Juan-Luis VÃ¡zquez

List of Publications by Year
in descending order

241	9,922	38742	54911
papers	citations	50	84
		h-index	g-index

248	248	248	2055
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	A Strong Maximum Principle for some quasilinear elliptic equations. Applied Mathematics and Optimization, 1984, 12, 191-202.	1.6	876
2	The Hardy Inequality and the Asymptotic Behaviour of the Heat Equation with an Inverse-Square Potential. Journal of Functional Analysis, 2000, 173, 103-153.	1.4	292
3	The problem Of blow-up in nonlinear parabolic equations. Discrete and Continuous Dynamical Systems, 2002, 8, 399-433.	0.9	263
4	Continuation of blowup solutions of nonlinear heat equations in several space dimensions. Communications on Pure and Applied Mathematics, 1997, 50, 1-67.	3.1	230
5	On the equation of turbulent filtration in one- dimensional porous media. Nonlinear Analysis: Theory, Methods & Applications, 1986, 10, 1303-1325.	1.1	161
6	A fractional porous medium equation. Advances in Mathematics, 2011, 226, 1378-1409.	1.1	161
7	Asymptotic behaviour for the porous medium equation posed in the whole space. Journal of Evolution Equations, 2003, 3, 67-118.	1.1	151
8	Nonlinear Porous Medium Flow with Fractional Potential Pressure. Archive for Rational Mechanics and Analysis, 2011, 202, 537-565.	2.4	149
9	Blow-up solutions of some nonlinear elliptic problems. Revista Matematica Complutense, 1997, 10, 443.	1.2	144
10	Title is missing!. Indiana University Mathematics Journal, 1987, 36, 373.	0.9	139
11	A General Fractional Porous Medium Equation. Communications on Pure and Applied Mathematics, 2012, 65, 1242-1284.	3.1	131
12	Theory of Extended Solutions¶for Fast-Diffusion Equations¶in Optimal Classes of Data.¶Radiation from Singularities. Archive for Rational Mechanics and Analysis, 2002, 164, 133-187.	2.4	116
13	Travelling waves and finite propagation in a reaction-diffusion equation. Journal of Differential Equations, 1991, 93, 19-61.	2.2	115
14	Existence, uniqueness and asymptotic behaviour for fractional porous medium equations on bounded domains. Discrete and Continuous Dynamical Systems, 2015, 35, 5725-5767.	0.9	114
15	Nonlinear Elliptic Equations in RN without Growth Restrictions on the Data. Journal of Differential Equations, 1993, 105, 334-363.	2.2	110
16	Asymptotics of the Fast Diffusion Equation via Entropy Estimates. Archive for Rational Mechanics and Analysis, 2009, 191, 347-385.	2.4	97
17	Nonlinear Diffusion with Fractional Laplacian Operators. Abel Symposia, 2012, , 271-298.	0.3	95
18	Asymptotic Behaviour of Solutions of the Porous Medium Equation with Changing Sign. SIAM Journal on Mathematical Analysis, 1991, 22, 34-45.	1.9	93

#	ARTICLE	IF	CITATIONS
19	Asymptotic behaviour and source-type solutions for a diffusion-convection equation. Archive for Rational Mechanics and Analysis, 1993, 124, 43-65.	2.4	92
20	The Heleâ€"Shaw Asymptotics for Mechanical Models of Tumor Growth. Archive for Rational Mechanics and Analysis, 2014, 212, 93-127.	2.4	92
21	Recent progress in the theory of nonlinear diffusion with fractional Laplacian operators. Discrete and Continuous Dynamical Systems - Series S, 2014, 7, 857-885.	1.1	92
22	Asymptotic Behaviour and Propagation Properties of the One-Dimensional Flow of Gas in a Porous Medium. Transactions of the American Mathematical Society, 1983, 277, 507.	0.9	91
23	A free-boundary problem for the heat equation arising in flame propagation. Transactions of the American Mathematical Society, 1995, 347, 411-441.	0.9	86
24	Fine Asymptotics for Fast Diffusion Equations. Communications in Partial Differential Equations, 2003, 28, 1023-1056.	2.2	84
25	On the stability or instability of the singular solution of the semilinear heat equation with exponential reaction term. Archive for Rational Mechanics and Analysis, 1995, 129, 201-224.	2.4	81
26	Title is missing!. Indiana University Mathematics Journal, 1991, 40, 1333.	0.9	81
27	A well posed problem in singular Fickian diffusion. Archive for Rational Mechanics and Analysis, 1990, 110, 141-163.	2.4	79
28	A Nonlinear heat equation with singular diffusivity. Communications in Partial Differential Equations, 1988, 13, 985-1039.	2.2	78
29	Asymptotic behaviour of nonlinear parabolic equations with critical exponents. A dynamical systems approach. Journal of Functional Analysis, 1991, 100, 435-462.	1.4	78
30	Eventual C?-regularity and concavity for flows in one-dimensional porous media. Archive for Rational Mechanics and Analysis, 1987, 99, 329-348.	2.4	76
31	Homogeneous diffusion in ? with power-like nonlinear diffusivity. Archive for Rational Mechanics and Analysis, 1988, 103, 39-80.	2.4	76
32	Quantitative local and global a priori estimates for fractional nonlinear diffusion equations. Advances in Mathematics, 2014, 250, 242-284.	1.1	76
33	The One-Dimensional Nonlinear Heat Equation with Absorption: Regularity of Solutions and Interfaces. SIAM Journal on Mathematical Analysis, 1987, 18, 149-167.	1.9	74
34	Sharp rates of decay of solutions to the nonlinear fast diffusion equation via functional inequalities. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 16459-16464.	7.1	70
35	Optimal existence and uniqueness theory for the fractional heat equation. Nonlinear Analysis: Theory, Methods & Applications, 2017, 153, 142-168.	1.1	70
36	Interfaces with a corner point in one-dimensional porous medium flow. Communications on Pure and Applied Mathematics, 1985, 38, 375-404.	3.1	69

