

# Maite Grau

## List of Publications by Year in descending order

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42  
papers

515  
citations

623734

14  
h-index

713466

21  
g-index

42  
all docs

42  
docs citations

42  
times ranked

159  
citing authors

#	ARTICLE	IF	CITATIONS
1	A Survey on the Inverse Integrating Factor. <i>Qualitative Theory of Dynamical Systems</i> , 2010, 9, 115-166.	1.7	40
2	Averaging theory at any order for computing periodic orbits. <i>Physica D: Nonlinear Phenomena</i> , 2013, 250, 58-65.	2.8	38
3	Bifurcation of critical periods from Pleshkan's isochrones. <i>Journal of the London Mathematical Society</i> , 2010, 81, 142-160.	1.0	30
4	Necessary conditions for the existence of invariant algebraic curves for planar polynomial systems. <i>Bulletin Des Sciences Mathematiques</i> , 2005, 129, 99-126.	1.0	29
5	Weierstrass integrability of differential equations. <i>Applied Mathematics Letters</i> , 2010, 23, 523-526.	2.7	28
6	Universal centres and composition conditions. <i>Proceedings of the London Mathematical Society</i> , 2013, 106, 481-507.	1.3	28
7	The inverse integrating factor and the Poincaré map. <i>Transactions of the American Mathematical Society</i> , 2010, 362, 3591-3612.	0.9	27
8	A necessary condition in the monodromy problem for analytic differential equations on the plane. <i>Journal of Symbolic Computation</i> , 2006, 41, 943-958.	0.8	23
9	Characterization of isochronous foci for planar analytic differential systems. <i>Proceedings of the Royal Society of Edinburgh Section A: Mathematics</i> , 2005, 135, 985-998.	1.2	21
10	Linearizability and integrability of vector fields via commutation. <i>Journal of Mathematical Analysis and Applications</i> , 2006, 319, 326-332.	1.0	17
11	Generalized Hopf Bifurcation for Planar Vector Fields via the Inverse Integrating Factor. <i>Journal of Dynamics and Differential Equations</i> , 2011, 23, 251-281.	1.9	17
12	Integrability of Planar Polynomial Differential Systems through Linear Differential Equations. <i>Rocky Mountain Journal of Mathematics</i> , 2006, 36, 457.	0.4	16
13	Coexistence of algebraic and non-algebraic limit cycles, explicitly given, using Riccati equations. <i>Nonlinearity</i> , 2006, 19, 1939-1950.	1.4	16
14	On the polynomial limit cycles of polynomial differential equations. <i>Israel Journal of Mathematics</i> , 2011, 181, 461-475.	0.8	16
15	On the cyclicity of weight-homogeneous centers. <i>Journal of Differential Equations</i> , 2009, 246, 3126-3135.	2.2	15
16	A family of non-darboux-integrable quadratic polynomial differential systems with algebraic solutions of arbitrarily high degree. <i>Applied Mathematics Letters</i> , 2003, 16, 833-837.	2.7	14
17	Polynomial and rational first integrals for planar quasi-homogeneous polynomial differential systems. <i>Discrete and Continuous Dynamical Systems</i> , 2013, 33, 4531-4547.	0.9	14
18	On the extensions of the Darboux theory of integrability. <i>Nonlinearity</i> , 2013, 26, 2221-2229.	1.4	12

#	ARTICLE	IF	CITATIONS
19	Coexistence of limit cycles and invariant algebraic curves for a Kukles system. <i>Nonlinear Analysis: Theory, Methods &amp; Applications</i> , 2004, 59, 673-693.	1.1	11
20	The role of algebraic solutions in planar polynomial differential systems. <i>Mathematical Proceedings of the Cambridge Philosophical Society</i> , 2007, 143, 487-508.	0.4	8
21	The center problem and composition condition for Abel differential equations. , 2016, 34, 210-222.		8
22	First integrals and Darboux polynomials of natural polynomial Hamiltonian systems. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 2010, 374, 4746-4748.	2.1	7
23	Transversal conics and the existence of limit cycles. <i>Journal of Mathematical Analysis and Applications</i> , 2015, 428, 563-586.	1.0	7
24	Universal centers in the cubic trigonometric Abel equation. <i>Electronic Journal of Qualitative Theory of Differential Equations</i> , 2014, , 1-7.	0.5	7
25	A note on: "Relaxation oscillators with exact limit cycles". <i>Journal of Mathematical Analysis and Applications</i> , 2006, 324, 739-745.	1.0	6
26	A note on Liouvillian first integrals and invariant algebraic curves. <i>Applied Mathematics Letters</i> , 2013, 26, 285-289.	2.7	6
27	Limit cycles bifurcating from planar polynomial quasi-homogeneous centers. <i>Journal of Differential Equations</i> , 2015, 259, 7135-7160.	2.2	6
28	A counterexample to the composition condition conjecture for polynomial Abel differential equations. <i>Ergodic Theory and Dynamical Systems</i> , 2019, 39, 3347-3352.	0.6	6
29	Integrable systems via polynomial inverse integrating factors. <i>Bulletin Des Sciences Mathematiques</i> , 2002, 126, 315-331.	1.0	5
30	Invariant algebraic curves linear in one variable for planar real quadratic systems. <i>Applied Mathematics and Computation</i> , 2003, 138, 291-308.	2.2	5
31	A note on linear differential equations with periodic coefficients. <i>Nonlinear Analysis: Theory, Methods &amp; Applications</i> , 2009, 71, 3197-3202.	1.1	5
32	Essential perturbations of polynomial vector fields with a period annulus. <i>Communications on Pure and Applied Analysis</i> , 2015, 14, 1073-1095.	0.8	5
33	Multiplicity of limit cycles and analytic m-solutions for planar differential systems. <i>Journal of Differential Equations</i> , 2007, 240, 375-398.	2.2	4
34	Linearizable planar differential systems via the inverse integrating factor. <i>Journal of Physics A: Mathematical and Theoretical</i> , 2008, 41, 135205.	2.1	4
35	Divergence and Poincaré-Liapunov constants for analytic differential systems. <i>Journal of Differential Equations</i> , 2015, 258, 4348-4367.	2.2	3
36	On the stability of periodic orbits for differential systems in $\mathbb{R}^n$ . <i>Discrete and Continuous Dynamical Systems - Series B</i> , 2008, 10, 495-509.	0.9	3

#	ARTICLE	IF	CITATIONS
37	Exact Solutions for the Fluctuations in a Flat FRW Universe Coupled to a Scalar Field. International Journal of Theoretical Physics, 2002, 41, 2027-2035.	1.2	2
38	QUADRATIC SYSTEMS WITH AN ALGEBRAIC LIMIT CYCLE OF DEGREE 2 OR 4 DO NOT HAVE A LIOUVILLIAN FIRST INTEGRAL. , 2005, .		2
39	On the Multiplicity of Algebraic Limit Cycles. Journal of Dynamics and Differential Equations, 2012, 24, 539-560.	1.9	1
40	On the critical points of the flight return time function of perturbed closed orbits. Journal of Differential Equations, 2019, 266, 8344-8369.	2.2	1
41	COMPOSITION CONDITIONS IN THE TRIGONOMETRIC ABEL EQUATION. Journal of Applied Analysis and Computation, 2013, 3, 133-144.	0.5	1
42	EFFECTIVE CONSTRUCTION OF POINCAR&#201;BENDIXSON REGIONS. Journal of Applied Analysis and Computation, 2017, 7, 1549-1569.	0.5	1