Simin Yu

List of Publications by Year
in descending order

112 papers	3,324 citations	201674 27 h-index	155660 55 g-index
114 all docs	114 docs citations	114 times ranked	1604 citing authors

#	Article	IF	Citations
1	Generating hyperchaotic Lü attractor via state feedback control. Physica A: Statistical Mechanics and Its Applications, 2006, 364, 103-110.	2.6	397
2	On the cryptanalysis of Fridrich's chaotic image encryption scheme. Signal Processing, 2017, 132, 150-154.	3.7	233
3	Theoretical Design and FPGA-Based Implementation of Higher-Dimensional Digital Chaotic Systems. IEEE Transactions on Circuits and Systems I: Regular Papers, 2016, 63, 401-412.	5.4	190
4	Experimental verification of multidirectional multiscroll chaotic attractors. IEEE Transactions on Circuits and Systems Part 1: Regular Papers, 2006, 53, 149-165.	0.1	166
5	Design and implementation of n-scroll chaotic attractors from a general jerk circuit. IEEE Transactions on Circuits and Systems Part 1: Regular Papers, 2005, 52, 1459-1476.	0.1	148
6	Design and Implementation of Grid Multiwing Hyperchaotic Lorenz System Family via Switching Control and Constructing Super-Heteroclinic Loops. IEEE Transactions on Circuits and Systems I: Regular Papers, 2012, 59, 1015-1028.	5.4	104
7	Designing Hyperchaotic Systems With <newline/>Any Desired Number of Positive Lyapunov <newline/>Exponents via A Simple Model. IEEE Transactions on Circuits and Systems I: Regular Papers, 2014, 61, 2380-2389.	5.4	98
8	A Systematic Methodology for Constructing Hyperchaotic Systems With Multiple Positive Lyapunov Exponents and Circuit Implementation. IEEE Transactions on Circuits and Systems I: Regular Papers, 2014, 61, 854-864.	5.4	96
9	Design and ARM-Embedded Implementation of a Chaotic Map-Based Real-Time Secure Video Communication System. IEEE Transactions on Circuits and Systems for Video Technology, 2015, 25, 1203-1216.	8.3	96
10	Design and FPGA-Based Realization of a Chaotic Secure Video Communication System. IEEE Transactions on Circuits and Systems for Video Technology, 2018, 28, 2359-2371.	8.3	84
11	A general multiscroll Lorenz system family and its realization via digital signal processors. Chaos, 2006, 16, 033126.	2.5	81
12	Theoretical Design and Circuit Implementation of Multidirectional Multi-Torus Chaotic Attractors. IEEE Transactions on Circuits and Systems Part 1: Regular Papers, 2007, 54, 2087-2098.	0.1	79
13	Generation of $n \times m$-Wing Lorenz-Like Attractors From a Modified Shimizu–Morioka Model. IEEE Transactions on Circuits and Systems II: Express Briefs, 2008, 55, 1168-1172.	3.0	75
14	Generating Grid Multiwing Chaotic Attractors by Constructing Heteroclinic Loops Into Switching Systems. IEEE Transactions on Circuits and Systems II: Express Briefs, 2011, 58, 314-318.	3.0	69
15	GENERATION OF $n \times m$-SCROLL ATTRACTORS UNDER A CHUA-CIRCUIT FRAMEWORK. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2007, 17, 3951-3964.	1.7	68
16	DESIGN AND IMPLEMENTATION OF MULTI-WING BUTTERFLY CHAOTIC ATTRACTORS VIA LORENZ-TYPE SYSTEMS. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2010, 20, 29-41.	1.7	61
17	A memristor–meminductor-based chaotic system with abundant dynamical behaviors. Nonlinear Dynamics, 2019, 96, 765-788.	5.2	59
18	Generation of grid multi-scroll chaotic attractors via switching piecewise linear controller. Physics Letters, Section A: General, Atomic and Solid State Physics, 2010, 374, 3029-3037.	2.1	49

