

Jose A Carrillo

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270
papers

6,918
citations

41
h-index

71
g-index

279
ext. papers

7,886
ext. citations

1.9
avg, IF

6.42
L-index

#	Paper	IF	Citations
270	Asymptotic Flocking Dynamics for the Kinetic Cucker-Smale Model. <i>SIAM Journal on Mathematical Analysis</i> , 2010 , 42, 218-236	1.7	281
269	Kinetic equilibration rates for granular media and related equations: entropy dissipation and mass transportation estimates. <i>Revista Matemática Iberoamericana</i> , 2003 , 971-1018	1.2	192
268	Entropy Dissipation Methods for Degenerate Parabolic Problems and Generalized Sobolev Inequalities. <i>Monatshefte Fur Mathematik</i> , 2001 , 133, 1-82	0.7	189
267	Contractions in the 2-Wasserstein Length Space and Thermalization of Granular Media. <i>Archive for Rational Mechanics and Analysis</i> , 2006 , 179, 217-263	2.3	186
266	A WELL-POSEDNESS THEORY IN MEASURES FOR SOME KINETIC MODELS OF COLLECTIVE MOTION. <i>Mathematical Models and Methods in Applied Sciences</i> , 2011 , 21, 515-539	3.5	160
265	Infinite time aggregation for the critical Patlak-Keller-Segel model in \mathbb{R}^2 . <i>Communications on Pure and Applied Mathematics</i> , 2008 , 61, 1449-1481	2.5	153
264	Double milling in self-propelled swarms from kinetic theory. <i>Kinetic and Related Models</i> , 2009 , 2, 363-378	2.4	153
263	Asymptotic L^1 -decay of solutions of the porous medium equation to self-similarity. <i>Indiana University Mathematics Journal</i> , 2000 , 49, 0-0	0.6	151
262	On Some Properties of Kinetic and Hydrodynamic Equations for Inelastic Interactions. <i>Journal of Statistical Physics</i> , 2000 , 98, 743-773	1.5	150
261	Global-in-time weak measure solutions and finite-time aggregation for nonlocal interaction equations. <i>Duke Mathematical Journal</i> , 2011 , 156,	1.9	142
260	Blow-up in multidimensional aggregation equations with mildly singular interaction kernels. <i>Nonlinearity</i> , 2009 , 22, 683-710	1.7	140
259	Volume effects in the Keller-Segel model: energy estimates preventing blow-up. <i>Journal Des Mathématiques Pures Et Appliquées</i> , 2006 , 86, 155-175	1.7	139
258	Particle, kinetic, and hydrodynamic models of swarming 2010 , 297-336		134
257	Convergence of the Mass-Transport Steepest Descent Scheme for the Subcritical Patlak-Keller-Segel Model. <i>SIAM Journal on Numerical Analysis</i> , 2008 , 46, 691-721	2.4	117
256	STOCHASTIC MEAN-FIELD LIMIT: NON-LIPSCHITZ FORCES AND SWARMING. <i>Mathematical Models and Methods in Applied Sciences</i> , 2011 , 21, 2179-2210	3.5	115
255	Critical mass for a Patlak-Keller-Segel model with degenerate diffusion in higher dimensions. <i>Calculus of Variations and Partial Differential Equations</i> , 2009 , 35, 133-168	1.5	114
254	A WENO-solver for the transients of Boltzmann-Boltzmann system for semiconductor devices: performance and comparisons with Monte Carlo methods. <i>Journal of Computational Physics</i> , 2003 , 184, 498-525	4.1	101

