

Pei Yu

List of Publications by Year in descending order

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109
papers

2,251
citations

236612

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all docs

110
docs citations

110
times ranked

919
citing authors

#	ARTICLE	IF	CITATIONS
1	Study of hidden attractors, multiple limit cycles from Hopf bifurcation and boundedness of motion in the generalized hyperchaotic Rabinovich system. <i>Nonlinear Dynamics</i> , 2015, 82, 131-141.	2.7	120
2	HOPF BIFURCATION CONTROL USING NONLINEAR FEEDBACK WITH POLYNOMIAL FUNCTIONS. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 2004, 14, 1683-1704.	0.7	106
3	Normal Forms, Melnikov Functions and Bifurcations of Limit Cycles. <i>Applied Mathematical Sciences (Switzerland)</i> , 2012, , .	0.4	86
4	Bifurcation analysis of an SIRS epidemic model with a generalized nonmonotone and saturated incidence rate. <i>Journal of Differential Equations</i> , 2019, 267, 1859-1898.	1.1	83
5	HOPF BIFURCATIONS FOR NEAR-HAMILTONIAN SYSTEMS. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 2009, 19, 4117-4130.	0.7	80
6	Analysis on Double Hopf Bifurcation Using Computer Algebra with the Aid of Multiple Scales. <i>Nonlinear Dynamics</i> , 2002, 27, 19-53.	2.7	71
7	Vibration analysis on a thin plate with the aid of computation of normal forms. <i>International Journal of Non-Linear Mechanics</i> , 2001, 36, 597-627.	1.4	62
8	Global Dynamics of a Parametrically and Externally Excited Thin Plate. <i>Nonlinear Dynamics</i> , 2001, 24, 245-268.	2.7	60
9	DELAY-INDUCED BIFURCATIONS IN A NONAUTONOMOUS SYSTEM WITH DELAYED VELOCITY FEEDBACKS. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 2004, 14, 2777-2798.	0.7	59
10	Bifurcation of limit cycles at infinity in piecewise polynomial systems. <i>Nonlinear Analysis: Real World Applications</i> , 2018, 41, 82-106.	0.9	57
11	CHAOTIFICATION OF DISCRETE DYNAMICAL SYSTEMS IN BANACH SPACES. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 2006, 16, 2615-2636.	0.7	48
12	Globally exponentially attractive sets of the family of Lorenz systems. <i>Science in China Series F: Information Sciences</i> , 2008, 51, 283-292.	1.1	43
13	Aeroelasticity of Time-Delayed Feedback Control of Two-Dimensional Supersonic Lifting Surfaces. <i>Journal of Guidance, Control, and Dynamics</i> , 2004, 27, 795-803.	1.6	40
14	GLOBALLY ATTRACTIVE AND POSITIVE INVARIANT SET OF THE LORENZ SYSTEM. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 2006, 16, 757-764.	0.7	40
15	Symbolic computation of normal forms for semi-simple cases. <i>Journal of Computational and Applied Mathematics</i> , 1999, 102, 195-220.	1.1	36
16	Spectral sequences and parametric normal forms. <i>Journal of Differential Equations</i> , 2012, 252, 1003-1031.	1.1	36
17	Twelve limit cycles around a singular point in a planar cubic-degree polynomial system. <i>Communications in Nonlinear Science and Numerical Simulation</i> , 2014, 19, 2690-2705.	1.7	36
18	Bi-center problem and bifurcation of limit cycles from nilpotent singular points in Z_2 -equivariant cubic vector fields. <i>Journal of Differential Equations</i> , 2018, 265, 4965-4992.	1.1	36

