diffusion approximation for billiards with totally accommodating scatterers. Journal of Statistical Physics, 1997, 86, 351-375.	1.2	13
29	Global regularity and convergence of a Birkhoffâ€Rottâ€Î± approximation of the dynamics of vortex sheets of the twoâ€dimensional Euler equations. Communications on Pure and Applied Mathematics, 2010, 63, 697-746.	3.1	12
30	Observation estimate for kinetic transport equations by diffusion approximation. Comptes Rendus Mathematique, 2017, 355, 640-664.	0.3	12
31	Sound-field modeling in architectural acoustics by a transport theory: Application to street canyons. Physical Review E, 2005, 72, 046609.	2.1	11
32	Entire Solutions of Hydrodynamical Equations with Exponential Dissipation. Communications in Mathematical Physics, 2010, 293, 519-543.	2.2	11
33	The Classification of Well-Posed Kinetic Boundary Layer for Hard Sphere Gas Mixtures. Communications in Partial Differential Equations, 2012, 37, 1286-1314.	2.2	10
34	Diffusion approximation and hyperbolic automorphisms of the torus. Physica D: Nonlinear Phenomena, 1997, 104, 32-60.	2.8	9
35	Global-in-time existence of solutions to the multiconfiguration time-dependent Hartreeâ€“Fock equations: A sufficient condition. Applied Mathematics Letters, 2009, 22, 147-152.	2.7	9
36	Short-time heat diffusion in compact domains with discontinuous transmission boundary conditions. Mathematical Models and Methods in Applied Sciences, 2016, 26, 59-110.	3.3	9

#	Article	IF	Citations
37	Different aspects of the milne problem (based on energy estimates). Transport Theory and Statistical Physics, 1987, 16, 561-585.	0.4	7
38	Optimal control approach in inverse radiative transfer problems: the problem on boundary function. ESAIM - Control, Optimisation and Calculus of Variations, 2000, 5, 259-278.	1.3	7
39	Hamiltonian Structure, Fluid Representation and Stability for the Vlasovâ€“Diracâ€“Benney Equation. Fields Institute Communications, 2015, , 1-30.	1.3	7
40	The diffusion approximation for the linear Boltzmann equation with vanishing scattering coefficient. Communications in Mathematical Sciences, 2015, 13, 641-671.	1.0	7
41	About a Variant of the <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mn>1</mml:mn><mml:mi>d</mml:mi></mml:mrow></mml:m Vlasov equation, dubbed â€œVlasov-Dirac-Benney Equation". SÃ©minaire Laurent Schwartz â€“ EDP Et Applications, 0, , 1-21.	0.0	7
42	Onsager-type conjecture and renormalized solutions for the relativistic Vlasovâ€“Maxwell system. Quarterly of Applied Mathematics, 2019, 78, 193-217.	0.7	6
43	The radiative transfer model for the greenhouse effect. SeMA Journal, 2022, 79, 489-525.	2.0	4
44	On the Derivation of Nonlinear SchrÃ¶dinger and Vlasov Equations. The IMA Volumes in Mathematics and Its Applications, 2004, , 1-23.	0.5	4
45	Navier-Stokes Equations and Dynamical Systems. Handbook of Dynamical Systems, 2002, , 503-597.	0.6	3
46	On the classical limit of the SchrÃ¶dinger equation. Discrete and Continuous Dynamical Systems, 2015, 35, 5689-5709.	0.9	3
47	Hamiltonian Evolution of Monokinetic Measures with Rough Momentum Profile. Archive for Rational Mechanics and Analysis, 2015, 217, 71-111.	2.4	3
48	Kinetic Equations: A French History. EMS Newsletter, 2018, 2018-9, 10-18.	0.1	3
49	Simultaneous diffusion and homogenization asymptotic for the linear Boltzmann equation. Asymptotic Analysis, 2016, 100, 111-130.	0.5	2
50	What Use for the Mathematical Theory of the Navier-Stokes Equations. , 2001, , 1-25.		2
51	Diffusion limit of the Vlasov equation in the weak turbulent regime. Journal of Mathematical Physics, 2021, 62, 101505.	1.1	1