Hardware implementation of pseudo-random number g

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Citation Report

#	Article	IF	Citations
1	An efficient di-chaotic diffusion based medical image cryptosystem., 2017,,.		3
2	Security analysis of the pseudo-random bit generator based on multi-modal maps. Nonlinear Dynamics, 2018, 91, 505-513.	2.7	9
3	FPGA Hardware Design of a Unified Chaotic System for CTRNG. , 2018, , .		4
4	FPGA-based Chaotic Cryptosystem by Using Voice Recognition as Access Key. Electronics (Switzerland), 2018, 7, 414.	1.8	46
5	An Improved Pseudo-Random Number Generator Based on the Logistic Chaotic. , 2018, , .		0
6	Parameter estimation for 1D PWL chaotic maps using noisy dynamics. Nonlinear Dynamics, 2018, 94, 2979-2993.	2.7	3
7	Hardware implementation of multi-scroll chaos based architecture for securing biometric templates. , $2018,  ,  .$		2
8	A New Chaotic System with a Self-Excited Attractor: Entropy Measurement, Signal Encryption, and Parameter Estimation. Entropy, 2018, 20, 86.	1.1	70
9	Complexity of Simple, Switched and Skipped Chaotic Maps in Finite Precision. Entropy, 2018, 20, 135.	1.1	10
10	A New Two-Dimensional Map with Hidden Attractors. Entropy, 2018, 20, 322.	1.1	39
11	A novel pseudo-random number generator from coupled map lattice with time-varying delay. Nonlinear Dynamics, 2018, 94, 325-341.	2.7	33
12	Security analysis and improvement of the pseudo-random number generator based on quantum chaotic map. Nonlinear Dynamics, 2018, 94, 1117-1126.	2.7	25
13	Chaos-based hardware speech encryption scheme using modified tent map and bit permutation. , 2018, , .		14
14	Implementation and Performance Analysis of True Random Number Generator on FPGA Environment by Using Non-periodic Chaotic Signals Obtained from Chaotic Maps. Arabian Journal for Science and Engineering, 2019, 44, 9427-9441.	1.7	24
16	A Novel S-Box Design Algorithm Based on a New Compound Chaotic System. Entropy, 2019, 21, 1004.	1.1	59
17	Pseudorandom number generator based on enhanced HÃ $\odot$ non map and its implementation. AEU - International Journal of Electronics and Communications, 2019, 107, 239-251.	1.7	64
18	Implementing a Chaotic Cryptosystem by Performing Parallel Computing on Embedded Systems with Multiprocessors. Entropy, 2019, 21, 268.	1.1	24
19	Medical Image Encryption Based on Hybrid Chaotic DNA Diffusion. Wireless Personal Communications, 2019, 108, 591-612.	1.8	61

