Esteban Tlelo-Cuautle

List of Publications by Year in Descending Order

Source: https://exaly.com/author-pdf/1046864/esteban-tlelo-cuautle-publications-by-year.pdf

Version: 2024-04-25

ext. papers

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

245 2,973 31 45 g-index 285 3,620 2 5.89

avg, IF

ext. citations

L-index

#	Paper	IF	Citations
245	PoincarImaps for detecting chaos in fractional-order systems with hidden attractors for its Kaplan-Yorke dimension optimization. <i>AIMS Mathematics</i> , 2022 , 7, 5871-5894	2.2	2
244	FPAA-based implementation of fractional-order multidirectional multiscroll chaotic oscillators 2022 , 341-374		
243	Optimization of fractional-order chaotic cellular neural networks by metaheuristics <i>European Physical Journal: Special Topics</i> , 2022 , 1-7	2.3	1
242	Traffic Flow Prediction for Smart Traffic Lights Using Machine Learning Algorithms. <i>Technologies</i> , 2022 , 10, 5	2.4	8
241	Synchronization of Chaotic Electroencephalography (EEG) Signals. <i>Studies in Big Data</i> , 2022 , 83-108	0.9	
240	An Image Compression-Encryption Algorithm Based on Compressed Sensing and Chaotic Oscillator. <i>Studies in Big Data</i> , 2022 , 19-50	0.9	
239	Secure Communication Scheme Based on Projective Synchronization of Hyperchaotic Systems. <i>Studies in Big Data</i> , 2022 , 109-156	0.9	
238	Attention Measurement of an Autism Spectrum Disorder User Using EEG Signals: A Case Study. <i>Mathematical and Computational Applications</i> , 2022 , 27, 21	1	2
237	Evaluation of Machine Learning Algorithms for Early Diagnosis of Deep Venous Thrombosis. <i>Mathematical and Computational Applications</i> , 2022 , 27, 24	1	O
236	Evaluation of underwater image enhancement algorithms based on Retinex and its implementation on embedded systems. <i>Neurocomputing</i> , 2022 , 494, 148-159	5.4	O
235	An Image Encryption Scheme Synchronizing Optimized Chaotic Systems Implemented on Raspberry Pis. <i>Mathematics</i> , 2022 , 10, 1907	2.3	O
234	A New 4-D Hyperchaotic System with No Balance Point, Its Bifurcation Analysis, Multi-Stability, Circuit Simulation, and FPGA Realization 2022 , 177-200		
233	On the Sizing of CMOS Operational Amplifiers by Applying Many-Objective Optimization Algorithms. <i>Electronics (Switzerland)</i> , 2021 , 10, 3148	2.6	4
232	Pipeline FPGA-Based Implementations of ANNs for the Prediction of up to 600-Steps-Ahead of Chaotic Time Series. <i>Journal of Circuits, Systems and Computers</i> , 2021 , 30, 2150164	0.9	9
231	Development of a Portable, Reliable and Low-Cost Electrical Impedance Tomography System Using an Embedded System. <i>Electronics (Switzerland)</i> , 2021 , 10, 15	2.6	9
230	A New 4-D Multi-Stable Hyperchaotic System With No Balance Point: Bifurcation Analysis, Circuit Simulation, FPGA Realization and Image Cryptosystem. <i>IEEE Access</i> , 2021 , 9, 144555-144573	3.5	7
229	Real-time RGB image encryption for IoT applications using enhanced sequences from chaotic maps. <i>Chaos, Solitons and Fractals,</i> 2021 , 153, 111506	9.3	6

(2020-2021)