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19	Viral Blips May Not Need a Trigger: How Transient Viremia Can Arise in Deterministic In-Host Models. <i>SIAM Review</i> , 2014, 56, 127-155.	4.2	34
20	NEW ESTIMATIONS FOR GLOBALLY ATTRACTIVE AND POSITIVE INVARIANT SET OF THE FAMILY OF THE LORENZ SYSTEMS. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 2006, 16, 3383-3390.	0.7	33
21	Center conditions in a switching Bautin system. <i>Journal of Differential Equations</i> , 2015, 259, 1203-1226.	1.1	33
22	AN EXPLICIT RECURSIVE FORMULA FOR COMPUTING THE NORMAL FORM AND CENTER MANIFOLD OF GENERAL n-DIMENSIONAL DIFFERENTIAL SYSTEMS ASSOCIATED WITH HOPF BIFURCATION. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 2013, 23, 1350104.	0.7	28
23	Computation of focus values with applications. <i>Nonlinear Dynamics</i> , 2008, 51, 409-427.	2.7	27
24	Dynamics of an HIV-1 therapy model of fighting a virus with another virus. <i>Journal of Biological Dynamics</i> , 2009, 3, 387-409.	0.8	26
25	Bifurcation analysis in a model of cytotoxic T-lymphocyte response to viral infections. <i>Nonlinear Analysis: Real World Applications</i> , 2012, 13, 64-77.	0.9	26
26	Modeling and Analysis of Recurrent Autoimmune Disease. <i>SIAM Journal on Applied Mathematics</i> , 2014, 74, 1998-2025.	0.8	26
27	FOUR LIMIT CYCLES FROM PERTURBING QUADRATIC INTEGRABLE SYSTEMS BY QUADRATIC POLYNOMIALS. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 2012, 22, 1250254.	0.7	25
28	Bifurcation analysis on a class of Z_2 -equivariant cubic switching systems showing eighteen limit cycles. <i>Journal of Differential Equations</i> , 2019, 266, 1221-1244.	1.1	25
29	STUDY OF GLOBALLY EXPONENTIAL SYNCHRONIZATION FOR THE FAMILY OF $R\tilde{A}$ -SSLER SYSTEMS. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 2006, 16, 2395-2406.	0.7	24
30	Small-amplitude limit cycles of polynomial Liénard systems. <i>Science China Mathematics</i> , 2013, 56, 1543-1556.	0.8	24
31	BIFURCATION OF LIMIT CYCLES IN Z_{10} -EQUIVARIANT VECTOR FIELDS OF DEGREE 9. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 2006, 16, 2309-2324.	0.7	23
32	Double Hopf Bifurcations and Chaos of a Nonlinear Vibration System. <i>Nonlinear Dynamics</i> , 1999, 19, 313-332.	2.7	21
33	A matching pursuit technique for computing the simplest normal forms of vector fields. <i>Journal of Symbolic Computation</i> , 2003, 35, 591-615.	0.5	21
34	Four small limit cycles around a Hopf singular point in 3-dimensional competitive Lotka-Volterra systems. <i>Journal of Mathematical Analysis and Applications</i> , 2016, 436, 521-555.	0.5	21
35	Bifurcation Analysis of a Mosquito Population Model with a Saturated Release Rate of Sterile Mosquitoes. <i>SIAM Journal on Applied Dynamical Systems</i> , 2019, 18, 939-972.	0.7	21
36	EXISTENCE CONDITIONS OF THIRTEEN LIMIT CYCLES IN A CUBIC SYSTEM. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 2010, 20, 2569-2577.	0.7	20

