RenÃ© Lozi

List of Publications by Year
in descending order

55 papers	**831** citations	623188 **14** h-index	525886 **27** g-index
56 all docs	**56** docs citations	**56** times ranked	**594** citing authors

#	Article	IF	Citations
1	Special Issue on Cryptography and Its Applications in Information Security. Applied Sciences (Switzerland), 2022, 12, 2588.	1.3	2
2	Some elements for a history of the dynamical systems theory. Chaos, 2021, 31, 053110.	1.0	12
3	The Design and FPGA-Based Implementation of a Stream Cipher Based on a Secure Chaotic Generator. Applied Sciences (Switzerland), 2021, 11, 625.	1.3	20
4	Mem-fractive properties of mushrooms. Bioinspiration and Biomimetics, 2021, 16, 066026.	1.5	19
5	Bifurcation analysis of a model of tuberculosis epidemic with treatment of wider population suggesting a possible role in the seasonality of this disease. Chaos, 2021, 31, 123125.	1.0	4
6	Geometrical Model of Spiking and Bursting Neuron on a Mug-Shaped Branched Manifold. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2020, 30, 2030044.	0.7	0
7	Mixed-Mode Oscillations Based on Complex Canard Explosion in a Fractional-Order Fitzhugh-Nagumo Model.. Applied Mathematics and Nonlinear Sciences, 2020, 5, 239-256.	0.9	9
8	Complex Canard Explosion in a Fractional-Order FitzHugh–Nagumo Model. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2019, 29, 1950111.	0.7	14
9	Hopf-like bifurcation and mixed mode oscillation in a fractional-order FitzHugh-Nagumo model. AIP Conference Proceedings, 2019, , .	0.3	5
10	On fractional–order discrete–time systems: Chaos, stabilization and synchronization. Chaos, Solitons and Fractals, 2019, 119, 150-162.	2.5	93
11	Design and analysis of two stream ciphers based on chaotic coupling and multiplexing techniques. Multimedia Tools and Applications, 2018, 77, 13391-13417.	2.6	27
12	How useful randomness for cryptography can emerge from multicore-implemented complex networks of chaotic maps. Journal of Difference Equations and Applications, 2017, 23, 821-859.	0.7	2
13	The Challenging Problem of Industrial Applications of Multicore-Generated Iterates of Nonlinear Mappings. Industrial and Applied Mathematics, 2017, , 43-76.	0.3	1
14	On the Origins of Currencies. Inference, 2017, 3, .	0.0	0
15	Key requirements for the design of robust chaotic PRNG. , 2016, , .		3
16	Hidden Bifurcations in the Multispiral Chua Attractor. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2016, 26, 1630039.	0.7	24
17	Robust PRNG based on homogeneously distributed chaotic dynamics. Journal of Physics: Conference Series, 2016, 692, 012011.	0.3	8
18	A new accurate numerical method of approximation of chaotic solutions of dynamical model equations with quadratic nonlinearities. Chaos, Solitons and Fractals, 2016, 91, 108-114.	2.5	14

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19	New Nonlinear CPRNG Based on Tent and Logistic Maps. Understanding Complex Systems, 2016, , 131-161.	0.3	3
20	A novel chaotic generator based on weakly-coupled discrete skewtent maps. , 2015, , .		5
21	Computer Intelligence in Modeling, Prediction, and Analysis of Complex Dynamical Systems. Scientific World Journal, The, 2015, 2015, 1-1.	0.8	1
22	A New Reliable Numerical Method for Computing Chaotic Solutions of Dynamical Systems: The Chen Attractor Case. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2015, 25, 1550187.	0.7	19
23	Bifurcation analysis and chaos in simplest fractional-order electrical circuit. , 2015, , .		4
24	Hopf Bifurcation and Chaos in Simplest Fractional-Order Memristor-based Electrical Circuit. Indian Journal of Industrial and Applied Mathematics, 2015, 6, 105.	0.1	7
25	Cryptography-Based Chaos via Geometric Undersampling of Ring-Coupled Attractors. Industrial and Applied Mathematics, 2015, , 1-30.	0.3	1
26	From chaos to randomness via geometric undersampling. ESAIM Proceedings and Surveys, 2014, 46, 177-195.	0.5	9
27	Designing Chaotic Mathematical Circuits for Solving Practical Problems. International Journal of Automation and Computing, 2014, 11, 588-597.	4.5	7
28	Memfractance: A Mathematical Paradigm for Circuit Elements with Memory. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2014, 24, 1430023.	0.7	90
29	Lightweight chaos-based cryptosystem for secure images. , 2013, , .		1
30	CHAOTIC MATHEMATICAL CIRCUITRY. , 2013, , 307-323.		2
31	Can we trust in numerical computations of chaotic solutions of dynamical systems ?. World Scientific Series on Nonlinear Science, Series A, 2013, , 63-98.	0.0	41
32	Engineering of Mathematical Chaotic Circuits. Advances in Intelligent Systems and Computing, 2013, , 17-29.	0.5	6
33	Assessing the Security of Subsampling Process Using Modified EKF and Nonlinear Least Squares Methods. International Journal of Chaotic Computing, 2013, 2, 31-35.	0.3	1
34	Blondel et les oscillations auto-entretenues. Archive for History of Exact Sciences, 2012, 66, 485-530.	0.2	8
35	Fast chaotic optimization algorithm based on locally averaged strategy and multifold chaotic attractor. Applied Mathematics and Computation, 2012, 219, 188-196.	1.4	23
36	EMERGENCE OF RANDOMNESS FROM CHAOS. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2012, 22, 1250021.	0.7	46

