

Jesus Ildefonso Diaz

List of Publications by Year in descending order

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208
papers

2,876
citations

201575

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44
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214
all docs

214
docs citations

214
times ranked

1035
citing authors

#	ARTICLE	IF	CITATIONS
1	On a Nonlinear Parabolic Problem Arising in Some Models Related to Turbulent Flows. SIAM Journal on Mathematical Analysis, 1994, 25, 1085-1111.	0.9	149
2	An elliptic equation with singular nonlinearity. Communications in Partial Differential Equations, 1987, 12, 1333-1344.	1.0	134
3	Some Qualitative Properties for the Total Variation Flow. Journal of Functional Analysis, 2002, 188, 516-547.	0.7	126
4	Existence and Regularity of Renormalized Solutions for Some Elliptic Problems Involving Derivatives of Nonlinear Terms. Journal of Differential Equations, 1993, 106, 215-237.	1.1	121
5	Energy Methods for Free Boundary Problems. , 2002, , .		104
6	On a nonlinear degenerate parabolic equation in infiltration or evaporation through a porous medium. Journal of Differential Equations, 1987, 69, 368-403.	1.1	101
7	Local Vanishing Properties of Solutions of Elliptic and Parabolic Quasilinear Equations. Transactions of the American Mathematical Society, 1985, 290, 787.	0.5	93
8	Symmetrization Techniques on Unbounded Domains: Application to a Chemotaxis System on \mathbb{R}^N . Journal of Differential Equations, 1998, 145, 156-183.	1.1	72
9	Finite extinction time for a class of non-linear parabolic equations. Communications in Partial Differential Equations, 1979, 4, 1213-1231.	1.0	64
10	On the Multiplicity of Equilibrium Solutions to a Nonlinear Diffusion Equation on a Manifold Arising in Climatology. Journal of Mathematical Analysis and Applications, 1997, 216, 593-613.	0.5	58
11	On the Existence of a Free Boundary for a Class of Reaction-Diffusion Systems. SIAM Journal on Mathematical Analysis, 1984, 15, 670-685.	0.9	54
12	S-Shaped Bifurcation Branch in a Quasilinear Multivalued Model Arising in Climatology. Journal of Differential Equations, 1998, 150, 215-225.	1.1	54
13	On a Doubly Nonlinear Parabolic Obstacle Problem Modelling Ice Sheet Dynamics. SIAM Journal on Applied Mathematics, 2003, 63, 683-707.	0.8	52
14	Estimates on the support of the solutions of some nonlinear elliptic and parabolic problems. Proceedings of the Royal Society of Edinburgh Section A: Mathematics, 1981, 89, 249-258.	0.8	49
15	ON THE COMPLEX GINZBURG-LANDAU EQUATION WITH A DELAYED FEEDBACK. Mathematical Models and Methods in Applied Sciences, 2006, 16, 1-17.	1.7	43
16	Effective Chemical Processes in Porous Media. Mathematical Models and Methods in Applied Sciences, 2003, 13, 1437-1462.	1.7	42
17	Existence and uniqueness of solutions of the Boussinesq system with nonlinear thermal diffusion. Topological Methods in Nonlinear Analysis, 1998, 11, 59.	0.2	40
18	Existence for Reaction Diffusion Systems. A Compactness Method Approach. Journal of Mathematical Analysis and Applications, 1994, 188, 521-540.	0.5	39

