Weinian Zhang

List of Publications by Year
in descending order

103 papers	1,366 citations	279798 23 h-index	434195 31 g-index
103 all docs	103 docs citations	103 times ranked	399 citing authors

#	ARTICLE	IF	CITATIONS
1	Discussion on the differentiable solutions of the iterated equation. Nonlinear Analysis: Theory, Methods & Applications, 1990, 15, 387-398.	1.1	64
2	Coexistence of Limit Cycles and Homoclinic Loops in a SIRS Model with a Nonlinear Incidence Rate. SIAM Journal on Applied Mathematics, 2008, 69, 621-639.	1.8	62
3	PM functions, their characteristic intervals and iterative roots. Annales Polonici Mathematici, 1996, 65, 119-128.	0.5	60
4	Iterative roots of piecewise monotonic functions of nonmonotonicity height not less than 2. Nonlinear Analysis: Theory, Methods & Applications, 2012, 75, 286-303.	1.1	48
5	Non-monotonic iterative roots extended from characteristic intervals. Journal of Mathematical Analysis and Applications, 2011, 378, 359-373.	1.0	39
6	Solutions of equivariance for a polynomial-like iterative equation. Proceedings of the Royal Society of Edinburgh Section A: Mathematics, 2000, 130, 1153-1163.	1.2	38
7	Chaotic and subharmonic oscillations of a nonlinear power system. IEEE Transactions on Circuits and Systems Part 2: Express Briefs, 2005, 52, 811-815.	2.2	37
8	Weak centers and bifurcation of critical periods in reversible cubic systems. Computers and Mathematics With Applications, 2000, 40, 771-782.	2.7	36
9	Characteristic solutions of polynomial-like iterative equations. Aequationes Mathematicae, 2004, 67, 80-105.	0.8	36
10	Construction of continuous solutions and stability for the polynomial-like iterative equation. Journal of Mathematical Analysis and Applications, 2007, 325, 1160-1170.	1.0	36
11	Decomposition of algebraic sets and applications to weak centers of cubic systems. Journal of Computational and Applied Mathematics, 2009, 232, 565-581.	2.0	36
12	Versal unfoldings of predator–prey systems with ratio-dependent functional response. Journal of Differential Equations, 2010, 249, 1410-1435.	2.2	32
13	On the sexual transmission dynamics of hepatitis B virus in China. Journal of Theoretical Biology, 2015, 369, 1-12.	1.7	32
14	Invariant curves for planar mappings. Journal of Difference Equations and Applications, 1997, 3, 147-168.	1.1	31
15	A note on iterative roots of PM functions. Journal of Mathematical Analysis and Applications, 2008, 341, 1482-1486.	1.0	30
16	Continuous solutions of a polynomial-like iterative equation with variable coefficients. Annales Polonici Mathematici, 2000, 73, 29-36.	0.5	29
17	Decreasing solutions and convex solutions of the polynomial-like iterative equation. Journal of Mathematical Analysis and Applications, 2007, 329, 483-497.	1.0	28
18	Equivalences between nonuniform exponential dichotomy and admissibility. Journal of Differential Equations, 2017, 262, 682-747.	2.2	28

