Maria Colombo

List of Publications by Year
in descending order

47 papers	2,081 citations	516710 16 h-index	243625 44 g-index
47 all docs	47 docs citations	47 times ranked	420 citing authors

#	Article	IF	Citations
1	Typicality results for weak solutions of the incompressible Navierâ€"Stokes equations. ESAIM - Control, Optimisation and Calculus of Variations, 2022, 28, 38.	1.3	5
2	On the Wellâ€Posedness of Branched Transportation. Communications on Pure and Applied Mathematics, 2021, 74, 833-864.	3.1	6
3	Global regularity for the hyperdissipative Navier-Stokes equation below the critical order. Journal of Differential Equations, 2021, 275, 815-836.	2.2	4
4	Bounds on optimal transport maps onto log-concave measures. Journal of Differential Equations, 2021, 271, 1007-1022.	2.2	4
5	Estimate on the Dimension of the Singular Set of the Supercritical Surface Quasigeostrophic Equation. Annals of PDE, 2021, 7, 6.	1.8	1
6	Positive Solutions of Transport Equations and Classical Nonuniqueness of Characteristic curves. Archive for Rational Mechanics and Analysis, 2021, 240, 1055-1090.	2.4	16
7	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
8	Stability of optimal traffic plans in the irrigation problem. Discrete and Continuous Dynamical Systems, 2021, .	0.9	2
9	The Generalized Caffarelliâ€Kohnâ€Nirenberg Theorem for the Hyperdissipative Navierâ€Stokes System. Communications on Pure and Applied Mathematics, 2020, 73, 609-663.	3.1	19
10	Direct Epiperimetric Inequalities for the Thin Obstacle Problem and Applications. Communications on Pure and Applied Mathematics, 2020, 73, 384-420.	3.1	17
11	Regularity in Time of HÃ¶lder Solutions of Euler and Hypodissipative Navier--Stokes Equations. SIAM Journal on Mathematical Analysis, 2020, 52, 221-238.	1.9	14
12	Regularity results for rough solutions of the incompressible Euler equations via interpolation methods. Nonlinearity, 2020, 33, 4818-4836.	1.4	9
13	Stability for the mailing problem. Journal Des Mathematiques Pures Et Appliquees, 2019, 128, 152-182.	1.6	5
14	Continuity of Multimarginal Optimal Transport with Repulsive Cost. SIAM Journal on Mathematical Analysis, 2019, 51, 2903-2926.	1.9	5
15	On the Singular Local Limit for Conservation Laws with Nonlocal Fluxes. Archive for Rational Mechanics and Analysis, 2019, 233, 1131-1167.	2.4	30
16	Improved stability of optimal traffic paths. Calculus of Variations and Partial Differential Equations, 2018, 57, 1.	1.7	9
17	Regularity for general functionals with double phase. Calculus of Variations and Partial Differential Equations, 2018, 57, 1.	1.7	290
18	Ill-Posedness of Leray Solutions for the Hypodissipative Navierâ€"Stokes Equations. Communications in Mathematical Physics, 2018, 362, 659-688.	2.2	41

#	Article	IF	Citations
19	A logarithmic epiperimetric inequality for the obstacle problem. Geometric and Functional Analysis, 2018, 28, 1029-1061.	1.8	19
20	Flows of Non-smooth Vector Fields and Degenerate Elliptic Equations. , 2017, , .		3
21	On the Lagrangian structure of transport equations: The Vlasov–Poisson system. Duke Mathematical Journal, 2017, 166, .	1.5	9
22	On the lower semicontinuous envelope of functionals defined on polyhedral chains. Nonlinear Analysis: Theory, Methods & Applications, 2017, 163, 201-215.	1.1	17
23	Optimality of integrability estimates for advection–diffusion equations. Nonlinear Differential Equations and Applications, 2017, 24, 1.	0.8	11
24	Existence and almost everywhere regularity of isoperimetric clusters for fractional perimeters. Nonlinear Analysis: Theory, Methods & Applications, 2017, 153, 243-274.	1.1	5
25	Essential connectedness and the rigidity problem for Gaussian symmetrization. Journal of the European Mathematical Society, 2017, 19, 395-439.	1.4	6
26	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
27	Non-autonomous functionals, borderline cases and related function classes. St Petersburg Mathematical Journal, 2016, 27, 347-379.	0.4	180
28	Minimizing movements along a sequence of functionals and curves of maximal slope. Comptes Rendus Mathematique, 2016, 354, 685-689.	0.3	8
29	Calderón–Zygmund estimates and non-uniformly elliptic operators. Journal of Functional Analysis, 2016, 270, 1416-1478.	1.4	168
30	Logarithmic estimates for continuity equations. Networks and Heterogeneous Media, 2016, 11, 301-311.	1.1	4
31	Multimarginal Optimal Transport Maps for One–dimensional Repulsive Costs. Canadian Journal of Mathematics, 2015, 67, 350-368.	0.6	62
32	Harnack inequalities for double phase functionals. Nonlinear Analysis: Theory, Methods & Applications, 2015, 121, 206-222.	1.1	232
33	Regularity for Double Phase Variational Problems. Archive for Rational Mechanics and Analysis, 2015, 215, 443-496.	2.4	363
34	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
35	Bounded Minimisers of Double Phase Variational Integrals. Archive for Rational Mechanics and Analysis, 2015, 218, 219-273.	2.4	317
36	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

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37	Equality between Monge and Kantorovich multimarginal problems with Coulomb cost. Annali Di Matematica Pura Ed Applicata, 2015, 194, 307-320.	1.0	21
38	Regularity results for very degenerate elliptic equations. Journal Des Mathematiques Pures Et Appliquees, 2014, 101, 94-117.	1.6	28
39	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
40	Rigidity of equality cases in Steiner's perimeter inequality. Analysis and PDE, 2014, 7, 1535-1593.	1.4	7
41	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
42	Obstructions to regularity in the classical Monge problem. Mathematical Research Letters, 2014, 21, 697-712.	0.5	2
43	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
44	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
45	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
46	Slow Time Behavior of the Semidiscrete Perona–Malik Scheme in One Dimension. SIAM Journal on Mathematical Analysis, 2011, 43, 2564-2600.	1.9	7
47	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