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37	Asymptotic behaviour of a porous medium equation with fractional diffusion. Discrete and Continuous Dynamical Systems, 2011, 29, 1393-1404.	0.9	68
38	Regularity of solutions of the fractional porous medium flow. Journal of the European Mathematical Society, 2013, 15, 1701-1746.	1.4	66
39	On the propagation properties of a nonlinear degenerate parabolic equation. Communications in Partial Differential Equations, 1982, 7, 1381-1402.	2.2	65
40	Asymptotics of the Fast-Diffusion Equation with Critical Exponent. SIAM Journal on Mathematical Analysis, 2000, 31, 1157-1174.	1.9	64
41	The Dirichlet Problem for the Porous Medium Equation in Bounded Domains. Asymptotic Behavior. Monatshefte Fur Mathematik, 2004, 142, 81-111.	0.9	64
42	A Priori Estimates for Fractional Nonlinear Degenerate Diffusion Equations on Bounded Domains. Archive for Rational Mechanics and Analysis, 2015, 218, 317-362.	2.4	64
43	Necessary and sufficient conditions for complete blow-up and extinction for one-dimensional quasilinear heat equations. Archive for Rational Mechanics and Analysis, 1995, 129, 225-244.	2.4	63
44	The diffusive limit for Carleman-type kinetic models. Nonlinearity, 2005, 18, 1223-1248.	1.4	62
45	Barenblatt solutions and asymptotic behaviour for a nonlinear fractional heat equation of porous medium type. Journal of the European Mathematical Society, 2014, 16, 769-803.	1.4	58
46	Positivity, local smoothing, and Harnack inequalities for very fast diffusion equations. Advances in Mathematics, 2010, 223, 529-578.	1.1	56
47	Local Aronsonâ€“BÃ©nilan estimates and entropy formulae for porous medium and fast diffusion equations on manifolds. Journal Des Mathematiques Pures Et Appliquees, 2009, 91, 1-19.	1.6	55
48	The Mathematical Theories of Diffusion: Nonlinear and Fractional Diffusion. Lecture Notes in Mathematics, 2017, , 205-278.	0.2	54
49	Title is missing!. Indiana University Mathematics Journal, 1993, 42, 1413.	0.9	54
50	The regularity of solutions of reaction-diffusion equations via Lagrangian coordinates. Nonlinear Differential Equations and Applications, 1996, 3, 465-497.	0.8	53
51	COMPLEXITY OF LARGE TIME BEHAVIOUR OF EVOLUTION EQUATIONS WITH BOUNDED DATA. Chinese Annals of Mathematics Series B, 2002, 23, 293-310.	0.4	53
52	Geometrical properties of the solutions of one-dimensional nonlinear parabolic equations. Mathematische Annalen, 1995, 303, 741-769.	1.4	51
53	The Dirichlet problem for the fractional p-Laplacian evolution equation. Journal of Differential Equations, 2016, 260, 6038-6056.	2.2	51
54	A Free-Boundary Problem for the Heat Equation Arising in Flame Propagation. Transactions of the American Mathematical Society, 1995, 347, 411.	0.9	51