#	ARTICLE	IF	CITATIONS
19	Qualitative analysis for recurrent neural networks with linear threshold transfer functions. IEEE Transactions on Circuits and Systems Part 1: Regular Papers, 2005, 52, 1003-1012.	0.1	27
20	Linearizability conditions of time-reversible quartic systems having homogeneous nonlinearities. Nonlinear Analysis: Theory, Methods & Applications, 2008, 69, 1525-1539.	1.1	26
21	Convex solutions of polynomial-like iterative equations. Journal of Mathematical Analysis and Applications, 2006, 315, 29-40.	1.0	25
22	Differentiability of the conjugacy in the Hartman-Grobman Theorem. Transactions of the American Mathematical Society, 2017, 369, 4995-5030.	0.9	25
23	Local bifurcations of critical periods for cubic Liénard equations with cubic damping. Journal of Computational and Applied Mathematics, 2008, 222, 404-410.	2.0	23
24	Linearizability and local bifurcation of critical periods in a cubic Kolmogorov system. Journal of Computational and Applied Mathematics, 2013, 245, 86-96.	2.0	23
25	Critical periods of perturbations of reversible rigidly isochronous centers. Journal of Differential Equations, 2011, 251, 1505-1525.	2.2	20
26	On Existence for Polynomial-Like Iterative Equations. Resultate Der Mathematik, 2004, 45, 185-194.	0.2	18
27	Sharpness for <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si1.gif" overflow="scroll"><mml:msup><mml:mrow><mml:mi>C</mml:mi></mml:mrow><mml:mrow><mml:mn>1</mml:mn></mml:mrow></mml:mrow> linearization of planar hyperbolic diffeomorphisms. Journal of Differential Equations, 2014, 257, 4470-4502.	2.2	18
28	Bounded solutions for non-autonomous parabolic equations. Dynamical Systems, 1996, 11, 109-120.	0.7	17
29	Computing iterative roots of polygonal functions. Journal of Computational and Applied Mathematics, 2007, 205, 497-508.	2.0	17
30	Sharp regularity of linearization for $$C^{1,1}$$ C 1 , 1 hyperbolic diffeomorphisms. Mathematische Annalen, 2014, 358, 69-113.	1.4	17
31	-Hölder linearization of hyperbolic diffeomorphisms with resonance. Ergodic Theory and Dynamical Systems, 2016, 36, 310-334.	0.6	17
32	Leading coefficient problem for polynomial-like iterative equations. Journal of Mathematical Analysis and Applications, 2009, 349, 413-419.	1.0	16
33	Identifying weak foci and centers in the Maxwell–Bloch system. Journal of Mathematical Analysis and Applications, 2015, 430, 549-571.	1.0	16
34	Smooth linearization of nonautonomous difference equations with a nonuniform dichotomy. Mathematische Zeitschrift, 2019, 292, 1175-1193.	0.9	15
35	Smooth linearization of nonautonomous differential equations with a nonuniform dichotomy. Proceedings of the London Mathematical Society, 2020, 121, 32-50.	1.3	14
36	Also set-valued functions do not like iterative roots. Elemente Der Mathematik, 2007, 62, 73-80.	0.1	14

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37	Bifurcations in a second-order difference equation from macroeconomicsâ€Supported by NSFC, TRAPOYT and MOE Research grants.. Journal of Difference Equations and Applications, 2008, 14, 91-104.	1.1	13
38	Continuity of iteration and approximation of iterative roots. Journal of Computational and Applied Mathematics, 2011, 235, 1232-1244.	2.0	13
39	Global Solutions for Leading Coefficient Problem of Polynomial-like Iterative Equations. Results in Mathematics, 2013, 63, 79-93.	0.8	13
40	Dynamics of epidemic models with asymptomatic infection and seasonal succession. Mathematical Biosciences and Engineering, 2017, 14, 1407-1424.	1.9	13
41	Local bifurcations of critical periods in a generalized 2D LV system. Applied Mathematics and Computation, 2009, 214, 17-25.	2.2	11
42	<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si1.gif" overflow="scroll"><mml:msup><mml:mi>C</mml:mi><mml:mn>1</mml:mn></mml:msup></mml:math> linearization for planar contractions. Journal of Functional Analysis, 2011, 260, 2043-2063.	1.4	11
43	Discussion on polynomials having polynomial iterative roots. Journal of Symbolic Computation, 2012, 47, 1154-1162.	0.8	11
44	Characteristic analysis for a polynomial-like iterative equation. Science Bulletin, 1998, 43, 192-196.	1.7	10
45	Koenigs embedding flow problem with global <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si1.gif" overflow="scroll"><mml:msup><mml:mi>C</mml:mi><mml:mn>1</mml:mn></mml:msup></mml:math> smoothness. Journal of Mathematical Analysis and Applications, 2011, 374, 633-643.	1.0	10
46	Linearizability conditions of a time-reversible quartic-like system. Journal of Mathematical Analysis and Applications, 2011, 383, 179-189.	1.0	10
47	Local <mml:math altimg="si1.gif" 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/xml/	1.0	10
48	On uniformity of exponential dichotomies for delay equations. Journal of Differential Equations, 2004, 204, 1-4.	2.2	8
49	Direct parametric analysis of an enzyme-catalyzed reaction model. IMA Journal of Applied Mathematics, 2011, 76, 876-898.	1.6	8
50	Construction of usc Solutions for a Multivalued Iterative Equation of Order n. Results in Mathematics, 2012, 62, 203-216.	0.8	8
51	Notes on stability of the generalized gamma functional equation. International Journal of Mathematics and Mathematical Sciences, 2002, 32, 57-63.	0.7	7
52	Exponential Dichotomies, the Fredholm Alternative, and Transverse Homoclinic Orbits in Partial Functional Differential Equations. Journal of Dynamics and Differential Equations, 2005, 17, 759-777.	1.9	7
53	Discontinuous function with continuous second iterate. Aequationes Mathematicae, 2014, 88, 243-266.	0.8	7
54	Control exponential growth of tumor cells with slow spread of oncolytic virus. Journal of Theoretical Biology, 2015, 367, 111-129.	1.7	7

