

# Weinian Zhang

## List of Publications by Year in descending order

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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	Admissibility and nonuniform exponential dichotomies. <i>Journal of Differential Equations</i> , 2022, 326, 201-226.	2.2	3
2	USE SLOW-SPREAD OF ONCOLYTIC VIRUS TO DEPRESS EXPONENTIAL GROWTH OF TUMOR CELLS. <i>Journal of Applied Analysis and Computation</i> , 2022, 12, 1158-1185.	0.5	0
3	More degeneracy but fewer bifurcations in a predator-prey system having fully null linear part. <i>Zeitschrift Fur Angewandte Mathematik Und Physik</i> , 2022, 73, .	1.4	0
4	Iterative roots of type $T_2$ . <i>Discrete and Continuous Dynamical Systems</i> , 2022, 42, 4965.	0.9	2
5	Approximative dichotomy and persistence of nonuniformly normally hyperbolic invariant manifolds in Banach spaces. <i>Journal of Differential Equations</i> , 2021, 274, 35-126.	2.2	7
6	Iterative roots of exclusive multifunctions. <i>Journal of Difference Equations and Applications</i> , 2021, 27, 41-60.	1.1	1
7	Smooth linearization of nonautonomous differential equations with a nonuniform dichotomy. <i>Proceedings of the London Mathematical Society</i> , 2020, 121, 32-50.	1.3	14
8	Bounded or unbounded solutions of a functional equation with nonautonomous iteration. <i>Aequationes Mathematicae</i> , 2020, 94, 259-275.	0.8	0
9	Reachability of maximal number of critical periods without independence. <i>Journal of Differential Equations</i> , 2020, 269, 9783-9803.	2.2	1
10	Flatness, plateau limit and limit length of single-plateau functions. <i>Science China Mathematics</i> , 2020, 64, 1757.	1.7	0
11	Dynamics of a Predator-Prey Model with Hunting Cooperation and Allee Effects in Predators. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 2020, 30, 2050199.	1.7	7
12	C1 Hartman Theorem for random dynamical systems. <i>Advances in Mathematics</i> , 2020, 375, 107375.	1.1	2
13	Smoothness of invariant manifolds and foliations for infinite dimensional random dynamical systems. <i>Science China Mathematics</i> , 2020, 63, 1877-1912.	1.7	3
14	Smooth linearization of nonautonomous difference equations with a nonuniform dichotomy. <i>Mathematische Zeitschrift</i> , 2019, 292, 1175-1193.	0.9	15
15	Versal unfolding of a nilpotent LiÅnard equilibrium within the odd LiÅnard family. <i>Journal of Differential Equations</i> , 2019, 267, 2671-2685.	2.2	0
16	Estimation, dependence and stability of solutions of an iterative equation. <i>Aequationes Mathematicae</i> , 2019, 93, 59-77.	0.8	0
17	Conjugation of Rational Functions to Power Functions and Applications to Iteration. <i>Results in Mathematics</i> , 2018, 73, 1.	0.8	3
18	Open question on lower order iterative roots for PM functions. <i>Journal of Difference Equations and Applications</i> , 2018, 24, 825-847.	1.1	7