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55	Large-time geometric properties of solutions of the evolution p-Laplacian equation. Journal of Differential Equations, 2006, 229, 389-411.	2.2	50
56	Large Time Behavior for a Simplified 1D Model of Fluid–Solid Interaction€. Communications in Partial Differential Equations, 2003, 28, 1705-1738.	2.2	49
57	Global positivity estimates and Harnack inequalities for the fast diffusion equation. Journal of Functional Analysis, 2006, 240, 399-428.	1.4	47
58	Heat equation with dynamical boundary conditions of reactive–diffusive type. Journal of Differential Equations, 2011, 250, 2143-2161.	2.2	47
59	Behaviour of the Velocity of One-Dimensional Flows in Porous Media. Transactions of the American Mathematical Society, 1984, 286, 787.	0.9	46
60	Asymptotic Behaviour and Self-Similarity for the Three Dimensional Vlasov–Poisson–Fokker–Planck System. Journal of Functional Analysis, 1996, 141, 99-132.	1.4	46
61	Porous media equations with two weights: Smoothing and decay properties of energy solutions via Poincaré inequalities. Discrete and Continuous Dynamical Systems, 2013, 33, 3599-3640.	0.9	45
62	Isolated singularities of some semilinear elliptic equations. Journal of Differential Equations, 1985, 60, 301-321.	2.2	44
63	Viscosity solutions for quasilinear degenerate parabolic equations of porous medium type. Indiana University Mathematics Journal, 2005, 54, 817-860.	0.9	44
64	Persistence of corners in free boundaries in Hele-Shaw flow. European Journal of Applied Mathematics, 1995, 6, 455-490.	2.9	43
65	SINGULAR FREE BOUNDARY PROBLEM FROM IMAGE PROCESSING. Mathematical Models and Methods in Applied Sciences, 2005, 15, 689-715.	3.3	42
66	The Balance Between Strong Reaction And Slow Diffusion. Communications in Partial Differential Equations, 1990, 15, 159-183.	2.2	41
67	Geometrical properties of solutions of the Porous Medium Equation for large times. Indiana University Mathematics Journal, 2003, 52, 0-0.	0.9	41
68	Hardy–Poincaré inequalities and applications to nonlinear diffusions. Comptes Rendus Mathematique, 2007, 344, 431-436.	0.3	41
69	Removable singularities of some strongly nonlinear elliptic equations. Manuscripta Mathematica, 1980, 33, 129-144.	0.6	40
70	Regularity of solutions and interfaces of a generalized porous medium equation inR N. Annali Di Matematica Pura Ed Applicata, 1991, 158, 51-74.	1.0	40
71	Extinction for a quasilinear heat equation with absorprtion i. technique of intersection comparison. Communications in Partial Differential Equations, 1994, 19, 1075-1106.	2.2	40
72	Behaviour near extinction for the Fast Diffusion Equation on bounded domains. Journal Des Mathematiques Pures Et Appliquees, 2012, 97, 1-38.	1.6	40

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73	Fast diffusion flow on manifolds of nonpositive curvature. Journal of Evolution Equations, 2008, 8, 99-128.	1.1	38
74	Local smoothing effects, positivity, and Harnack inequalities for the fast p-Laplacian equation. Advances in Mathematics, 2010, 224, 2151-2215.	1.1	38
75	Classification of singular solutions of a nonlinear heat equation. Duke Mathematical Journal, 1989, 58, 601.	1.5	37
76	A mean field equation as limit of nonlinear diffusions with fractional Laplacian operators. Calculus of Variations and Partial Differential Equations, 2014, 49, 1091-1120.	1.7	37
77	Classical solutions and higher regularity for nonlinear fractional diffusion equations. Journal of the European Mathematical Society, 2017, 19, 1949-1975.	1.4	37
78	Regional Blow Up in a Semilinear Heat Equation with Convergence to a Hamilton–Jacobi Equation. SIAM Journal on Mathematical Analysis, 1993, 24, 1254-1276.	1.9	36
79	Entropy solutions for diffusion-convection equations with partial diffusivity. Transactions of the American Mathematical Society, 1994, 343, 829-842.	0.9	36
80	Obstructions to Existence in Fast-Diffusion Equations. Journal of Differential Equations, 2002, 184, 348-385.	2.2	36
81	Darcy's Law and the Theory of Shrinking Solutions of Fast Diffusion Equations. SIAM Journal on Mathematical Analysis, 2003, 35, 1005-1028.	1.9	36
82	Heat Equation with Dynamical Boundary Conditions of Reactive Type. Communications in Partial Differential Equations, 2008, 33, 561-612.	2.2	36
83	Special Fast Diffusion with Slow Asymptotics: Entropy Method and Flow on a Riemannian Manifold. Archive for Rational Mechanics and Analysis, 2010, 196, 631-680.	2.4	36
84	Extinction for a quasilinear heat equation with absorption ii. a dynamical systems approach. Communications in Partial Differential Equations, 1994, 19, 1107-1137.	2.2	35
85	A new free boundary problem for unsteady flows in porous media. European Journal of Applied Mathematics, 1998, 9, 37-54.	2.9	35
86	Fundamental solution and long time behavior of the Porous Medium Equation in hyperbolic space. Journal Des Mathematiques Pures Et Appliquees, 2015, 104, 454-484.	1.6	35
87	Concavity of Solutions of the Porous Medium Equation. Transactions of the American Mathematical Society, 1987, 299, 81.	0.9	34
88	Regularity of solutions and interfaces of the porous medium equation via local estimates. Proceedings of the Royal Society of Edinburgh Section A: Mathematics, 1989, 112, 1-13.	1.2	34
89	LACK OF COLLISION IN A SIMPLIFIED 1D MODEL FOR FLUID–SOLID INTERACTION. Mathematical Models and Methods in Applied Sciences, 2006, 16, 637-678.	3.3	34
90	Sharp global estimates for local and nonlocal porous medium-type equations in bounded domains. Analysis and PDE, 2018, 11, 945-982.	1.4	34