#	Article	IF	Citations
19	Design and Implementation of Grid Multiwing Butterfly Chaotic Attractors From a Piecewise Lorenz System. IEEE Transactions on Circuits and Systems II: Express Briefs, 2010, 57, 803-807.	3.0	48
20	On constructing complex grid multiâ€wing hyperchaotic system: Theoretical design and circuit implementation. International Journal of Circuit Theory and Applications, 2013, 41, 221-237.	2.0	48
21	Hidden Coexisting Attractors in a Chaotic System Without Equilibrium Point. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2018, 28, 1830033.	1.7	47
22	Breaking an Image Encryption Algorithm Based on DNA Encoding and Spatiotemporal Chaos. Entropy, 2019, 21, 246.	2.2	47
23	Chaotic oscillator based on memcapacitor and meminductor. Nonlinear Dynamics, 2019, 96, 161-173.	5.2	46
24	A family of n-scroll hyperchaotic attractors and their realization. Physics Letters, Section A: General, Atomic and Solid State Physics, 2007, 364, 244-251.	2.1	45
25	Adaptive impulsive synchronization for a class of fractional-order chaotic and hyperchaotic systems. Optik, 2014, 125, 2036-2040.	2.9	43
26	Fractional-order permanent magnet synchronous motor and its adaptive chaotic control. Chinese Physics B, 2012, 21, 100506.	1.4	42
27	Cryptanalysis of an image encryption cryptosystem based on binary bit planes extraction and multiple chaotic maps. European Physical Journal Plus, 2019, 134, 1.	2.6	30
28	Anti-control of continuous-time dynamical systems. Communications in Nonlinear Science and Numerical Simulation, 2012, 17, 2617-2627.	3.3	29
29	Dynamics analysis and synchronization of a new chaotic attractor. Optik, 2014, 125, 3071-3075.	2.9	28
30	Constructing hyperchaotic systems at will. International Journal of Circuit Theory and Applications, 2015, 43, 2039-2056.	2.0	28
31	New results of study on generating multiple-scroll chaotic attractors. Science in China Series F: Information Sciences, 2003, 46, 104.	1.1	25
32	A MODULE-BASED AND UNIFIED APPROACH TO CHAOTIC CIRCUIT DESIGN AND ITS APPLICATIONS. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2007, 17, 1785-1800.	1.7	24
33	Multifolded torus chaotic attractors: Design and implementation. Chaos, 2007, 17, 013118.	2.5	24
34	Generation of nÃ—m-scroll attractors in a two-port RCL network with hysteresis circuits. Chaos, Solitons and Fractals, 2009, 39, 821-830.	5.1	24
35	ARM-embedded implementation of a video chaotic secure communication via WAN remote transmission with desirable security and frame rate. Nonlinear Dynamics, 2016, 86, 725-740.	5.2	24
36	Generating 2nâ€wing attractors from Lorenzâ€like systems. International Journal of Circuit Theory and Applications, 2010, 38, 243-258.	2.0	23

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37	DESIGN AND REALIZATION OF MULTI-WING CHAOTIC ATTRACTORS VIA SWITCHING CONTROL. International Journal of Modern Physics B, 2011, 25, 2183-2194.	2.0	23
38	Hyperchaotic signal generation via DSP for efficient perturbations to liquid mixing. International Journal of Circuit Theory and Applications, 2009, 37, 31-41.	2.0	22
39	Generation of multi-wing chaotic attractor in fractional order system. Chaos, Solitons and Fractals, 2011, 44, 845-850.	5.1	22
40	Design and Smartphone-Based Implementation of a Chaotic Video Communication Scheme via WAN Remote Transmission. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2016, 26, 1650158.	1.7	21
41	Design and ARMâ€embedded implementation of a chaotic mapâ€based multicast scheme for multiuser speech wireless communication. International Journal of Circuit Theory and Applications, 2017, 45, 1849-1872.	2.0	20
42	Theoretical Design and Circuit Implementation of Integer Domain Chaotic Systems. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2014, 24, 1450128.	1.7	19
43	Security performance analysis of a chaotic stream cipher. Nonlinear Dynamics, 2018, 94, 1003-1017.	5.2	19
44	Cryptanalysis of a Chaotic Stream Cipher and Its Improved Scheme. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2018, 28, 1850086.	1.7	18
45	A NEW CHAOTIC SYSTEM BASED ON MULTIPLE-ANGLE SINUSOIDAL FUNCTION: DESIGN AND IMPLEMENTATION. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2009, 19, 2073-2084.	1.7	17
46	DESIGN AND IMPLEMENTATION OF COMPOUND CHAOTIC ATTRACTORS. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2012, 22, 1250120.	1.7	17
47	Tetrapterous butterfly attractors in modified Lorenz systems. Chaos, Solitons and Fractals, 2009, 41, 1740-1749.	5.1	16
48	Global meanâ€square exponential stabilization of stochastic system with time delay via impulsive control. Asian Journal of Control, 2012, 14, 288-299.	3.0	14
49	Study on a new chaotic bitwise dynamical system and its FPGA implementation. Chinese Physics B, 2015, 24, 060503.	1.4	14
50	Design and FPGA Implementation of a Universal Chaotic Signal Generator Based on the Verilog HDL Fixed-Point Algorithm and State Machine Control. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2017, 27, 1750040.	1.7	13
51	Design and ARM-embedded implementation of a chaotic secure communication scheme based on H.264 selective encryption. Nonlinear Dynamics, 2017, 89, 1949-1965.	5.2	13
52	A Novel Approach for Constructing One-Way Hash Function Based on a Message Block Controlled 8D Hyperchaotic Map. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2017, 27, 1750106.	1.7	13
53	An Optimized Memristor-Based Hyperchaotic System With Controlled Hidden Attractors. IEEE Access, 2019, 7, 124641-124646.	4.2	13
54	On the use of chaotic iterations to design keyed hash function. Cluster Computing, 2019, 22, 905-919.	5.0	13