253	A Finite-Volume Method for Nonlinear Nonlocal Equations with a Gradient Flow Structure. <i>Communications in Computational Physics</i> , 2015 , 17, 233-258	2.4	94
252	A Non-Maxwellian Steady Distribution for One-Dimensional Granular Media. <i>Journal of Statistical Physics</i> , 1998 , 91, 979-990	1.5	90
251	Functional inequalities, thick tails and asymptotics for the critical mass Patlak-Keller-Segel model. <i>Journal of Functional Analysis</i> , 2012 , 262, 2142-2230	1.4	83
250	Dimensionality of Local Minimizers of the Interaction Energy. <i>Archive for Rational Mechanics and Analysis</i> , 2013 , 209, 1055-1088	2.3	82
249	Long-Time Asymptotics for Strong Solutions of the Thin Film Equation. <i>Communications in Mathematical Physics</i> , 2002 , 225, 551-571	2	82
248	Stability and Asymptotic Analysis of a Fluid-Particle Interaction Model. <i>Communications in Partial Differential Equations</i> , 2006 , 31, 1349-1379	1.6	76
247	SELF-PROPELLED INTERACTING PARTICLE SYSTEMS WITH ROOSTING FORCE. <i>Mathematical Models and Methods in Applied Sciences</i> , 2010 , 20, 1533-1552	3.5	71
246	The derivation of swarming models: Mean-field limit and Wasserstein distances. <i>CISM International Centre for Mechanical Sciences, Courses and Lectures</i> , 2014 , 1-46	0.6	66
245	Mean-field limit for the stochastic Vicsek model. <i>Applied Mathematics Letters</i> , 2012 , 25, 339-343	3.5	64
244	Critical thresholds in 1D Euler equations with non-local forces. <i>Mathematical Models and Methods in Applied Sciences</i> , 2016 , 26, 185-206	3.5	62
243	Nonlocal interactions by repulsive-attractive potentials: Radial ins/stability. <i>Physica D: Nonlinear Phenomena</i> , 2013 , 260, 5-25	3.3	61
242	Global classical solutions close to equilibrium to the Vlasov-Fokker-Planck-Euler system. <i>Kinetic and Related Models</i> , 2011 , 4, 227-258	2.4	60
241	Steady states of a boltzmann equation for driven granular media. <i>Physical Review E</i> , 2000 , 62, 7700-7	2.4	57
240	Nonoscillatory Interpolation Methods Applied to Vlasov-Based Models. <i>SIAM Journal of Scientific Computing</i> , 2007 , 29, 1179-1206	2.6	56
239	Existence of Compactly Supported Global Minimisers for the Interaction Energy. <i>Archive for Rational Mechanics and Analysis</i> , 2015 , 217, 1197-1217	2.3	50
238	A mass-transportation approach to a one dimensional fluid mechanics model with nonlocal velocity. <i>Advances in Mathematics</i> , 2012 , 231, 306-327	1.3	46
237	Analysis of nonlinear noisy integrate & fire neuron models: blow-up and steady states. <i>Journal of Mathematical Neuroscience</i> , 2011 , 1, 7	2.4	46
236	Sharp conditions to avoid collisions in singular Cucker-Smale interactions. <i>Nonlinear Analysis: Real World Applications</i> , 2017 , 37, 317-328	2.1	45

235	Entropies and Equilibria of Many-Particle Systems: An Essay on Recent Research. <i>Monatshefte Fur Mathematik</i> , 2004 , 142, 35-43	0.7	45
234	Exponential convergence toward equilibrium for homogeneous Fokker-Planck-type equations. <i>Mathematical Methods in the Applied Sciences</i> , 1998 , 21, 1269-1286	2.3	44
233	2D semiconductor device simulations by WENO-Boltzmann schemes: Efficiency, boundary conditions and comparison to Monte Carlo methods. <i>Journal of Computational Physics</i> , 2006 , 214, 55-80	4.1	43
232	Fine Asymptotics for Fast Diffusion Equations. <i>Communications in Partial Differential Equations</i> , 2003 , 28, 1023-1056	1.6	43
231	Asymptotic Behavior of an Initial-Boundary Value Problem for the Vlasov-Poisson-Fokker-Planck System. <i>SIAM Journal on Applied Mathematics</i> , 1997 , 57, 1343-1372	1.8	42
230	Asymptotic Behaviour and Self-Similarity for the Three Dimensional Vlasov-Poisson-Fokker-Planck System. <i>Journal of Functional Analysis</i> , 1996 , 141, 99-132	1.4	42
229	Regularity of Local Minimizers of the Interaction Energy Via Obstacle Problems. <i>Communications in Mathematical Physics</i> , 2016 , 343, 747-781	2	40
228	Numerical Simulation of Diffusive and Aggregation Phenomena in Nonlinear Continuity Equations by Evolving Diffeomorphisms. <i>SIAM Journal of Scientific Computing</i> , 2010 , 31, 4305-4329	2.6	39
227	On the initial value problem for the Vlasov-Poisson-Fokker-Planck system with initial data in L_p spaces. <i>Mathematical Methods in the Applied Sciences</i> , 1995 , 18, 825-839	2.3	38
226	An analytical framework for consensus-based global optimization method. <i>Mathematical Models and Methods in Applied Sciences</i> , 2018 , 28, 1037-1066	3.5	36
225	Structured populations, cell growth and measure valued balance laws. <i>Journal of Differential Equations</i> , 2012 , 252, 3245-3277	2.1	36
224	The asymptotic behaviour of subcritical dissipative quasi-geostrophic equations. <i>Nonlinearity</i> , 2008 , 21, 1001-1018	1.7	36
223	On the analysis of a coupled kinetic-fluid model with local alignment forces. <i>Annales De L'Institut Henri Poincare (C) Analyse Non Lineaire</i> , 2016 , 33, 273-307	1.6	35
222	Nonlinear mobility continuity equations and generalized displacement convexity. <i>Journal of Functional Analysis</i> , 2010 , 258, 1273-1309	1.4	35
221	Phase Transitions in a Kinetic Flocking Model of Cucker-Smale Type. <i>Multiscale Modeling and Simulation</i> , 2016 , 14, 1063-1088	1.8	33
220	Stability Analysis of Flock and Mill Rings for Second Order Models in Swarming. <i>SIAM Journal on Applied Mathematics</i> , 2014 , 74, 794-818	1.8	33
219	Equilibration Rate for the Linear Inhomogeneous Relaxation-Time Boltzmann Equation for Charged Particles. <i>Communications in Partial Differential Equations</i> , 2003 , 28, 969-989	1.6	33
218	Global weak solutions for the initial-boundary-value problems Vlasov-Poisson-Fokker-Planck System. <i>Mathematical Methods in the Applied Sciences</i> , 1998 , 21, 907-938	2.3	32