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19	Continuous solutions of a second order iterative equation. <i>Publicationes Mathematicae</i> , 2018, 93, 303-321.	0.2	1
20	Differentiability of the conjugacy in the Hartman-Grobman Theorem. <i>Transactions of the American Mathematical Society</i> , 2017, 369, 4995-5030.	0.9	25
21	Iterative Roots of Clenched Single-Plateau Functions. <i>Results in Mathematics</i> , 2017, 71, 15-43.	0.8	5
22	Restricted independence in displacement function for better estimation of cyclicity. <i>Journal of Differential Equations</i> , 2017, 262, 5773-5791.	2.2	1
23	Equivalences between nonuniform exponential dichotomy and admissibility. <i>Journal of Differential Equations</i> , 2017, 262, 682-747.	2.2	28
24	Dynamics of epidemic models with asymptomatic infection and seasonal succession. <i>Mathematical Biosciences and Engineering</i> , 2017, 14, 1407-1424.	1.9	13
25	Bogdanov-Takens bifurcations in the enzyme-catalyzed reaction comprising a branched network. <i>Mathematical Biosciences and Engineering</i> , 2017, 14, 1499-1514.	1.9	3
26	Higher order linearization of hyperbolic diffeomorphisms with resonance. <i>Ergodic Theory and Dynamical Systems</i> , 2016, 36, 310-334.	0.6	17
27	Versal unfolding of planar Hamiltonian systems at fully degenerate equilibrium. <i>Journal of Differential Equations</i> , 2016, 261, 236-272.	2.2	2
28	On invariant manifolds and invariant foliations without a spectral gap. <i>Advances in Mathematics</i> , 2016, 303, 549-610.	1.1	4
29	Conditions for polynomial Liouville centers. <i>Science China Mathematics</i> , 2016, 59, 411-424.	1.7	3
30	On the sexual transmission dynamics of hepatitis B virus in China. <i>Journal of Theoretical Biology</i> , 2015, 369, 1-12.	1.7	32
31	Smoothness repaired by iteration. <i>Aequationes Mathematicae</i> , 2015, 89, 829-848.	0.8	4
32	Identifying weak foci and centers in the Maxwell-Bloch system. <i>Journal of Mathematical Analysis and Applications</i> , 2015, 430, 549-571.	1.0	16
33	Local Bifurcations of the Enzyme-Catalyzed Reaction Comprising a Branched Network. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 2015, 25, 1550081.	1.7	4
34	Invariant curves for a second-order difference equation modelled from macroeconomics. <i>Journal of Difference Equations and Applications</i> , 2015, 21, 757-773.	1.1	4
35	Control exponential growth of tumor cells with slow spread of oncolytic virus. <i>Journal of Theoretical Biology</i> , 2015, 367, 111-129.	1.7	7
36	Iterative learning control for a class of nonlinear input processes in Hilbert space. <i>International Journal of Adaptive Control and Signal Processing</i> , 2014, 28, 40-51.	4.1	3

#	ARTICLE	IF	CITATIONS
37	Sharp regularity of linearization for $C^{1,1}$ hyperbolic diffeomorphisms. <i>Mathematische Annalen</i> , 2014, 358, 69-113.	1.4	17
38	Discontinuous function with continuous second iterate. <i>Aequationes Mathematicae</i> , 2014, 88, 243-266.	0.8	7
39	Identification of focus and center in a 3-dimensional system. <i>Discrete and Continuous Dynamical Systems - Series B</i> , 2014, 19, 485-522.	0.9	1
40	Sharpness for linearization of planar hyperbolic diffeomorphisms. <i>Journal of Differential Equations</i> , 2014, 257, 4470-4502.	2.2	18
41	Persistent centers of complex systems. <i>Bulletin Des Sciences Mathematiques</i> , 2014, 138, 110-123.	1.0	4
42	Global Solutions for Leading Coefficient Problem of Polynomial-like Iterative Equations. <i>Results in Mathematics</i> , 2013, 63, 79-93.	0.8	13
43	BOUNDED TRAVELING WAVES OF THE GENERALIZED BURGERS-FISHER EQUATION. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 2013, 23, 1350054.	1.7	2
44	Linearizability and local bifurcation of critical periods in a cubic Kolmogorov system. <i>Journal of Computational and Applied Mathematics</i> , 2013, 245, 86-96.	2.0	23
45	Real polynomial iterative roots in the case of nonmonotonicity height $\geq 2$ . <i>Science China Mathematics</i> , 2012, 55, 2433-2446.	1.7	3
46	Construction of usc Solutions for a Multivalued Iterative Equation of Order $n$ . <i>Results in Mathematics</i> , 2012, 62, 203-216.	0.8	8
47	Discussion on polynomials having polynomial iterative roots. <i>Journal of Symbolic Computation</i> , 2012, 47, 1154-1162.	0.8	11
48	Iterative roots of piecewise monotonic functions of nonmonotonicity height not less than 2. <i>Nonlinear Analysis: Theory, Methods &amp; Applications</i> , 2012, 75, 286-303.	1.1	48
49	Local linearization of iterative roots of piecewise monotonic functions of nonmonotonicity height not less than 2. <i>Journal of Symbolic Computation</i> , 2012, 47, 1154-1162.	1.0	10
50	Continuity of iteration and approximation of iterative roots. <i>Journal of Computational and Applied Mathematics</i> , 2011, 235, 1232-1244.	2.0	13
51	Critical periods of perturbations of reversible rigidly isochronous centers. <i>Journal of Differential Equations</i> , 2011, 251, 1505-1525.	2.2	20
52	Linearization for planar contractions. <i>Journal of Functional Analysis</i> , 2011, 260, 2043-2063.	1.4	11
53	Koenigs embedding flow problem with global smoothness. <i>Journal of Mathematical Analysis and Applications</i> , 2011, 374, 633-643.	1.0	10
54	Non-monotonic iterative roots extended from characteristic intervals. <i>Journal of Mathematical Analysis and Applications</i> , 2011, 378, 359-373.	1.0	39

