

# Maria Colombo

## List of Publications by Year in descending order

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47  
papers

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citations

516710

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docs citations

47  
times ranked

420  
citing authors

#	ARTICLE	IF	CITATIONS
1	Regularity for Double Phase Variational Problems. Archive for Rational Mechanics and Analysis, 2015, 215, 443-496.	2.4	363
2	Bounded Minimisers of Double Phase Variational Integrals. Archive for Rational Mechanics and Analysis, 2015, 218, 219-273.	2.4	317
3	Regularity for general functionals with double phase. Calculus of Variations and Partial Differential Equations, 2018, 57, 1.	1.7	290
4	Harnack inequalities for double phase functionals. Nonlinear Analysis: Theory, Methods & Applications, 2015, 121, 206-222.	1.1	232
5	Non-autonomous functionals, borderline cases and related function classes. St Petersburg Mathematical Journal, 2016, 27, 347-379.	0.4	180
6	Calderón-Zygmund estimates and non-uniformly elliptic operators. Journal of Functional Analysis, 2016, 270, 1416-1478.	1.4	168
7	Multimarginal Optimal Transport Maps for One-dimensional Repulsive Costs. Canadian Journal of Mathematics, 2015, 67, 350-368.	0.6	62
8	Ill-Posedness of Leray Solutions for the Hypodissipative Navier-Stokes Equations. Communications in Mathematical Physics, 2018, 362, 659-688.	2.2	41
9	Existence of Eulerian Solutions to the Semigeostrophic Equations in Physical Space: The 2-Dimensional Periodic Case. Communications in Partial Differential Equations, 2012, 37, 2209-2227.	2.2	34
10	On the Singular Local Limit for Conservation Laws with Nonlocal Fluxes. Archive for Rational Mechanics and Analysis, 2019, 233, 1131-1167.	2.4	30
11	Regularity results for very degenerate elliptic equations. Journal Des Mathematiques Pures Et Appliquees, 2014, 101, 94-117.	1.6	28
12	Existence and Uniqueness of Maximal Regular Flows for Non-smooth Vector Fields. Archive for Rational Mechanics and Analysis, 2015, 218, 1043-1081.	2.4	22
13	A global existence result for the semigeostrophic equations in three dimensional convex domains. Discrete and Continuous Dynamical Systems, 2014, 34, 1251-1268.	0.9	22
14	Equality between Monge and Kantorovich multimarginal problems with Coulomb cost. Annali Di Matematica Pura Ed Applicata, 2015, 194, 307-320.	1.0	21
15	A logarithmic epiperimetric inequality for the obstacle problem. Geometric and Functional Analysis, 2018, 28, 1029-1061.	1.8	19
16	The Generalized Caffarelli-Kohn-Nirenberg Theorem for the Hyperdissipative Navier-Stokes System. Communications on Pure and Applied Mathematics, 2020, 73, 609-663.	3.1	19
17	On the lower semicontinuous envelope of functionals defined on polyhedral chains. Nonlinear Analysis: Theory, Methods & Applications, 2017, 163, 201-215.	1.1	17
18	Direct Epiperimetric Inequalities for the Thin Obstacle Problem and Applications. Communications on Pure and Applied Mathematics, 2020, 73, 384-420.	3.1	17

