

Enrique Ponce

List of Publications by Year in descending order

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101
papers

2,237
citations

201385

27
h-index

253896

43
g-index

105
all docs

105
docs citations

105
times ranked

564
citing authors

#	ARTICLE	IF	CITATIONS
1	On normal forms and return maps for pseudo-focus points. Journal of Mathematical Analysis and Applications, 2022, 507, 125774.	0.5	1
2	Bifurcation set for a disregarded Bogdanov-Takens unfolding: Application to 3D cubic memristor oscillators. Nonlinear Dynamics, 2021, 104, 1657-1675.	2.7	2
3	Limit cycles from a monodromic infinity in planar piecewise linear systems. Journal of Mathematical Analysis and Applications, 2021, 496, 124818.	0.5	4
4	Dynamic analysis of self-oscillating H-bridge inverters with state feedback. Journal of the Franklin Institute, 2020, 357, 494-521.	1.9	3
5	Bifurcations from a center at infinity in 3D piecewise linear systems with two zones. Physica D: Nonlinear Phenomena, 2020, 402, 132280.	1.3	4
6	Periodic Orbit Bifurcations in Planar Hysteretic Systems without Equilibria. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2020, 30, 2030016.	0.7	0
7	Hopf bifurcation at infinity in 3D symmetric piecewise linear systems. Application to a Bonhoeffer-van der Pol oscillator. Nonlinear Analysis: Real World Applications, 2020, 54, 103112.	0.9	10
8	Bifurcation Analysis in a Self-Oscillating Series Resonant Converter. , 2020, , 15-28.		0
9	A direct transition to chaos in hysteretic systems with focus dynamics. Chaos, 2019, 29, 103111.	1.0	1
10	Periodic orbits in hysteretic systems with real eigenvalues. Nonlinear Dynamics, 2019, 97, 2557-2578.	2.7	2
11	Delay effects on the limit cycling behavior in resonant inverters with state feedback. Nonlinear Theory and Its Applications IEICE, 2019, 10, 337-356.	0.4	2
12	On the Teixeira singularity bifurcation in a DC-DC power electronic converter. Nonlinear Dynamics, 2019, 96, 1243-1266.	2.7	12
13	Suppression of Undesired Attractors in a Self-Oscillating H-Bridge Parallel Resonant Converters Under Zero Current Switching Control. IEEE Transactions on Circuits and Systems II: Express Briefs, 2019, 66, 692-696.	2.2	7
14	Two Limit Cycles in Liénard Piecewise Linear Differential Systems. Journal of Nonlinear Science, 2019, 29, 1499-1522.	1.0	14
15	Nonlinear Dynamic Modeling and Analysis of Self-Oscillating H-Bridge Parallel Resonant Converter Under Zero Current Switching Control: Unveiling Coexistence of Attractors. IEEE Transactions on Circuits and Systems I: Regular Papers, 2019, 66, 1657-1667.	3.5	8
16	The boundary focus-saddle bifurcation in planar piecewise linear systems. Application to the analysis of memristor oscillators. Nonlinear Analysis: Real World Applications, 2018, 43, 495-514.	0.9	19
17	Revisiting the Teixeira Singularity Bifurcation Analysis: Application to the Control of Power Converters. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2018, 28, 1850106.	0.7	16
18	A multiple focus-center-cycle bifurcation in 4D discontinuous piecewise linear memristor oscillators. Nonlinear Dynamics, 2018, 94, 3011-3028.	2.7	7