228	FPGA Realization of Spherical Chaotic System with Application in Image Transmission. <i>Mathematical Problems in Engineering</i> , 2021 , 2021, 1-16	1.1	4
227	FPGA Realization of the Parameter-Switching Method in the Chen Oscillator and Application in Image Transmission. <i>Symmetry</i> , 2021 , 13, 923	2.7	1
226	Synchronization of chaotic artificial neurons and its application to secure image transmission under MQTT for IoT protocol. <i>Nonlinear Dynamics</i> , 2021 , 104, 4581	5	11
225	Fractional-Order Approximation of PID Controller for Buck-Boost Converters. <i>Micromachines</i> , 2021 , 12,	3.3	4
224	Maximizing the Chaotic Behavior of Fractional Order Chen System by Evolutionary Algorithms. <i>Mathematics</i> , 2021 , 9, 1194	2.3	3
223	Designing an authenticated Hash function with a 2D chaotic map. <i>Nonlinear Dynamics</i> , 2021 , 104, 4569	5	8
222	Automated Driving of GaN Chireix Power Amplifier for the Digital Predistortion Linearization. <i>IEEE Transactions on Circuits and Systems II: Express Briefs</i> , 2021 , 68, 1887-1891	3.5	2
221	Optimization of the Kaplan-Yorke dimension in fractional-order chaotic oscillators by metaheuristics. <i>Applied Mathematics and Computation</i> , 2021 , 394, 125831	2.7	13
220	Issues on Applying One- and Multi-Step Numerical Methods to Chaotic Oscillators for FPGA Implementation. <i>Mathematics</i> , 2021 , 9, 151	2.3	9
219	On the FPGA implementation of chaotic oscillators based on memristive circuits 2021 , 41-66		
218	A 5-D Multi-Stable Hyperchaotic Two-Disk Dynamo System With No Equilibrium Point: Circuit Design, FPGA Realization and Applications to TRNGs and Image Encryption. <i>IEEE Access</i> , 2021 , 9, 81352-	81369	17
217	Estimating the Highest Time-Step in Numerical Methods to Enhance the Optimization of Chaotic Oscillators. <i>Mathematics</i> , 2021 , 9, 1938	2.3	7
216	CMOS OTA-Based Filters for Designing Fractional-Order Chaotic Oscillators. <i>Fractal and Fractional</i> , 2021 , 5, 122	3	5
215	Gate Sizing Methodology with a Novel Accurate Metric to Improve Circuit Timing Performance under Process Variations. <i>Technologies</i> , 2020 , 8, 25	2.4	4
214	CMOS Analog AGC for Biomedical Applications. <i>Electronics (Switzerland)</i> , 2020 , 9, 878	2.6	0
213	FPAA-based implementation of fractional-order chaotic oscillators using first-order active filter blocks. <i>Journal of Advanced Research</i> , 2020 , 25, 77-85	13	33
212	Surrogate Assisted Optimization for Low-Voltage Low-Power Circuit Design. <i>Journal of Low Power Electronics and Applications</i> , 2020 , 10, 20	1.7	1
211	Metamodelling Techniques for the Optimal Design of Low-Noise Amplifiers. <i>Electronics</i> (Switzerland), 2020 , 9, 787	2.6	2

21 0	Investigation of Early Warning Indexes in a Three-Dimensional Chaotic System with Zero Eigenvalues. <i>Entropy</i> , 2020 , 22,	2.8	4
209	A novel chaotic system in the spherical coordinates. <i>European Physical Journal: Special Topics</i> , 2020 , 229, 1257-1263	2.3	1
208	Chaotic Image Encryption Using Hopfield and Hindmarsh-Rose Neurons Implemented on FPGA. <i>Sensors</i> , 2020 , 20,	3.8	32
207	Sizing CMOS Amplifiers by PSO and MOL to Improve DC Operating Point Conditions. <i>Electronics</i> (Switzerland), 2020 , 9, 1027	2.6	11
206	FPGA-based system for effective IQ imbalance mitigation of RF power amplifiers. <i>International Journal of Circuit Theory and Applications</i> , 2020 , 48, 512-523	2	2
205	Convergence rates of the efficient global optimization algorithm for improving the design of analog circuits. <i>Analog Integrated Circuits and Signal Processing</i> , 2020 , 103, 143-162	1.2	5
204	Characterization and Optimization of Fractional-Order Chaotic Systems 2020 , 75-91		
203	FPAA-Based Implementation and Behavioral Descriptions of Autonomous Chaotic Oscillators 2020 , 41-	74	1
202	Integer and Fractional-Order Chaotic Circuits and Systems 2020 , 1-40		3
2 01	Analog Implementations of Fractional-Order Chaotic Systems 2020 , 93-114		1
200	Synchronization and Applications of Fractional-Order Chaotic Systems 2020 , 175-201		2
199	Randomness improvement of chaotic maps for image encryption in a wireless communication scheme using PIC-microcontroller via Zigbee channels. <i>Chaos, Solitons and Fractals,</i> 2020 , 133, 109646	9.3	51
198	Analog/Digital Implementation of Fractional Order Chaotic Circuits and Applications 2020,		26
197	. IEEE Access, 2020 , 8, 138217-138235	3.5	2
196	A 3-D Multi-Stable System With a Peanut-Shaped Equilibrium Curve: Circuit Design, FPGA Realization, and an Application to Image Encryption. <i>IEEE Access</i> , 2020 , 8, 137116-137132	3.5	64
195	A new four-dimensional two-scroll hyperchaos dynamical system with no rest point, bifurcation analysis, multi-stability, circuit simulation and FPGA design. <i>International Journal of Computer Applications in Technology</i> , 2020 , 63, 147	0.7	2
194	Single-Objective Optimization of a CMOS VCO Considering PVT and Monte Carlo Simulations. <i>Mathematical and Computational Applications</i> , 2020 , 25, 76	1	3
193	Mathematical and numerical analysis of the dynamical behavior of chen oscillator. <i>International Journal of Dynamics and Control</i> , 2020 , 8, 386-395	1.7	3

