Shaobo He

List of Publications by Year
in descending order

105 papers	3,718 citations	126708 33 h-index	155451 55 g-index
106 all docs	106 docs citations	106 times ranked	1729 citing authors

#	Article	IF	Citations
1	Dynamics of the Fractional-Order Lorenz System Based on Adomian Decomposition Method and Its DSP Implementation. IEEE/CAA Journal of Automatica Sinica, 2024, 11, 1298-1300.	8.5	11
2	Obstacle induced spiral waves in a multilayered Huber-Braun (HB) neuron model. Cognitive Neurodynamics, 2023, 17, 277-291.	2.3	3
3	A discrete Huber-Braun neuron model: from nodal properties to network performance. Cognitive Neurodynamics, 2023, 17, 301-310.	2.3	9
4	Parameter identification for discrete memristive chaotic map using adaptive differential evolution algorithm. Nonlinear Dynamics, 2022, 107, 1263-1275.	2.7	46
5	Design and dynamics of the multicavity hyperchaotic map based on offset boosting. European Physical Journal Plus, 2022, 137, 1.	1.2	11
6	Distributed Consensus Tracking Control of Chaotic Multi-Agent Supply Chain Network: A New Fault-Tolerant, Finite-Time, and Chatter-Free Approach. Entropy, 2022, 24, 33.	1.1	13
7	A novel discrete memristive chaotic map. European Physical Journal Plus, 2022, 137, 1.	1.2	26
8	From Memristor-Modeled Jerk System to the Nonlinear Systems with Memristor. Symmetry, 2022, 14, 659.	1.1	8
9	Chaos in a Simplest Cyclic Memristive Neural Network. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2022, 32, .	0.7	46
10	Dynamics of a fractional-order Colpitts oscillator and its FPGA implementation. European Physical Journal: Special Topics, 2022, 231, 2467-2476.	1.2	10
11	Novel dynamical behaviors in fractional-order conservative hyperchaotic system and DSP implementation. Nonlinear Dynamics, 2022, 109, 1167-1186.	2.7	9
12	Discrete Memristor and Discrete Memristive Systems. Entropy, 2022, 24, 786.	1.1	33
13	Multifractal analysis on age-based discrimination in X-ray images for sensing the severity of COVID-19 disease. European Physical Journal: Special Topics, 2022, 231, 3663-3671.	1.2	3
14	Firing patterns of Izhikevich neuron model under electric field and its synchronization patterns. European Physical Journal: Special Topics, 2022, 231, 4017-4023.	1.2	4
15	A fully integrated chaos generator based on voltage controlled oscillator. Microelectronics Journal, 2022, 126, 105514.	1.1	4
16	A higher dimensional chaotic map with discrete memristor. AEU - International Journal of Electronics and Communications, 2021, 129, 153539.	1.7	92
17	Dynamics and complexity analysis of the conformable fractionalâ€order twoâ€machine interconnected power system. Mathematical Methods in the Applied Sciences, 2021, 44, 2439-2454.	1.2	10
18	Analysis of three types of initial offset-boosting behavior for a new fractional-order dynamical system. Chaos, Solitons and Fractals, 2021, 143, 110613.	2.5	37