#	ARTICLE	IF	CITATIONS
19	Limit cycle bifurcations in resonant LC power inverters under zero current switching strategy. <i>Nonlinear Dynamics</i> , 2018, 91, 1145-1161.	2.7	12
20	Limit Cycle Bifurcation from a Persistent Center at Infinity in 3D Piecewise Linear Systems with Two Zones. <i>Trends in Mathematics</i> , 2017, , 55-58.	0.1	1
21	On Discontinuous Piecewise Linear Models for Memristor Oscillators. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 2017, 27, 1730022.	0.7	15
22	Analysis of coexisting solutions and control of their bifurcations in a parallel LC resonant inverter. , 2017, , .		2
23	Sliding bifurcations in resonant inverters. , 2017, , .		1
24	Unravelling the dynamical richness of 3D canonical memristor oscillators. <i>Microelectronic Engineering</i> , 2017, 182, 15-24.	1.1	9
25	Bifurcation Analysis of Hysteretic Systems with Saddle Dynamics. <i>Applied Mathematics and Nonlinear Sciences</i> , 2017, 2, 449-464.	0.9	18
26	Bifurcation Analysis of a DC-DC Bidirectional Power Converter Operating with Constant Power Loads. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 2016, 26, 1630010.	0.7	19
27	Canards, Folded Nodes, and Mixed-Mode Oscillations in Piecewise-Linear Slow-Fast Systems. <i>SIAM Review</i> , 2016, 58, 653-691.	4.2	46
28	Jump bifurcations in some degenerate planar piecewise linear differential systems with three zones. <i>Physica D: Nonlinear Phenomena</i> , 2016, 325, 74-85.	1.3	27
29	A Simple Solution to the Braga-Mello Conjecture. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 2015, 25, 1550009.	0.7	34
30	Limit Cycle and Boundary Equilibrium Bifurcations in Continuous Planar Piecewise Linear Systems. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 2015, 25, 1530008.	0.7	27
31	Uniqueness and Non-uniqueness of Limit Cycles for Piecewise Linear Differential Systems with Three Zones and No Symmetry. <i>Journal of Nonlinear Science</i> , 2015, 25, 861-887.	1.0	37
32	On the critical crossing cycle bifurcation in planar Filippov systems. <i>Journal of Differential Equations</i> , 2015, 259, 7086-7107.	1.1	37
33	Nonlinear Analysis of Interconnected Power Converters: A Case Study. <i>IEEE Journal on Emerging and Selected Topics in Circuits and Systems</i> , 2015, 5, 326-335.	2.7	56
34	A general mechanism to generate three limit cycles in planar Filippov systems with two zones. <i>Nonlinear Dynamics</i> , 2014, 78, 251-263.	2.7	109
35	The discontinuous matching of two planar linear foci can have three nested crossing limit cycles. <i>Publicacions Matemàtiques</i> , 2014, EXTRA, 221-253.	0.2	55
36	Piecewise Linear Analogue of Hopf-Zero Bifurcation in an Extended BVP Oscillator. <i>SEMA SIMAI Springer Series</i> , 2014, , 113-121.	0.4	0

#	ARTICLE	IF	CITATIONS
37	Sliding mode control of interconnected power electronic converters in DC microgrids. , 2013, , .		10
38	On the existence and uniqueness of limit cycles in planar continuous piecewise linear systems without symmetry. Nonlinear Analysis: Real World Applications, 2013, 14, 2002-2012.	0.9	89
39	Unfolding the fold-Hopf bifurcation in piecewise linear continuous differential systems with symmetry. Physica D: Nonlinear Phenomena, 2013, 250, 34-46.	1.3	15
40	Algebraically computable piecewise linear nodal oscillators. Applied Mathematics and Computation, 2013, 219, 4194-4207.	1.4	3
41	Canards in piecewise-linear systems: explosions and super-explosions. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2013, 469, 20120603.	1.0	28
42	A Hopf-Zero Degenerated Case in Symmetric Piecewise Linear Systems. Springer Proceedings in Mathematics and Statistics, 2013, , 325-333.	0.1	2
43	Planar Filippov Systems with Maximal Crossing Set and Piecewise Linear Focus Dynamics. Springer Proceedings in Mathematics and Statistics, 2013, , 221-232.	0.1	4
44	Canonical Discontinuous Planar Piecewise Linear Systems. SIAM Journal on Applied Dynamical Systems, 2012, 11, 181-211.	0.7	155
45	Nonlinear control of dc-dc bidirectional converters in stand-alone dc Microgrids. , 2012, , .		45
46	Rate-limiter stability analysis comparing bifurcation and LMI-based approaches. , 2011, , .		0
47	Sliding Dynamics Bifurcations in the Control of Boost Converters*. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2011, 44, 13293-13298.	0.4	3
48	Control of interconnected power electronic converters in dc distribution systems. , 2011, , .		21
49	Algebraic determination of limit cycles in a family of three-dimensional piecewise linear differential systems. Nonlinear Analysis: Theory, Methods & Applications, 2011, 74, 6712-6727.	0.6	10
50	On Double Boundary Equilibrium Bifurcations in Piecewise Smooth Planar Systems. Qualitative Theory of Dynamical Systems, 2011, 10, 277-301.	0.8	12
51	Sliding Mode Controllers Design through Bifurcation Analysis *. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2010, 43, 1284-1289.	0.4	4
52	On the fold-Hopf bifurcation for continuous piecewise linear differential systems with symmetry. Chaos, 2010, 20, 033119.	1.0	9
53	On the robustness of the DC-DC boost converter under washout SMC. , 2009, , .		9
54	FOLLOWING A SADDLE-NODE OF PERIODIC ORBITS' BIFURCATION CURVE IN CHUA'S CIRCUIT. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2009, 19, 487-495.	0.7	9

