

Jose A Carrillo

List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

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	Large friction-high force fields limit for the nonlinear Vlasov-Boltzmann system. <i>Kinetic and Related Models</i> , 2022 ,	2.4	0
269	Boltzmann to Landau from the gradient flow perspective. <i>Nonlinear Analysis: Theory, Methods & Applications</i> , 2022 , 219, 112824	1.3	0
268	A positivity-preserving scheme for fluctuating hydrodynamics. <i>Journal of Computational Physics</i> , 2022 , 111248	4.1	2
267	An Optimal Mass Transport Method for Random Genetic Drift. <i>SIAM Journal on Numerical Analysis</i> , 2022 , 60, 940-969	2.4	
266	Infinite-time concentration in aggregation-diffusion equations with a given potential. <i>Journal Des Mathematiques Pures Et Appliquees</i> , 2021 , 157, 346-346	1.7	1
265	Uniqueness of stationary states for singular Keller-Segel type models. <i>Nonlinear Analysis: Theory, Methods & Applications</i> , 2021 , 205, 112222	1.3	1
264	The equilibrium measure for an anisotropic nonlocal energy. <i>Calculus of Variations and Partial Differential Equations</i> , 2021 , 60, 1	1.5	1
263	Enhancement of damaged-image prediction through Cahn-Hilliard image inpainting. <i>Royal Society Open Science</i> , 2021 , 8, 201294	3.3	0
262	Mean-Field Limits: From Particle Descriptions to Macroscopic Equations. <i>Archive for Rational Mechanics and Analysis</i> , 2021 , 241, 1529-1573	2.3	4
261	Boundary spike-layer solutions of the singular Keller-Segel system: existence and stability. <i>Proceedings of the London Mathematical Society</i> , 2021 , 122, 42-68	1.2	4
260	A finite-volume method for fluctuating dynamical density functional theory. <i>Journal of Computational Physics</i> , 2021 , 428, 109796	4.1	5
259	Coarse graining of a Fokker-Planck equation with excluded volume effects preserving the gradient flow structure. <i>European Journal of Applied Mathematics</i> , 2021 , 32, 711-745	1	0
258	A second-order numerical method for the aggregation equations. <i>Mathematics of Computation</i> , 2021 , 90, 103-139	1.6	1
257	High-Order Well-Balanced Finite-Volume Schemes for Hydrodynamic Equations With Nonlocal Free Energy. <i>SIAM Journal of Scientific Computing</i> , 2021 , 43, A828-A858	2.6	2
256	Lagrangian schemes for Wasserstein gradient flows. <i>Handbook of Numerical Analysis</i> , 2021 , 271-311	1	1
255	Recent Development in Kinetic Theory of Granular Materials: Analysis and Numerical Methods. <i>SEMA SIMAI Springer Series</i> , 2021 , 1-36	0.2	
254	Equilibria of an anisotropic nonlocal interaction equation: Analysis and numerics. <i>Discrete and Continuous Dynamical Systems</i> , 2021 , 41, 3985	2	