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55	Open question on lower order iterative roots for PM functions. Journal of Difference Equations and Applications, 2018, 24, 825-847.	1.1	7
56	Dynamics of a Predator–Prey Model with Hunting Cooperation and Allee Effects in Predators. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2020, 30, 2050199.	1.7	7
57	Approximative dichotomy and persistence of nonuniformly normally hyperbolic invariant manifolds in Banach spaces. Journal of Differential Equations, 2021, 274, 35-126.	2.2	7
58	On The Polynomial-Like Iterative Functional Equation. , 2000, , 145-170.		7
59	Analytic Solutions of aq-Difference Equation and Applications to Iterative Equations*. Journal of Difference Equations and Applications, 2004, 10, 955-962.	1.1	6
60	A general class of iterative equations on the unit circle. Czechoslovak Mathematical Journal, 2007, 57, 809-829.	0.3	6
61	Invariant foliations for parabolic equations. Science in China Series A: Mathematics, 2000, 43, 357-370.	0.5	5
62	Finding Sum of Powers on Arithmetic Progressions with Application of Cauchy's Equation. Resultate Der Mathematik, 2002, 42, 277-288.	0.2	5
63	Planar Quadratic Degree-Preserving Maps and Their Iteration. Results in Mathematics, 2009, 55, 39-63.	0.8	5
64	Iterative Roots of Clenched Single-Plateau Functions. Results in Mathematics, 2017, 71, 15-43.	0.8	5
65	Subharmonic bifurcations in a perturbed nonlinear oscillation. Nonlinear Analysis: Theory, Methods & Applications, 2005, 61, 1057-1091.	1.1	4
66	Persistent centers of complex systems. Bulletin Des Sciences Mathematiques, 2014, 138, 110-123.	1.0	4
67	Smoothness repaired by iteration. Aequationes Mathematicae, 2015, 89, 829-848.	0.8	4
68	Local Bifurcations of the Enzyme-Catalyzed Reaction Comprising a Branched Network. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2015, 25, 1550081.	1.7	4
69	Invariant curves for a second-order difference equation modelled from macroeconomics. Journal of Difference Equations and Applications, 2015, 21, 757-773.	1.1	4
70	On invariant manifolds and invariant foliations without a spectral gap. Advances in Mathematics, 2016, 303, 549-610.	1.1	4
71	Notes on a Functional Equation Related to Invariant Curves. Journal of Difference Equations and Applications, 2003, 9, 247-255.	1.1	3
72	ON THE PERIODICITY OF AN IMPLICIT DIFFERENCE EQUATION WITH DISCONTINUITY: ANALYSIS AND SIMULATIONS. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2006, 16, 1599-1608.	1.7	3