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55	ON PERIODIC ORBITS OF 3D SYMMETRIC PIECEWISE LINEAR SYSTEMS WITH REAL TRIPLE EIGENVALUES. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2009, 19, 2391-2399.	0.7	7
56	Chaos through Sliding Bifurcations in a Boost Converter under a SMC Strategy*. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2009, 42, 279-284.	0.4	4
57	BISTABILITY AND HYSTERESIS IN SYMMETRIC 3D PIECEWISE LINEAR OSCILLATORS WITH THREE ZONES. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2008, 18, 3633-3645.	0.7	6
58	NONHYPERBOLIC BOUNDARY EQUILIBRIUM BIFURCATIONS IN PLANAR FILIPPOV SYSTEMS: A CASE STUDY APPROACH. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2008, 18, 1377-1392.	0.7	45
59	On the existence and uniqueness of limit cycles in LiÄ©nard differential equations allowing discontinuities. Nonlinearity, 2008, 21, 2121-2142.	0.6	54
60	HORSESHOES NEAR HOMOCLINIC ORBITS FOR PIECEWISE LINEAR DIFFERENTIAL SYSTEMS IN \mathbb{R}^3 . International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2007, 17, 1171-1184.	0.7	49
61	A BIPARAMETRIC BIFURCATION IN 3D CONTINUOUS PIECEWISE LINEAR SYSTEMS WITH TWO ZONES: APPLICATION TO CHUA'S CIRCUIT. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2007, 17, 445-457.	0.7	22
62	Some Recent Results for Continuous Switched Linear Systems. , 2006, , .		3
63	A NEW METHODOLOGY FOR LIMIT CYCLE BIFURCATION FROM INFINITY IN N-DIMENSIONAL SYMMETRIC PIECEWISE LINEAR CONTROL SYSTEMS. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2006, 39, 215-220.	0.4	2
64	LIMIT CYCLE BIFURCATION INDUCED BY RATE-LIMITERS IN THE FEEDBACK LOOP. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2006, 39, 209-214.	0.4	2
65	DYNAMICAL COMPLEXITY NEAR NON-CONTROLLABLE 3D PIECEWISE LINEAR LUR'E SYSTEMS. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2006, 39, 439-444.	0.4	0
66	The continuous matching of two stable linear systems can be unstable. Discrete and Continuous Dynamical Systems, 2006, 16, 689-703.	0.5	37
67	Some Recent Results for Continuous Switched Linear Systems. , 2006, , .		1
68	Bifurcation Phenomena in Elementary Takagi-Sugeno Fuzzy Systems. , 2006, , 285-315.		0
69	LIMIT CYCLE BIFURCATION IN SISO CONTROL SYSTEMS WITH SATURATION. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2005, 38, 646-651.	0.4	1
70	INSTABILITY IN THE SIMPLEST CLASS OF CONTINUOUS SWITCHED LINEAR SYSTEMS WITH STABLE COMPONENTS. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2005, 38, 79-84.	0.4	2
71	BIFURCATION ANALYSIS OF A ROTATING ARM WITH SATURATED HAMILTONIAN CONTROL LAWS. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2005, 15, 3223-3243.	0.7	0
72	The Focus-Center-Limit Cycle Bifurcation in Symmetric 3D Piecewise Linear Systems. SIAM Journal on Applied Mathematics, 2005, 65, 1933-1951.	0.8	41