#	ARTICLE	IF	CITATIONS
19	Energy Methods for Free Boundary Problems: Applications to Nonlinear PDEs and Fluid Mechanics. Progress in Nonlinear Differential Equations and Their Applications, Vol 48. Applied Mechanics Reviews, 2002, 55, B74-B75.	4.5	39
20	On Convexity and Starshapedness of Level Sets for Some Nonlinear Elliptic and Parabolic Problems on Convex Rings. Journal of Mathematical Analysis and Applications, 1993, 177, 263-286.	0.5	35
21	On the differentiability of very weak solutions with right-hand side data integrable with respect to the distance to the boundary. Journal of Functional Analysis, 2009, 257, 807-831.	0.7	35
22	Local vanishing properties of solutions of elliptic and parabolic quasilinear equations. Transactions of the American Mathematical Society, 1985, 290, 787-814.	0.5	34
23	An energy balance climate model with hysteresis. Nonlinear Analysis: Theory, Methods & Applications, 2006, 64, 2053-2074.	0.6	32
24	On Very Weak Positive Solutions to Some Semilinear Elliptic Problems With Simultaneous Singular Nonlinear and Spatial Dependence Terms. Milan Journal of Mathematics, 2011, 79, 233-245.	0.7	32
25	On a nonlocal stationary free-boundary problem arising in the confinement of a plasma in a Stellarator geometry. Archive for Rational Mechanics and Analysis, 1996, 134, 53-95.	1.1	30
26	Elliptic equations and Steiner symmetrization. Communications on Pure and Applied Mathematics, 1996, 49, 217-236.	1.2	29
27	Branches of positive and free boundary solutions for some singular quasilinear elliptic problems. Journal of Mathematical Analysis and Applications, 2009, 352, 449-474.	0.5	29
28	Global bifurcation and continua of nonnegative solutions for a quasilinear elliptic problem. Comptes Rendus Mathematique, 1999, 329, 587-592.	0.5	28
29	Solutions with compact support for some degenerate parabolic problems. Nonlinear Analysis: Theory, Methods & Applications, 1979, 3, 831-847.	0.6	26
30	On a quasilinear degenerate system arising in semiconductors theory. Part I: Existence and uniqueness of solutions. Nonlinear Analysis: Real World Applications, 2001, 2, 305-336.	0.9	26
31	On very weak solutions of semi-linear elliptic equations in the framework of weighted spaces with respect to the distance to the boundary. Discrete and Continuous Dynamical Systems, 2010, 27, 1037-1058.	0.5	24
32	The fractional Schrödinger equation with general nonnegative potentials. The weighted space approach. Nonlinear Analysis: Theory, Methods & Applications, 2018, 177, 325-360.	0.6	24
33	On the boussinesq system with non linear thermal diffusion. Nonlinear Analysis: Theory, Methods & Applications, 1997, 30, 3255-3263.	0.6	23
34	Uniqueness and existence of solutions in the $BV_t(Q)$ space to a doubly nonlinear parabolic problem. Publicacions Matemàtiques, 1996, 40, 527-560.	0.2	23
35	The support shrinking properties for solutions of quasilinear parabolic equations with strong absorption terms. Annales De La Faculté Des Sciences De Toulouse, 1995, 4, 5-30.	0.3	23
36	A note on the dynamics of an oscillator in the presence of strong friction. Nonlinear Analysis: Theory, Methods & Applications, 2003, 55, 209-216.	0.6	22

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37	Uniqueness and continuum of foliated solutions for a quasilinear elliptic equation with a non lipschitz nonlinearity. Communications in Partial Differential Equations, 1992, 17, 1037-1050.	1.0	20
38	Mathematical treatment of the magnetic confinement in a current carrying stellarator. Nonlinear Analysis: Theory, Methods & Applications, 1998, 34, 857-887.	0.6	19
39	On the ambiguous treatment of the Schrödinger equation for the infinite potential well and an alternative via singular potentials: the multi-dimensional case. SeMA Journal, 2017, 74, 255-278.	1.0	19
40	Generalized Gagliardo-Nirenberg inequalities using Lorentz spaces, BMO, Hölder spaces and fractional Sobolev spaces. Nonlinear Analysis: Theory, Methods & Applications, 2018, 173, 146-153.	0.6	19
41	ON THE INVISCID AND NON-RESISTIVE LIMIT FOR THE EQUATIONS OF INCOMPRESSIBLE MAGNETOHYDRODYNAMICS. Mathematical Models and Methods in Applied Sciences, 2002, 12, 1401-1419.	1.7	18
42	Stopping a Viscous Fluid by a Feedback Dissipative Field: I. The Stationary Stokes Problem. Journal of Mathematical Fluid Mechanics, 2004, 6, 439-461.	0.4	18
43	Large Solutions for a System of Elliptic Equations Arising from Fluid Dynamics. SIAM Journal on Mathematical Analysis, 2005, 37, 490-513.	0.9	18
44	Control of turbulence in oscillatory reaction-diffusion systems through a combination of global and local feedback. Physical Review E, 2007, 76, 036209.	0.8	17
45	Title is missing!. Indiana University Mathematics Journal, 1983, 32, 319.	0.4	17
46	On the ambiguous treatment of the Schrödinger equation for the infinite potential well and an alternative via flat solutions: The one-dimensional case. Interfaces and Free Boundaries, 2015, 17, 333-351.	0.2	16
47	On a climate model with a dynamic nonlinear diffusive boundary condition. Discrete and Continuous Dynamical Systems - Series S, 2008, 1, 253-262.	0.6	16
48	Comparison of solutions of nonlinear evolution problems with different nonlinear terms. Israel Journal of Mathematics, 1982, 42, 241-257.	0.4	15
49	Spatial and continuous dependence estimates in linear viscoelasticity. Journal of Mathematical Analysis and Applications, 2002, 273, 1-16.	0.5	15
50	Why are outcomes different for registry patients enrolled prospectively and retrospectively? Insights from the global anticoagulant registry in the FIELD-Atrial Fibrillation (GARFIELD-AF). European Heart Journal Quality of Care & Clinical Outcomes, 2018, 4, 27-35.	1.8	15
51	Linear diffusion with singular absorption potential and/or unbounded convective flow: The weighted space approach. Discrete and Continuous Dynamical Systems, 2018, 38, 509-546.	0.5	15
52	Lagrangian Approach to the Study of Level Sets: Application to a Free Boundary Problem in Climatology. Archive for Rational Mechanics and Analysis, 2009, 194, 75-103.	1.1	14
53	On the Approximate Controllability of Some Semilinear Parabolic Boundary-Value Problems. Applied Mathematics and Optimization, 1998, 37, 71-97.	0.8	13
54	On a degenerate parabolic/hyperbolic system in glaciology giving rise to a free boundary. Nonlinear Analysis: Theory, Methods & Applications, 1999, 38, 649-673.	0.6	13