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55	A Sinusoidally Driven Lorenz System and Circuit Implementation. Mathematical Problems in Engineering, 2015, 2015, 1-11.	1.1	12
56	GENERATION AND IMPLEMENTATION OF HYPERCHAOTIC CHUA SYSTEM VIA STATE FEEDBACK CONTROL. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2012, 22, 1250119.	1.7	11
57	A RING-SCROLL CHUA SYSTEM. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2013, 23, 1350170.	1.7	11
58	Design and SOPC-Based Realization of a Video Chaotic Secure Communication Scheme. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2018, 28, 1850160.	1.7	11
59	On the Security of a Latin-Bit Cube-Based Image Chaotic Encryption Algorithm. Entropy, 2019, 21, 888.	2.2	10
60	Design and Virtex-7-Based Implementation of Video Chaotic Secure Communications. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2020, 30, 2050075.	1.7	10
61	A hybrid intelligent optimization method for multiple metal grades optimization. Neural Computing and Applications, 2012, 21, 1391-1402.	5.6	9
62	DESIGN AND CIRCUIT IMPLEMENTATION OF FRACTIONAL-ORDER MULTIWING CHAOTIC ATTRACTORS. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2012, 22, 1250269.	1.7	9
63	A dictionary-learning algorithm based on method of optimal directions and approximate K-SVD. , 2016, , .		9
64	CHAOTIFYING CONTINUOUS-TIME NONLINEAR AUTONOMOUS SYSTEMS. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2012, 22, 1250232.	1.7	8
65	Sequential Blind Identification of Underdetermined Mixtures Using a Novel Deflation Scheme. IEEE Transactions on Neural Networks and Learning Systems, 2013, 24, 1503-1509.	11.3	8
66	On the Security Analysis of a Hopfield Chaotic Neural Network-Based Image Encryption Algorithm. Complexity, 2020, 2020, 1-10.	1.6	8
67	Constructing Higher-Dimensional Digital Chaotic Systems via Loop-State Contraction Algorithm. IEEE Transactions on Circuits and Systems I: Regular Papers, 2021, 68, 3794-3807.	5.4	8
68	Hopf bifurcation analysis of a new modified hyperchaotic Lü system. Optik, 2013, 124, 6265-6269.	2.9	7
69	Generating chaos via nonlinear system switching anti-control and circuit implementation. Optik, 2014, 125, 3491-3498.	2.9	7
70	Design and ARM Platform-Based Realization of Digital Color Image Encryption and Decryption via Single State Variable Feedback Control. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2014, 24, 1450049.	1.7	7
71	Numerical Analysis and Improved Algorithms for Lyapunov-Exponent Calculation of Discrete-Time Chaotic Systems. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2016, 26, 1650219.	1.7	7
72	Constructing Higher-Dimensional Nondegenerate Hyperchaotic Systems with Multiple Controllers. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2017, 27, 1750146.	1.7	6

