Douglas D. Novaes

List of Publications by Year
in descending order

45 papers	**887** citations	567281 **15** h-index	477307 **29** g-index
46 all docs	**46** docs citations	**46** times ranked	**173** citing authors

#	Article	IF	Citations
1	Higher order averaging theory for finding periodic solutions via Brouwer degree. Nonlinearity, 2014, 27, 563-583.	1.4	98
2	Averaging theory for discontinuous piecewise differential systems. Journal of Differential Equations, 2015, 258, 4007-4032.	2.2	97
3	Maximum number of limit cycles for certain piecewise linear dynamical systems. Nonlinear Dynamics, 2015, 82, 1159-1175.	5.2	90
4	On the birth of limit cycles for non-smooth dynamical systems. Bulletin Des Sciences Mathematiques, 2015, 139, 229-244.	1.0	80
5	New lower bound for the Hilbert number in piecewise quadratic differential systems. Journal of Differential Equations, 2019, 266, 4170-4203.	2.2	47
6	Limit Cycles Bifurcating from the Periodic Orbits of a Discontinuous Piecewise Linear Differentiable Center with Two Zones. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2015, 25, 1550144.	1.7	46
7	A Simple Solution to the Braga–Mello Conjecture. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2015, 25, 1550009.	1.7	34
8	Regularization of hidden dynamics in piecewise smooth flows. Journal of Differential Equations, 2015, 259, 4615-4633.	2.2	32
9	Averaging theory at any order for computing limit cycles of discontinuous piecewise differential systems with many zones. Physica D: Nonlinear Phenomena, 2017, 353-354, 1-10.	2.8	32
10	On extended Chebyshev systems with positive accuracy. Journal of Mathematical Analysis and Applications, 2017, 448, 171-186.	1.0	31
11	A new result on averaging theory for a class of discontinuous planar differential systems with applications. Revista Matematica Iberoamericana, 2017, 33, 1247-1265.	0.9	31
12	Melnikov analysis in nonsmooth differential systems with nonlinear switching manifold. Journal of Differential Equations, 2019, 267, 3748-3767.	2.2	23
13	Persistence of periodic solutions for higher order perturbed differential systems via Lyapunov–Schmidt reduction. Nonlinearity, 2017, 30, 3560-3586.	1.4	22
14	The generic unfolding of a codimension-two connection to a two-fold singularity of planar Filippov systems. Nonlinearity, 2018, 31, 2083-2104.	1.4	17
15	Improving the averaging theory for computing periodic solutions of the differential equations. Zeitschrift Fur Angewandte Mathematik Und Physik, 2015, 66, 1401-1412.	1.4	16
16	Shilnikov problem in Filippov dynamical systems. Chaos, 2019, 29, 063110.	2.5	15
17	Sliding Shilnikov connection in Filippov-type predator–prey model. Nonlinear Dynamics, 2020, 100, 2973-2987.	5.2	13
18	Piecewise smooth dynamical systems: Persistence of periodic solutions and normal forms. Journal of Differential Equations, 2016, 260, 6108-6129.	2.2	12

#	Article	IF	Citations
19	Chaos Induced by Sliding Phenomena in Filippov Systems. Journal of Dynamics and Differential Equations, 2017, 29, 1569-1583.	1.9	12
20	Higher order Melnikov analysis for planar piecewise linear vector fields with nonlinear switching curve. Journal of Differential Equations, 2021, 287, 1-36.	2.2	12
21	A new simple proof for Lumâ€"Chuaâ€™s conjecture. Nonlinear Analysis: Hybrid Systems, 2021, 40, 100992.	3.5	11
22	Lyapunov coefficients for monodromic tangential singularities in Filippov vector fields. Journal of Differential Equations, 2021, 300, 565-596.	2.2	11
23	On limit cycles bifurcating from the infinity in discontinuous piecewise linear differential systems. Applied Mathematics and Computation, 2015, 271, 365-374.	2.2	10
24	Simultaneous occurrence of sliding and crossing limit cycles in piecewise linear planar vector fields. Dynamical Systems, 2020, 35, 490-514.	0.4	9
25	On nonsmooth perturbations of nondegenerate planar centers. Publicacions Matematiques, 2014, EXTRA, 395-420.	0.5	9
26	An Equivalent Formulation of the Averaged Functions via Bell Polynomials. Trends in Mathematics, 2017, , 141-145.	0.1	8
27	On the torus bifurcation in averaging theory. Journal of Differential Equations, 2020, 268, 4555-4576.	2.2	7
28	Higher Order Analysis on the Existence of Periodic Solutions in Continuous Differential Equations via Degree Theory. SIAM Journal on Mathematical Analysis, 2021, 53, 2476-2490.	1.9	7
29	Bifurcations from families of periodic solutions in piecewise differential systems. Physica D: Nonlinear Phenomena, 2020, 404, 132342.	2.8	5
30	Smoothing of nonsmooth differential systems near regular-tangential singularities and boundary limit cycles. Nonlinearity, 2021, 34, 4202-4263.	1.4	5
31	Nonlinear Sliding of Discontinuous Vector Fields and Singular Perturbation. Differential Equations and Dynamical Systems, 2022, 30, 675-693.	1.0	4
32	An averaging result for periodic solutions of Carathéodory differential equations. Proceedings of the American Mathematical Society, 2022, 150, 2945-2954.	0.8	4
33	Periodic solutions and invariant torus in the Rössler system. Nonlinearity, 2020, 33, 4512-4539.	1.4	4
34	Higher order stroboscopic averaged functions: a general relationship with Melnikov functions. Electronic Journal of Qualitative Theory of Differential Equations, 2021, , 1-9.	0.5	4
35	Study of Periodic Orbits in Periodic Perturbations of Planar Reversible Filippov Systems Having a Twofold Cycle. SIAM Journal on Applied Dynamical Systems, 2020, 19, 1343-1371.	1.6	3
36	Limit cycles of piecewise polynomial perturbations of higher dimensional linear differential systems. Revista Matematica Iberoamericana, 2019, 36, 291-318.	0.9	3

#	Article	IF	Citations
37	A note on invariant measures for Filippov systems. Bulletin Des Sciences Mathematiques, 2021, 167, 102954.	1.0	3
38	On the periodic solutions of a perturbed double pendulum. Sao Paulo Journal of Mathematical Sciences, 2011, 5, 317.	0.4	2
39	Asymptotic behavior of periodic solutions in one-parameter families of Liénard equations. Nonlinear Analysis: Theory, Methods & Applications, 2020, 190, 111617.	1.1	2
40	On the periodic solutions of perturbed 4D non-resonant systems. Sao Paulo Journal of Mathematical Sciences, 2015, 9, 229-250.	0.4	1
41	Periodic solutions of Lienard differential equations via averaging theory of order two. Anais Da Academia Brasileira De Ciencias, 2015, 87, 1905-1913.	0.8	1
42	Number of Limit Cycles for Some Non-generic Classes of Piecewise Linear Differential Systems. Trends in Mathematics, 2017, , 135-139.	0.1	1
43	A note on Vishik's normal form. Journal of Differential Equations, 2021, 281, 442-458.	2.2	1
44	On the non-existence of isochronous tangential centers in Filippov vector fields. , 0, , .		1
45	Perturbed damped pendulum: finding periodic solutions via averaging method. Revista Brasileira De Ensino De Fisica, 2013, 35, 01-07.	0.2	0