217	Simulation of fluid and particles flows: Asymptotic preserving schemes for bubbling and flowing regimes. <i>Journal of Computational Physics</i> , 2008 , 227, 7929-7951	4.1	32
216	Contractive Metrics for a Boltzmann Equation for Granular Gases: Diffusive Equilibria. <i>Journal of Statistical Physics</i> , 2005 , 118, 301-331	1.5	32
215	Discontinuous Galerkin methods for the one-dimensional Vlasov-Poisson system. <i>Kinetic and Related Models</i> , 2011 , 4, 955-989	2.4	32
214	An improved version of the Hughes model for pedestrian flow. <i>Mathematical Models and Methods in Applied Sciences</i> , 2016 , 26, 671-697	3.5	32
213	Ground States for Diffusion Dominated Free Energies with Logarithmic Interaction. <i>SIAM Journal on Mathematical Analysis</i> , 2015 , 47, 1-25	1.7	31
212	A Direct Solver for 2D Non-Stationary Boltzmann-Poisson Systems for Semiconductor Devices: A MESFET Simulation by WENO-Boltzmann Schemes. <i>Journal of Computational Electronics</i> , 2003 , 2, 375-380	1.8	31
211	A Review on Attractive/Repulsive Hydrodynamics for Consensus in Collective Behavior. <i>Modeling and Simulation in Science, Engineering and Technology</i> , 2017 , 259-298	0.8	30
210	Hardy-Littlewood-Sobolev inequalities via fast diffusion flows. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2010 , 107, 19696-701	11.5	30
209	A mixed finite element method for nonlinear diffusion equations. <i>Kinetic and Related Models</i> , 2010 , 3, 59-83	2.4	30
208	Sharp logarithmic Sobolev inequalities on gradient solitons and applications. <i>Communications in Analysis and Geometry</i> , 2009 , 17, 721-753	0.9	30
207	Numerical Schemes of Diffusion Asymptotics and Moment Closures for Kinetic Equations. <i>Journal of Scientific Computing</i> , 2008 , 36, 113-149	2.3	29
206	Long-time behavior for a nonlinear fourth-order parabolic equation. <i>Transactions of the American Mathematical Society</i> , 2004 , 357, 1161-1175	1	29
205	Nonlinear stability of flock solutions in second-order swarming models. <i>Nonlinear Analysis: Real World Applications</i> , 2014 , 17, 332-343	2.1	28
204	Equilibria of homogeneous functionals in the fair-competition regime. <i>Nonlinear Analysis: Theory, Methods & Applications</i> , 2017 , 159, 85-128	1.3	28
203	Classical Solutions for a Nonlinear Fokker-Planck Equation Arising in Computational Neuroscience. <i>Communications in Partial Differential Equations</i> , 2013 , 38, 385-409	1.6	28
202	Contractivity of Transport Distances for the Kinetic Kuramoto Equation. <i>Journal of Statistical Physics</i> , 2014 , 156, 395-415	1.5	27
201	A new interaction potential for swarming models. <i>Physica D: Nonlinear Phenomena</i> , 2013 , 260, 112-126	3.3	26
200	DISCONTINUOUS GALERKIN METHODS FOR THE MULTI-DIMENSIONAL VLASOV-BOISSON PROBLEM. <i>Mathematical Models and Methods in Applied Sciences</i> , 2012 , 22, 1250042	3.5	26