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37	An explicit recursive formula for computing the normal forms associated with semisimple cases. Communications in Nonlinear Science and Numerical Simulation, 2014, 19, 2294-2308.	1.7	20
38	Ten limit cycles around a center-type singular point in a 3-d quadratic system with quadratic perturbation. Applied Mathematics Letters, 2015, 44, 17-20.	1.5	20
39	Center and isochronous center conditions for switching systems associated with elementary singular points. Communications in Nonlinear Science and Numerical Simulation, 2015, 28, 81-97.	1.7	20
40	Backward bifurcations, turning points and rich dynamics in simple disease models. Journal of Mathematical Biology, 2016, 73, 947-976.	0.8	20
41	Global Dynamics of a Susceptible-Infectious-Recovered Epidemic Model with a Generalized Nonmonotone Incidence Rate. Journal of Dynamics and Differential Equations, 2021, 33, 1625-1661.	1.0	20
42	Conditions for Transient Viremia in Deterministic in-Host Models: Viral Blips Need No Exogenous Trigger. SIAM Journal on Applied Mathematics, 2013, 73, 853-881.	0.8	19
43	Complex isochronous centers and linearization transformations for cubic Z_2 -equivariant planar systems. Journal of Differential Equations, 2020, 268, 3819-3847.	1.1	19
44	COMPETITIVE MODES AND THEIR APPLICATION. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2006, 16, 497-522.	0.7	18
45	AN APPLICATION OF REGULAR CHAIN THEORY TO THE STUDY OF LIMIT CYCLES. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2013, 23, 1350154.	0.7	18
46	Exact bound on the number of zeros of Abelian integrals for two hyper-elliptic Hamiltonian systems of degree 4. Journal of Differential Equations, 2019, 267, 7369-7384.	1.1	18
47	Analytical Solutions for a Family of Gaussian Impinging Jets. Journal of Applied Mechanics, Transactions ASME, 2008, 75, .	1.1	17
48	Hopf-zero bifurcation in a generalized Gopalsamy neural network model. Nonlinear Dynamics, 2012, 70, 1037-1050.	2.7	17
49	SYNCHRONIZATION AND STABILIZATION OF MULTI-SCROLL INTEGER AND FRACTIONAL ORDER CHAOTIC ATTRACTORS GENERATED USING TRIGONOMETRIC FUNCTIONS. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2013, 23, 1350145.	0.7	17
50	DOUBLE HOPF BIFURCATION IN DELAYED VAN DER POL'S DUFFING EQUATION. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2013, 23, 1350014.	0.7	17
51	Complex dynamics in biological systems arising from multiple limit cycle bifurcation. Journal of Biological Dynamics, 2016, 10, 263-285.	0.8	17
52	Global Existence and Uniqueness of Periodic Waves in a Population Model with Density-Dependent Migrations and Allee Effect. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2017, 27, 1750192.	0.7	16
53	GLOBALLY EXPONENTIAL HYPERCHAOS (LAG) SYNCHRONIZATION IN A FAMILY OF MODIFIED HYPERCHAOTIC RÅ-SSLER SYSTEMS. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2007, 17, 1759-1774.	0.7	15
54	Dynamical analysis and simulation of a 2-dimensional disease model with convex incidence. Communications in Nonlinear Science and Numerical Simulation, 2016, 37, 163-192.	1.7	15

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55	Bifurcation of ten small-amplitude limit cycles by perturbing a quadratic Hamiltonian system with cubic polynomials. <i>Journal of Differential Equations</i> , 2016, 260, 971-990.	1.1	15
56	Bifurcation of small limit cycles in cubic integrable systems using higher-order analysis. <i>Journal of Differential Equations</i> , 2018, 264, 5950-5976.	1.1	15
57	Integrability and linearizability of cubic Z2 systems with non-resonant singular points. <i>Journal of Differential Equations</i> , 2020, 269, 9026-9049.	1.1	15
58	Chapter 1 Bifurcation, Limit Cycle and Chaos of Nonlinear Dynamical Systems. Edited Series on Advances in Nonlinear Science and Complexity, 2006, 1, 1-125.	0.3	14
59	FORMAL DECOMPOSITION METHOD AND PARAMETRIC NORMAL FORMS. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 2010, 20, 3487-3515.	0.7	14
60	An Improvement on the Number of Limit Cycles Bifurcating from a Nondegenerate Center of Homogeneous Polynomial Systems. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 2018, 28, 1850078.	0.7	13
61	Complex Dynamics in a Unified SIR and HIV Disease Model: A Bifurcation Theory Approach. <i>Journal of Nonlinear Science</i> , 2019, 29, 2447-2500.	1.0	13
62	ANALYSIS ON THE GLOBALLY EXPONENT SYNCHRONIZATION OF CHUA'S CIRCUIT USING ABSOLUTE STABILITY THEORY. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 2005, 15, 3867-3881.	0.7	12
63	Bifurcation of limit cycles in a cubic-order planar system around a nilpotent critical point. <i>Journal of Mathematical Analysis and Applications</i> , 2017, 453, 645-667.	0.5	12
64	Bifurcation of small limit cycles in  overflow="scroll" xmlns:xocs="http://www.elsevier.com/xml/xocs/dtd" xmlns:xs="http://www.w3.org/2001/XMLSchema" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns="http://www.elsevier.com/xml/ja/dtd" xmlns:ja="http://www.elsevier.com/xml/ja/dtd" xmlns:mml="http://www.w3.org/1998/Math/MathML" xmlns:tb="http://www.elsevier.com/xml/common/table/dtd" xmlns:sb="http://www.elsevier.com/xml/common/struct-bib/dtd" xmlns:ce="http://www.elsevier.com"/> <i>Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 2017, 27, 1750043.	0.5	11
65	Double Hopf bifurcation in a container crane model with delayed position feedback. <i>Applied Mathematics and Computation</i> , 2013, 219, 9270-9281.	1.4	11
66	Limit cycle bifurcations near a double homoclinic loop with a nilpotent saddle of order m. <i>Journal of Differential Equations</i> , 2019, 266, 455-492.	1.1	11
67	Eighteen limit cycles around two symmetric foci in a cubic planar switching polynomial system. <i>Journal of Differential Equations</i> , 2021, 275, 939-959.	1.1	11
68	Bifurcation analysis in a recurrent neural network model with delays. <i>Communications in Nonlinear Science and Numerical Simulation</i> , 2013, 18, 351-372.	1.7	10
69	Equivalence of the MTS Method and CMR Method for Differential Equations Associated with Semisimple Singularity. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 2014, 24, 1450003.	0.7	10
70	Seven Limit Cycles Around a Focus Point in a Simple Three-Dimensional Quadratic Vector Field. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 2014, 24, 1450083.	0.7	10
71	Multistable Phenomena Involving Equilibria and Periodic Motions in Predator-Prey Systems. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 2017, 27, 1750043.	0.7	10
72	Centers and isochronous centers of a class of quasi-analytic switching systems. <i>Science China Mathematics</i> , 2018, 61, 1201-1218.	0.8	10