#	ARTICLE	IF	CITATIONS
19	Positive Solutions of Transport Equations and Classical Nonuniqueness of Characteristic curves. Archive for Rational Mechanics and Analysis, 2021, 240, 1055-1090.	2.4	16
20	Renormalized solutions to the continuity equation with an integrable damping term. Calculus of Variations and Partial Differential Equations, 2015, 54, 1831-1845.	1.7	15
21	Local limit of nonlocal traffic models: Convergence results and total variation blow-up. Annales De L'Institut Henri Poincare (C) Analyse Non Lineaire, 2021, 38, 1653-1666.	1.4	15
22	Regularity in Time of Hölder Solutions of Euler and Hypodissipative Navier–Stokes Equations. SIAM Journal on Mathematical Analysis, 2020, 52, 221-238.	1.9	14
23	Counterexamples in multimarginal optimal transport with Coulomb cost and spherically symmetric data. Mathematical Models and Methods in Applied Sciences, 2016, 26, 1025-1049.	3.3	11
24	Optimality of integrability estimates for advection–diffusion equations. Nonlinear Differential Equations and Applications, 2017, 24, 1.	0.8	11
25	PASSING TO THE LIMIT IN MAXIMAL SLOPE CURVES: FROM A REGULARIZED PERONA–MALIK EQUATION TO THE TOTAL VARIATION FLOW. Mathematical Models and Methods in Applied Sciences, 2012, 22, .	3.3	10
26	On the Lagrangian structure of transport equations: The Vlasov–Poisson system. Duke Mathematical Journal, 2017, 166, .	1.5	9
27	Improved stability of optimal traffic paths. Calculus of Variations and Partial Differential Equations, 2018, 57, 1.	1.7	9
28	Regularity results for rough solutions of the incompressible Euler equations via interpolation methods. Nonlinearity, 2020, 33, 4818-4836.	1.4	9
29	Minimizing movements along a sequence of functionals and curves of maximal slope. Comptes Rendus Mathematique, 2016, 354, 685-689.	0.3	8
30	Slow Time Behavior of the Semidiscrete Perona–Malik Scheme in One Dimension. SIAM Journal on Mathematical Analysis, 2011, 43, 2564-2600.	1.9	7
31	Rigidity of equality cases in Steiner's perimeter inequality. Analysis and PDE, 2014, 7, 1535-1593.	1.4	7
32	Essential connectedness and the rigidity problem for Gaussian symmetrization. Journal of the European Mathematical Society, 2017, 19, 395-439.	1.4	6
33	On the Well-Posedness of Branched Transportation. Communications on Pure and Applied Mathematics, 2021, 74, 833-864.	3.1	6
34	Existence and almost everywhere regularity of isoperimetric clusters for fractional perimeters. Nonlinear Analysis: Theory, Methods & Applications, 2017, 153, 243-274.	1.1	5
35	Stability for the mailing problem. Journal Des Mathematiques Pures Et Appliquees, 2019, 128, 152-182.	1.6	5
36	Continuity of Multimarginal Optimal Transport with Repulsive Cost. SIAM Journal on Mathematical Analysis, 2019, 51, 2903-2926.	1.9	5

#	ARTICLE	IF	CITATIONS
37	Typicality results for weak solutions of the incompressible Navier-Stokes equations. ESAIM - Control, Optimisation and Calculus of Variations, 2022, 28, 38.	1.3	5
38	Global regularity for the hyperdissipative Navier-Stokes equation below the critical order. Journal of Differential Equations, 2021, 275, 815-836.	2.2	4
39	Bounds on optimal transport maps onto log-concave measures. Journal of Differential Equations, 2021, 271, 1007-1022.	2.2	4
40	Logarithmic estimates for continuity equations. Networks and Heterogeneous Media, 2016, 11, 301-311.	1.1	4
41	On the role of numerical viscosity in the study of the local limit of nonlocal conservation laws. ESAIM: Mathematical Modelling and Numerical Analysis, 0, , .	1.9	4
42	Flows of Non-smooth Vector Fields and Degenerate Elliptic Equations. , 2017, , .		3
43	An excess-decay result for a class of degenerate elliptic equations. Discrete and Continuous Dynamical Systems - Series S, 2014, 7, 631-652.	1.1	2
44	Obstructions to regularity in the classical Monge problem. Mathematical Research Letters, 2014, 21, 697-712.	0.5	2
45	Stability of optimal traffic plans in the irrigation problem. Discrete and Continuous Dynamical Systems, 2021, .	0.9	2
46	Estimate on the Dimension of the Singular Set of the Supercritical Surface Quasigeostrophic Equation. Annals of PDE, 2021, 7, 6.	1.8	1
47	Multiple Object Tracking via Prediction and Filtering with a Sobolev-Type Metric on Curves. Lecture Notes in Computer Science, 2012, , 143-152.	1.3	0