

# ClÃ©ment Mouhot

## List of Publications by Year in descending order

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39  
papers

1,904  
citations

331670

21  
h-index

315739

38  
g-index

39  
all docs

39  
docs citations

39  
times ranked

706  
citing authors

#	ARTICLE	IF	CITATIONS
1	On Landau damping. <i>Acta Mathematica</i> , 2011, 207, 29-201.	3.9	288
2	Hypo-coercivity for linear kinetic equations conserving mass. <i>Transactions of the American Mathematical Society</i> , 2015, 367, 3807-3828.	0.9	154
3	Fast algorithms for computing the Boltzmann collision operator. <i>Mathematics of Computation</i> , 2006, 75, 1833-1852.	2.1	128
4	Quantitative perturbative study of convergence to equilibrium for collisional kinetic models in the torus. <i>Nonlinearity</i> , 2006, 19, 969-998.	1.4	114
5	Fractional Diffusion Limit for Collisional Kinetic Equations. <i>Archive for Rational Mechanics and Analysis</i> , 2011, 199, 493-525.	2.4	106
6	Kac's program in kinetic theory. <i>Inventiones Mathematicae</i> , 2013, 193, 1-147.	2.5	95
7	Regularity Theory for the Spatially Homogeneous Boltzmann Equation with Cut-Off. <i>Archive for Rational Mechanics and Analysis</i> , 2004, 173, 169-212.	2.4	86
8	Rate of Convergence to Equilibrium for the Spatially Homogeneous Boltzmann Equation with Hard Potentials. <i>Communications in Mathematical Physics</i> , 2006, 261, 629-672.	2.2	86
9	Solving the Boltzmann Equation in $N \log 2N$ . <i>SIAM Journal of Scientific Computing</i> , 2006, 28, 1029-1053.	2.8	82
10	Explicit Coercivity Estimates for the Linearized Boltzmann and Landau Operators. <i>Communications in Partial Differential Equations</i> , 2006, 31, 1321-1348.	2.2	77
11	Spectral gap and coercivity estimates for linearized Boltzmann collision operators without angular cutoff. <i>Journal Des Mathématiques Pures Et Appliquées</i> , 2007, 87, 515-535.	1.6	77
12	On the Mean Field and Classical Limits of Quantum Mechanics. <i>Communications in Mathematical Physics</i> , 2016, 343, 165-205.	2.2	67
13	Landau Damping: Paraproducts and Gevrey Regularity. <i>Annals of PDE</i> , 2016, 2, 1.	1.8	57
14	A new approach to quantitative propagation of chaos for drift, diffusion and jump processes. <i>Probability Theory and Related Fields</i> , 2015, 161, 1-59.	1.8	44
15	On measure solutions of the Boltzmann equation, part I: Moment production and stability estimates. <i>Journal of Differential Equations</i> , 2012, 252, 3305-3363.	2.2	35
16	Exponential Stability of Slowly Decaying Solutions to the Kinetic-Fokker-Planck Equation. <i>Archive for Rational Mechanics and Analysis</i> , 2016, 221, 677-723.	2.4	35
17	Stability and Uniqueness for the Spatially Homogeneous Boltzmann Equation with Long-Range Interactions. <i>Archive for Rational Mechanics and Analysis</i> , 2009, 193, 227-253.	2.4	34
18	Analysis of spectral methods for the homogeneous Boltzmann equation. <i>Transactions of the American Mathematical Society</i> , 2011, 363, 1947-1947.	0.9	31

#	ARTICLE	IF	CITATIONS
19	Quantitative Lower Bounds for the Full Boltzmann Equation, Part I: Periodic Boundary Conditions. Communications in Partial Differential Equations, 2005, 30, 881-917.	2.2	30
20	On the Well-Posedness of the Spatially Homogeneous Boltzmann Equation with a Moderate Angular Singularity. Communications in Mathematical Physics, 2009, 289, 803-824.	2.2	28
21	Landau Damping in Finite Regularity for Unconfined Systems with Screened Interactions. Communications on Pure and Applied Mathematics, 2018, 71, 537-576.	3.1	25
22	A New Approach to the Creation and Propagation of Exponential Moments in the Boltzmann Equation. Communications in Partial Differential Equations, 2013, 38, 155-169.	2.2	22
23	From Boltzmann to incompressible Navier-Stokes in Sobolev spaces with polynomial weight. Analysis and Applications, 2019, 17, 85-116.	2.2	22
24	Fractional Poincaré inequalities for general measures. Journal Des Mathematiques Pures Et Appliquees, 2011, 95, 72-84.	1.6	21
25	Lyapunov functionals for boundary-driven nonlinear drift-diffusion equations. Nonlinearity, 2014, 27, 2111-2132.	1.4	21
26	Hypoocoercivity for a Linearized Multispecies Boltzmann System. SIAM Journal on Mathematical Analysis, 2016, 48, 538-568.	1.9	20
27	Hypoocoercivity without confinement. Pure and Applied Analysis, 2020, 2, 203-232.	1.1	20
28	THE WIGNER-FOKKER-PLANCK EQUATION: STATIONARY STATES AND LARGE TIME BEHAVIOR. Mathematical Models and Methods in Applied Sciences, 2012, 22, .	3.3	15
29	Gaussian Lower Bounds for the Boltzmann Equation without Cutoff. SIAM Journal on Mathematical Analysis, 2020, 52, 2930-2944.	1.9	15
30	Empirical measures and Vlasov hierarchies. Kinetic and Related Models, 2013, 6, 919-943.	0.9	14
31	Towards an H-theorem for granular gases. Journal of Statistical Mechanics: Theory and Experiment, 2015, 2015, P11009.	2.3	13
32	Rate of Convergence to Self-Similarity for Smoluchowski's Coagulation Equation with Constant Coefficients. SIAM Journal on Mathematical Analysis, 2010, 41, 2283-2314.	1.9	9
33	Exponential Decay to Equilibrium for a Fiber Lay-Down Process on a Moving Conveyor Belt. SIAM Journal on Mathematical Analysis, 2017, 49, 3233-3251.	1.9	9
34	On measure solutions of the Boltzmann equation, Part II: Rate of convergence to equilibrium. Journal of Differential Equations, 2015, 258, 3742-3810.	2.2	8
35	Quantitative Linearized Study of the Boltzmann Collision Operator and Applications. Communications in Mathematical Sciences, 2007, 5, 73-86.	1.0	8
36	Uniqueness of the Non-Equilibrium Steady State for a 1d BGK Model in Kinetic Theory. Acta Applicandae Mathematicae, 2020, 169, 99-124.	1.0	4

#	ARTICLE	IF	CITATIONS
37	About Kac's program in kinetic theory. <i>Comptes Rendus Mathématique</i> , 2011, 349, 1245-1250.	0.3	3
38	Long time behavior in locally activated random walks. <i>Communications in Mathematical Sciences</i> , 2019, 17, 1071-1094.	1.0	1
39	Weighted Korn and Poincaré-Korn Inequalities in the Euclidean Space and Associated Operators. <i>Archive for Rational Mechanics and Analysis</i> , 2022, 243, 1565.	2.4	0