#	Article	IF	CITATIONS
20	Chaotic Map with No Fixed Points: Entropy, Implementation and Control. Entropy, 2019, 21, 279.	1.1	25
21	Chaotic Encryption Applied to Optical Ethernet in Industrial Control Systems. IEEE Transactions on Instrumentation and Measurement, 2019, 68, 4876-4886.	2.4	13
22	A novel memristive true random number generator design. COMPEL - the International Journal for Computation and Mathematics in Electrical and Electronic Engineering, 2019, 38, 1931-1947.	0.5	4
23	A Digital Pseudo Random Number Generator Based on a Chaotic Dynamic System. , 2019, , .		3
24	Selecting Unrepeatable Random Starting Nodes in Large-Scale Networks for Parallel Computing and Searching., 2019,,.		0
25	Design and FPGA Implementation of a Pseudorandom Number Generator Based on a Four-Wing Memristive Hyperchaotic System and Bernoulli Map. IEEE Access, 2019, 7, 181884-181898.	2.6	55
26	A true random bit generator based on a memristive chaotic circuit: Analysis, design and FPGA implementation. Chaos, Solitons and Fractals, 2019, 119, 143-149.	2.5	102
27	Chaotic Encryption for 10-Gb Ethernet Optical Links. IEEE Transactions on Circuits and Systems I: Regular Papers, 2019, 66, 859-868.	3.5	12
28	Chaos-Based Bitwise Dynamical Pseudorandom Number Generator On FPGA. IEEE Transactions on Instrumentation and Measurement, 2019, 68, 291-293.	2.4	76
29	FPGA realization of a speech encryption system based on a generalized modified chaotic transition map and bit permutation. Multimedia Tools and Applications, 2019, 78, 16097-16127.	2.6	24
30	A true random number generator based on a Chua and RO-PUF: design, implementation and statistical analysis. Analog Integrated Circuits and Signal Processing, 2020, 102, 415-426.	0.9	23
31	A Coupled Variable Input LCG Method and its VLSI Architecture for Pseudorandom Bit Generation. IEEE Transactions on Instrumentation and Measurement, 2020, 69, 1011-1019.	2.4	24
32	An efficient and lightweight multiâ€scroll chaosâ€based hardware solution for protecting fingerprint biometric templates. International Journal of Communication Systems, 2020, 33, e4211.	1.6	13
33	A novel dissipative and conservative megastable oscillator with engineering applications. Modern Physics Letters B, 2020, 34, 2150007.	1.0	7
34	A novel secure chaos-based pseudo random number generator based on ANN-based chaotic and ring oscillator: design and its FPGA implementation. Analog Integrated Circuits and Signal Processing, 2020, 105, 167-181.	0.9	26
35	Low power and high-speed FPGA implementation for 4D memristor chaotic system for image encryption. Multimedia Tools and Applications, 2020, 79, 23203-23222.	2.6	24
36	An Efficient Image Encryption Scheme Based on the LSS Chaotic Map and Single S-Box. IEEE Access, 2020, 8, 25664-25678.	2.6	179
37	PUF-Based Secure Chaotic Random Number Generator Design Methodology. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2020, 28, 1740-1744.	2.1	34

#	ARTICLE	IF	CITATIONS
38	Chaos-Based Application of a Novel Multistable 5D Memristive Hyperchaotic System with Coexisting Multiple Attractors. Complexity, 2020, 2020, 1-19.	0.9	32
39	Encrypted Physical Layer Communications Using Synchronized Hyperchaotic Maps. IEEE Access, 2021, 9, 13286-13303.	2.6	10
40	Secure speech coding communication using hyperchaotic key generators for AMR-WB codec. Multimedia Systems, 2021, 27, 247-269.	3.0	5
41	Generative Adversarial Networks-Based Pseudo-Random Number Generator for Embedded Processors. Lecture Notes in Computer Science, 2021, , 215-234.	1.0	1
42	Differential Evolution under Fixed Point Arithmetic and FP16 Numbers. Mathematical and Computational Applications, 2021, 26, 13.	0.7	2
43	Xilinx Zynq FPGA for Hardware Implementation of a Chaos-Based Cryptosystem for Real-Time Image Protection. Journal of Circuits, Systems and Computers, 2021, 30, 2150204.	1.0	11
44	Single Neuronal Dynamical System in Self-Feedbacked Hopfield Networks and Its Application in Image Encryption. Entropy, 2021, 23, 456.	1.1	9
45	True Bit Generation by Using Two Different Noise Sources. Journal of Circuits, Systems and Computers, 2021, 30, .	1.0	3
46	From Continuous-Time Chaotic Systems to Pseudo Random Number Generators: Analysis and Generalized Methodology. Entropy, 2021, 23, 671.	1.1	3
47	Synchronization of chaotic artificial neurons and its application to secure image transmission under MQTT for IoT protocol. Nonlinear Dynamics, 2021, 104, 4581-4600.	2.7	22
48	Designing an authenticated Hash function with a 2D chaotic map. Nonlinear Dynamics, 2021, 104, 4569-4580.	2.7	25
49	Control, synchronization with linear quadratic regulator method and FFANN-based PRNG application on FPGA of a novel chaotic system. European Physical Journal: Special Topics, 2021, 230, 1915-1931.	1.2	10
50	Design and Implementation of Chaotic Frequency Hopping Sequences based on One Dimensional Chaotic Maps utilizing FPGA., 2021, , .		2
51	Design and FPGA Implementation of a Pseudo-random Number Generator Based on a Hopfield Neural Network Under Electromagnetic Radiation. Frontiers in Physics, 2021, 9, .	1.0	49
52	The N-level (N ≥ 4) logistic cascade homogenized mapping for image encryption. Nonlinear Dynamic 2021, 105, 1911-1935.	S, <sub>2.7</sub>	8
53	A non-autonomous chaotic system with no equilibrium. The Integration VLSI Journal, 2021, 79, 143-156.	1.3	9
54	Design and FPGA implementation of TRNG based on a new multi-wing attractor in Lorenz chaotic system. European Physical Journal: Special Topics, 2021, 230, 3469-3480.	1.2	14
55	A novel memristive chaotic system without any equilibrium point. The Integration VLSI Journal, 2021, 79, 133-142.	1.3	11