253	Variational Asymptotic Preserving Scheme for the Vlasov--Poisson--Fokker--Planck System. <i>Multiscale Modeling and Simulation</i> , 2021 , 19, 478-505	1.8	1
252	Mathematical modelling of collagen fibres rearrangement during the tendon healing process. <i>Kinetic and Related Models</i> , 2021 , 14, 283	2.4	
251	Phase Transitions for Nonlinear Nonlocal Aggregation-Diffusion Equations. <i>Communications in Mathematical Physics</i> , 2021 , 382, 485-545	2	1
250	Quantifying the hydrodynamic limit of Vlasov-type equations with alignment and nonlocal forces. <i>Mathematical Models and Methods in Applied Sciences</i> , 2021 , 31, 327-408	3.5	4
249	Wasserstein stability estimates for covariance-preconditioned Fokker-Planck equations. <i>Nonlinearity</i> , 2021 , 34, 2275-2295	1.7	3
248	A finite volume method for continuum limit equations of nonlocally interacting active chiral particles. <i>Journal of Computational Physics</i> , 2021 , 440, 110275	4.1	0
247	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
246	Convergence of a finite volume scheme for a system of interacting species with cross-diffusion. <i>Numerische Mathematik</i> , 2020 , 145, 473-511	2.2	7
245	Well-Balanced Finite-Volume Schemes for Hydrodynamic Equations with General Free Energy. <i>Multiscale Modeling and Simulation</i> , 2020 , 18, 502-541	1.8	7
244	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
243	Phase Transitions and Bump Solutions of the Keller--Segel Model with Volume Exclusion. <i>SIAM Journal on Applied Mathematics</i> , 2020 , 80, 232-261	1.8	8
242	Analysis of Spherical Shell Solutions for the Radially Symmetric Aggregation Equation. <i>SIAM Journal on Applied Dynamical Systems</i> , 2020 , 19, 2628-2657	2.8	0
241	Measure solutions to a system of continuity equations driven by Newtonian nonlocal interactions. <i>Discrete and Continuous Dynamical Systems</i> , 2020 , 40, 1191-1231	2	3
240	Relative entropy method for the relaxation limit of hydrodynamic models. <i>Networks and Heterogeneous Media</i> , 2020 , 15, 369-387	1.6	5
239	Fully discrete positivity-preserving and energy-dissipating schemes for aggregation-diffusion equations with a gradient-flow structure. <i>Communications in Mathematical Sciences</i> , 2020 , 18, 1259-1303 ¹		8
238	On the singularity formation and relaxation to equilibrium in 1D Fokker-Planck model with superlinear drift. <i>Advances in Mathematics</i> , 2020 , 360, 106883	1.3	2
237	Convergence of a fully discrete and energy-dissipating finite-volume scheme for aggregation-diffusion equations. <i>Mathematical Models and Methods in Applied Sciences</i> , 2020 , 30, 2487-2522	2.5	3
236	On a mean field optimal control problem. <i>Nonlinear Analysis: Theory, Methods & Applications</i> , 2020 , 199, 112039	1.3	2

235	A particle method for the homogeneous Landau equation. <i>Journal of Computational Physics: X</i> , 2020 , 7, 100066	1	3
234	Fluid models with phase transition for kinetic equations in swarming. <i>Mathematical Models and Methods in Applied Sciences</i> , 2020 , 30, 2023-2065	3.5	1
233	Traveling bands, clouds, and vortices of chiral active matter. <i>Physical Review E</i> , 2020 , 102, 022604	2.4	7
232	Pressureless Euler with nonlocal interactions as a singular limit of degenerate Navier-Stokes system. <i>Journal of Mathematical Analysis and Applications</i> , 2020 , 492, 124400	1.1	1
231	A \mathbb{K} -convexity based proof for the propagation of chaos for weakly interacting stochastic particles. <i>Journal of Functional Analysis</i> , 2020 , 279, 108734	1.4	4
230	Segregation effects and gap formation in cross-diffusion models. <i>Interfaces and Free Boundaries</i> , 2020 , 22, 175-203	0.7	3
229	The Ellipse Law: Kirchhoff Meets Dislocations. <i>Communications in Mathematical Physics</i> , 2020 , 373, 507-524		4
228	The role of a strong confining potential in a nonlinear Fokker-Planck equation. <i>Nonlinear Analysis: Theory, Methods & Applications</i> , 2020 , 193, 111480	1.3	1
227	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
226	Nonlinear aggregation-diffusion equations: radial symmetry and long time asymptotics. <i>Inventiones Mathematicae</i> , 2019 , 218, 889-977	2.2	20
225	Reverse Hardy-Littlewood-Bobolev inequalities. <i>Journal Des Mathematiques Pures Et Appliquees</i> , 2019 , 132, 133-165	1.7	6
224	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
223	Propagation of chaos for the Vlasov-Poisson-Fokker-Planck equation with a polynomial cut-off. <i>Communications in Contemporary Mathematics</i> , 2019 , 21, 1850039	1.1	8
222	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
221	A blob method for diffusion. <i>Calculus of Variations and Partial Differential Equations</i> , 2019 , 58, 1	1.5	25
220	A Lipschitz metric for the Hunter-Baxton equation. <i>Communications in Partial Differential Equations</i> , 2019 , 44, 309-334	1.6	4
219	Convergence to Equilibrium in Wasserstein Distance for Damped Euler Equations with Interaction Forces. <i>Communications in Mathematical Physics</i> , 2019 , 365, 329-361	2	8
218	A Hybrid Mass Transport Finite Element Method for Keller-Segel Type Systems. <i>Journal of Scientific Computing</i> , 2019 , 80, 1777-1804	2.3	1

