

# Claudio Buzzi

## List of Publications by Year in descending order

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40  
papers

510  
citations

759233

12  
h-index

677142

22  
g-index

40  
all docs

40  
docs citations

40  
times ranked

230  
citing authors

#	ARTICLE	IF	CITATIONS
1	Piecewise linear perturbations of a linear center. <i>Discrete and Continuous Dynamical Systems</i> , 2013, 33, 3915-3936.	0.9	111
2	A singular approach to discontinuous vector fields on the plane. <i>Journal of Differential Equations</i> , 2006, 231, 633-655.	2.2	67
3	Birth of limit cycles bifurcating from a nonsmooth center. <i>Journal Des Mathematiques Pures Et Appliquees</i> , 2014, 102, 36-47.	1.6	30
4	Generic bifurcation of refracted systems. <i>Advances in Mathematics</i> , 2013, 234, 653-666.	1.1	26
5	3-dimensional Hopf bifurcation via averaging theory. <i>Discrete and Continuous Dynamical Systems</i> , 2007, 17, 529-540.	0.9	25
6	Melnikov analysis in nonsmooth differential systems with nonlinear switching manifold. <i>Journal of Differential Equations</i> , 2019, 267, 3748-3767.	2.2	23
7	On Poincaré-Bendixson Theorem and non-trivial minimal sets in planar nonsmooth vector fields. <i>Publicacions Matematiques</i> , 2018, 62, 113-131.	0.5	21
8	Phase Portraits of Reversible Linear Differential Systems with Cubic Homogeneous Polynomial Nonlinearities Having a Non-degenerate Center at the Origin. <i>Qualitative Theory of Dynamical Systems</i> , 2009, 7, 369-403.	1.7	20
9	Hopf and zero-Hopf bifurcations in the Hindmarsh-Rose system. <i>Nonlinear Dynamics</i> , 2016, 83, 1549-1556.	5.2	19
10	Closed poly-trajectories and Poincaré index of non-smooth vector fields on the plane. <i>Journal of Dynamical and Control Systems</i> , 2013, 19, 173-193.	0.8	17
11	Periodic orbits for a class of reversible quadratic vector field on $\mathbb{R}^2$ . <i>Journal of Dynamical and Control Systems</i> , 2013, 19, 173-193.	1.0	13
12	Chaotic planar piecewise smooth vector fields with non-trivial minimal sets. <i>Ergodic Theory and Dynamical Systems</i> , 2016, 36, 458-469.	0.6	12
13	Bifurcation of limit cycles from a centre in $\mathbb{R}^4$ in resonance 1:N. <i>Dynamical Systems</i> , 2009, 24, 123-137.	0.4	11
14	Limit cycles in 4-star-symmetric planar piecewise linear systems. <i>Journal of Differential Equations</i> , 2020, 268, 2414-2434.	2.2	11
15	Hopf-zero bifurcations of reversible vector fields. <i>Nonlinearity</i> , 2001, 14, 623-638.	1.4	10
16	Reversible Equivariant Hopf Bifurcation. <i>Archive for Rational Mechanics and Analysis</i> , 2005, 175, 39-84.	2.4	10
17	ON THREE-PARAMETER FAMILIES OF FILIPPOV SYSTEMS AT THE FOLD-SADDLE SINGULARITY. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 2012, 22, 1250291.	1.7	10
18	On 3-Parameter Families of Piecewise Smooth Vector Fields in the Plane. <i>SIAM Journal on Applied Dynamical Systems</i> , 2012, 11, 1402-1424.	1.6	10

#	ARTICLE	IF	CITATIONS
19	Slow-fast systems on algebraic varieties bordering piecewise-smooth dynamical systems. <i>Bulletin Des Sciences Mathematiques</i> , 2012, 136, 444-462.	1.0	9
20	Limit cycles via higher order perturbations for some piecewise differential systems. <i>Physica D: Nonlinear Phenomena</i> , 2018, 371, 28-47.	2.8	8
21	Singular perturbation problems for time-reversible systems. <i>Proceedings of the American Mathematical Society</i> , 2005, 133, 3323-3331.	0.8	8
22	Algebraic Limit Cycles in Piecewise Linear Differential Systems. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 2018, 28, 1850039.	1.7	6
23	Time-Reversible Hamiltonian Vector Fields with Symplectic Symmetries. <i>Journal of Dynamics and Differential Equations</i> , 2004, 16, 559-574.	1.9	5
24	On the dynamics of the Bianchi IX system. <i>Journal of Physics A: Mathematical and Theoretical</i> , 2007, 40, 7187-7192.	2.1	5
25	On the limit cycles of a class of piecewise linear differential systems in with two zones. <i>Mathematics and Computers in Simulation</i> , 2011, 82, 533-539.	4.4	5
26	Final evolutions of a class of May-Leonard Lotka-Volterra systems. <i>Journal of Nonlinear Mathematical Physics</i> , 2020, 27, 267.	1.3	5
27	Hopf bifurcation in the full repressilator equations. <i>Mathematical Methods in the Applied Sciences</i> , 2015, 38, 1428-1436.	2.3	3
28	Peixoto's Theorem for vector fields on $S^2$ with impasse points. <i>Bulletin Des Sciences Mathematiques</i> , 2013, 137, 691-704.	1.0	2
29	Quadratic Planar Systems with Two Parallel Invariant Straight Lines. <i>Qualitative Theory of Dynamical Systems</i> , 2009, 7, 295-316.	1.7	1
30	On the periodic solutions of the static, spherically symmetric Einstein-Yang-Mills equations. <i>Journal of Mathematical Physics</i> , 2012, 53, 122703.	1.1	1
31	Discussion on the limit cycles of the Lev Ginzburg equation by M. Bellamy and R.E. Mickens, <i>Journal of Sound and Vibration</i> 308 (2007) 337-342. <i>Journal of Sound and Vibration</i> , 2012, 331, 5168-5170.	3.9	1
32	No periodic orbits for the type A Bianchi's systems. <i>Journal of Nonlinear Mathematical Physics</i> , 2015, 22, 170.	1.3	1
33	Bifurcation of limit cycles from a non-smooth perturbation of a two-dimensional isochronous cylinder. <i>Bulletin Des Sciences Mathematiques</i> , 2016, 140, 519-540.	1.0	1
34	Center boundaries for planar piecewise-smooth differential equations with two zones. <i>Journal of Mathematical Analysis and Applications</i> , 2017, 445, 631-649.	1.0	1
35	Periodic orbits of a Hamiltonian system related with the Friedmann-Robertson-Walker system in rotating coordinates. <i>Physica D: Nonlinear Phenomena</i> , 2020, 413, 132673.	2.8	1
36	The local period function for Hamiltonian systems with applications. <i>Journal of Differential Equations</i> , 2021, 280, 590-617.	2.2	1

#	ARTICLE	IF	CITATIONS
37	Regularization of saddle-fold singularity for nonsmooth differential systems. Journal of Mathematical Analysis and Applications, 2019, 474, 1036-1048.	1.0	0
38	On the dynamics of the Euler equations on $so(4)$ . Dynamical Systems, 2020, 35, 361-368.	0.4	0
39	Centers and Limit Cycles of Vector Fields Defined on Invariant Spheres. Journal of Nonlinear Science, 2021, 31, 1.	2.1	0
40	Reversible Hamiltonian Liapunov center theorem. Discrete and Continuous Dynamical Systems - Series B, 2004, 5, 51-66.	0.9	0