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73	On a class of iterative-difference equations. Journal of Difference Equations and Applications, 2010, 16, 1237-1255.	1.1	3
74	Real polynomial iterative roots in the case of nonmonotonicity height â©¾ 2. Science China Mathematics, 2012, 55, 2433-2446.	1.7	3
75	Iterative learning control for a class of nonâ€affineâ€inâ€input processes in Hilbert space. International Journal of Adaptive Control and Signal Processing, 2014, 28, 40-51.	4.1	3
76	Conditions for polynomial LiÃ©nard centers. Science China Mathematics, 2016, 59, 411-424.	1.7	3
77	Conjugation of Rational Functions to Power Functions and Applications to Iteration. Results in Mathematics, 2018, 73, 1.	0.8	3
78	Smoothness of invariant manifolds and foliations for infinite dimensional random dynamical systems. Science China Mathematics, 2020, 63, 1877-1912.	1.7	3
79	Bogdanov-Takens bifurcations in the enzyme-catalyzed reaction comprising a branched network. Mathematical Biosciences and Engineering, 2017, 14, 1499-1514.	1.9	3
80	Continuous solutions of an iterative-difference equation and Brillouet-Belluot's problem. Publicationes Mathematicae, 2011, 78, 613-624.	0.2	3
81	Admissibility and nonuniform exponential dichotomies. Journal of Differential Equations, 2022, 326, 201-226.	2.2	3
82	On closed orbit for a class of planar systems of high degree. Acta Mathematicae Applicatae Sinica, 1997, 13, 395-404.	0.7	2
83	Regular and irregular solutions of a system of functional equations. Aequationes Mathematicae, 2006, 72, 27-40.	0.8	2
84	Persistence of bounded solutions to degenerate Sobolev-Galpern equations. Science China Mathematics, 2010, 53, 2831-2846.	1.7	2
85	A projected discrete Gronwall's inequality with sub-exponential growth. Journal of Difference Equations and Applications, 2010, 16, 931-943.	1.1	2
86	BOUNDED TRAVELING WAVES OF THE GENERALIZED BURGERSâ€"FISHER EQUATION. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2013, 23, 1350054.	1.7	2
87	Versal unfolding of planar Hamiltonian systems at fully degenerate equilibrium. Journal of Differential Equations, 2016, 261, 236-272.	2.2	2
88	C1 Hartman Theorem for random dynamical systems. Advances in Mathematics, 2020, 375, 107375.	1.1	2
89	Iterative roots of type $ \mathcal {T}_2 $. Discrete and Continuous Dynamical Systems, 2022, 42, 4965.	0.9	2
90	Non-isochronicity of the center in polynomial Hamiltonian systems. Nonlinear Analysis: Theory, Methods & Applications, 2010, 73, 228-243.	1.1	1

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91	Identification of focus and center in a 3-dimensional system. Discrete and Continuous Dynamical Systems - Series B, 2014, 19, 485-522.	0.9	1
92	Restricted independence in displacement function for better estimation of cyclicity. Journal of Differential Equations, 2017, 262, 5773-5791.	2.2	1
93	Reachability of maximal number of critical periods without independence. Journal of Differential Equations, 2020, 269, 9783-9803.	2.2	1
94	Continuous solutions of a second order iterative equation. Publicationes Mathematicae, 2018, 93, 303-321.	0.2	1
95	Iterative roots of exclusive multifunctions. Journal of Difference Equations and Applications, 2021, 27, 41-60.	1.1	1
96	Smoothness of $O(N)$-equivariant solutions of a polynomial-like iterative equation on R^N. Journal of Difference Equations and Applications, 2005, 11, 1005-1011.	1.1	0
97	Versal unfolding of a nilpotent Liénard equilibrium within the odd Liénard family. Journal of Differential Equations, 2019, 267, 2671-2685.	2.2	0
98	Estimation, dependence and stability of solutions of an iterative equation. Aequationes Mathematicae, 2019, 93, 59-77.	0.8	0
99	Bounded or unbounded solutions of a functional equation with nonautonomous iteration. Aequationes Mathematicae, 2020, 94, 259-275.	0.8	0
100	Flatness, plateau limit and limit length of single-plateau functions. Science China Mathematics, 2020, 64, 1757.	1.7	0
101	LOCAL GEOMETRIC STRUCTURES AND BIFURCATIONS OF A POLYNOMIAL DIFFERENTIAL SYSTEM FROM A GENERAL MULTI-MOLECULAR REACTION. , 2000, , .		0
102	USE SLOW-SPREAD OF ONCOLYTIC VIRUS TO DEPRESS EXPONENTIAL GROWTH OF TUMOR CELLS. Journal of Applied Analysis and Computation, 2022, 12, 1158-1185.	0.5	0
103	More degeneracy but fewer bifurcations in a predator–prey system having fully null linear part. Zeitschrift Fur Angewandte Mathematik Und Physik, 2022, 73, .	1.4	0