192	Pseudo Expected Improvement Based-Optimization for CMOS Analog Circuit Design 2019,		3	
191	On maximizing the positive Lyapunov exponent of chaotic oscillators applying DE and PSO. <i>International Journal of Dynamics and Control</i> , 2019 , 7, 1157-1172	1.7	6	
190	FPGA-based implementation of different families of fractional-order chaotic oscillators applying Grāwaldletnikov method. <i>Communications in Nonlinear Science and Numerical Simulation</i> , 2019 , 72, 516-527	3.7	43	
189	Optimizing the KaplanNorke Dimension of Chaotic Oscillators Applying DE and PSO. <i>Technologies</i> , 2019 , 7, 38	2.4	13	
188	Fast and Efficient Sensitivity Aware Multi-Objective Optimization of Analog Circuits. <i>Technologies</i> , 2019 , 7, 40	2.4	1	
187	Synchronization of complex networks of identical and nonidentical chaotic systems via model-matching control. <i>PLoS ONE</i> , 2019 , 14, e0216349	3.7	12	
186	Implementing a Chaotic Cryptosystem by Performing Parallel Computing on Embedded Systems with Multiprocessors. <i>Entropy</i> , 2019 , 21,	2.8	18	
185	FPGA Implementation of Chaotic Oscillators, Their Synchronization, and Application to Secure Communications 2019 , 301-328		3	
184	On the synchronization techniques of chaotic oscillators and their FPGA-based implementation for secure image transmission. <i>PLoS ONE</i> , 2019 , 14, e0209618	3.7	24	
183	Implementing a chaotic cryptosystem in a 64-bit embedded system by using multiple-precision arithmetic. <i>Nonlinear Dynamics</i> , 2019 , 96, 497-516	5	42	
182	FPGA Realisation of n-QAM Digital Modulators. <i>IETE Technical Review (Institution of Electronics and Telecommunication Engineers, India)</i> , 2019 , 36, 315-325	1.5		
181	High-Q and Wide-Bandwidth Capacitor Multiplier Optimized by NSGA-II. <i>IETE Journal of Research</i> , 2019 , 65, 661-666	0.9	2	
180	A New Nonlinear Dynamical Model with Three Quadratic Nonlinear Terms and Hidden Chaos 2019,		1	
179	A Novel 3-D Chaotic System with Line Equilibrium: Dynamical Analysis and Synchronization. <i>Journal of Physics: Conference Series</i> , 2019 , 1179, 012086	0.3		
178	A Novel Chaotic System with Two Circles of Equilibrium Points: Multistability, Electronic Circuit and FPGA Realization. <i>Electronics (Switzerland)</i> , 2019 , 8, 1211	2.6	41	
177	Comparison of Two Methods for I/Q Imbalance Compensation Applied in RF Power Amplifiers. <i>Studies in Computational Intelligence</i> , 2019 , 275-294	0.8		
176	Optimal Sizing of Low-DropOut Voltage Regulators by NSGA-II and PVT Analysis. <i>Studies in Computational Intelligence</i> , 2019 , 225-247	0.8	1	
175	Enhancing Q-Factor in a Biquadratic Bandpass Filter Implemented with Opamps. <i>Technologies</i> , 2019 , 7, 64	2.4	4	