#	ARTICLE	IF	CITATIONS
56	Chaotic Path Planning for 3D Area Coverage Using a Pseudo-Random Bit Generator from a 1D Chaotic Map. Mathematics, 2021, 9, 1821.	1.1	12
57	Research on Pseudorandom Number Generator Based on Several New Types of Piecewise Chaotic Maps. Mathematical Problems in Engineering, 2021, 2021, 1-12.	0.6	9
58	Exact Analysis of the Finite Precision Error Generated in Important Chaotic Maps and Complete Numerical Remedy of These Schemes. Informatics, 2021, 8, 54.	2.4	0
59	Hardware Efficient Pseudo-Random Number Generator using Chen Chaotic System on FPGA. Journal of Circuits, Systems and Computers, 0, , 2250043.	1.0	10
60	The use of ellipse-based estimator as a sub-key distinguisher for Side-Channel Analysis. Computers and Electrical Engineering, 2021, 94, 107311.	3.0	0
61	On chaos and projective synchronization of a fractional difference map with no equilibria using a fuzzy-based state feedback control. Physica A: Statistical Mechanics and Its Applications, 2021, 578, 126100.	1.2	23
62	Hyperchaotic fractional Grassi–Miller map and its hardware implementation. The Integration VLSI Journal, 2021, 80, 13-19.	1.3	12
63	A novel chaos based generating function of the Chebyshev polynomials and its applications in image encryption. Chaos, Solitons and Fractals, 2021, 151, 111315.	2.5	14
64	Secure image encryption scheme using 4D-Hyperchaotic systems based reconfigurable pseudo-random number generator and S-Box. The Integration VLSI Journal, 2021, 81, 137-159.	1.3	30
65	A Method to Determine the Most Suitable Initial Conditions of Chaotic Map in Statistical Randomness Applications. IEEE Access, 2021, 9, 1482-1494.	2.6	18
66	A new discrete-space chaotic map based on the multiplication of integer numbers and its application in S-box design. Nonlinear Dynamics, 2020, 100, 699-711.	2.7	98
67	Cellular Automata Based Key Stream Generator – A Reconfigurable Hardware Approach. Communications in Computer and Information Science, 2019, , 232-242.	0.4	0
68	Real-time RGB image encryption for IoT applications using enhanced sequences from chaotic maps. Chaos, Solitons and Fractals, 2021, 153, 111506.	2.5	49
69	A Hardware Pseudo-Random Number Generator Using Stochastic Computing and Logistic Map. Micromachines, 2021, 12, 31.	1.4	9
70	Kalman observers in estimating the states of chaotic neurons for image encryption under MQTT for loT protocol. European Physical Journal: Special Topics, 2022, 231, 945-962.	1.2	8
71	Hardware architecture of a digital piecewise linear chaotic map with perturbation for pseudorandom number generation. AEU - International Journal of Electronics and Communications, 2022, 147, 154138.	1.7	9
72	DESSB-TRNG: A novel true random number generator using data encryption standard substitution box as post-processing., 2022, 123, 103455.		5
73	PUFloc: PUF and Location Based Hierarchical Mutual Authentication Protocol for Surveillance Drone Networks. Communications in Computer and Information Science, 2022, , 66-89.	0.4	2