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55	Mathematical and numerical analysis of a nonlinear diffusive climate energy balance model. <i>Mathematical and Computer Modelling</i> , 2009, 49, 1180-1210.	2.0	13
56	On the existence of positive solutions and solutions with compact support for a spectral nonlinear elliptic problem with strong absorption. <i>Nonlinear Analysis: Theory, Methods & Applications</i> , 2015, 119, 484-500.	0.6	13
57	On a quasilinear degenerate system arising in semiconductor theory. Part II: Localization of vacuum solutions. <i>Nonlinear Analysis: Theory, Methods & Applications</i> , 1999, 36, 569-594.	0.6	12
58	An elliptic-parabolic equation with a nonlocal term for the transient regime of a plasma in a Stellarator. <i>Journal of Differential Equations</i> , 2004, 198, 321-355.	1.1	12
59	Multiple solutions and numerical analysis to the dynamic and stationary models coupling a delayed energy balance model involving latent heat and discontinuous albedo with a deep ocean. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , 2014, 470, 20140376.	1.0	12
60	Homogenization of the p-Laplacian with nonlinear boundary condition on critical size particles: Identifying the strange term for the some non smooth and multivalued operators. <i>Doklady Mathematics</i> , 2016, 94, 387-392.	0.1	12
61	Homogenization of variational inequalities of Signorini type for the p-Laplacian in perforated domains when $p \in (1, 2)$. <i>Doklady Mathematics</i> , 2017, 95, 151-156.	0.1	12
62	On the Initial Growth of the Interfaces in Nonlinear Diffusion-Convection Processes. <i>Mathematical Sciences Research Institute Publications</i> , 1988, , 1-20.	0.3	12
63	Sufficient and necessary initial mass conditions for the existence of a waiting time in nonlinear-convection processes. <i>Journal of Mathematical Analysis and Applications</i> , 1991, 155, 378-392.	0.5	11
64	Infinitely many stationary solutions for a simple climate model via a shooting method. <i>Mathematical Methods in the Applied Sciences</i> , 2002, 25, 327-334.	1.2	11
65	Localizing estimates of the support of solutions of some nonlinear Schrödinger equations - The stationary case. <i>Annales De L'Institut Henri Poincare (C) Analyse Non Lineaire</i> , 2012, 29, 35-58.	0.7	11
66	The Uniform Hopf Inequality for discontinuous coefficients and optimal regularity in BMO for singular problems. <i>Journal of Mathematical Analysis and Applications</i> , 2016, 437, 350-379.	0.5	11
67	Characterizing the strange term in critical size homogenization: Quasilinear equations with a general microscopic boundary condition. <i>Advances in Nonlinear Analysis</i> , 2017, 8, 679-693.	1.3	11
68	On the exact multiplicity of stable ground states of non-Lipschitz semilinear elliptic equations for some classes of starshaped sets. <i>Advances in Nonlinear Analysis</i> , 2019, 9, 1046-1065.	1.3	11
69	Homogenization of a net of periodic critically scaled boundary obstacles related to reverse osmosis - nano-composite membranes. <i>Advances in Nonlinear Analysis</i> , 2020, 9, 193-227.	1.3	11
70	Space and time localization in the flow of two immiscible fluids through a porous medium: energy methods applied to systems. <i>Nonlinear Analysis: Theory, Methods & Applications</i> , 1991, 16, 299-313.	0.6	10
71	Global stability for convection when the viscosity has a maximum. <i>Continuum Mechanics and Thermodynamics</i> , 2004, 16, 347-352.	1.4	10
72	A gradient estimate to a degenerate parabolic equation with a singular absorption term: The global quenching phenomena. <i>Journal of Mathematical Analysis and Applications</i> , 2016, 437, 445-473.	0.5	10