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19	Complexity and Chimera States in a Network of Fractional-Order Laser Systems. Symmetry, 2021, 13, 341.	1.1	11
20	Complex Dynamics and Hard Limiter Control of a Fractional-Order Buck-Boost System. Mathematical Problems in Engineering, 2021, 2021, 1-16.	0.6	0
21	Characteristic Analysis of Fractional-Order Memristor-Based Hypogenetic Jerk System and Its DSP Implementation. Electronics (Switzerland), 2021, 10, 841.	1.8	18
22	A memristive map with coexisting chaos and hyperchaos*. Chinese Physics B, 2021, 30, 110502.	0.7	36
23	Multistability and chaos in a noise-induced blood flow. European Physical Journal: Special Topics, 2021, 230, 1525-1533.	1.2	8
24	Chaos in the discrete memristor-based system with fractional-order difference. Results in Physics, 2021, 24, 104106.	2.0	75
25	Size matters: Effects of the size of heterogeneity on the wave re-entry and spiral wave formation in an excitable media. Chaos, 2021, 31, 053131.	1.0	9
26	Simplest symmetric chaotic flows: the strange case of asymmetry in Master Stability Function. European Physical Journal: Special Topics, 2021, 230, 1999-2010.	1.2	3
27	A memristive chaotic system with flexible attractor growing. European Physical Journal: Special Topics, 2021, 230, 1695-1708.	1.2	13
28	Self-reproducing dynamics in a two-dimensional discrete map. European Physical Journal: Special Topics, 2021, 230, 1959-1970.	1.2	11
29	A Modified Multivariable Complexity Measure Algorithm and Its Application for Identifying Mental Arithmetic Task. Entropy, 2021, 23, 931.	1.1	3
30	A hyperchaotic cycloid map with attractor topology sensitive to system parameters. Chaos, 2021, 31, 083132.	1.0	10
31	A fractional-order ship power system with extreme multistability. Nonlinear Dynamics, 2021, 106, 1027-1040.	2.7	19
32	A Modified Chaotic Binary Particle Swarm Optimization Scheme and Its Application in Face-Iris Multimodal Biometric Identification. Electronics (Switzerland), 2021, 10, 217.	1.8	24
33	A Fractional-Order Chaotic Sparrow Search Algorithm for Enhancement of Long Distance Iris Image. Mathematics, 2021, 9, 2790.	1.1	18
34	Spiral waves in a hybrid discrete excitable media with electromagnetic flux coupling. Chaos, 2021, 31, 113132.	1.0	6
35	Multifractal based image processing for estimating the complexity of COVID-19 dynamics. European Physical Journal: Special Topics, 2021, , 1-8.	1.2	5
36	Chaotification of Sine-series maps based on the internal perturbation model. Results in Physics, 2021, 31, 105010.	2.0	13

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37	Localization of Hidden Attractors in Chua's System With Absolute Nonlinearity and Its FPGA Implementation. Frontiers in Physics, 2021, 9, .	1.0	6
38	An improved image encryption algorithm with finite computing precision. Signal Processing, 2020, 168, 107340.	2.1	97
39	Fractional symbolic network entropy analysis for the fractional-order chaotic systems. Physica Scripta, 2020, 95, 035220.	1.2	25
40	Constructing chaotic map with multi-cavity. European Physical Journal Plus, 2020, 135, 1.	1.2	18
41	Chaos and complexity in a fractional-order financial system with time delays. Chaos, Solitons and Fractals, 2020, 131, 109521.	2.5	84
42	Chaos and complexity in a fractional-order higher-dimensional multicavity chaotic map. Chaos, Solitons and Fractals, 2020, 131, 109488.	2.5	32
43	Extremely rich dynamics in a memristor-based chaotic system. European Physical Journal Plus, 2020, 135, 1.	1.2	35
44	Further dynamical analysis of modified Fitzhugh–Nagumo model under the electric field. Nonlinear Dynamics, 2020, 101, 521-529.	2.7	19
45	Complexity and Chimera States in a Ring-Coupled Fractional-Order Memristor Neural Network. Frontiers in Applied Mathematics and Statistics, 2020, 6, .	0.7	15
46	Multistability and Formation of Spiral Waves in a Fractional-Order Memristor-Based Hyperchaotic Lü System with No Equilibrium Points. Mathematical Problems in Engineering, 2020, 2020, 1-12.	0.6	16
47	Multistability in a Fractional-Order Centrifugal Flywheel Governor System and Its Adaptive Control. Complexity, 2020, 2020, 1-11.	0.9	4
48	Initial offset boosting coexisting attractors in memristive multi-double-scroll Hopfield neural network. Nonlinear Dynamics, 2020, 102, 2821-2841.	2.7	124
49	Route to hyperchaos and chimera states in a network of modified Hindmarsh-Rose neuron model with electromagnetic flux and external excitation. European Physical Journal: Special Topics, 2020, 229, 929-942.	1.2	17
50	SEIR modeling of the COVID-19 and its dynamics. Nonlinear Dynamics, 2020, 101, 1667-1680.	2.7	464
51	Synchronization for the integer-order and fractional-order chaotic maps based on parameter estimation with JAYA-IPSO algorithm. European Physical Journal Plus, 2020, 135, 1.	1.2	14
52	Dynamics of a hyperchaotic map with spherical attractor. Physica Scripta, 2020, 95, 065215.	1.2	14
53	Chaotic flows with special equilibria. European Physical Journal: Special Topics, 2020, 229, 905-919.	1.2	33
54	Synchronization of a Non-Equilibrium Four-Dimensional Chaotic System Using a Disturbance-Observer-Based Adaptive Terminal Sliding Mode Control Method. Entropy, 2020, 22, 271.	1.1	35