217	Monte Carlo gPC Methods for Diffusive Kinetic Flocking Models with Uncertainties. <i>Vietnam Journal of Mathematics</i> , 2019 , 47, 931-954	0.5	10
216	An entropy stable high-order discontinuous Galerkin method for cross-diffusion gradient flow systems. <i>Kinetic and Related Models</i> , 2019 , 12, 885-908	2.4	6
215	Hydrodynamic limits for kinetic flocking models of Cucker-Smale type. <i>Mathematical Biosciences and Engineering</i> , 2019 , 16, 7883-7910	2.1	7
214	Particle Based gPC Methods for Mean-Field Models of Swarming with Uncertainty. <i>Communications in Computational Physics</i> , 2019 , 25,	2.4	19
213	Aggregation-Diffusion Equations: Dynamics, Asymptotics, and Singular Limits. <i>Modeling and Simulation in Science, Engineering and Technology</i> , 2019 , 65-108	0.8	9
212	Uniform in Time (L^{∞})-Estimates for Nonlinear Aggregation-Diffusion Equations. <i>Acta Applicandae Mathematicae</i> , 2019 , 164, 1-19	1.1	
211	Collective Search With Finite Perception: Transient Dynamics and Search Efficiency. <i>Frontiers in Physics</i> , 2019 , 6,	3.9	4
210	The Escalator Boxcar Train Method for a System of Age-Structured Equations in the Space of Measures. <i>SIAM Journal on Numerical Analysis</i> , 2019 , 57, 1842-1874	2.4	4
209	Stability Analysis of Line Patterns of an Anisotropic Interaction Model. <i>SIAM Journal on Applied Dynamical Systems</i> , 2019 , 18, 1798-1845	2.8	3
208	On long-time asymptotics for viscous hydrodynamic models of collective behavior with damping and nonlocal interactions. <i>Mathematical Models and Methods in Applied Sciences</i> , 2019 , 29, 31-63	3.5	7
207	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
206	Exponential equilibration of genetic circuits using entropy methods. <i>Journal of Mathematical Biology</i> , 2019 , 78, 373-411	2	3
205	Structure preserving schemes for the continuum Kuramoto model: Phase transitions. <i>Journal of Computational Physics</i> , 2019 , 376, 365-389	4.1	8
204	Existence of ground states for aggregation-diffusion equations. <i>Analysis and Applications</i> , 2019 , 17, 393-423	4.5	11
203	Displacement convexity for the entropy in semi-discrete non-linear Fokker-Planck equations. <i>European Journal of Applied Mathematics</i> , 2019 , 30, 1103-1122	1	1
202	Zoology of a Nonlocal Cross-Diffusion Model for Two Species. <i>SIAM Journal on Applied Mathematics</i> , 2018 , 78, 1078-1104	1.8	22
201	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
200	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

199	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
198	Particle Interactions Mediated by Dynamical Networks: Assessment of Macroscopic Descriptions. <i>Journal of Nonlinear Science</i> , 2018 , 28, 235-268	2.8	9
197	Convergence of a linearly transformed particle method for aggregation equations. <i>Numerische Mathematik</i> , 2018 , 139, 743-793	2.2	6
196	Compactly supported stationary states of the degenerate Keller-Segel system in the diffusion-dominated regime. <i>Indiana University Mathematics Journal</i> , 2018 , 67, 2279-2312	0.6	5
195	Pedestrian Models Based on Rational Behaviour. <i>Modeling and Simulation in Science, Engineering and Technology</i> , 2018 , 259-292	0.8	8
194	Optimal consensus control of the Cucker-Smale model. <i>IFAC-PapersOnLine</i> , 2018 , 51, 1-6	0.7	16
193	Splitting Schemes and Segregation in Reaction Cross-Diffusion Systems. <i>SIAM Journal on Mathematical Analysis</i> , 2018 , 50, 5695-5718	1.7	16
192	Ground states in the diffusion-dominated regime. <i>Calculus of Variations and Partial Differential Equations</i> , 2018 , 57, 127	1.5	20
191	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
190	Geometry of minimizers for the interaction energy with mildly repulsive potentials. <i>Annales De L'Institut Henri Poincare (C) Analyse Non Lineaire</i> , 2017 , 34, 1299-1308	1.6	17
189	A Review on AttractiveRepulsive Hydrodynamics for Consensus in Collective Behavior. <i>Modeling and Simulation in Science, Engineering and Technology</i> , 2017 , 259-298	0.8	30
188	Weak solutions for Euler systems with non-local interactions. <i>Journal of the London Mathematical Society</i> , 2017 , 95, 705-724	0.7	12
187	Sharp conditions to avoid collisions in singular CuckerSmale interactions. <i>Nonlinear Analysis: Real World Applications</i> , 2017 , 37, 317-328	2.1	45
186	Nonlocal and Nonlinear Diffusions and Interactions: New Methods and Directions. <i>Lecture Notes in Mathematics</i> , 2017 ,	0.4	2
185	L^∞ estimates for the JKO scheme in parabolic-elliptic Keller-Segel systems. <i>Quarterly of Applied Mathematics</i> , 2017 , 76, 515-530	0.7	4
184	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
183	Equilibria of homogeneous functionals in the fair-competition regime. <i>Nonlinear Analysis: Theory, Methods & Applications</i> , 2017 , 159, 85-128	1.3	28
182	Explicit equilibrium solutions for the aggregation equation with power-law potentials. <i>Kinetic and Related Models</i> , 2017 , 10, 171-192	2.4	12