174	Design of a Wide-Band Voltage-Controlled Ring Oscillator Implemented in 180 nm CMOS Technology. <i>Electronics (Switzerland)</i> , 2019 , 8, 1156	2.6	6
173	Design and Construction of an ROV for Underwater Exploration. Sensors, 2019, 19,	3.8	11
172	Memory Circuit Elements: Complexity, Complex Systems, and Applications. <i>Complexity</i> , 2019 , 2019, 1-4	1.6	8
171	Optimization and CMOS design of chaotic oscillators robust to PVT variations: INVITED. <i>The Integration VLSI Journal</i> , 2019 , 65, 32-42	1.4	32
170	Development and implementation of a fish counter by using an embedded system. <i>Computers and Electronics in Agriculture</i> , 2018 , 145, 53-62	6.5	23
169	Symbolic Analysis and Synthesis of Analog Circuits Using Nullors and Pathological Mirror Elements. Lecture Notes in Electrical Engineering, 2018 , 3-30	0.2	
168	Sizing Analogue Integrated Circuits by Integer Encoding and NSGA-II. <i>IETE Technical Review</i> (Institution of Electronics and Telecommunication Engineers, India), 2018 , 35, 237-243	1.5	6
167	Optimal Sizing of Amplifiers by Evolutionary Algorithms with Integer Encoding and (g_m/I_D) Design Method. <i>Studies in Computational Intelligence</i> , 2018 , 263-279	0.8	1
166	Experimental Verification of Optimized Multiscroll Chaotic Oscillators Based on Irregular Saturated Functions. <i>Complexity</i> , 2018 , 2018, 1-17	1.6	12
165	A new four-dimensional chaotic system with hidden attractor and its circuit design 2018,		2
164	FPGA-based implementation of chaotic oscillators by applying the numerical method based on trigonometric polynomials. <i>AIP Advances</i> , 2018 , 8, 075217	1.5	28
163	Thermal-Sensor-Based Occupancy Detection for Smart Buildings Using Machine-Learning Methods. <i>ACM Transactions on Design Automation of Electronic Systems</i> , 2018 , 23, 1-21	1.5	16
162	Kriging Metamodeling-Assisted Multi-Objective Optimization of CMOS Current Conveyors 2018,		2
161	Expected Improvement-Based Optimization Approach for the Optimal Sizing of a CMOS Operational Transconductance Amplifier 2018 ,		4
160	Linearizing the Transconductance of an OTA Through the Optimal Sizing by Applying NSGA-II 2018 ,		1
159	Prediction of chaotic time series by using ANNs, ANFIS and SVMs 2018 ,		3
158	An RBF-PSO technique for the rapid optimization of (CMOS) analog circuits 2018,		7
157	FPGA-based Chaotic Cryptosystem by Using Voice Recognition as Access Key. <i>Electronics</i> (Switzerland), 2018 , 7, 414	2.6	31

156	PVT-Robust CMOS Programmable Chaotic Oscillator: Synchronization of Two 7-Scroll Attractors. <i>Electronics (Switzerland)</i> , 2018 , 7, 252	2.6	12
155	On the Prediction of the Threshold Voltage Degradation in CMOS Technology Due to Bias-Temperature Instability. <i>Electronics (Switzerland)</i> , 2018 , 7, 427	2.6	4
154	FPGA-Based Implementation of a Multilayer Perceptron Suitable for Chaotic Time Series Prediction. <i>Technologies</i> , 2018 , 6, 90	2.4	18
153	A Memristive System with Hidden Attractors and Its Engineering Application. <i>Studies in Computational Intelligence</i> , 2017 , 81-99	0.8	2
152	Analysis of a 4-D Hyperchaotic Fractional-Order Memristive System with Hidden Attractors. <i>Studies in Computational Intelligence</i> , 2017 , 207-235	0.8	14
151	A New Chaotic System With Stable Equilibrium: From Theoretical Model to Circuit Implementation. <i>IEEE Access</i> , 2017 , 5, 8851-8858	3.5	45
150	Dynamics, FPGA realization and application of a chaotic system with an infinite number of equilibrium points. <i>Nonlinear Dynamics</i> , 2017 , 89, 1129-1139	5	60
149	A switched-capacitor skew-tent map implementation for random number generation. <i>International Journal of Circuit Theory and Applications</i> , 2017 , 45, 305-315	2	32
148	Hardware implementation of pseudo-random number generators based on chaotic maps. <i>Nonlinear Dynamics</i> , 2017 , 90, 1661-1670	5	70
147	2017,		4
147 146	2017, Prediction of chaotic time-series with different MLE values using FPGA-based ANNs 2017,		1
		5	
146	Prediction of chaotic time-series with different MLE values using FPGA-based ANNs 2017 , New alternatives for analog implementation of fractional-order integrators, differentiators and PID	5	1
146	Prediction of chaotic time-series with different MLE values using FPGA-based ANNs 2017, New alternatives for analog implementation of fractional-order integrators, differentiators and PID controllers based on integer-order integrators. <i>Nonlinear Dynamics</i> , 2017, 90, 241-256 Arduino-based chaotic secure communication system using multi-directional multi-scroll chaotic		1 46
146 145 144	Prediction of chaotic time-series with different MLE values using FPGA-based ANNs 2017, New alternatives for analog implementation of fractional-order integrators, differentiators and PID controllers based on integer-order integrators. <i>Nonlinear Dynamics</i> , 2017, 90, 241-256 Arduino-based chaotic secure communication system using multi-directional multi-scroll chaotic oscillators. <i>Nonlinear Dynamics</i> , 2017, 87, 2203-2217 On the Selection of Solutions in Multiobjective Analog Circuit Design. <i>Studies in Computational</i>	5	1 46 73
146 145 144 143	Prediction of chaotic time-series with different MLE values using FPGA-based ANNs 2017, New alternatives for analog implementation of fractional-order integrators, differentiators and PID controllers based on integer-order integrators. <i>Nonlinear Dynamics</i> , 2017, 90, 241-256 Arduino-based chaotic secure communication system using multi-directional multi-scroll chaotic oscillators. <i>Nonlinear Dynamics</i> , 2017, 87, 2203-2217 On the Selection of Solutions in Multiobjective Analog Circuit Design. <i>Studies in Computational Intelligence</i> , 2017, 377-389 Comprehensive detection of counterfeit ICs via on-chip sensor and post-fabrication authentication	5	1 46 73
146 145 144 143	Prediction of chaotic time-series with different MLE values using FPGA-based ANNs 2017, New alternatives for analog implementation of fractional-order integrators, differentiators and PID controllers based on integer-order integrators. <i>Nonlinear Dynamics</i> , 2017, 90, 241-256 Arduino-based chaotic secure communication system using multi-directional multi-scroll chaotic oscillators. <i>Nonlinear Dynamics</i> , 2017, 87, 2203-2217 On the Selection of Solutions in Multiobjective Analog Circuit Design. <i>Studies in Computational Intelligence</i> , 2017, 377-389 Comprehensive detection of counterfeit ICs via on-chip sensor and post-fabrication authentication policy 2017, Symbolic sensitivity analysis in the multi-objective optimization of CMOS operational amplifiers	5	1 46 73 1