199	On the dynamics of a fluid-particle interaction model: The bubbling regime. <i>Nonlinear Analysis: Theory, Methods & Applications</i> , 2011 , 74, 2778-2801	1.3	26
198	Refined asymptotics for the subcritical Keller-Segel system and related functional inequalities. <i>Proceedings of the American Mathematical Society</i> , 2012 , 140, 3515-3530	0.8	26
197	A blob method for diffusion. <i>Calculus of Variations and Partial Differential Equations</i> , 2019 , 58, 1	1.5	25
196	A discontinuous Galerkin method for nonlinear parabolic equations and gradient flow problems with interaction potentials. <i>Journal of Computational Physics</i> , 2018 , 352, 76-104	4.1	25
195	Measure Solutions for Some Models in Population Dynamics. <i>Acta Applicandae Mathematicae</i> , 2013 , 123, 141-156	1.1	25
194	A numerical solver for a nonlinear Fokker-Planck equation representation of neuronal network dynamics. <i>Journal of Computational Physics</i> , 2011 , 230, 1084-1099	4.1	25
193	Self-similar solutions and large time asymptotics for the dissipative quasi-geostrophic equation. <i>Monatshefte Fur Mathematik</i> , 2007 , 151, 111-142	0.7	25
192	Decay Rates in Probability Metrics Towards Homogeneous Cooling States for the Inelastic Maxwell Model. <i>Journal of Statistical Physics</i> , 2006 , 124, 625-653	1.5	25
191	Finite speed of propagation in porous media by mass transportation methods. <i>Comptes Rendus Mathematique</i> , 2004 , 338, 815-818	0.4	25
190	Nonlinear Stability in L_p for a Confined System of Charged Particles. <i>SIAM Journal on Mathematical Analysis</i> , 2002 , 34, 478-494	1.7	24
189	A hybrid variational principle for the Keller-Segel system in \mathbb{R}^2 . <i>ESAIM: Mathematical Modelling and Numerical Analysis</i> , 2015 , 49, 1553-1576	1.8	23
188	CROSS DIFFUSION AND NONLINEAR DIFFUSION PREVENTING BLOW UP IN THE KELLER-SEGEL MODEL. <i>Mathematical Models and Methods in Applied Sciences</i> , 2012 , 22, 1250041	3.5	23
187	On the Vlasov-Poisson-Fokker-Planck Equations with Measures in Morrey Spaces as Initial Data. <i>Journal of Mathematical Analysis and Applications</i> , 1997 , 207, 475-495	1.1	23
186	Granular hydrodynamics and pattern formation in vertically oscillated granular disk layers. <i>Journal of Fluid Mechanics</i> , 2008 , 597, 119-144	3.7	23
185	Zoology of a Nonlocal Cross-Diffusion Model for Two Species. <i>SIAM Journal on Applied Mathematics</i> , 2018 , 78, 1078-1104	1.8	22
184	Confinement in nonlocal interaction equations. <i>Nonlinear Analysis: Theory, Methods & Applications</i> , 2012 , 75, 550-558	1.3	22
183	Explicit flock solutions for Quasi-Morse potentials. <i>European Journal of Applied Mathematics</i> , 2014 , 25, 553-578	1	22
182	1D nonlinear Fokker-Planck equations for fermions and bosons. <i>Applied Mathematics Letters</i> , 2008 , 21, 148-154	3.5	22