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73	Classification of homogenized limits of diffusion problems with spatially dependent reaction over critical-size particles. <i>Applicable Analysis</i> , 2019, 98, 232-255.	0.6	10
74	On an oblique boundary value problem related to the Backus problem in Geodesy. <i>Nonlinear Analysis: Real World Applications</i> , 2006, 7, 147-166.	0.9	9
75	On the asymptotic behaviour of solutions of a stochastic energy balance climate model. <i>Physica D: Nonlinear Phenomena</i> , 2009, 238, 880-887.	1.3	9
76	On the retention of the interfaces in some elliptic and parabolic nonlinear problems. <i>Discrete and Continuous Dynamical Systems</i> , 2009, 25, 1-17.	0.5	9
77	The extinction versus the blow-up: Global and non-global existence of solutions of source types of degenerate parabolic equations with a singular absorption. <i>Journal of Differential Equations</i> , 2017, 263, 6764-6804.	1.1	9
78	On the behaviour and cases of nonexistence of the free boundary in a semibounded porous medium. <i>Journal of Mathematical Analysis and Applications</i> , 1988, 132, 281-289.	0.5	8
79	Mathematical Aspects of the Combustion of a Solid by a Distributed Isothermal Gas Reaction. <i>SIAM Journal on Mathematical Analysis</i> , 1995, 26, 305-328.	0.9	8
80	Approximate controllability of the Stokes system on cylinders by external unidirectional forces. <i>Journal Des Mathematiques Pures Et Appliquees</i> , 1997, 76, 353-375.	0.8	8
81	Introduction to Mathematics and Geosciences: Global and Local Perspectives, Volume I. <i>Pure and Applied Geophysics</i> , 2015, 172, 1-5.	0.8	8
82	Existence of weak solutions to some stationary Schrödinger equations with singular nonlinearity. <i>Revista De La Real Academia De Ciencias Exactas, Fisicas Y Naturales - Serie A: Matematicas</i> , 2015, 109, 43-63.	0.6	8
83	Flat solutions of some non-Lipschitz autonomous semilinear equations may be stable for $N \geq 3$. <i>Chinese Annals of Mathematics Series B</i> , 2017, 38, 345-378.	0.2	8
84	A simple proof of the approximate controllability from the interior for nonlinear evolution problems. <i>Applied Mathematics Letters</i> , 1994, 7, 85-87.	1.5	7
85	On the confinement of a viscous fluid by means of a feedback external field. <i>Comptes Rendus - Mecanique</i> , 2002, 330, 797-802.	2.1	7
86	On a nonlinear Schrödinger equation with a localizing effect. <i>Comptes Rendus Mathematique</i> , 2006, 342, 459-463.	0.1	7
87	A sharper energy method for the localization of the support to some stationary Schrödinger equations with a singular nonlinearity. <i>Discrete and Continuous Dynamical Systems</i> , 2014, 34, 3371-3382.	0.5	7
88	On a fully nonlinear parabolic equation and the asymptotic behaviour of its solutions. <i>Journal of Mathematical Analysis and Applications</i> , 1983, 95, 144-168.	0.5	6
89	On the interfaces in a nonlocal quasilinear degenerate equation arising in population dynamics. <i>Japan Journal of Industrial and Applied Mathematics</i> , 1996, 13, 385-415.	0.5	6
90	On a nonlocal elliptic problem arising in the magnetic confinement of a plasma in a stellarator. <i>Nonlinear Analysis: Theory, Methods & Applications</i> , 1997, 30, 3963-3974.	0.6	6

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91	Time Periodic Solutions for a Diffusive Energy Balance Model in Climatology. <i>Journal of Mathematical Analysis and Applications</i> , 1999, 233, 713-729.	0.5	6
92	Analysis of a Degenerate Obstacle Problem on an Unbounded Set Arising in the Environment. <i>Applied Mathematics and Optimization</i> , 2002, 45, 251-267.	0.8	6
93	On the mathematical controllability in a simple growth tumors model by the internal localized action of inhibitors. <i>Nonlinear Analysis: Real World Applications</i> , 2003, 4, 109-125.	0.9	6
94	Numerical experiments regarding the distributed control of semilinear parabolic problems. <i>Computers and Mathematics With Applications</i> , 2004, 48, 1575-1586.	1.4	6
95	On some Bernoulli free boundary type problems for general elliptic operators. <i>Proceedings of the Royal Society of Edinburgh Section A: Mathematics</i> , 2007, 137, 895-911.	0.8	6
96	Asymptotics for some nonlinear damped wave equation: finite time convergence versus exponential decay results. <i>Annales De L'Institut Henri Poincare (C) Analyse Non Lineaire</i> , 2007, 24, 1009-1028.	0.7	6
97	Lagrangian approach to the study of level sets II: A quasilinear equation in climatology. <i>Journal of Mathematical Analysis and Applications</i> , 2009, 352, 475-495.	0.5	6
98	Construction of the maximal solution of Backusâ€™ problem in geodesy and geomagnetism. <i>Studia Geophysica Et Geodaetica</i> , 2011, 55, 415-440.	0.3	6
99	Convergence to travelling waves for quasilinear Fisherâ€™KPP type equations. <i>Journal of Mathematical Analysis and Applications</i> , 2012, 390, 74-85.	0.5	6
100	Asymptotic behavior of large radial solutions of a polyharmonic equation with superlinear growth. <i>Journal of Differential Equations</i> , 2014, 257, 4249-4276.	1.1	6
101	Positive and nodal solutions bifurcating from the infinity for a semilinear equation: solutions with compact support. <i>Portugaliae Mathematica</i> , 2015, 72, 145-160.	0.4	6
102	On the Effectiveness of Wastewater Cylindrical Reactors: an Analysis Through Steiner Symmetrization. <i>Pure and Applied Geophysics</i> , 2016, 173, 923-935.	0.8	6
103	Homogenization of Boundary Value Problems in Plane Domains with Frequently Alternating Type of Nonlinear Boundary Conditions: Critical Case. <i>Doklady Mathematics</i> , 2018, 97, 271-276.	0.1	6
104	Level Set Regularization Using Geometric Flows. <i>SIAM Journal on Imaging Sciences</i> , 2018, 11, 1493-1523.	1.3	6
105	On the well-posedness of a multiscale mathematical model for Lithium-ion batteries. <i>Advances in Nonlinear Analysis</i> , 2019, 8, 1132-1157.	1.3	6
106	Complete quenching phenomenon and instantaneous shrinking of support of solutions of degenerate parabolic equations with nonlinear singular absorption. <i>Proceedings of the Royal Society of Edinburgh Section A: Mathematics</i> , 2019, 149, 1323-1346.	0.8	6
107	Compactness of the green operator of nonlinear diffusion equations: application to Boussinesq type systems in fluid dynamics. <i>Topological Methods in Nonlinear Analysis</i> , 1994, 4, 399.	0.2	6
108	On the free boundary for quenching type parabolic problems via local energy methods. <i>Communications on Pure and Applied Analysis</i> , 2014, 13, 1799-1814.	0.4	6