138	Behavioral Modeling of Chaos-Based Applications by Using Verilog-A. <i>Studies in Computational Intelligence</i> , 2017 , 553-579	0.8	
137	FPGA-based test bed for measurement of AM/AM and AM/PM distortion and modeling memory effects in RF PAs. <i>The Integration VLSI Journal</i> , 2016 , 52, 291-300	1.4	1
136	Optimization of LDO voltage regulators by NSGA-II 2016 ,		2
135	Optimising operational amplifiers by evolutionary algorithms and gm/Id method. <i>International Journal of Electronics</i> , 2016 , 103, 1665-1684	1.2	20
134	VHDL Descriptions for the FPGA Implementation of PWL-Function-Based Multi-Scroll Chaotic Oscillators. <i>PLoS ONE</i> , 2016 , 11, e0168300	3.7	22
133	Discrete Chaotic Dynamics for Economics and Social Science. <i>Discrete Dynamics in Nature and Society</i> , 2016 , 2016, 1-2	1.1	2
132	Review: Advances in BTI modeling for the design of reliable ICs 2016,		2
131	Kinematic Control of a Robot by Using a Non-autonomous Chaotic System. <i>Studies in Computational Intelligence</i> , 2016 , 1-17	0.8	2
130	On the Verification for Realizing Multi-scroll Chaotic Attractors with High Maximum Lyapunov Exponent and Entropy. <i>Studies in Computational Intelligence</i> , 2016 , 311-336	0.8	
129	Engineering Applications of FPGAs 2016 ,		25
129	Engineering Applications of FPGAs 2016 , Generating a 50-scroll chaotic attractor at 66 MHz by using FPGAs. <i>Nonlinear Dynamics</i> , 2016 , 85, 2143-2	2 1 57	25 79
		2 3 57 0.7	
128	Generating a 50-scroll chaotic attractor at 66 MHz by using FPGAs. <i>Nonlinear Dynamics</i> , 2016 , 85, 2143-7. Circuit Realization of the Synchronization of Two Chaotic Oscillators with Optimized Maximum		
128	Generating a 50-scroll chaotic attractor at 66 MHz by using FPGAs. <i>Nonlinear Dynamics</i> , 2016 , 85, 2143-2005. Circuit Realization of the Synchronization of Two Chaotic Oscillators with Optimized Maximum Lyapunov Exponent. <i>Studies in Fuzziness and Soft Computing</i> , 2016 , 627-651 CDCTA and OTA Realizations of a Multi-phase Sinusoidal Oscillator. <i>IETE Technical Review</i>	0.7	79
128 127 126	Generating a 50-scroll chaotic attractor at 66 MHz by using FPGAs. <i>Nonlinear Dynamics</i> , 2016 , 85, 2143-22. Circuit Realization of the Synchronization of Two Chaotic Oscillators with Optimized Maximum Lyapunov Exponent. <i>Studies in Fuzziness and Soft Computing</i> , 2016 , 627-651 CDCTA and OTA Realizations of a Multi-phase Sinusoidal Oscillator. <i>IETE Technical Review (Institution of Electronics and Telecommunication Engineers, India)</i> , 2015 , 32, 497-504	0.7	79
128 127 126	Generating a 50-scroll chaotic attractor at 66 MHz by using FPGAs. <i>Nonlinear Dynamics</i> , 2016 , 85, 2143-22. Circuit Realization of the Synchronization of Two Chaotic Oscillators with Optimized Maximum Lyapunov Exponent. <i>Studies in Fuzziness and Soft Computing</i> , 2016 , 627-651. CDCTA and OTA Realizations of a Multi-phase Sinusoidal Oscillator. <i>IETE Technical Review (Institution of Electronics and Telecommunication Engineers, India)</i> , 2015 , 32, 497-504. Study of regression methodologies on analog circuit design 2015 , FPGA realization of multi-scroll chaotic oscillators. <i>Communications in Nonlinear Science and</i>	0.7	79
128 127 126 125	Generating a 50-scroll chaotic attractor at 66 MHz by using FPGAs. <i>Nonlinear Dynamics</i> , 2016 , 85, 2143-22. Circuit Realization of the Synchronization of Two Chaotic Oscillators with Optimized Maximum Lyapunov Exponent. <i>Studies in Fuzziness and Soft Computing</i> , 2016 , 627-651 CDCTA and OTA Realizations of a Multi-phase Sinusoidal Oscillator. <i>IETE Technical Review (Institution of Electronics and Telecommunication Engineers, India)</i> , 2015 , 32, 497-504 Study of regression methodologies on analog circuit design 2015 , FPGA realization of multi-scroll chaotic oscillators. <i>Communications in Nonlinear Science and Numerical Simulation</i> , 2015 , 27, 66-80 Optimizing an LDO voltage regulator by evolutionary algorithms considering tolerances of the	0.7	79 10 2 151