181	On the pressureless damped Euler-Poisson equations with quadratic confinement: Critical thresholds and large-time behavior. <i>Mathematical Models and Methods in Applied Sciences</i> , 2016 , 26, 2311-2340	3.5	22
180	Long-Time Behaviour and Phase Transitions for the McKean-Vlasov Equation on the Torus. <i>Archive for Rational Mechanics and Analysis</i> , 2020 , 235, 635-690	2.3	22
179	Qualitative properties of solutions for the noisy integrate and fire model in computational neuroscience. <i>Nonlinearity</i> , 2015 , 28, 3365-3388	1.7	21
178	The Filippov characteristic flow for the aggregation equation with mildly singular potentials. <i>Journal of Differential Equations</i> , 2016 , 260, 304-338	2.1	21
177	On a nonlocal elliptic equation with decreasing nonlinearity arising in plasma physics and heat conduction. <i>Nonlinear Analysis: Theory, Methods & Applications</i> , 1998 , 32, 97-115	1.3	21
176	Computational macroscopic approximations to the one-dimensional relaxation-time kinetic system for semiconductors. <i>Physica D: Nonlinear Phenomena</i> , 2000 , 146, 289-306	3.3	21
175	Uniqueness for Keller-Segel-type chemotaxis models. <i>Discrete and Continuous Dynamical Systems</i> , 2014 , 34, 1319-1338	2	21
174	Nonlinear aggregation-diffusion equations: radial symmetry and long time asymptotics. <i>Inventiones Mathematicae</i> , 2019 , 218, 889-977	2.2	20
173	Exponential convergence towards stationary states for the 1D porous medium equation with fractional pressure. <i>Journal of Differential Equations</i> , 2015 , 258, 736-763	2.1	20
172	A deterministic solver for a hybrid quantum-classical transport model in nanoMOSFETs. <i>Journal of Computational Physics</i> , 2009 , 228, 6553-6571	4.1	20
171	LOW AND HIGH FIELD SCALING LIMITS FOR THE VLASOV AND WIGNER-POISSON-FOKKER-PLANCK SYSTEMS. <i>Transport Theory and Statistical Physics</i> , 2001 , 30, 121-153		20
170	Numerical simulation of nonlinear continuity equations by evolving diffeomorphisms. <i>Journal of Computational Physics</i> , 2016 , 327, 186-202	4.1	20
169	Mean-field limit for collective behavior models with sharp sensitivity regions. <i>Journal of the European Mathematical Society</i> , 2019 , 21, 121-161	1.8	20
168	Ground states in the diffusion-dominated regime. <i>Calculus of Variations and Partial Differential Equations</i> , 2018 , 57, 127	1.5	20
167	Fermi-Dirac-Fokker-Planck equation: Well-posedness & long-time asymptotics. <i>Journal of Differential Equations</i> , 2009 , 247, 2209-2234	2.1	19
166	GLOBAL SOLUTIONS FOR THE ONE-DIMENSIONAL VLASOV-MAXWELL SYSTEM FOR LASER-PLASMA INTERACTION. <i>Mathematical Models and Methods in Applied Sciences</i> , 2006 , 16, 19-57	3.5	19
165	A Numerical Study on Large-Time Asymptotics of the Lifshitz-Blyozov System. <i>Journal of Scientific Computing</i> , 2004 , 20, 69-113	2.3	19
164	On the Long-Time Behavior of the Quantum Fokker-Planck Equation. <i>Monatshefte Fur Mathematik</i> , 2004 , 141, 237-257	0.7	19