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55	Linearizability conditions of a time-reversible quartic-like system. <i>Journal of Mathematical Analysis and Applications</i> , 2011, 383, 179-189.	1.0	10
56	Direct parametric analysis of an enzyme-catalyzed reaction model. <i>IMA Journal of Applied Mathematics</i> , 2011, 76, 876-898.	1.6	8
57	Continuous solutions of an iterative-difference equation and Brillouet-Belluot's problem. <i>Publicationes Mathematicae</i> , 2011, 78, 613-624.	0.2	3
58	Non-isochronicity of the center in polynomial Hamiltonian systems. <i>Nonlinear Analysis: Theory, Methods &amp; Applications</i> , 2010, 73, 228-243.	1.1	1
59	Persistence of bounded solutions to degenerate Sobolev-Galpern equations. <i>Science China Mathematics</i> , 2010, 53, 2831-2846.	1.7	2
60	Versal unfoldings of predator-prey systems with ratio-dependent functional response. <i>Journal of Differential Equations</i> , 2010, 249, 1410-1435.	2.2	32
61	On a class of iterative-difference equations. <i>Journal of Difference Equations and Applications</i> , 2010, 16, 1237-1255.	1.1	3
62	A projected discrete Gronwall's inequality with sub-exponential growth. <i>Journal of Difference Equations and Applications</i> , 2010, 16, 931-943.	1.1	2
63	Planar Quadratic Degree-Preserving Maps and Their Iteration. <i>Results in Mathematics</i> , 2009, 55, 39-63.	0.8	5
64	Leading coefficient problem for polynomial-like iterative equations. <i>Journal of Mathematical Analysis and Applications</i> , 2009, 349, 413-419.	1.0	16
65	Local bifurcations of critical periods in a generalized 2D LV system. <i>Applied Mathematics and Computation</i> , 2009, 214, 17-25.	2.2	11
66	Decomposition of algebraic sets and applications to weak centers of cubic systems. <i>Journal of Computational and Applied Mathematics</i> , 2009, 232, 565-581.	2.0	36
67	A note on iterative roots of PM functions. <i>Journal of Mathematical Analysis and Applications</i> , 2008, 341, 1482-1486.	1.0	30
68	Local bifurcations of critical periods for cubic Liénard equations with cubic damping. <i>Journal of Computational and Applied Mathematics</i> , 2008, 222, 404-410.	2.0	23
69	Linearizability conditions of time-reversible quartic systems having homogeneous nonlinearities. <i>Nonlinear Analysis: Theory, Methods &amp; Applications</i> , 2008, 69, 1525-1539.	1.1	26
70	Coexistence of Limit Cycles and Homoclinic Loops in a SIRS Model with a Nonlinear Incidence Rate. <i>SIAM Journal on Applied Mathematics</i> , 2008, 69, 621-639.	1.8	62
71	Bifurcations in a second-order difference equation from macroeconomics—Supported by NSFC, TRAPOYT and MOE Research grants.. <i>Journal of Difference Equations and Applications</i> , 2008, 14, 91-104.	1.1	13
72	Computing iterative roots of polygonal functions. <i>Journal of Computational and Applied Mathematics</i> , 2007, 205, 497-508.	2.0	17