181	Numerical study of a particle method for gradient flows. <i>Kinetic and Related Models</i> , 2017 , 10, 613-641	2.4	13
180	The Geometry of Diffusing and Self-Attracting Particles in a One-Dimensional Fair-Competition Regime. <i>Lecture Notes in Mathematics</i> , 2017 , 1-71	0.4	6
179	The Fokker-Planck equation for bosons in 2D: Well-posedness and asymptotic behavior. <i>Nonlinear Analysis: Theory, Methods & Applications</i> , 2016 , 137, 291-305	1.3	4
178	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
177	Convergence of a Particle Method for Diffusive Gradient Flows in One Dimension. <i>SIAM Journal on Mathematical Analysis</i> , 2016 , 48, 3708-3741	1.7	8
176	Phase Transitions in a Kinetic Flocking Model of Cucker--Smale Type. <i>Multiscale Modeling and Simulation</i> , 2016 , 14, 1063-1088	1.8	33
175	Regularity of Local Minimizers of the Interaction Energy Via Obstacle Problems. <i>Communications in Mathematical Physics</i> , 2016 , 343, 747-781	2	40
174	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
173	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
172	Single to double mill small noise transition via semi-Lagrangian finite volume methods. <i>Communications in Mathematical Sciences</i> , 2016 , 14, 1111-1136	1	7
171	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
170	Stability of stochastic gene regulatory networks using entropy methods**This work has been partially supported by Ministerio de Economia y Competitividad AGL2012-39951-C02-01. M. Pajaro acknowledge support from grants BES-2013-063112 and EEBB-I-16-10540.. <i>IFAC-PapersOnLine</i> , 2016 , 49, 1-5	0.7	3
169	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
168	Efficient numerical calculation of drift and diffusion coefficients in the diffusion approximation of kinetic equations. <i>IMA Journal of Numerical Analysis</i> , 2016 , 36, 1536-1569	1.8	4
167	Numerical simulation of nonlinear continuity equations by evolving diffeomorphisms. <i>Journal of Computational Physics</i> , 2016 , 327, 186-202	4.1	20
166	Ground States for Diffusion Dominated Free Energies with Logarithmic Interaction. <i>SIAM Journal on Mathematical Analysis</i> , 2015 , 47, 1-25	1.7	31
165	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
164	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

163	Qualitative properties of solutions for the noisy integrate and fire model in computational neuroscience. <i>Nonlinearity</i> , 2015 , 28, 3365-3388	1.7	21
162	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
161	A hybrid variational principle for the Keller-Begel system in \mathbb{R}^2 . <i>ESAIM: Mathematical Modelling and Numerical Analysis</i> , 2015 , 49, 1553-1576	1.8	23
160	On the Exponential Convergence Rate for a Non-Gradient Fokker-Planck Equation in Computational Neuroscience. <i>Journal of Elliptic and Parabolic Equations</i> , 2015 , 1, 271-279	0.7	
159	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
158	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
157	Nonlocal-interaction equations on uniformly prox-regular sets. <i>Discrete and Continuous Dynamical Systems</i> , 2015 , 36, 1209-1247	2	1
156	Non-local kinetic and macroscopic models for self-organised animal aggregations. <i>Kinetic and Related Models</i> , 2015 , 8, 413-441	2.4	14
155	Gradient flows for non-smooth interaction potentials. <i>Nonlinear Analysis: Theory, Methods & Applications</i> , 2014 , 100, 122-147	1.3	12
154	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
153	Contractivity of Transport Distances for the Kinetic Kuramoto Equation. <i>Journal of Statistical Physics</i> , 2014 , 156, 395-415	1.5	27
152	Nonlinear stability of flock solutions in second-order swarming models. <i>Nonlinear Analysis: Real World Applications</i> , 2014 , 17, 332-343	2.1	28
151	Nonlinear Diffusion: Geodesic Convexity is Equivalent to Wasserstein Contraction. <i>Communications in Partial Differential Equations</i> , 2014 , 39, 1860-1869	1.6	4
150	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
149	Rényi entropy and improved equilibration rates to self-similarity for nonlinear diffusion equations. <i>Nonlinearity</i> , 2014 , 27, 3159-3177	1.7	9
148	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
147	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
146	Explicit flock solutions for Quasi-Morse potentials. <i>European Journal of Applied Mathematics</i> , 2014 , 25, 553-578	1	22