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91	Blow-Up for Quasilinear Heat Equations Described by Means of Nonlinear Hamilton–Jacobi Equations. Journal of Differential Equations, 1996, 127, 1-40.	2.2	33
92	Asymptotic behaviour of a generalized Burgers' equation. Journal Des Mathematiques Pures Et Appliquees, 1999, 78, 633-666.	1.6	32
93	Domain of existence and blowup for the exponential reaction-diffusion equation. Indiana University Mathematics Journal, 1999, 48, 0-0.	0.9	32
94	Symmetrization and Mass Comparison for Degenerate Nonlinear Parabolic and Related Elliptic Equations. Advanced Nonlinear Studies, 2005, 5, 87-131.	1.7	32
95	The Fisher-KPP Equation with Nonlinear Fractional Diffusion. SIAM Journal on Mathematical Analysis, 2014, 46, 3241-3276.	1.9	32
96	On a semilinear equation in $\mathbb{R}^2$ involving bounded measures. Proceedings of the Royal Society of Edinburgh Section A: Mathematics, 1983, 95, 181-202.	1.2	31
97	Classification of blow-up with nonlinear diffusion and localized reaction. Journal of Differential Equations, 2006, 231, 195-211.	2.2	31
98	Long time behavior for the inhomogeneous PME in a medium with slowly decaying density. Communications on Pure and Applied Analysis, 2009, 8, 493-508.	0.8	31
99	Monotone perturbations of the laplacian in $L_1(R^N)$. Israel Journal of Mathematics, 1982, 43, 255-272.	0.8	30
100	Singularities of elliptic equations with an exponential nonlinearity. Mathematische Annalen, 1984, 269, 119-135.	1.4	30
101	Bounded speed of propagation for solutions to radiative transfer equations. Communications in Mathematical Physics, 1990, 130, 457-469.	2.2	30
102	Extinction behaviour for fast diffusion equations with absorption. Nonlinear Analysis: Theory, Methods & Applications, 2001, 43, 943-985.	1.1	30
103	Failure of the Strong Maximum Principle in Nonlinear Diffusion. Existence of Needles. Communications in Partial Differential Equations, 2005, 30, 1263-1303.	2.2	30
104	Symmetrization for linear and nonlinear fractional parabolic equations of porous medium type. Journal Des Mathematiques Pures Et Appliquees, 2014, 101, 553-582.	1.6	30
105	Fractional nonlinear degenerate diffusion equations on bounded domains part I. Existence, uniqueness and upper bounds. Nonlinear Analysis: Theory, Methods & Applications, 2016, 131, 363-398.	1.1	30
106	Long time behavior for the inhomogeneous PME in a medium with rapidly decaying density. Discrete and Continuous Dynamical Systems, 2010, 26, 521-549.	0.9	30
107	The Cauchy problem for the inhomogeneous porous medium equation. Networks and Heterogeneous Media, 2006, 1, 337-351.	1.1	30
108	Finite and infinite speed of propagation for porous medium equations with nonlocal pressure. Journal of Differential Equations, 2016, 260, 1154-1199.	2.2	29

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109	The Fisher-KPP problem with doubly nonlinear diffusion. Journal of Differential Equations, 2017, 263, 7647-7708.	2.2	28
110	The propagation of turbulent bursts. European Journal of Applied Mathematics, 1992, 3, 263-272.	2.9	27
111	Singular solutions of some nonlinear parabolic equations. Journal D'Analyse Mathematique, 1992, 59, 51-74.	0.8	27
112	Radial equivalence for the two basic nonlinear degenerate diffusion equations. Journal Des Mathematiques Pures Et Appliquees, 2008, 89, 1-24.	1.6	27
113	Noncoercive convection–diffusion elliptic problems with Neumann boundary conditions. Calculus of Variations and Partial Differential Equations, 2009, 34, 413-434.	1.7	27
114	Classification of radial solutions to the Emden–Fowler equation on the hyperbolic space. Calculus of Variations and Partial Differential Equations, 2013, 46, 375-401.	1.7	27
115	Regularity of Interfaces in Diffusion Processes under the Influence of Strong Absorption. Archive for Rational Mechanics and Analysis, 1999, 149, 183-212.	2.4	26
116	Asymptotic behaviour for the porous medium equation posed in the whole space. , 2003, , 67-118.		26
117	Exponential convergence towards stationary states for the 1D porous medium equation with fractional pressure. Journal of Differential Equations, 2015, 258, 736-763.	2.2	25
118	The porous medium equation on Riemannian manifolds with negative curvature. The large-time behaviour. Advances in Mathematics, 2017, 314, 328-377.	1.1	25
119	Characterisation of homogeneous fractional Sobolev spaces. Calculus of Variations and Partial Differential Equations, 2021, 60, 1.	1.7	25
120	Sharp boundary behaviour of solutions to semilinear nonlocal elliptic equations. Calculus of Variations and Partial Differential Equations, 2018, 57, 1.	1.7	24
121	The fractional Schrödinger equation with general nonnegative potentials. The weighted space approach. Nonlinear Analysis: Theory, Methods & Applications, 2018, 177, 325-360.	1.1	24
122	Asymptotic behaviour of the doubly nonlinear diffusion equation on bounded domains. Nonlinear Analysis: Theory, Methods & Applications, 2013, 77, 1-32.	1.1	23
123	Optimal estimates for fractional fast diffusion equations. Journal Des Mathematiques Pures Et Appliquees, 2015, 103, 535-556.	1.6	23
124	The inhomogeneous PME in several space dimensions. Existence and uniqueness of finite energy solutions. Communications on Pure and Applied Analysis, 2008, 7, 1275-1294.	0.8	22
125	Rate of Convergence to Barenblatt Profiles for the Fast Diffusion Equation. Archive for Rational Mechanics and Analysis, 2012, 204, 599-625.	2.4	21
126	The porous medium equation as a finite-speed approximation to a Hamilton-Jacobi equation. Annales De L'Institut Henri Poincare (C) Analyse Non Lineaire, 1987, 4, 203-230.	1.4	20