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73	Complex integrability and linearizability of cubic Z_2 -equivariant systems with two 1:q resonant singular points. <i>Journal of Differential Equations</i> , 2021, 300, 786-813.	1.1	10
74	DOUBLE-HOPF BIFURCATION IN AN OSCILLATOR WITH EXTERNAL FORCING AND TIME-DELAYED FEEDBACK CONTROL. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 2006, 16, 3523-3537.	0.7	9
75	Twelve Limit Cycles in 3D Quadratic Vector Fields with Z_3 Symmetry. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 2018, 28, 1850139.	0.7	9
76	BIFURCATION ANALYSIS ON AN HIV-1 MODEL WITH CONSTANT INJECTION OF RECOMBINANT. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 2012, 22, 1250062.	0.7	8
77	Dynamics of an HIV-1 infection model with cell mediated immunity. <i>Communications in Nonlinear Science and Numerical Simulation</i> , 2014, 19, 3827-3844.	1.7	8
78	Robust absolute stability of Lurie interval control systems. <i>International Journal of Robust and Nonlinear Control</i> , 2007, 17, 1669-1689.	2.1	7
79	Bifurcation of limit cycles in 3rd-order Hamiltonian planar vector fields with 3rd-order perturbations. <i>Communications in Nonlinear Science and Numerical Simulation</i> , 2013, 18, 978-988.	1.7	7
80	Bifurcation analysis on a class of three-dimensional quadratic systems with twelve limit cycles. <i>Applied Mathematics and Computation</i> , 2019, 363, 124577.	1.4	7
81	Center condition and bifurcation of limit cycles for quadratic switching systems with a nilpotent equilibrium point. <i>Journal of Differential Equations</i> , 2021, 303, 326-368.	1.1	7
82	The simplest parametrized normal forms of Hopf and generalized Hopf bifurcations. <i>Nonlinear Dynamics</i> , 2007, 50, 297-313.	2.7	6
83	Hopf and Generalized Hopf Bifurcations in a Recurrent Autoimmune Disease Model. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 2016, 26, 1650079.	0.7	6
84	Bifurcation of limit cycles at infinity in a class of switching systems. <i>Nonlinear Dynamics</i> , 2017, 88, 403-414.	2.7	6
85	Cyclicity of periodic annulus and Hopf cyclicity in perturbing a hyper-elliptic Hamiltonian system with a degenerate heteroclinic loop. <i>Journal of Differential Equations</i> , 2020, 269, 9224-9253.	1.1	6
86	Dynamical analysis on traveling wave of a reaction-diffusion model. <i>Applied Mathematics Letters</i> , 2020, 109, 106550.	1.5	5
87	The Impact of Prophage on the Equilibria and Stability of Phage and Host. <i>Journal of Nonlinear Science</i> , 2017, 27, 817-846.	1.0	4
88	Nine limit cycles around a singular point by perturbing a cubic Hamiltonian system with a nilpotent center. <i>Applied Mathematics and Computation</i> , 2017, 298, 141-152.	1.4	4
89	Bifurcation of Multiple Limit Cycles in an Epidemic Model on Adaptive Networks. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 2019, 29, 1950096.	0.7	4
90	Bifurcation analysis on the effect of store-operated and receptor-operated calcium channels for calcium oscillations in astrocytes. <i>Nonlinear Dynamics</i> , 2019, 97, 733-748.	2.7	4