163	Poincaré inequalities for linearizations of very fast diffusion equations. <i>Nonlinearity</i> , 2002 , 15, 565-580	1.7	19
162	Confinement for repulsive-attractive kernels. <i>Discrete and Continuous Dynamical Systems - Series B</i> , 2014 , 19, 1227-1248	1.3	19
161	Particle Based gPC Methods for Mean-Field Models of Swarming with Uncertainty. <i>Communications in Computational Physics</i> , 2019 , 25,	2.4	19
160	A population dynamics model of cell-cell adhesion incorporating population pressure and density saturation. <i>Journal of Theoretical Biology</i> , 2019 , 474, 14-24	2.3	18
159	On global minimizers of repulsive-attractive power-law interaction energies. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2014 , 372,	3	18
158	Geometry of minimizers for the interaction energy with mildly repulsive potentials. <i>Annales De L'institut Henri Poincaré (C) Analyse Non Linéaire</i> , 2017 , 34, 1299-1308	1.6	17
157	An Asymptotic Preserving Scheme for the Diffusive Limit of Kinetic Systems for Chemotaxis. <i>Multiscale Modeling and Simulation</i> , 2013 , 11, 336-361	1.8	17
156	Collective Behavior of Animals: Swarming and Complex Patterns. <i>Arbor</i> , 2010 , 186, 1035-1049	0.2	17
155	Asymptotic Complexity in Filtration Equations. <i>Journal of Evolution Equations</i> , 2007 , 7, 471-495	1.2	16
154	Strict contractivity of the 2-Wasserstein distance for the porous medium equation by mass-centering. <i>Proceedings of the American Mathematical Society</i> , 2006 , 135, 353-363	0.8	16
153	Refined long-time asymptotics for some polymeric fluid flow models. <i>Communications in Mathematical Sciences</i> , 2010 , 8, 763-782	1	16
152	Optimal consensus control of the Cucker-Smale model. <i>IFAC-PapersOnLine</i> , 2018 , 51, 1-6	0.7	16
151	Splitting Schemes and Segregation in Reaction Cross-Diffusion Systems. <i>SIAM Journal on Mathematical Analysis</i> , 2018 , 50, 5695-5718	1.7	16
150	A Lagrangian Scheme for the Solution of Nonlinear Diffusion Equations Using Moving Simplex Meshes. <i>Journal of Scientific Computing</i> , 2018 , 75, 1463-1499	2.3	15
149	Splitting-particle methods for structured population models: Convergence and applications. <i>Mathematical Models and Methods in Applied Sciences</i> , 2014 , 24, 2171-2197	3.5	15
148	Adaptive dynamics via Hamilton-Jacobi approach and entropy methods for a juvenile-adult model. <i>Mathematical Biosciences</i> , 2007 , 205, 137-61	3.9	15
147	A WENO-Solver for the 1D Non-Stationary Boltzmann-Poisson System for Semiconductor Devices. <i>Journal of Computational Electronics</i> , 2002 , 1, 365-370	1.8	15
146	Entropy-energy inequalities and improved convergence rates for nonlinear parabolic equations. <i>Discrete and Continuous Dynamical Systems - Series B</i> , 2006 , 6, 1027-1050	1.3	15

145	Local well-posedness of the generalized Cucker-Smale model with singular kernels. <i>ESAIM Proceedings and Surveys</i> , 2014 , 47, 17-35	0.9	14
144	Tanaka Theorem for Inelastic Maxwell Models. <i>Communications in Mathematical Physics</i> , 2007 , 276, 287-314		14
143	Non-local kinetic and macroscopic models for self-organised animal aggregations. <i>Kinetic and Related Models</i> , 2015 , 8, 413-441	2.4	14
142	Adhesion and volume constraints via nonlocal interactions determine cell organisation and migration profiles. <i>Journal of Theoretical Biology</i> , 2018 , 445, 75-91	2.3	14
141	Large time asymptotics of the doubly nonlinear equation in the non-displacement convexity regime. <i>Journal of Evolution Equations</i> , 2010 , 10, 59-84	1.2	13
140	Intermediate Asymptotics Beyond Homogeneity and Self-Similarity: Long Time Behavior for $u_t = \mathcal{R}(u)$. <i>Archive for Rational Mechanics and Analysis</i> , 2006 , 180, 127-149	2.3	13
139	Over-populated tails for conservative-in-the-mean inelastic Maxwell models. <i>Discrete and Continuous Dynamical Systems</i> , 2009 , 24, 59-81	2	13
138	A maximum entropy principle based closure method for macro-micro models of polymeric materials. <i>Kinetic and Related Models</i> , 2008 , 1, 171-184	2.4	13
137	Numerical study of a particle method for gradient flows. <i>Kinetic and Related Models</i> , 2017 , 10, 613-641	2.4	13
136	A consensus-based global optimization method for high dimensional machine learning problems. <i>ESAIM - Control, Optimisation and Calculus of Variations</i> , 2021 , 27, S5	1	13
135	Weak solutions for Euler systems with non-local interactions. <i>Journal of the London Mathematical Society</i> , 2017 , 95, 705-724	0.7	12
134	Gradient flows for non-smooth interaction potentials. <i>Nonlinear Analysis: Theory, Methods & Applications</i> , 2014 , 100, 122-147	1.3	12
133	ASYMPTOTIC FIXED-SPEED REDUCED DYNAMICS FOR KINETIC EQUATIONS IN SWARMING. <i>Mathematical Models and Methods in Applied Sciences</i> , 2013 , 23, 2353-2393	3.5	12
132	Example of a displacement convex functional of first order. <i>Calculus of Variations and Partial Differential Equations</i> , 2009 , 36, 547-564	1.5	12
131	Contractivity of Wasserstein metrics and asymptotic profiles for scalar conservation laws. <i>Journal of Differential Equations</i> , 2006 , 231, 425-458	2.1	12
130	Explicit equilibrium solutions for the aggregation equation with power-law potentials. <i>Kinetic and Related Models</i> , 2017 , 10, 171-192	2.4	12
129	Equivalence of gradient flows and entropy solutions for singular nonlocal interaction equations in 1D. <i>ESAIM - Control, Optimisation and Calculus of Variations</i> , 2015 , 21, 414-441	1	11
128	Some free boundary problems involving non-local diffusion and aggregation. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2015 , 373,	3	11