(2014-2015)

120	CCII+ Based on QFGMOS for Implementing Chua s Chaotic Oscillator. <i>IEEE Latin America Transactions</i> , 2015 , 13, 2865-2870	0.7	17
119	Optimizing an amplifier by a many-objective algorithm based on R2 indicator 2015 ,		1
118	Optimizing operational amplifiers by metaheuristics and considering tolerance analysis 2015,		2
117	Full-chip electromigration assessment: Effect of cross-layout temperature and thermal stress distributions 2015 ,		1
116	Simulation of Piecewise-Linear One-Dimensional Chaotic Maps by Verilog-A. <i>IETE Technical Review</i> (Institution of Electronics and Telecommunication Engineers, India), 2015 , 32, 304-310	1.5	12
115	Control algorithm using trajectory-based MPC for MPPT application 2015,		1
114	OCBA in the yield optimization of analog integrated circuits by evolutionary algorithms 2015,		6
113	Modeling memory effects in RF power amplifiers applied to a digital pre-distortion algorithm and emulated on a DSP-FPGA board. <i>The Integration VLSI Journal</i> , 2015 , 49, 49-64	1.4	6
112	Distributed Selection of the Optimal Sizes of Analog Unity Gain Cells by Fuzzy Set Intersection. <i>Advances in Computer and Electrical Engineering Book Series</i> , 2015 , 180-209	0.3	
111	Combination of Metaheuristics to the Optimal Design of Analog and RF Circuits. <i>Advances in Computer and Electrical Engineering Book Series</i> , 2015 , 210-234	0.3	1
110	Frequency limitations in generating multi-scroll chaotic attractors using CFOAs. <i>International Journal of Electronics</i> , 2014 , 101, 1559-1569	1.2	66
109	Graph-Based Symbolic Technique for Improving Sensitivity Analysis in Analog Integrated Circuits. IEEE Latin America Transactions, 2014 , 12, 871-876	0.7	9
108	Application of a Chaotic Oscillator in an Autonomous Mobile Robot. <i>Journal of Electrical Engineering</i> , 2014 , 65, 157-162	0.6	10
107	Graph-based symbolic technique and its application in the frequency response bound analysis of analog integrated circuits. <i>Scientific World Journal, The</i> , 2014 , 2014, 202371	2.2	
106	Experimental realization of a multiscroll chaotic oscillator with optimal maximum Lyapunov exponent. <i>Scientific World Journal, The</i> , 2014 , 2014, 303614	2.2	3
105	Experimental Synchronization of two Integrated Multi-scroll Chaotic Oscillators. <i>Journal of Applied Research and Technology</i> , 2014 , 12, 459-470	1.7	7
104	A new segmentation-based GPU-accelerated sparse matrix-vector multiplication 2014,		2
103	Selection of the Optimal Sizes of Analog Integrated Circuits by Fuzzy Sets Intersection. <i>IEEE Latin America Transactions</i> , 2014 , 12, 1005-1011	0.7	1