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127	Self-similar solutions of the second kind for the modified porous medium equation. European Journal of Applied Mathematics, 1994, 5, 391-403.	2.9	20
128	Calculation of anomalous exponents in nonlinear diffusion. Physical Review Letters, 1994, 72, 348-351.	7.8	20
129	Extinction and focusing behaviour of spherical and annular flames described by a free boundary problem. Journal Des Mathematiques Pures Et Appliquees, 1997, 76, 563-608.	1.6	20
130	Finite and infinite speed of propagation for porous medium equations with fractional pressure. Comptes Rendus Mathematique, 2014, 352, 123-128.	0.3	20
131	The Fisherâ€"KPP problem with doubly nonlinear â€œfastâ€•diffusion. Nonlinear Analysis: Theory, Methods & Applications, 2017, 157, 212-248.	1.1	20
132	The evolution fractional p-Laplacian equation in ‹mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" id="d1e73" altimg="si8.svg"›‹mml:msup›‹mml:mrow›‹mml:mi mathvariant="double-struck"›R‹/mml:mi›‹/mml:mrow›‹mml:mrow›‹mml:mi›N‹/mml:mi›‹/mml:mrow›‹/mml:msup›‹/mml:math›. Fundamental solution and asymptotic behaviour. Nonlinear Analysis: Theory, Methods & Applications, 2020, 199, 112034.	1.1	20
133	Non-uniqueness of solutions of nonlinear heat equations of fast diffusion type. Annales De L'Institut Henri Poincare (C) Analyse Non Lineaire, 1995, 12, 173-200.	1.4	19
134	Asymptotic Complexity in Filtration Equations. Journal of Evolution Equations, 2007, 7, 471-495.	1.1	18
135	Thermal waves in absorbing media. Journal of Differential Equations, 1988, 74, 218-233.	2.2	17
136	Stabilization of solutions of weakly singular quenching problems. Proceedings of the American Mathematical Society, 1993, 119, 555-559.	0.8	17
137	Localized Non-diffusive Asymptotic Patterns for Nonlinear Parabolic Equations with Gradient Absorption. Journal of Dynamics and Differential Equations, 2007, 19, 985-1005.	1.9	17
138	On the Laplace equation with dynamical boundary conditions of reactiveâ€"diffusive type. Journal of Mathematical Analysis and Applications, 2009, 354, 674-688.	1.0	17
139	Transformations of self-similar solutions for porous medium equations of fractional type. Nonlinear Analysis: Theory, Methods & Applications, 2015, 119, 62-73.	1.1	17
140	Concavity of solutions of the porous medium equation. Transactions of the American Mathematical Society, 1987, 299, 81-93.	0.9	17
141	Stabilization towards a singular steady state with gradient blow-up for a diffusion-convection problem. Discrete and Continuous Dynamical Systems, 2005, 14, 221-234.	0.9	17
142	The fractional p-Laplacian evolution equation in $${\mathbb {R}}^N$$ in the sublinear case. Calculus of Variations and Partial Differential Equations, 2021, 60, 1.	1.7	16
143	Anisotropic ?-Laplacian Evolution of Fast Diffusion Type. Advanced Nonlinear Studies, 2021, 21, 523-555.	1.7	16
144	Heat Equation with Dynamical Boundary Conditions of Locally Reactive Type. Semigroup Forum, 2007, 74, 1-40.	0.6	15

