Jordi Villadelprat

List of Publications by Year
in descending order

| 41 papers | 705 citations | 567247 15 h-index | 552766 26 g-index |

| 41 all docs | 41 docs citations | 41 times ranked | 154 citing authors |

#	Article	IF	Citations
1	A Chebyshev criterion for Abelian integrals. Transactions of the American Mathematical Society, 2011, 363, 109-109.	0.9	119
2	Isochronicity for Several Classes of Hamiltonian Systems. Journal of Differential Equations, 1999, 157, 373-413.	2.2	75
3	Bounding the number of zeros of certain Abelian integrals. Journal of Differential Equations, 2011, 251, 1656-1669.	2.2	63
4	The period function of reversible quadratic centers. Journal of Differential Equations, 2006, 224, 120-171.	2.2	46
5	Bifurcation of critical periods from Pleshkan's isochrones. Journal of the London Mathematical Society, 2010, 81, 142-160.	1.0	30
6	On the reversible quadratic centers with monotonic period function. Proceedings of the American Mathematical Society, 2007, 135, 2555-2566.	0.8	26
7	On the time function of the Dulac map for families of meromorphic vector fields. Nonlinearity, 2003, 16, 855-881.	1.4	23
8	On the wave length of smooth periodic traveling waves of the Camassa–Holm equation. Journal of Differential Equations, 2015, 259, 2317-2332.	2.2	22
9	The period function of the generalized Lotka–Volterra centers. Journal of Mathematical Analysis and Applications, 2008, 341, 834-854.	1.0	20
10	Computer-assisted techniques for the verification of the Chebyshev property of Abelian integrals. Journal of Differential Equations, 2013, 254, 3647-3663.	2.2	20
11	Algebraic and analytical tools for the study of the period function. Journal of Differential Equations, 2014, 257, 2464-2484.	2.2	20
12	The period function for second-order quadratic ODEs is monotone. Qualitative Theory of Dynamical Systems, 2004, 4, 329-352.	1.7	18
13	The bifurcation set of the period function of the dehomogenized Loud's centers is bounded. Proceedings of the American Mathematical Society, 2008, 136, 1631-1643.	0.8	18
14	A NOTE ON THE CRITICAL PERIODS OF POTENTIAL SYSTEMS. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2006, 16, 765-774.	1.7	16
15	On the return time function around monodromic polycycles. Journal of Differential Equations, 2006, 228, 226-258.	2.2	15
16	On the period of the limit cycles appearing in one-parameter bifurcations. Journal of Differential Equations, 2005, 213, 255-288.	2.2	14
17	Criteria to bound the number of critical periods. Journal of Differential Equations, 2009, 246, 2415-2433.	2.2	14
18	Unfolding of resonant saddles and the Dulac time. Discrete and Continuous Dynamical Systems, 2008, 21, 1221-1244.	0.9	14

#	Article	IF	Citations
19	Nonexistence of Isochronous Centers in Planar Polynomial Hamiltonian Systems of Degree Four. Journal of Differential Equations, 2002, 180, 334-373.	2.2	13
20	Area-Preserving Normalizations for Centers of Planar Hamiltonian Systems. Journal of Differential Equations, 2002, 179, 625-646.	2.2	12
21	The criticality of centers of potential systems at the outer boundary. Journal of Differential Equations, 2016, 260, 4918-4972.	2.2	10
22	A criticality result for polycycles in a family of quadratic reversible centers. Journal of Differential Equations, 2018, 264, 6585-6602.	2.2	10
23	A PoincarÃ©-Hopf theorem for noncompact manifolds. Topology, 1998, 37, 261-277.	0.3	8
24	The index of stable critical points. Topology and Its Applications, 2002, 126, 263-271.	0.4	8
25	The period function of generalized LoudÊ¼s centers. Journal of Differential Equations, 2013, 255, 3071-3097.	2.2	8
26	Unfoldings of saddle-nodes and their Dulac time. Journal of Differential Equations, 2016, 261, 6411-6436.	2.2	8
27	The Period Function of Hamiltonian Systems with Separable Variables. Journal of Dynamics and Differential Equations, 2020, 32, 741-767.	1.9	8
28	Analytic Tools to Bound the Criticality at the Outer Boundary of the Period Annulus. Journal of Dynamics and Differential Equations, 2018, 30, 883-909.	1.9	7
29	Study of the period function of a two-parameter family of centers. Journal of Mathematical Analysis and Applications, 2017, 452, 188-208.	1.0	6
30	On the Chebyshev Property of Certain Abelian Integrals Near a Polycycle. Qualitative Theory of Dynamical Systems, 2018, 17, 261-270.	1.7	6
31	Asymptotic expansion of the Dulac map and time for unfoldings of hyperbolic saddles: General setting. Journal of Differential Equations, 2021, 275, 684-732.	2.2	6
32	Bifurcation of local critical periods in the generalized Loudâ€™s system. Applied Mathematics and Computation, 2012, 218, 6803-6813.	2.2	5
33	On the Number of Limit Cycles in Generalized Abel Equations. SIAM Journal on Applied Dynamical Systems, 2020, 19, 2343-2370.	1.6	5
34	Asymptotic expansion of the Dulac map and time for unfoldings of hyperbolic saddles: Local setting. Journal of Differential Equations, 2020, 269, 8425-8467.	2.2	5
35	On Bounded Vector Fields. Rocky Mountain Journal of Mathematics, 1999, 29, 473.	0.4	3
36	On the period function of centers in planar polynomial hamiltonian systems of degree four. Qualitative Theory of Dynamical Systems, 2002, 3, 157-180.	1.7	1

#	Article	IF	Citations
37	Bifurcations of Zeros in Translated Families of Functions and Applications. Journal of Dynamical and Control Systems, 2020, , 1.	0.8	1
38	Non-bifurcation of critical periods from semi-hyperbolic polycycles of quadratic centres. Proceedings of the Royal Society of Edinburgh Section A: Mathematics, 2023, 153, 104-114.	1.2	1
39	The criticality of reversible quadratic centers at the outer boundary of its period annulus. Journal of Differential Equations, 2022, 332, 123-201.	2.2	1
40	On the period function in a class of generalized Lotka–Volterra systems. Applied Mathematics and Computation, 2010, 216, 1956-1964.	2.2	0
41	An effective algorithm to compute Mandelbrot sets in parameter planes. Numerical Algorithms, 2017, 76, 555-571.	1.9	0