102	Maximizing Lyapunov Exponents in a Chaotic Oscillator by Applying Differential Evolution. <i>International Journal of Nonlinear Sciences and Numerical Simulation</i> , 2014 , 15,	1.8	10
101	Optimizing the maximum Lyapunov exponent and phase space portraits in multi-scroll chaotic oscillators. <i>Nonlinear Dynamics</i> , 2014 , 76, 1503-1515	5	43
100	Multiscroll floating gateBased integrated chaotic oscillator. <i>International Journal of Circuit Theory and Applications</i> , 2013 , 41, 831-843	2	40
99	Graph-Based Symbolic and Symbolic Sensitivity Analysis of Analog Integrated Circuits. <i>Lecture Notes in Electrical Engineering</i> , 2013 , 101-122	0.2	4
98	Optimizing the positive Lyapunov exponent in multi-scroll chaotic oscillators with differential evolution algorithm. <i>Applied Mathematics and Computation</i> , 2013 , 219, 8163-8168	2.7	32
97	Performance bound and yield analysis for analog circuits under process variations 2013,		2
96	Richardson extrapolation-based sensitivity analysis in the multi-objective optimization of analog circuits. <i>Applied Mathematics and Computation</i> , 2013 , 222, 167-176	2.7	32
95	Symbolic Moment Computation for Statistical Analysis of Large Interconnect Networks. <i>IEEE Transactions on Very Large Scale Integration (VLSI) Systems</i> , 2013 , 21, 944-957	2.6	5
94	A survey on the integrated design of chaotic oscillators. <i>Applied Mathematics and Computation</i> , 2013 , 219, 5113-5122	2.7	62
93	Operating-point driven formulation for analog computer-aided design. <i>Analog Integrated Circuits and Signal Processing</i> , 2013 , 74, 345-353	1.2	16
92	Analysis, Design and Optimization of Active Devices 2013 , 1-30		1
91	Performance bound analysis of analog circuits in frequency- and time-domain considering process variations. <i>ACM Transactions on Design Automation of Electronic Systems</i> , 2013 , 19, 1-22	1.5	6
90	Behavioral Modeling of SNFS for Synthesizing Multi-Scroll Chaotic Attractors. <i>International Journal of Nonlinear Sciences and Numerical Simulation</i> , 2013 , 14, 463-469	1.8	10
89	Sensitivity analysis in the optimal sizing of analog ICs by evolutionary algorithms 2013,		2
88	Simulating the synchronization of multi-scroll chaotic oscillators 2013,		4
87	Sizing Analog Integrated Circuits by Current-Branches-Bias Assignments with Heuristics. <i>Elektronika Ir Elektrotechnika</i> , 2013 , 19,	1.7	10
86	On the Synchronization of 1D and 2D Multi-scroll Chaotic Oscillators. <i>Studies in Computational Intelligence</i> , 2013 , 19-40	0.8	1
85	On the Synchronization of 1D and 2D Multi-scroll Chaotic Oscillators. <i>Studies in Computational Intelligence</i> , 2013 , 19-40	0.8	