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145	Parabolic approach to nonlinear elliptic eigenvalue problems. Advances in Mathematics, 2008, 219, 2006-2028.	1.1	15
146	Functional aspects of the Hardy inequality: appearance of a hidden energy. Journal of Evolution Equations, 2012, 12, 713-739.	1.1	15
147	Classical solutions for a logarithmic fractional diffusion equation. Journal Des Mathematiques Pures Et Appliquees, 2014, 101, 901-924.	1.6	15
148	Existence of Weak Solutions for a General Porous Medium Equation with Nonlocal Pressure. Archive for Rational Mechanics and Analysis, 2019, 233, 451-496.	2.4	15
149	Regularity of solutions of the fractional porous medium flow with exponent $1/2$. St Petersburg Mathematical Journal, 2016, 27, 437-460.	0.4	14
150	Nonlinear diffusion and image contour enhancement. Interfaces and Free Boundaries, 2004, 6, 31-54.	0.8	13
151	Intermediate Asymptotics for Inhomogeneous Nonlinear Heat Conduction. Journal of Mathematical Sciences, 2004, 120, 1277-1294.	0.4	13
152	Degenerate homogeneous parabolic equations associated with the infinity-Laplacian. Calculus of Variations and Partial Differential Equations, 2013, 46, 705-724.	1.7	13
153	Some free boundary problems involving non-local diffusion and aggregation. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2015, 373, 20140275.	3.4	13
154	Free boundary problems: the forefront of current and future developments. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2015, 373, 20140285.	3.4	13
155	Asymptotic behaviour for the fractional heat equation in the Euclidean space. Complex Variables and Elliptic Equations, 2018, 63, 1216-1231.	0.8	13
156	COMPLETE BLOW-UP AND THERMAL AVALANCHE FOR HEAT EQUATIONS WITH NONLINEAR BOUNDARY CONDITIONS. Communications in Partial Differential Equations, 2002, 27, 395-424.	2.2	12
157	Thermal avalanche for blowup solutions of semilinear heat equations. Communications on Pure and Applied Mathematics, 2004, 57, 59-98.	3.1	12
158	Highly time-oscillating solutions for very fast diffusion equations. Journal of Evolution Equations, 2011, 11, 725-742.	1.1	12
159	Multiple blow-up for a porous medium equation with reaction. Mathematische Annalen, 2011, 350, 801-827.	1.4	12
160	Symmetrization for fractional elliptic and parabolic equations and an isoperimetric application. Chinese Annals of Mathematics Series B, 2017, 38, 661-686.	0.4	12
161	Flatness implies smoothness for solutions of the porous medium equation. Calculus of Variations and Partial Differential Equations, 2018, 57, 1.	1.7	12
162	Three Representations of the Fractional p-Laplacian: Semigroup, Extension and Balakrishnan Formulas. Fractional Calculus and Applied Analysis, 2021, 24, 966-1002.	2.2	12

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163	The fractional Schrödinger equation with singular potential and measure data. Discrete and Continuous Dynamical Systems, 2019, 39, 7113-7139.	0.9	12
164	The one-phase fractional Stefan problem. Mathematical Models and Methods in Applied Sciences, 2021, 31, 83-131.	3.3	12
165	Isolated singularities of the solutions of the Schrödinger equation with a radial potential. Archive for Rational Mechanics and Analysis, 1987, 98, 251-284.	2.4	11
166	The Evolution of Singularities in Fast Diffusion Equations: Infinite-Time Blow-Down. SIAM Journal on Mathematical Analysis, 2011, 43, 1499-1535.	1.9	11
167	The Pressure Equation in the Fast Diffusion Range. Revista Matematica Iberoamericana, 2003, 19, 873-917.	0.9	11
168	An overdetermined initial and boundary-value problem for a reaction-diffusion equation. Nonlinear Analysis: Theory, Methods & Applications, 1992, 19, 259-269.	1.1	10
169	TheN-Laplacian Elliptic Equation: Variational versus Entropy Solutions. Journal of Mathematical Analysis and Applications, 1996, 201, 671-688.	1.0	10
170	Limit behaviour of focusing solutions to nonlinear diffusions. Communications in Partial Differential Equations, 1998, 23, 197-206.	2.2	10
171	SECOND-ORDER INTERFACE EQUATIONS FOR NONLINEAR DIFFUSION WITH VERY STRONG ABSORPTION. Communications in Contemporary Mathematics, 1999, 01, 51-64.	1.2	10
172	Porous medium equation with nonlocal pressure in a bounded domain. Communications in Partial Differential Equations, 2018, 43, 1502-1539.	2.2	10
173	On a fractional thin film equation. Advances in Nonlinear Analysis, 2020, 9, 1516-1558.	2.6	10
174	Finite-time blow-down in the evolution of point masses by planar logarithmic diffusion. Discrete and Continuous Dynamical Systems, 2007, 19, 1-35.	0.9	10
175	A very singular solution for the dual porous medium equation and the asymptotic behaviour of general solutions.. Journal Fur Die Reine Und Angewandte Mathematik, 1993, 1993, 1-32.	0.9	9
176	Behaviour of interfaces in a diffusion-absorption equation with critical exponents. Interfaces and Free Boundaries, 2000, 2, 425-448.	0.8	9
177	WAVE EQUATION WITH SECOND-ORDER NON-STANDARD DYNAMICAL BOUNDARY CONDITIONS. Mathematical Models and Methods in Applied Sciences, 2008, 18, 2019-2054.	3.3	9
178	Measure-valued solutions and the phenomenon of blow-down in logarithmic diffusion. Journal of Mathematical Analysis and Applications, 2009, 352, 515-547.	1.0	9
179	The porous medium equation on Riemannian manifolds with negative curvature: the superquadratic case. Mathematische Annalen, 2019, 373, 119-153.	1.4	9
180	On the Two-phase Fractional Stefan Problem. Advanced Nonlinear Studies, 2020, 20, 437-458.	1.7	9