127	Strong convergence towards homogeneous cooling states for dissipative Maxwell models. <i>Annales De L'Institut Henri Poincare (C) Analyse Non Lineaire</i> , 2009 , 26, 1675-1700	1.6	11
126	Equilibrium Solution to the Inelastic Boltzmann Equation Driven by a Particle Bath. <i>Journal of Statistical Physics</i> , 2008 , 133, 841-870	1.5	11
125	Numerical study on hydrodynamic and quasi-neutral approximations for collisionless two-species plasmas. <i>Journal of Computational Physics</i> , 2004 , 200, 267-298	4.1	11
124	Existence of ground states for aggregation-diffusion equations. <i>Analysis and Applications</i> , 2019 , 17, 393-423	4.5	11
123	Quantitative error estimates for the large friction limit of Vlasov equation with nonlocal forces. <i>Annales De L'Institut Henri Poincare (C) Analyse Non Lineaire</i> , 2020 , 37, 925-954	1.6	10
122	Monte Carlo gPC Methods for Diffusive Kinetic Flocking Models with Uncertainties. <i>Vietnam Journal of Mathematics</i> , 2019 , 47, 931-954	0.5	10
121	On the relativistic heat equation in one space dimension. <i>Proceedings of the London Mathematical Society</i> , 2013 , 107, 1395-1423	1.2	10
120	Erratum on On Some Properties of Kinetic and Hydrodynamic Equations for Inelastic Interactions. <i>Journal of Statistical Physics</i> , 2001 , 103, 1137-1138	1.5	10
119	LARGE-TIME BEHAVIOR OF DISCRETE KINETIC EQUATIONS WITH NON-SYMMETRIC INTERACTIONS. <i>Mathematical Models and Methods in Applied Sciences</i> , 2002 , 12, 1555-1564	3.5	10
118	N-Cadherin Orchestrates Self-Organization of Neurons within a Columnar Unit in the Medulla. <i>Journal of Neuroscience</i> , 2019 , 39, 5861-5880	6.6	9
117	Particle Interactions Mediated by Dynamical Networks: Assessment of Macroscopic Descriptions. <i>Journal of Nonlinear Science</i> , 2018 , 28, 235-268	2.8	9
116	Reduced fluid models for self-propelled particles interacting through alignment. <i>Mathematical Models and Methods in Applied Sciences</i> , 2017 , 27, 1255-1299	3.5	9
115	Rényi entropy and improved equilibration rates to self-similarity for nonlinear diffusion equations. <i>Nonlinearity</i> , 2014 , 27, 3159-3177	1.7	9
114	A numerical study of the Navier-Stokes transport coefficients for two-dimensional granular hydrodynamics. <i>New Journal of Physics</i> , 2013 , 15, 043044	2.9	9
113	Exponential Decay Towards Equilibrium for the Inhomogeneous Aizenman-Bak Model. <i>Communications in Mathematical Physics</i> , 2008 , 278, 433-451	2	9
112	Deterministic Simulation of the Boltzmann-Poisson System in GaAs-Based Semiconductors. <i>SIAM Journal of Scientific Computing</i> , 2006 , 27, 1981-2009	2.6	9
111	H-theorem for electrostatic or self-gravitating Vlasov-Poisson-Fokker-Planck systems. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 1996 , 212, 55-59	2.3	9
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- 1 An Optimal Mass Transport Method for Random Genetic Drift. *SIAM Journal on Numerical Analysis*, **2022**, 60, 940-969 2.4