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55	An effective image encryption algorithm based on compressive sensing and 2D-SLIM. Optics and Lasers in Engineering, 2020, 134, 106178.	2.0	104
56	Complexity and Multistability in the Centrifugal Flywheel Governor System With Stochastic Noise. IEEE Access, 2020, 8, 30092-30103.	2.6	7
57	Modeling of discrete fracmemristor and its application. AIP Advances, 2020, 10, .	0.6	57
58	Synchronization of fractional time-delayed financial system using a novel type-2 fuzzy active control method. Chaos, Solitons and Fractals, 2020, 136, 109768.	2.5	47
59	An Improved Return Maps Method for Parameter Estimation of Chaotic Systems. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2020, 30, 2050058.	0.7	16
60	A Multistable Chaotic Jerk System with Coexisting and Hidden Attractors: Dynamical and Complexity Analysis, FPGA-Based Realization, and Chaos Stabilization Using a Robust Controller. Symmetry, 2020, 12, 569.	1.1	29
61	A discrete memristor model and its application in Hénon map. Chaos, Solitons and Fractals, 2020, 137, 109873.	2.5	119
62	Numerical analysis of a simplest fractional-order hyperchaotic system. Theoretical and Applied Mechanics Letters, 2019, 9, 220-228.	1.3	24
63	A class of higher-dimensional hyperchaotic maps. European Physical Journal Plus, 2019, 134, 1.	1.2	32
64	Design of a Network Permutation Entropy and Its Applications for Chaotic Time Series and EEG Signals. Entropy, 2019, 21, 849.	1.1	12
65	The influence of samples on meta-heuristic algorithm for parameter estimation of chaotic system. Modern Physics Letters B, 2019, 33, 1950041.	1.0	13
66	Parameter Identification of Fractional-Order Discrete Chaotic Systems. Entropy, 2019, 21, 27.	1.1	43
67	Complex dynamics and multiple coexisting attractors in a fractional-order microscopic chemical system. European Physical Journal: Special Topics, 2019, 228, 195-207.	1.2	33
68	Comments on "Discrete fractional logistic map and its chaos"[Nonlinear Dyn. 75, 283–287 (2014)]. Nonlinear Dynamics, 2019, 97, 897-901.	2.7	13
69	Detecting chaos in fractional-order nonlinear systems using the smaller alignment index. Physics Letters, Section A: General, Atomic and Solid State Physics, 2019, 383, 2267-2271.	0.9	37
70	Complexity in the muscular blood vessel model with variable fractional derivative and external disturbances. Physica A: Statistical Mechanics and Its Applications, 2019, 526, 120904.	1.2	22
71	Dynamics and synchronization of conformable fractional-order hyperchaotic systems using the Homotopy analysis method. Communications in Nonlinear Science and Numerical Simulation, 2019, 73, 146-164.	1.7	54
72	Dynamics and Optimization Control of a Robust Chaotic Map. IEEE Access, 2019, 7, 160072-160081.	2.6	23