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109	Stability results for discontinuous nonlinear elliptic and parabolic problems with a S-shaped bifurcation branch of stationary solutions. <i>Discrete and Continuous Dynamical Systems - Series B</i> , 2017, 22, 1757-1778.	0.5	6
110	On the mathematical treatment of energy balance climate models. , 1997, , 217-251.		6
111	On the initial growth of interfaces in reaction-diffusion equations with strong absorption. <i>Proceedings of the Royal Society of Edinburgh Section A: Mathematics</i> , 1993, 123, 803-817.	0.8	5
112	Sur la contractibilit�e approche de probl�mes paraboliques avec ph�nom�nes d'explosion. <i>Comptes Rendus Mathematique</i> , 1998, 327, 173-177.	0.5	5
113	Stopping a Viscous Fluid by a Feedback Dissipative Field: Thermal Effects without Phase Changing. <i>Progress in Nonlinear Differential Equations and Their Application</i> , 2005, , 1-14.	0.4	5
114	Mathematical issues concerning the Boussinesq approximation for thermally coupled viscous flows. <i>Proceedings in Applied Mathematics and Mechanics</i> , 2007, 7, 1101205-1101206.	0.2	5
115	Mathematical Analysis of a Model of River Channel Formation. <i>Pure and Applied Geophysics</i> , 2008, 165, 1663-1682.	0.8	5
116	A Finite Element Algorithm of a Nonlinear Diffusive Climate Energy Balance Model. <i>Pure and Applied Geophysics</i> , 2008, 165, 1025-1047.	0.8	5
117	Euler's tallest column revisited. <i>Nonlinear Analysis: Real World Applications</i> , 2010, 11, 2731-2747.	0.9	5
118	On the free boundary associated with the stationary Monge-Amp�re operator on the set of non strictly convex functions. <i>Discrete and Continuous Dynamical Systems</i> , 2015, 35, 1447-1468.	0.5	5
119	On the asymptotic limit of the effectiveness of reaction-diffusion equations in periodically structured media. <i>Journal of Mathematical Analysis and Applications</i> , 2017, 455, 1597-1613.	0.5	5
120	On the convergence of controls and cost functionals in some optimal control heterogeneous problems when the homogenization process gives rise to some strange terms. <i>Journal of Mathematical Analysis and Applications</i> , 2022, 506, 125559.	0.5	5
121	On the Approximate Controllability for Higher Order Parabolic Nonlinear Equations of Cahn-Hilliard Type. , 1998, , 111-127.		5
122	Space localization and uniqueness of solutions of a quasilinear parabolic system arising in semiconductor theory. <i>Comptes Rendus Mathematique</i> , 1997, 325, 267-272.	0.5	4
123	On a nonlocal quasilinear parabolic model related to a current-carrying Stellarator. <i>Nonlinear Analysis: Real World Applications</i> , 2002, 3, 503-514.	0.9	4
124	Existence of weak solutions to a system of nonlinear partial differential equations modelling ice streams. <i>Nonlinear Analysis: Real World Applications</i> , 2007, 8, 267-287.	0.9	4
125	On an evolution problem associated to the modelling of incertitude into the environment. <i>Nonlinear Analysis: Real World Applications</i> , 2007, 8, 399-404.	0.9	4
126	The Effectiveness Factor of Reaction-Diffusion Equations: Homogenization and Existence of Optimal Pellet Shapes. <i>Journal of Elliptic and Parabolic Equations</i> , 2016, 2, 119-129.	0.4	4