145	Uniqueness for Keller-Segel-type chemotaxis models. <i>Discrete and Continuous Dynamical Systems</i> , 2014 , 34, 1319-1338	2	21
144	Confinement for repulsive-attractive kernels. <i>Discrete and Continuous Dynamical Systems - Series B</i> , 2014 , 19, 1227-1248	1.3	19
143	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
142	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
141	Nonlocal interactions by repulsive-attractive potentials: Radial ins/stability. <i>Physica D: Nonlinear Phenomena</i> , 2013 , 260, 5-25	3.3	61
140	Measure Solutions for Some Models in Population Dynamics. <i>Acta Applicandae Mathematicae</i> , 2013 , 123, 141-156	1.1	25
139	A new interaction potential for swarming models. <i>Physica D: Nonlinear Phenomena</i> , 2013 , 260, 112-126	3.3	26
138	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
137	Dimensionality of Local Minimizers of the Interaction Energy. <i>Archive for Rational Mechanics and Analysis</i> , 2013 , 209, 1055-1088	2.3	82
136	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
135	On the relativistic heat equation in one space dimension. <i>Proceedings of the London Mathematical Society</i> , 2013 , 107, 1395-1423	1.2	10
134	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
133	Complexity reduction of rate-equations models for two-choice decision-making. <i>PLoS ONE</i> , 2013 , 8, e80820	3.7	2
132	One-dimensional Fokker-Planck reduced dynamics of decision making models in computational neuroscience. <i>Communications in Mathematical Sciences</i> , 2013 , 11, 523-540	1	1
131	Confinement in nonlocal interaction equations. <i>Nonlinear Analysis: Theory, Methods & Applications</i> , 2012 , 75, 550-558	1.3	22
130	Structured populations, cell growth and measure valued balance laws. <i>Journal of Differential Equations</i> , 2012 , 252, 3245-3277	2.1	36
129	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
128	Decay rates for a class of diffusive-dominated interaction equations. <i>Journal of Mathematical Analysis and Applications</i> , 2012 , 389, 541-557	1.1	4

127	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
126	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
125	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
124	A Note on the Subcritical Two Dimensional Keller-Segel System. <i>Acta Applicandae Mathematicae</i> , 2012 , 119, 43-55	1.1	5
123	Mean-field limit for the stochastic Vicsek model. <i>Applied Mathematics Letters</i> , 2012 , 25, 339-343	3.5	64
122	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
121	Aggregation Equation with Growing at Infinity Attractive-repulsive Potentials. <i>Series in Contemporary Applied Mathematics</i> , 2012 , 136-147	0	3
120	Global-in-time weak measure solutions and finite-time aggregation for nonlocal interaction equations. <i>Duke Mathematical Journal</i> , 2011 , 156,	1.9	142
119	A decision-making Fokker-Planck model in computational neuroscience. <i>Journal of Mathematical Biology</i> , 2011 , 63, 801-30	2	8
118	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
117	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
116	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
115	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
114	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
113	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
112	Discontinuous Galerkin methods for the one-dimensional Vlasov-Poisson system. <i>Kinetic and Related Models</i> , 2011 , 4, 955-989	2.4	32
111	Collective Behavior of Animals: Swarming and Complex Patterns. <i>Arbor</i> , 2010 , 186, 1035-1049	0.2	17
110	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

109	SELF-PROPELLED INTERACTING PARTICLE SYSTEMS WITH ROOSTING FORCE. <i>Mathematical Models and Methods in Applied Sciences</i> , 2010 , 20, 1533-1552	3.5	71
108	Particle, kinetic, and hydrodynamic models of swarming 2010 , 297-336		134
107	Asymptotic Flocking Dynamics for the Kinetic Cucker-Smale Model. <i>SIAM Journal on Mathematical Analysis</i> , 2010 , 42, 218-236	1.7	281
106	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
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- 1 Fast Diffusion leads to partial mass concentration in Keller-Begel type stationary solutions.
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