#	ARTICLE	IF	CITATIONS
73	A general class of iterative equations on the unit circle. Czechoslovak Mathematical Journal, 2007, 57, 809-829.	0.3	6
74	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
75	Decreasing solutions and convex solutions of the polynomial-like iterative equation. Journal of Mathematical Analysis and Applications, 2007, 329, 483-497.	1.0	28
76	Also set-valued functions do not like iterative roots. Elemente Der Mathematik, 2007, 62, 73-80.	0.1	14
77	Regular and irregular solutions of a system of functional equations. Aequationes Mathematicae, 2006, 72, 27-40.	0.8	2
78	Convex solutions of polynomial-like iterative equations. Journal of Mathematical Analysis and Applications, 2006, 315, 29-40.	1.0	25
79	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
80	Subharmonic bifurcations in a perturbed nonlinear oscillation. Nonlinear Analysis: Theory, Methods & Applications, 2005, 61, 1057-1091.	1.1	4
81	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
82	Smoothness of $O(N)$ -equivariant solutions of a polynomial-like iterative equation on $\mathbb{R}^N$ . Journal of Difference Equations and Applications, 2005, 11, 1005-1011.	1.1	0
83	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
84	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
85	Analytic Solutions of $aq$ -Difference Equation and Applications to Iterative Equations*. Journal of Difference Equations and Applications, 2004, 10, 955-962.	1.1	6
86	Characteristic solutions of polynomial-like iterative equations. Aequationes Mathematicae, 2004, 67, 80-105.	0.8	36
87	On uniformity of exponential dichotomies for delay equations. Journal of Differential Equations, 2004, 204, 1-4.	2.2	8
88	On Existence for Polynomial-Like Iterative Equations. Resultate Der Mathematik, 2004, 45, 185-194.	0.2	18
89	Notes on a Functional Equation Related to Invariant Curves. Journal of Difference Equations and Applications, 2003, 9, 247-255.	1.1	3
90	Finding Sum of Powers on Arithmetic Progressions with Application of Cauchy's Equation. Resultate Der Mathematik, 2002, 42, 277-288.	0.2	5

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91	Notes on stability of the generalized gamma functional equation. International Journal of Mathematics and Mathematical Sciences, 2002, 32, 57-63.	0.7	7
92	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
93	Weak centers and bifurcation of critical periods in reversible cubic systems. Computers and Mathematics With Applications, 2000, 40, 771-782.	2.7	36
94	Invariant foliations for parabolic equations. Science in China Series A: Mathematics, 2000, 43, 357-370.	0.5	5
95	On The Polynomial-Like Iterative Functional Equation. , 2000, , 145-170.		7
96	Continuous solutions of a polynomial-like iterative equation with variable coefficients. Annales Polonici Mathematici, 2000, 73, 29-36.	0.5	29
97	LOCAL GEOMETRIC STRUCTURES AND BIFURCATIONS OF A POLYNOMIAL DIFFERENTIAL SYSTEM FROM A GENERAL MULTI-MOLECULAR REACTION. , 2000, , .		0
98	Characteristic analysis for a polynomial-like iterative equation. Science Bulletin, 1998, 43, 192-196.	1.7	10
99	Invariant curves for planar mappings. Journal of Difference Equations and Applications, 1997, 3, 147-168.	1.1	31
100	On closed orbit for a class of planar systems of high degree. Acta Mathematicae Applicatae Sinica, 1997, 13, 395-404.	0.7	2
101	Bounded solutions for non-autonomous parabolic equations. Dynamical Systems, 1996, 11, 109-120.	0.7	17
102	PM functions, their characteristic intervals and iterative roots. Annales Polonici Mathematici, 1996, 65, 119-128.	0.5	60
103	Discussion on the differentiable solutions of the iterated equation. Nonlinear Analysis: Theory, Methods & Applications, 1990, 15, 387-398.	1.1	64