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73	BIFURCATION OF INVARIANT CONES IN PIECEWISE LINEAR HOMOGENEOUS SYSTEMS. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2005, 15, 2469-2484.	0.7	48
74	Stabilization of oscillations through backstepping in high-dimensional systems. IEEE Transactions on Automatic Control, 2005, 50, 705-710.	3.6	45
75	LIMIT CYCLE BIFURCATION IN 3D CONTINUOUS PIECEWISE LINEAR SYSTEMS WITH TWO ZONES: APPLICATION TO CHUA'S CIRCUIT. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2005, 15, 3153-3164.	0.7	44
76	Invariant manifolds of periodic orbits for piecewise linear three-dimensional systems. IMA Journal of Applied Mathematics, 2004, 69, 71-91.	0.8	16
77	A PIECEWISE LINEAR ELECTRONIC CIRCUIT WITH A MULTIPLICITY OF BIFURCATIONS. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2004, 14, 3871-3881.	0.7	5
78	Existence of piecewise linear differential systems with exactly n limit cycles for all. Nonlinear Analysis: Theory, Methods & Applications, 2003, 54, 977-994.	0.6	20
79	PIECEWISE LINEAR FEEDBACK SYSTEMS WITH ARBITRARY NUMBER OF LIMIT CYCLES. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2003, 13, 895-904.	0.7	18
80	The describing function method accuracy in first order plants with rate-limited feedback. , 2003, , .		2
81	On simplifying and classifying piecewise-linear systems. IEEE Transactions on Circuits and Systems Part 1: Regular Papers, 2002, 49, 609-620.	0.1	80
82	BIFURCATION SETS OF SYMMETRICAL CONTINUOUS PIECEWISE LINEAR SYSTEMS WITH THREE ZONES. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2002, 12, 1675-1702.	0.7	31
83	Local and global bifurcations in simple Takagi-Sugeno fuzzy systems. IEEE Transactions on Fuzzy Systems, 2001, 9, 355-368.	6.5	17
84	Bifurcation Analysis of an Inverted Pendulum with Saturated Hamiltonian Control Laws. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2000, 33, 173-174.	0.4	1
85	A frequency-domain approach to bifurcations in control systems with saturation. International Journal of Systems Science, 2000, 31, 1261-1271.	3.7	7
86	LIMIT CYCLE BIFURCATION FROM CENTER IN SYMMETRIC PIECEWISE-LINEAR SYSTEMS. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 1999, 09, 895-907.	0.7	62
87	BIFURCATION ANALYSIS OF TIME-DELAY CONTROL SYSTEMS WITH SATURATION. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 1999, 09, 1089-1109.	0.7	12
88	Bifurcation of a periodic orbit from infinity in planar piecewise linear vector fields. Nonlinear Analysis: Theory, Methods & Applications, 1999, 36, 623-653.	0.6	28
89	Hypernormal form calculation for triple-zero degeneracies. Bulletin of the Belgian Mathematical Society - Simon Stevin, 1999, 6, .	0.1	27
90	Bifurcation Sets of Continuous Piecewise Linear Systems with Two Zones. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 1998, 08, 2073-2097.	0.7	214

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91	Limit cycles of polynomial Liénard systems. <i>Physical Review E</i> , 1998, 58, 5185-5187.	0.8	12
92	Behavior patterns of logistic models with a delay. <i>Mathematics and Computers in Simulation</i> , 1997, 44, 123-141.	2.4	4
93	Hopf-like bifurcations in planar piecewise linear systems. <i>Publicacions Matemàtiques</i> , 1997, 41, 135-148.	0.2	38
94	Global first harmonic bifurcation diagram for odd piecewise linear control systems. <i>Dynamical Systems</i> , 1996, 11, 49-88.	0.7	25
95	A case study for homoclinic chaos in an autonomous electronic circuit. <i>Physica D: Nonlinear Phenomena</i> , 1993, 62, 230-253.	1.3	59
96	A Method for Homoclinic and Heteroclinic Continuation in Two and Three Dimensions. , 1990, , 197-210.		12
97	Route to chaos via strange non-chaotic attractors. <i>Journal of Physics A</i> , 1990, 23, L383-L387.	1.6	44
98	Symbolic Computation and Bifurcation Methods. , 1990, , 105-122.		1
99	Order through fluctuations, and systems dynamics models. <i>Environment and Planning B: Planning and Design</i> , 1985, 12, 103-112.	1.7	4
100	Bifurcation analysis of low-order nonlinear control systems with delay. , 0, , .		2
101	Bifurcation Phenomena in Elementary Takagi-Sugeno Fuzzy Systems. , 0, , 285-315.		0