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91	Modeling and analysis of recurrent autoimmune disease. <i>Nonlinear Analysis: Real World Applications</i> , 2020, 54, 103109.	0.9	4
92	Revealing the role of the effector-regulatory t cell loop on autoimmune disease symptoms via nonlinear analysis. <i>Communications in Nonlinear Science and Numerical Simulation</i> , 2021, 93, 105529.	1.7	4
93	On the Melnikov functions and limit cycles near a double homoclinic loop with a nilpotent saddle of order $m \geq 1$. <i>Journal of Differential Equations</i> , 2021, 291, 27-56.	1.1	4
94	Analysis and simulation of periodic and solitary waves in nonlinear dispersive-dissipative solids. <i>Communications in Nonlinear Science and Numerical Simulation</i> , 2021, 102, 105921.	1.7	4
95	Analysis of Zero-Hopf Bifurcation in Two Rössler Systems Using Normal Form Theory. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 2020, 30, 2030050.	0.7	4
96	Simple algebraic necessary and sufficient conditions for Lyapunov stability of a Chen system and their applications. <i>Transactions of the Institute of Measurement and Control</i> , 2018, 40, 2200-2210.	1.1	3
97	On the independent perturbation parameters and the number of limit cycles of a type of Liénard system. <i>Journal of Mathematical Analysis and Applications</i> , 2018, 464, 679-692.	0.5	3
98	A note on the paper "Center and isochronous center conditions for switching systems associated with elementary singular points". <i>Communications in Nonlinear Science and Numerical Simulation</i> , 2020, 90, 105405.	1.7	3
99	Bifurcation of Limit Cycles in Cubic Integrable Z_2 -Equivariant Planar Vector Fields. <i>Qualitative Theory of Dynamical Systems</i> , 2010, 9, 221-233.	0.8	2
100	The monotonicity of ratios of some Abelian integrals. <i>Bulletin Des Sciences Mathematiques</i> , 2021, 166, 102934.	0.5	2
101	Complex Dynamics Due to Multiple Limit Cycle Bifurcations in a Tritrophic Food Chain Model. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 2019, 29, 1950193.	0.7	1
102	Tristable Phenomenon in a Predator-Prey System Arising from Multiple Limit Cycles Bifurcation. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 2020, 30, 2050129.	0.7	1
103	Isolated periodic wave solutions arising from Hopf and Poincaré bifurcations in a class of single species model. <i>Journal of Differential Equations</i> , 2022, 311, 59-80.	1.1	1
104	A hierarchical parametric analysis on Hopf bifurcation of an epidemic model. <i>Discrete and Continuous Dynamical Systems - Series S</i> , 2023, 16, 708-724.	0.6	1
105	Periodic Solutions and Asymptotic Analysis of Ordinary Differential Equations. <i>Abstract and Applied Analysis</i> , 2014, 2014, 1-1.	0.3	0
106	Identifying weak focus and center in a convection model. <i>Applied Mathematics Letters</i> , 2020, 100, 106019.	1.5	0
107	Comparison of Methods for Computing Focus Values. <i>Applied Mathematical Sciences (Switzerland)</i> , 2012, , 59-79.	0.4	0
108	Visualization of Four Limit Cycles in Near-Integrable Quadratic Polynomial Systems. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 2020, 30, 2050236.	0.7	0

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109	Parameter identification on Abelian integrals to achieve Chebyshev property. Discrete and Continuous Dynamical Systems - Series B, 2020, .	0.5	0