#	ARTICLE	IF	Citations
74	A New Fractional-Order Map with Infinite Number of Equilibria and Its Encryption Application. Complexity, 2022, 2022, 1-18.	0.9	5
75	FPGA Implementation of Chaos based Pseudo Random Number Generator. , 2021, , .		2
76	Dynamics of Multimodal Families of m-Modal Maps. Complexity, 2022, 2022, 1-13.	0.9	0
77	Design of a High Throughput Pseudorandom Number Generator Based on Discrete Hyper-Chaotic System. IEEE Transactions on Circuits and Systems II: Express Briefs, 2023, 70, 806-810.	2.2	10
78	A Novel 3D Chaotic System With Line Equilibrium: Multistability, Integral Sliding Mode Control, Electronic Circuit, FPGA Implementation and Its Image Encryption. IEEE Access, 2022, 10, 68057-68074.	2.6	47
79	Construction of a novel nth-order polynomial chaotic map and its application in the pseudorandom number generator. Nonlinear Dynamics, 2022, 110, 821-839.	2.7	4
80	CORDIC-Based FPGA Realization of a Spatially Rotating Translational Fractional-Order Multi-Scroll Grid Chaotic System. Fractal and Fractional, 2022, 6, 432.	1.6	4
81	Hardware implementation of a strong pseudorandom number generator based blockâ€cipher system for color image encryption and decryption. International Journal of Circuit Theory and Applications, 2023, 51, 410-436.	1.3	1
82	A Novel four - Wing chaotic system with multiple attractors based on hyperbolic sine: Application to image encryption*. The Integration VLSI Journal, 2022, 87, 313-331.	1.3	12
83	A high-performance hybrid random number generator based on a nondegenerate coupled chaos and its practical implementation. Nonlinear Dynamics, 2023, 111, 847-869.	2.7	2
84	Discrete Memristance and Nonlinear Term for Designing Memristive Maps. Symmetry, 2022, 14, 2110.	1.1	10
85	A Novel Discrete-Time Chaos-Function-Based Random-Number Generator: Design and Variability Analysis. Symmetry, 2022, 14, 2122.	1.1	4
86	How to perturb Bernoulli shift map. Chaos, Solitons and Fractals, 2022, 165, 112793.	2.5	1
87	Generating Even More Chaotic Instances in Hardware. Electronics (Switzerland), 2023, 12, 332.	1.8	1
88	A high speed pseudo-random bit generator driven by 2D-discrete hyperchaos. Chaos, Solitons and Fractals, 2023, 167, 113039.	2.5	7
89	A chaotic PRNG tested with the heuristic Differential Evolution. The Integration VLSI Journal, 2023, 90, 22-26.	1.3	7
90	Real-time medical image encryption for H-IoT applications using improved sequences from chaotic maps. The Integration VLSI Journal, 2023, 90, 131-145.	1.3	9
91	FPGA modeling of a novel fully-synthesizable and secure TRNG based on key-dependent s-box., 2023, 136, 103969.		1

#	Article	IF	Citations
92	An 8-bit integer true periodic orbit PRNG based on delayed Arnold's cat map. AEU - International Journal of Electronics and Communications, 2023, 162, 154575.	1.7	0
93	A novel asymmetrical double-wing hyperchaotic system with multiple different attractors: application to finite-time synchronization and image encryption. Multimedia Tools and Applications, 0, , .	2.6	1
94	FPGA Implementation of RO-PUF using Chaotic Maps. , 2023, , .		1
95	Bio-Hash Secured Hardware e-Health Record System. IEEE Transactions on Biomedical Circuits and Systems, 2023, 17, 420-432.	2.7	1
97	Research on encryption algorithms in terahertz communication systems. , 2023, , .		0
99	One-Dimensional Map Without Fixed Points and with Amplitude Control. Springer Proceedings in Complexity, 2023, , 87-97.	0.2	1
102	Random Number Generators. Advances in Computational Intelligence and Robotics Book Series, 2023, , 361-379.	0.4	0
106	Impulse Neurons: Phasic Bursts and Tonic Bursts, To Generate Pseudorandom Sequences., 2023, , .		0