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181	Entropy Solutions for Diffusion-Convection Equations with Partial Diffusivity. Transactions of the American Mathematical Society, 1994, 343, 829.	0.9	9
182	A continuum of extinction rates for the fast diffusion equation. Communications on Pure and Applied Analysis, 2011, 10, 1129-1147.	0.8	9
183	Uniqueness of asymptotic profiles for an extinction problem. Nonlinear Analysis: Theory, Methods & Applications, 2002, 50, 495-507.	1.1	8
184	POROUS MEDIUM FLOW IN A TUBE: TRAVELING WAVES AND KPP BEHAVIOR. Communications in Contemporary Mathematics, 2007, 09, 731-751.	1.2	8
185	Asymptotic behaviour of a nonlinear parabolic equation with gradient absorption and critical exponent. Interfaces and Free Boundaries, 2011, 13, 271-295.	0.8	8
186	A Porous Medium Equation Involving the Infinity-Laplacian. Viscosity Solutions and Asymptotic Behavior. Communications in Partial Differential Equations, 2012, 37, 753-793.	2.2	8
187	Estimates on translations and Taylor expansions in fractional Sobolev spaces. Nonlinear Analysis: Theory, Methods & Applications, 2020, 200, 111995.	1.1	8
188	Blow-up phenomena in nonlocal eigenvalue problems: When theories of L1 and L2 meet. Journal of Functional Analysis, 2021, 280, 108845.	1.4	8
189	Hardy type inequalities and hidden energies. Discrete and Continuous Dynamical Systems, 2013, 33, 5457-5491.	0.9	8
190	Isolated Singularities of the Schrodinger Equation with a Good Potential. Transactions of the American Mathematical Society, 1989, 315, 711.	0.9	7
191	The Interfaces of an Inhomogeneous Porous Medium Equation with Convection. Communications in Partial Differential Equations, 2006, 31, 497-514.	2.2	7
192	Multiple blowup for nonlinear heat equations at different places and different times. Indiana University Mathematics Journal, 2007, 56, 2859-2886.	0.9	7
193	Asymptotic analysis of the p-Laplacian flow in an exterior domain. Annales De L'Institut Henri Poincare (C) Analyse Non Lineaire, 2009, 26, 497-520.	1.4	7
194	Non-existence and instantaneous extinction of solutions for singular nonlinear fractional diffusion equations. Calculus of Variations and Partial Differential Equations, 2016, 55, 1.	1.7	7
195	Dirichlet boundary conditions can prevent blow-up in reaction-diffusion equations and systems. Discrete and Continuous Dynamical Systems, 2005, 14, 63-74.	0.9	7
196	Viscosity solutions for elliptic-parabolic problems. Nonlinear Differential Equations and Applications, 2007, 14, 75-90.	0.8	6
197	Quantitative Local Bounds for Subcritical Semilinear Elliptic Equations. Milan Journal of Mathematics, 2012, 80, 65-118.	1.1	6
198	The Porous Medium Equation. New Contractivity Results. Progress in Nonlinear Differential Equations and Their Application, 2005, , 433-451.	0.9	6

#	Article	IF	Citations
199	Hyperbolic Aspects in the Theory of the Porous Medium Equation. The IMA Volumes in Mathematics and Its Applications, 1987, , 325-342.	0.5	6
200	Behaviour of the velocity of one-dimensional flows in porous media. Transactions of the American Mathematical Society, 1984, 286, 787-802.	0.9	6
201	Schrödinger equations with unique positive isolated singularities. Manuscripta Mathematica, 1990, 67, 143-163.	0.6	5
202	Asymptotic convergence to dipole solutions in nonlinear parabolic equations. Proceedings of the Royal Society of Edinburgh Section A: Mathematics, 1995, 125, 877-900.	1.2	5
203	Maximal viscosity solutions of the modified porous medium equation and their asymptotic behaviour. European Journal of Applied Mathematics, 1996, 7, 453-471.	2.9	5
204	Nonlocal and Nonlinear Diffusions and Interactions: New Methods and Directions. Lecture Notes in Mathematics, 2017, , .	0.2	5
205	Weak and smooth solutions for a fractional Yamabe flow: The case of general compact and locally conformally flat manifolds. Communications in Partial Differential Equations, 2017, 42, 1481-1496.	2.2	5
206	Separatrices in the Hamilton–Jacobi formalism of inflaton models. Journal of Mathematical Physics, 2020, 61, .	1.1	5
207	Growing solutions of the fractional p-Laplacian equation in the Fast Diffusion range. Nonlinear Analysis: Theory, Methods & Applications, 2022, 214, 112575.	1.1	5
208	Two nonlinear diffusion equations with finite speed of propagation. , 1990, , 197-206.		4
209	Diffusivity determination in nonlinear diffusion. European Journal of Applied Mathematics, 1991, 2, 159-169.	2.9	4
210	The Nonlinearly Damped Oscillator. ESAIM - Control, Optimisation and Calculus of Variations, 2003, 9, 231-246.	1.3	4
211	Self-similar solutions of a semilinear parabolic equation with inverse-square potential. Journal of Differential Equations, 2005, 219, 40-77.	2.2	4
212	Anomalous large-time behaviour of the p-Laplacian flow in an exterior domain in low dimension. Journal of the European Mathematical Society, 2009, 12, 249-277.	1.4	4
213	The mesa problem for the fractional porous medium equation. Interfaces and Free Boundaries, 2015, 17, 263-288.	0.8	4
214	Existence of maximal solutions for some very singular nonlinear fractional diffusion equations in 1D. Journal of Evolution Equations, 2016, 16, 723-758.	1.1	4
215	Porous Medium Equation with Nonlocal Pressure. Springer Optimization and Its Applications, 2018, , 277-308.	0.9	4
216	Travelling wave behaviour arising in nonlinear diffusion problems posed in tubular domains. Journal of Differential Equations, 2020, 269, 2664-2696.	2.2	4