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127	Finite time extinction for the strongly damped nonlinear Schrödinger equation in bounded domains. <i>Journal of Differential Equations</i> , 2020, 268, 4029-4058.	1.1	4
128	Fractional Sobolev inequalities revisited: the maximal function approach. <i>Atti Della Accademia Nazionale Dei Lincei, Classe Di Scienze Fisiche, Matematiche E Naturali, Rendiconti Lincei Matematica E Applicazioni</i> , 2020, 31, 225-236.	0.3	4
129	Energy and Large Time Estimates for Nonlinear Porous Medium Flow with Nonlocal Pressure in \mathbb{R}^N . <i>Archive for Rational Mechanics and Analysis</i> , 2020, 238, 299-345.	1.1	4
130	On the exact number of monotone solutions of a simplified Budyko climate model and their different stability. <i>Discrete and Continuous Dynamical Systems - Series B</i> , 2019, 24, 1033-1047.	0.5	4
131	Parabolic Monge-Ampere equations giving rise to a free boundary: The worn stone model. , 2015, , .		4
132	Some results about the approximate controllability property for quasilinear diffusion equations. <i>Comptes Rendus Mathematique</i> , 1997, 324, 1243-1248.	0.5	3
133	Nonlocal elliptic-parabolic equation arising in the transient regime of a magnetically confined plasma in a Stellarator. <i>Comptes Rendus Mathematique</i> , 1999, 329, 773-777.	0.5	3
134	Diffusive energy balance models in climatology. <i>Pakistan Journal of Medical Sciences</i> , 2002, 31, 297-328.	0.4	3
135	Mathematical Analysis, Controllability and Numerical Simulation of a Simple Model of Avascular Tumor Growth. <i>Handbook of Numerical Analysis</i> , 2004, 12, 189-230.	0.9	3
136	Mathematical treatment of the discharge of a laminar hot gas in a stagnant colder atmosphere. <i>Journal of Applied Mechanics and Technical Physics</i> , 2008, 49, 681-692.	0.1	3
137	Finite extinction and null controllability via delayed feedback non-local actions. <i>Nonlinear Analysis: Theory, Methods & Applications</i> , 2009, 71, e2018-e2022.	0.6	3
138	On the Time Periodic Free Boundary Associated to Some Nonlinear Parabolic Equations. <i>Boundary Value Problems</i> , 2010, 2010, 147301.	0.3	3
139	Qualitative properties and approximation of solutions of Bingham flows: On the stabilization for large time and the geometry of the support. <i>Revista De La Real Academia De Ciencias Exactas, Fisicas Y Naturales - Serie A: Matematicas</i> , 2010, 104, 153-196.	0.6	3
140	Global null controllability of the 1-dimensional nonlinear slow diffusion equation. <i>Chinese Annals of Mathematics Series B</i> , 2013, 34, 333-344.	0.2	3
141	Free boundaries touching the boundary of the domain for some reaction-diffusion problems. <i>Nonlinear Analysis: Theory, Methods & Applications</i> , 2015, 119, 275-294.	0.6	3
142	Pointwise Gradient Estimates in Multi-dimensional Slow Diffusion Equations with a Singular Quenching Term. <i>Advanced Nonlinear Studies</i> , 2020, 20, 477-502.	0.7	3
143	On the Approximate Controllability for some Explosive Parabolic Problems. , 1999, , 115-132.		3
144	Steiner symmetrization for concave semilinear elliptic and parabolic equations and the obstacle problem. , 2015, , .		3

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145	Existence and uniqueness of solutions of Schrödinger type stationary equations with very singular potentials without prescribing boundary conditions and some applications. <i>Differential Equations and Applications</i> , 2018, , 47-74.	0.1	3
146	Linearized stability for degenerate and singular semilinear and quasilinear parabolic problems: the linearized singular equation. <i>Topological Methods in Nonlinear Analysis</i> , 0, , 1.	0.2	3
147	The propagation of the free boundary of the solution of the dam problem and related problems. <i>Applicable Analysis</i> , 1993, 49, 255-276.	0.6	2
148	Periodic solutions of a quasilinear parabolic boundary value problem arising in unsaturated flow through a porous medium. <i>Applicable Analysis</i> , 1995, 56, 279-301.	0.6	2
149	On the Uniqueness of Solutions of a Nonlinear Elliptic Problem Arising in the Confinement of a Plasma in a Stellarator Device. <i>Applied Mathematics and Optimization</i> , 1999, 39, 61-73.	0.8	2
150	A Free Boundary Problem Related to the Location of Volcanic Gas Sources. <i>Pure and Applied Geophysics</i> , 2004, 161, 1509-1517.	0.8	2
151	On the principle of pseudo-linearized stability: Applications to some delayed nonlinear parabolic equations. <i>Nonlinear Analysis: Theory, Methods & Applications</i> , 2005, 63, e997-e1007.	0.6	2
152	On the instantaneous formation of cavitation in hydrodynamic lubrication. <i>Comptes Rendus - Mecanique</i> , 2006, 334, 645-650.	2.1	2
153	Similarity solutions of an equation describing ice sheet dynamics. <i>Physica D: Nonlinear Phenomena</i> , 2006, 216, 319-326.	1.3	2
154	On the Mathematical Analysis of an Elastic-gravitational Layered Earth Model for Magmatic Intrusion: The Stationary Case. <i>Pure and Applied Geophysics</i> , 2008, 165, 1465-1490.	0.8	2
155	Estimates of the Location of a Free Boundary for the Obstacle and Stefan Problems Obtained by Means of Some Energy Methods. <i>Georgian Mathematical Journal</i> , 2008, 15, 475-484.	0.2	2
156	On a problem of slender, slightly hyperbolic, shells suggested by Torroja's structures. <i>Comptes Rendus - Mecanique</i> , 2009, 337, 1-7.	2.1	2
157	On the very weak solvability of the beam equation. <i>Revista De La Real Academia De Ciencias Exactas, Fisicas Y Naturales - Serie A: Matematicas</i> , 2011, 105, 167-172.	0.6	2
158	Some qualitative properties for geometric flows and its Euler implicit discretization. <i>Nonlinear Analysis: Theory, Methods & Applications</i> , 2016, 137, 43-76.	0.6	2
159	Existence and uniqueness of singular solutions of p -Laplacian with absorption for Dirichlet boundary condition. <i>Proceedings of the American Mathematical Society</i> , 2017, 145, 5235-5245.	0.4	2
160	Non existence of critical scales in the homogenization of the problem with p -Laplace diffusion and nonlinear reaction in the boundary of periodically distributed particles in n -dimensional domains when $p > n$. <i>Revista De La Real Academia De Ciencias Exactas, Fisicas Y Naturales - Serie A: Matematicas</i> , 2018, 112, 331-340.	0.6	2
161	Steiner symmetrization for anisotropic quasilinear equations via partial discretization. <i>Annales De L'Institut Henri Poincare (C) Analyse Non Lineaire</i> , 2021, 38, 347-368.	0.7	2
162	A Time-Dependent Strange Term Arising in Homogenization of an Elliptic Problem with Rapidly Alternating Neumann and Dynamic Boundary Conditions Specified at the Domain Boundary: The Critical Case. <i>Doklady Mathematics</i> , 2020, 101, 96-101.	0.1	2