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37	COMPLEXITY LEADS TO RANDOMNESS IN CHAOTIC SYSTEMS. , 2011, , .		5
38	Variations in the Gross Target Volume and Clinical Target Volume Evaluated by RTOG Sarcoma Radiation Oncologists for Preoperative Radiotherapy of Primary Extremity Sarcoma. International Journal of Radiation Oncology Biology Physics, 2010, 78, S620.	0.4	0
39	Global Orbit Patterns for Dynamical Systems On Finite Sets. , 2009, , .		0
40	The Importance of Strange Attractors for Industrial Mathematics. Applied Optimization, 2002, , 275-303.	0.4	1
41	SLOW MANIFOLDS OF SOME CHAOTIC SYSTEMS WITH APPLICATIONS TO LASER SYSTEMS. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2000, 10, 2729-2744.	0.7	8
42	FITTING TRAPPING REGIONS FOR CHUA'S ATTRACTOR â€" A NOVEL METHOD BASED ON ISOCHRONIC LINES. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2000, 10, 205-225.	0.7	14
43	THE THEORY OF CONFINORS IN CHUAâ€™S CIRCUIT: ACCURATE ANALYSIS OF BIFURCATIONS AND ATTRACTORS. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 1993, 03, 333-361.	0.7	18
44	SECURE COMMUNICATIONS VIA CHAOTIC SYNCHRONIZATION II: NOISE REDUCTION BY CASCADING TWO IDENTICAL RECEIVERS. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 1993, 03, 1319-1325.	0.7	34
45	CONFINORS AND BOUNDED-TIME PATTERNS IN CHUA'S CIRCUIT AND THE DOUBLE SCROLL FAMILY. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 1991, 01, 119-138.	0.7	15
46	COEXISTING CHAOTIC ATTRACTORS IN CHUA'S CIRCUIT. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 1991, 01, 923-926.	0.7	24
47	Confinor and anti-confinor in constrained â€œLorenzâ€•system. Japan Journal of Industrial and Applied Mathematics, 1987, 4, 433-454.	0.3	4
48	UN ATTRACTEUR Ã‰TRANGE (?) DU TYPE ATTRACTEUR DE HÃ‰NON. Journal De Physique Colloque, 1978, 39, C5-9-C5-10.	0.2	146
49	CONVECTION ENTRE DEUX PLAQUES PLANES EN ROTATION ET EFFET DYNAMO RÃ‰SULTANT D'UNE BIFURCATION SECONDAIRE. Journal De Physique Colloque, 1978, 39, C5-15-C5-15.	0.2	1
50	RÃ©sultat numÃ©rique de rÃ©gularitÃ© du problÃ¨me de Stokes et du laplacien itÃ©rÃ© dans un polygone. ESAIM: Mathematical Modelling and Numerical Analysis, 1978, 12, 267-282.	0.5	9
51	A computing method for bifurcation boughs of nonlinear eigenvalue problems. Bulletin of the American Mathematical Society, 1975, 81, 1127-1130.	3.0	6
52	Recovering parameters of chaotic piecewise linear dynamical systems. , 0, , .		0
53	Secure communications via chaotic synchronization in Chua's circuit and Bonhoeffer-Van der Pol equation: numerical analysis of the errors of the recovered signal. , 0, , .		8
54	Recovering trajectories of chaotic piecewise linear dynamical systems. , 0, , .		2

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55	Enhanced design and hardware implementation of a chaos-based block cipher for image protection. Journal of Difference Equations and Applications, 0, , 1-21.	0.7	2