#	Article	IF	Citations
217	Vortex formation for a non-local interaction model with Newtonian repulsion and superlinear mobility. Advances in Nonlinear Analysis, 2022, 11, 937-967.	2.6	4
218	Logarithmic Sobolev inequalities and Langevin algorithms in R^n. Stochastic Analysis and Applications, 1994, 12, 309-328.	1.5	3
219	Very intense pulse in the groundwater flow in fissurized-porous stratum. Proceedings of the National Academy of Sciences of the United States of America, 2000, 97, 1366-1369.	7.1	3
220	Quenching for a One-Dimensional Fully Nonlinear Parabolic Equation in Detonation Theory. SIAM Journal on Applied Mathematics, 2001, 61, 1253-1285.	1.8	3
221	ON UNIQUENESS FOR THE INVERSE SCATTERING PROBLEM AT FIXED ENERGY FOR A METRIC ON. Communications in Partial Differential Equations, 2002, 27, 381-393.	2.2	3
222	Reverse Smoothing Effects, Fine Asymptotics, and Harnack Inequalities for Fast Diffusion Equations. Boundary Value Problems, 2007, 2007, 1-31.	0.7	3
223	Large-time geometrical properties of solutions of the Barenblatt equation of elasto-plastic filtration. Journal of Differential Equations, 2012, 252, 4229-4242.	2.2	3
224	Stabilization of Solutions of Weakly Singular Quenching Problems. Proceedings of the American Mathematical Society, 1993, 119, 555.	0.8	3
225	Nonuniqueness of solutions to semilinear parabolic equations with singular coefficients. Communications on Pure and Applied Analysis, 2006, 5, 155-179.	0.8	3
226	Equivalence between radial solutions of different parabolic gradient-diffusion equations and applications. Annali Della Scuola Normale Superiore Di Pisa Classe Di Scienze, 2020, , 303-359.	0.2	3
227	Infinite-time concentration in aggregation–diffusion equations with a given potential. Journal Des Mathematiques Pures Et Appliquees, 2022, 157, 346-398.	1.6	3
228	Asymptotic Behavior of the Solutions of a Nonlinear Fokker-Planck Equation with Dirichlet Boundary Conditions. Journal of Mathematical Analysis and Applications, 1993, 175, 606-631.	1.0	2
229	Asymptotic behaviour for an equation of superslow diffusion. The Cauchy problem. Asymptotic Analysis, 1994, 8, 145-159.	0.5	2
230	Incomplete blow-up and singular interfaces for quasilinear heat equations. Communications in Partial Differential Equations, 1997, 22, 1405-1452.	2.2	2
231	Free boundary layer formation in nonlinear heat propagation. Communications in Partial Differential Equations, 1999, 24, 1945-1965.	2.2	2
232	Maximal Solutions of Singular Diffusion Equations with General Initial Data. , 1992, , 471-484.		2
233	Interaction of gas fronts. Quarterly of Applied Mathematics, 1992, 50, 469-478.	0.7	2
234	Regularity of Solutions and Interfaces to Degenerate Parabolic Equations. The Intersection Comparison Method. , 2019, , 115-130.		2

#	Article	IF	Citations
235	Optimal existence and uniqueness in a nonlinear diffusionâ€"absorption equation with critical exponents. Proceedings of the Royal Society of Edinburgh Section A: Mathematics, 1997, 127, 217-242.	1.2	1
236	The Dirichlet Problem for the Porous Medium Equation in Bounded Domains. Asymptotic Behavior. , 2004, , 81-111.		1
237	A simple proof of the generalized Leibniz rule on bounded Euclidean domains. Forum Mathematicum, 2021, 33, 1561-1572.	0.7	1
238	Ignition and propagation in an integro-differential model for spherical flames. Discrete and Continuous Dynamical Systems - Series B, 2002, 2, 379-387.	0.9	1
239	Functional Aspects of the Hardy Inequality: Appearance of a Hidden Energy. Springer Proceedings in Mathematics and Statistics, 2013, , 653-665.	0.2	1
240	Existence and regularity of solutions for a semilinear first-order equation on the torus. Manuscripta Mathematica, 1984, 45, 193-206.	0.6	0
241	FROM KINETIC SYSTEMS TO DIFFUSION EQUATIONS. , 2004, , .		0