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73	Complex Chaotic Attractor via Fractal Transformation. Entropy, 2019, 21, 1115.	1.1	19
74	A study on dynamical complexity of noise induced blood flow. European Physical Journal: Special Topics, 2019, 228, 2769-2777.	1.2	11
75	What is the lowest order of the fractional-order chaotic systems to behave chaotically?. Chaos, Solitons and Fractals, 2019, 119, 163-170.	2.5	18
76	Epidemic outbreaks and its control using a fractional order model with seasonality and stochastic infection. Physica A: Statistical Mechanics and Its Applications, 2018, 501, 408-417.	1.2	32
77	Fractional-order simplest memristor-based chaotic circuit with new derivative. European Physical Journal Plus, 2018, 133, 1.	1.2	98
78	Generalized synchronization of fractional-order hyperchaotic systems and its DSP implementation. Nonlinear Dynamics, 2018, 92, 85-96.	2.7	79
79	Multicavity formations and complexity modulation in a hyperchaotic discrete system. Physica A: Statistical Mechanics and Its Applications, 2018, 490, 366-377.	1.2	13
80	A hyperchaotic map with grid sinusoidal cavity. Chaos, Solitons and Fractals, 2018, 106, 107-117.	2.5	39
81	Self-excited and hidden attractors in a novel chaotic system with complicated multistability. European Physical Journal Plus, 2018, 133, 1.	1.2	57
82	Fractional fuzzy entropy algorithm and the complexity analysis for nonlinear time series. European Physical Journal: Special Topics, 2018, 227, 943-957.	1.2	33
83	Complex Dynamics of the Fractional-Order Rössler System and Its Tracking Synchronization Control. Complexity, 2018, 2018, 1-13.	0.9	10
84	Multiscale permutation Rényi entropy and its application for EEG signals. PLoS ONE, 2018, 13, e0202558.	1.1	18
85	Can derivative determine the dynamics of fractional-order chaotic system?. Chaos, Solitons and Fractals, 2018, 115, 14-22.	2.5	22
86	Parameter estimation of a complex chaotic system with unknown initial values. European Physical Journal Plus, 2018, 133, 1.	1.2	34
87	Chaos and Symbol Complexity in a Conformable Fractional-Order Memcapacitor System. Complexity, 2018, 2018, 1-15.	0.9	19
88	Multivariate Multiscale Complexity Analysis of Self-Reproducing Chaotic Systems. Entropy, 2018, 20, 556.	1.1	44
89	Designing an M-dimensional nonlinear model for producing hyperchaos. Chaos, Solitons and Fractals, 2018, 114, 506-515.	2.5	30
90	Dynamics and Synchronization of the Fractional-Order Hyperchaotic System. Advances in Computer and Electrical Engineering Book Series, 2018, , 23-53.	0.2	0

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91	Numerical analysis of a fractional-order chaotic system based on conformable fractional-order derivative. European Physical Journal Plus, 2017, 132, 1.	1.2	86
92	Solution and dynamics of a fractional-order 5-D hyperchaotic system with four wings. European Physical Journal Plus, 2017, 132, 1.	1.2	58
93	SF-SIMM high-dimensional hyperchaotic map and its performance analysis. Nonlinear Dynamics, 2017, 89, 2521-2532.	2.7	66
94	Synchronisation of fractional-order time delayed chaotic systems with ring connection. European Physical Journal: Special Topics, 2016, 225, 97-106.	1.2	35
95	Dynamical properties and complexity in fractional-order diffusionless Lorenz system. European Physical Journal Plus, 2016, 131, 1.	1.2	69
96	A nonlinear circuit with two memcapacitors. Nonlinear Dynamics, 2016, 86, 1735-1744.	2.7	40
97	Dynamics of a fractional-order simplified unified system based on the Adomian decomposition method. European Physical Journal Plus, 2016, 131, 1.	1.2	44
98	Multivariate permutation entropy and its application for complexity analysis of chaotic systems. Physica A: Statistical Mechanics and Its Applications, 2016, 461, 812-823.	1.2	43
99	Solution and dynamics analysis of a fractional€order hyperchaotic system. Mathematical Methods in the Applied Sciences, 2016, 39, 2965-2973.	1.2	29
100	DESIGN OF N-DIMENSIONAL MULTI-SCROLL JERK CHAOTIC SYSTEM AND ITS PERFORMANCES. Journal of Applied Analysis and Computation, 2016, 6, 1180-1194.	0.2	3
101	Complexity Analysis and DSP Implementation of the Fractional-Order Lorenz Hyperchaotic System. Entropy, 2015, 17, 8299-8311.	1.1	169
102	Design of Grid Multiscroll Chaotic Attractors via Transformations. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2015, 25, 1530027.	0.7	21
103	Characteristic Analysis and DSP Realization of Fractional-Order Simplified Lorenz System Based on Adomian Decomposition Method. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2015, 25, 1550085.	0.7	48
104	Dynamics of fractional-order sinusoidally forced simplified Lorenz system and its synchronization. European Physical Journal: Special Topics, 2014, 223, 1591-1600.	1.2	33
105	Analogue circuit implementation of a new logistic€like map. Electronics Letters, 0, , .	0.5	4