

# Shuo Cai

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/9276447/publications.pdf>

Version: 2024-02-01

37  
papers

1,131  
citations

361296

20  
h-index

414303

32  
g-index

38  
all docs

38  
docs citations

38  
times ranked

556  
citing authors

#	ARTICLE	IF	CITATIONS
1	A robust and fixed-time zeroing neural dynamics for computing time-variant nonlinear equation using a novel nonlinear activation function. <i>Neurocomputing</i> , 2019, 350, 108-116.	3.5	157
2	A New 4D Four-Wing Memristive Hyperchaotic System: Dynamical Analysis, Electronic Circuit Design, Shape Synchronization and Secure Communication. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 2020, 30, 2050147.	0.7	77
3	A new multi-scroll Chua's circuit with composite hyperbolic tangent-cubic nonlinearity: Complex dynamics, Hardware implementation and Image encryption application. <i>The Integration VLSI Journal</i> , 2021, 81, 71-83.	1.3	76
4	Analysis and FPGA Realization of a Novel 5D Hyperchaotic Four-Wing Memristive System, Active Control Synchronization, and Secure Communication Application. <i>Complexity</i> , 2019, 2019, 1-18.	0.9	72
5	A Survey on True Random Number Generators Based on Chaos. <i>Discrete Dynamics in Nature and Society</i> , 2019, 2019, 1-10.	0.5	58
6	FPGA implementation and image encryption application of a new PRNG based on a memristive Hopfield neural network with a special activation gradient. <i>Chinese Physics B</i> , 2022, 31, 020505.	0.7	56
7	Design and FPGA Implementation of a Pseudorandom Number Generator Based on a Four-Wing Memristive Hyperchaotic System and Bernoulli Map. <i>IEEE Access</i> , 2019, 7, 181884-181898.	2.6	55
8	Design and FPGA Implementation of a Pseudo-random Number Generator Based on a Hopfield Neural Network Under Electromagnetic Radiation. <i>Frontiers in Physics</i> , 2021, 9, .	1.0	49
9	Dynamics analysis, hardware implementation and engineering applications of novel multi-style attractors in a neural network under electromagnetic radiation. <i>Chaos, Solitons and Fractals</i> , 2021, 152, 111350.	2.5	49
10	Pseudorandom number generator based on a 5D hyperchaotic four-wing memristive system and its FPGA implementation. <i>European Physical Journal: Special Topics</i> , 2021, 230, 1763-1772.	1.2	42
11	Secure Communication Scheme Based on a New 5D Multistable Four-Wing Memristive Hyperchaotic System with Disturbance Inputs. <i>Complexity</i> , 2020, 2020, 1-16.	0.9	39
12	Multistability Analysis, Coexisting Multiple Attractors, and FPGA Implementation of Yu's Wang Four-Wing Chaotic System. <i>Mathematical Problems in Engineering</i> , 2020, 2020, 1-16.	0.6	37
13	Dynamic Analysis, Circuit Design, and Synchronization of a Novel 6D Memristive Four-Wing Hyperchaotic System with Multiple Coexisting Attractors. <i>Complexity</i> , 2020, 2020, 1-17.	0.9	35
14	CCII and FPGA Realization: A Multistable Modified Fourth-Order Autonomous Chua's Chaotic System with Coexisting Multiple Attractors. <i>Complexity</i> , 2020, 2020, 1-17.	0.9	34
15	Pseudorandom Number Generator Based on Three Kinds of Four-Wing Memristive Hyperchaotic System and Its Application in Image Encryption. <i>Complexity</i> , 2020, 2020, 1-17.	0.9	34
16	Dynamic analysis and application in medical digital image watermarking of a new multi-scroll neural network with quartic nonlinear memristor. <i>European Physical Journal Plus</i> , 2022, 137, 434.	1.2	33
17	Chaos-Based Application of a Novel Multistable 5D Memristive Hyperchaotic System with Coexisting Multiple Attractors. <i>Complexity</i> , 2020, 2020, 1-19.	0.9	32
18	A 6D Fractional-Order Memristive Hopfield Neural Network and its Application in Image Encryption. <i>Frontiers in Physics</i> , 2022, 10, .	1.0	29