#	ARTICLE	IF	CITATIONS
163	Some remarks on the coincidence set for the Signorini problem. <i>Opuscula Mathematica</i> , 2019, 39, 145-157.	0.3	2
164	Stochastic energy balance climate models with Legendre weighted diffusion and an additive cylindrical Wiener process forcing. <i>Discrete and Continuous Dynamical Systems - Series S</i> , 2022, 15, 2837.	0.6	2
165	On the Homogenization of an Optimal Control Problem in a Domain Perforated by Holes of Critical Size and Arbitrary Shape. <i>Doklady Mathematics</i> , 2022, 105, 6-13.	0.1	2
166	A note on hysteresis in glaciology. <i>Applied Mathematics Letters</i> , 2000, 13, 125-129.	1.5	1
167	On the mathematical analysis of the limit case of a radiative-convective climate model. <i>Nonlinear Analysis: Real World Applications</i> , 2002, 3, 293-305.	0.9	1
168	Pointwise gradient estimates of solutions to onedimensional nonlinear parabolic equations. <i>Journal of Evolution Equations</i> , 2003, 3, 577-602.	0.6	1
169	Pointwise gradient estimates of solutions to onedimensional nonlinear parabolic equations. , 2004, , 577-602.		1
170	On the Newton partially flat minimal resistance body type problems. <i>Journal of the European Mathematical Society</i> , 2005, 7, 395-411.	0.7	1
171	Actions on Environment under uncertainty: stochastic formulation and the associated deterministic problem. <i>Revista De La Real Academia De Ciencias Exactas, Fisicas Y Naturales - Serie A: Matematicas</i> , 2008, 102, 335-353.	0.6	1
172	On the Coupling Between Channel Level and Surface Ground-Water Flows. <i>Pure and Applied Geophysics</i> , 2008, 165, 1511-1530.	0.8	1
173	Introduction: Linking Earth Sciences and Mathematics. <i>Pure and Applied Geophysics</i> , 2008, 165, 997-1001.	0.8	1
174	Introduction to Earth Sciences and Mathematics, Volume II. <i>Pure and Applied Geophysics</i> , 2008, 165, 1459-1463.	0.8	1
175	On gradient estimates and other qualitative properties of solutions of nonlinear non autonomous parabolic systems. <i>Revista De La Real Academia De Ciencias Exactas, Fisicas Y Naturales - Serie A: Matematicas</i> , 2009, 103, 201-214.	0.6	1
176	NEW L1-GRADIENT TYPE ESTIMATES OF SOLUTIONS TO ONE-DIMENSIONAL QUASILINEAR PARABOLIC SYSTEMS. <i>Communications in Contemporary Mathematics</i> , 2010, 12, 85-106.	0.6	1
177	Global Null Controllability of the 1-Dimensional Nonlinear Slow Diffusion Equation. , 2014, , 211-224.		1
178	On an elliptic system related to desertification studies. <i>Revista De La Real Academia De Ciencias Exactas, Fisicas Y Naturales - Serie A: Matematicas</i> , 2014, 108, 397-404.	0.6	1
179	A problem on slender nearly cylindrical shells suggested by Torroja's structures. <i>International Journal of Engineering Science</i> , 2015, 88, 83-98.	2.7	1
180	On the optimal control for a semilinear equation with cost depending on the free boundary. <i>Networks and Heterogeneous Media</i> , 2012, 7, 605-615.	0.5	1