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73	On the Cryptanalysis of a Bit-Level Image Chaotic Encryption Algorithm. Mathematical Problems in Engineering, 2020, 2020, 1-15.	1.1	6
74	Design and Smartphone Implementation of Chaotic Duplex H.264-Codec Video Communications. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2021, 31, 2150045.	1.7	6
75	A METHOD FOR IMAGE ENCRYPTION BASED ON FRACTIONAL-ORDER HYPERCHAOTIC SYSTEMS. Journal of Applied Analysis and Computation, 2015, 5, 197-209.	0.5	6
76	On ACO-Based Fuzzy Clustering for Image Segmentation. Lecture Notes in Computer Science, 2009, , 717-726.	1.3	5
77	Design and Implementation of Image Chaotic Communication via FPGA Embedded Ethernet Transmission. , 2009, , .		5
78	Topological horseshoe analysis for a three-dimensional anti-control system and its application. Optik, 2016, 127, 9444-9456.	2.9	5
79	Construction of Higher-Dimensional Hyperchaotic Systems with a Maximum Number of Positive Lyapunov Exponents under Average Eigenvalue Criteria. Journal of Circuits, Systems and Computers, 2019, 28, 1950151.	1.5	5
80	ON CONSTRUCTING COMPLEX GRID MULTIWING CHAOTIC SYSTEM BY SWITCHING CONTROL AND MIRROR SYMMETRY CONVERSION. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2013, 23, 1350115.	1.7	4
81	From n-scroll to nÃ—m-scroll attractors: A general structure based on Chua's circuit framework. , 2007, , .		3
82	Generating Multi-Wing Butterfly Attractors from the Piecewise-Linear Chen System. , 2008, , .		3
83	Multi-wing butterfly attractors from the modified Lorenz systems. , 2008, , .		3
84	A modified fuzzy c-means algorithm with adaptive spatial information for color image segmentation. , 2009, , .		3
85	How to Generate Chaos from Switching System: A Saddle Focus of Index 1 and Heteroclinic Loop-Based Approach. Mathematical Problems in Engineering, 2011, 2011, 1-10.	1.1	3
86	Chemisorption-Induced Resonance Frequency Shift of a Microcantilever. Chinese Physics Letters, 2012, 29, 056801.	3.3	3
87	A Systematic Methodology for Multi-Images Encryption and Decryption Based on Single Chaotic System and FPGA Embedded Implementation. Mathematical Problems in Engineering, 2014, 2014, 1-15.	1.1	3
88	Design and Evaluation of Chaotic Iterations Based Keyed Hash Function. Lecture Notes in Electrical Engineering, 2017, , 404-414.	0.4	3
89	N âˆ' Scroll Chaotic Attractors from A General Jerk Circuit. , 0, , .		2
90	Generation of Hyperchaotic Chua System via State Feedback Control. , 2010, , .		2

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91	Design and realization of digital image encryption and decryption based on multi-wing butterfly chaotic attractors. , 2012, , .		2
92	Anti-control and circuit implementation of discrete-time systems under limited regional conditions. Wuli Xuebao/Acta Physica Sinica, 2012, 61, 190505.	0.5	2
93	Experimental Verification of 3-D Hysteresis Multi-Scroll Chaotic Attractors. , 0, , .		1
94	Generating hyperchaotic systems with multiple positive Lyapunov exponents. , 2013, , .		1
95	Design and Circuit Implementation of Discrete-Time Chaotic Systems with Modulus of Triangular Wave Functions. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2014, 24, 1450048.	1.7	1
96	Cryptanalysis of Some Self-Synchronous Chaotic Stream Ciphers and Their Improved Schemes. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2021, 31, 2150142.	1.7	1
97	Higher-Dimensional Digital Chaotic Systems (HDDCS). SpringerBriefs in Applied Sciences and Technology, 2018, , 59-88.	0.4	1
98	Chaotic Bitwise Dynamical Systems (CBDS). SpringerBriefs in Applied Sciences and Technology, 2018, , 35-45.	0.4	1
99	Generating multi-folded torus chaotic attractors. , 0, , .		0
100	MSR: a multi-service provisioning implementation in metro network based on RPR. , 2006, 6354, 977.		0
101	Design and Implementation of Multi-directional Grid Multi-Torus Chaotic Attractors. , 0, , .		0
102	A Novel Fourth-Order Chaotic Circuit and Its Implementation. , 2008, , .		0
103	Generation of multi-scroll chaotic attractors from fifth-order Chua system. , 2008, , .		0
104	Noise-robust Binary segmentation based on Ant Colony System and Modified Fuzzy C-Means algorithm. , 2009, , .		0
105	Adaptive Full State Hybrid Function Projective Lag Synchronization in Chaotic Continuous-Time System. Advanced Materials Research, 0, 383-390, 4169-4174.	0.3	0
106	Theoretical Analysis of Chemisorption-Induced Surface Stress. Advanced Materials Research, 0, 528, 229-232.	0.3	0
107	Deflection and Resonance Frequency Shift of a Microcantilever Induced by Chemisorption: Oxygen on Si(100). Advanced Materials Research, 2012, 503-504, 455-458.	0.3	0
108	Chemisorption-induced microcantilever deflection: a theoretical model. Philosophical Magazine Letters, 2013, 93, 183-195.	1.2	0

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109	Multi-images chaotic communication and FPGA implementation. , 2014, , .		0
110	Optimizing the framework of image denoising based on sparse and redundant representations. , 2016, , .		0
111	ANALYSIS AND DESIGN OF ANTI-CONTROLLED HIGHER-DIMENSIONAL HYPERCHAOTIC SYSTEMS VIA LYAPUNOV-EXPONENT GENERATING ALGORITHMS. Journal of Applied Analysis and Computation, 2016, 6, 1135-1151.	0.5	0
112	An Introduction to Digital Chaotic Systems Updated by Random Iterations. SpringerBriefs in Applied Sciences and Technology, 2018, , 1-10.	0.4	0