#	ARTICLE	IF	CITATIONS
19	Dynamic Analysis and Audio Encryption Application in IoT of a Multi-Scroll Fractional-Order Memristive Hopfield Neural Network. <i>Fractal and Fractional</i> , 2022, 6, 370.	1.6	28
20	Chaos-Based Engineering Applications with a 6D Memristive Multistable Hyperchaotic System and a 2D SF-SIMM Hyperchaotic Map. <i>Complexity</i> , 2021, 2021, 1-21.	0.9	25
21	Single Event Transient Propagation Probabilities Analysis for Nanometer CMOS Circuits. <i>Journal of Electronic Testing: Theory and Applications (JETTA)</i> , 2019, 35, 163-172.	0.9	18
22	A Secure DFT Architecture Protecting Crypto Chips Against Scan-Based Attacks. <i>IEEE Access</i> , 2019, 7, 22206-22213.	2.6	15
23	A 1ÅV, 0.53Åns, 59Å1/4W Current Comparator Using Standard 0.18Å1/4m CMOS Technology. <i>Wireless Personal Communications</i> , 2020, 111, 843-851.	1.8	15
24	Logic operation-based Design for Testability method and parallel test algorithm for 1T1R crossbar. <i>Electronics Letters</i> , 2017, 53, 1631-1632.	0.5	11
25	Ensuring Cryptography Chips Security by Preventing Scan-Based Side-Channel Attacks With Improved DFT Architecture. <i>IEEE Transactions on Systems, Man, and Cybernetics: Systems</i> , 2022, 52, 2009-2023.	5.9	10
26	Soft Error Reliability Evaluation of Nanoscale Logic Circuits in the Presence of Multiple Transient Faults. <i>Journal of Electronic Testing: Theory and Applications (JETTA)</i> , 2020, 36, 469-483.	0.9	7
27	An Efficient Degraded Deductive Fault Simulator for Small-Delay Defects. <i>IEEE Access</i> , 2020, 8, 204855-204862.	2.6	7
28	Defect Analysis and Parallel Testing for 3D Hybrid CMOS-Memristor Memory. <i>IEEE Transactions on Emerging Topics in Computing</i> , 2021, 9, 745-758.	3.2	6
29	A parallel-SSHI rectifier for ultra-low-voltage piezoelectric vibration energy harvesting. <i>IEICE Electronics Express</i> , 2016, 13, 20160539-20160539.	0.3	5
30	Defect Analysis and Parallel March Test Algorithm for 3D Hybrid CMOS-Memristor Memory. , 2018, , .		5
31	Securing Cryptographic Chips against Scan-Based Attacks in Wireless Sensor Network Applications. <i>Sensors</i> , 2019, 19, 4598.	2.1	5
32	A Survey on the Design of Current Comparator. , 2019, , .		3
33	A novel intelligent hyper-heuristic algorithm for solving optimization problems. <i>Journal of Intelligent and Fuzzy Systems</i> , 2022, 42, 5041-5053.	0.8	3
34	A novel test data compression approach based on bit reversion. <i>IEICE Electronics Express</i> , 2017, 14, 20170502-20170502.	0.3	2
35	Reliability evaluation of logic circuits based on transient faults propagation metrics. <i>IEICE Electronics Express</i> , 2017, 14, 20170128-20170128.	0.3	1
36	An Accurate Estimation Algorithm for Failure Probability of Logic Circuits Using Correlation Separation. <i>Journal of Electronic Testing: Theory and Applications (JETTA)</i> , 0, , 1.	0.9	1

#	ARTICLE	IF	CITATIONS
37	A Second Generation Current Controlled Current Conveyor Realization Using Cascode Current Mirror : A CCCII Realization Using Cascode Current Mirror. , 2018, , .		0