#	ARTICLE	IF	CITATIONS
181	ON A PARABOLIC PROBLEM WITH DIFFUSION ON THE BOUNDARY ARISING IN CLIMATOLOGY. , 2005, , .		1
182	Complete recuperation after the blow up time for semilinear problems. , 2015, , .		1
183	On a Degenerate System in Glaciology Giving Rise to a Free Boundary. , 2019, , 309-317.		1
184	Finite time extinction for a class of damped Schrödinger equations with a singular saturated nonlinearity. Journal of Differential Equations, 2022, 308, 252-285.	1.1	1
185	Energy method and localization of solutions of equations of continuum mechanics. Journal of Applied Mechanics and Technical Physics, 1989, 30, 182-189.	0.1	0
186	John von Neumann: precursor del Cálculo Científico y de la Meteorología. Arbor, 2003, CLXXV, 1455-1484.	0.1	0
187	Potential Symmetry Properties of a Family of Equations Occuring in Ice Sheet Dynamics. Pure and Applied Geophysics, 2008, 165, 1643-1661.	0.8	0
188	Stabilization beyond the distributions. Revista De La Real Academia De Ciencias Exactas, Fisicas Y Naturales - Serie A: Matematicas, 2009, 103, 167-175.	0.6	0
189	Foreword: The beginning of a new era for RACSAM. Revista De La Real Academia De Ciencias Exactas, Fisicas Y Naturales - Serie A: Matematicas, 2011, 105, 1-2.	0.6	0
190	A note on spatial uniformation for Fisher-KPP type equations with a concentration dependent diffusion. International Journal of Dynamical Systems and Differential Equations, 2012, 4, 70.	0.2	0
191	On a mathematical model arising in MHD perturbed equilibrium for Stellarator devices. A numerical approach. , 2012, , .		0
192	A nonlinear bilaplacian equation with hinged boundary conditions and very weak solutions: analysis and numerical solution. Revista De La Real Academia De Ciencias Exactas, Fisicas Y Naturales - Serie A: Matematicas, 2014, 108, 867-879.	0.6	0
193	Geometrical evolution of volcanoes: a theoretical approach. Revista De La Real Academia De Ciencias Exactas, Fisicas Y Naturales - Serie A: Matematicas, 2015, 109, 511-534.	0.6	0
194	Finite Speed of Propagation and Waiting Time for Local Solutions of Degenerate Equations in Viscoelastic Media or Heat Flows with Memory. Journal of Elliptic and Parabolic Equations, 2016, 2, 207-216.	0.4	0
195	Introduction to Mathematics and Geosciences: Global and Local Perspectives, Volume II. Pure and Applied Geophysics, 2016, 173, 731-737.	0.8	0
196	Half-space Gaussian symmetrization: applications to semilinear elliptic problems. Advances in Nonlinear Analysis, 2021, 10, 1201-1221.	1.3	0
197	On the HaĀm Brezis Pioneering Contributions on the Location of Free Boundaries. Progress in Nonlinear Differential Equations and Their Application, 2005, , 217-234.	0.4	0
198	On the Mathematical Analysis of an Elastic-gravitational Layered Earth Model for Magmatic Intrusion: The Stationary Case. , 2008, , 1465-1490.		0

#	ARTICLE	IF	CITATIONS
199	On the Coupling Between Channel Level and Surface Ground-Water Flows. , 2008, , 1511-1530.		0
200	Mathematical Analysis of a Model of River Channel Formation. , 2008, , 1663-1682.		0
201	Dedication to Professor Jes�s Ildefonso D�az on the Occasion of his 60th Birthday. Differential Equations and Applications, 2011, , 463-467.	0.1	0
202	l.13 Dead Cores. , 2014, , 755-778.		0
203	New Applications of Energy Methods to Parabolic and Elliptic Free Boundary Problems. , 1992, , 59-65.		0
204	Stabilization of a hyperbolic/elliptic system modelling the viscoelastic-gravitational deformation in a multilayered Earth. , 2015, , .		0
205	A Mathematical Proof in Nanocatalysis: Better Homogenized Results in the Diffusion of a Chemical Reactant Through Critically Small Reactive Particles. Mathematics in Industry, 2017, , 319-326.	0.1	0
206	Perimeter Symmetrization of Some Dynamic and Stationary Equations Involving the Monge-Amp�re Operator. Springer INdAM Series, 2017, , 119-149.	0.4	0
207	Qualitative properties and approximation of solutions of Bingham flows: On the stabilization for large time and the geometry of the support. Revista De La Real Academia De Ciencias Exactas, Fisicas Y Naturales - Serie A: Matematicas, 2010, 104, 153-196.	0.6	0
208	Controlled boundary explosions: Dynamics after blow-up for some semilinear problems with global controls. Discrete and Continuous Dynamical Systems, 2023, 43, 1201-1238.	0.5	0