84	DDD-based symbolic sensitivity analysis of active filters 2012 ,		4
83	Statistical extraction and modeling of inductance considering spatial correlation. <i>Analog Integrated Circuits and Signal Processing</i> , 2012 , 73, 3-11	1.2	2
82	Symbolic nodal analysis of analog integrated circuits using pathological elements 2012,		4
81	Integrated circuit generating 3- and 5-scroll attractors. <i>Communications in Nonlinear Science and Numerical Simulation</i> , 2012 , 17, 4328-4335	3.7	88
80	Binary Genetic Encoding for the Synthesis of Mixed-Mode Circuit Topologies. <i>Circuits, Systems, and Signal Processing</i> , 2012 , 31, 849-863	2.2	29
79	Symbolic DDD-based tool for the computation of noise in CMOS analog circuits 2012 ,		2
78	Design of Analog Circuits through Symbolic Analysis 2012 ,		34
77	Selection of MOSFET Sizes by Fuzzy Sets Intersection in the Feasible Solutions Space. <i>Journal of Applied Research and Technology</i> , 2012 , 10,	1.7	5
76	SODAC. International Journal of Applied Metaheuristic Computing, 2012, 3, 64-83	0.8	4
75	2011,		3
75 74	Design of current conveyors and their applications in universal filters 2011,		3
		3.9	
74	Design of current conveyors and their applications in universal filters 2011 ,	3.9 0.8	1
74 73	Design of current conveyors and their applications in universal filters 2011 , . IEEE Transactions on Circuits and Systems I: Regular Papers, 2011 , 58, 1382-1395 Evolutionary Algorithms in the Optimal Sizing of Analog Circuits. Studies in Computational		84
74 73 72	Design of current conveyors and their applications in universal filters 2011 , . <i>IEEE Transactions on Circuits and Systems I: Regular Papers</i> , 2011 , 58, 1382-1395 Evolutionary Algorithms in the Optimal Sizing of Analog Circuits. <i>Studies in Computational Intelligence</i> , 2011 , 109-138		1 8 ₄ 6
74 73 72 71	Design of current conveyors and their applications in universal filters 2011, . IEEE Transactions on Circuits and Systems I: Regular Papers, 2011, 58, 1382-1395 Evolutionary Algorithms in the Optimal Sizing of Analog Circuits. Studies in Computational Intelligence, 2011, 109-138 Design and Applications of Continuous-Time Chaos Generators 2011,		1 8 ₄ 6
74 73 72 71 70	Design of current conveyors and their applications in universal filters 2011, . IEEE Transactions on Circuits and Systems I: Regular Papers, 2011, 58, 1382-1395 Evolutionary Algorithms in the Optimal Sizing of Analog Circuits. Studies in Computational Intelligence, 2011, 109-138 Design and Applications of Continuous-Time Chaos Generators 2011, Multi-objective simulation-based optimization for the optimal design of analog circuits 2011, On the trade-off between the number of scrolls and the operating frequency of the chaotic		1 84 6 4 2

66	Symbolic Analysis of OTRAs-Based Circuits. Journal of Applied Research and Technology, 2011, 9,	1.7	17
65	Chaos-based communication systems by applying Hamiltonian synchronization 2010,		3
64	Symbolic noise analysis of low voltage amplifiers by using nullors 2010,		3
63	Sizing mixed-mode circuits by multi-objective evolutionary algorithms 2010 ,		1
62	On the Relation between the Number of Scrolls and the Lyapunov Exponents in PWL-functions-based Escroll Chaotic Oscillators. <i>International Journal of Nonlinear Sciences and Numerical Simulation</i> , 2010 , 11,	1.8	15
61	Symbolic behavioral modeling of low voltage amplifiers 2010 ,		1
60	Sensitivity analysis in the optimal sizing of analog circuits by evolutionary algorithms 2010,		5
59	Simulation-based optimization of CCIIs' performances in weak inversion 2010 ,		6
58	Multiscroll oscillator based on floating gate CMOS inverter 2010,		3
57	Statistical extraction and modeling of 3-D inductance with spatial correlation 2010 ,		2
56	Symbolic analysis of analog circuits containing voltage mirrors and current mirrors. <i>Analog Integrated Circuits and Signal Processing</i> , 2010 , 65, 89-95	1.2	39
55	N-scroll chaotic attractors from saturated function series employing CCII+s. <i>Nonlinear Dynamics</i> , 2010 , 61, 331-341	5	69
54	Generalized admittance matrix models of OTRAs and COAs. <i>Microelectronics Journal</i> , 2010 , 41, 502-505	1.8	21
53	Applications of Evolutionary Algorithms in the Design Automation of Analog Integrated Circuits. Journal of Applied Sciences, 2010 , 10, 1859-1872	0.3	32
52	Synthesis of Analog Circuits by Genetic Algorithms and their Optimization by Particle Swarm Optimization 2010 , 173-192		7
51	Hyperchaotic Encryption for Secure E-Mail Communication. <i>Advanced Information and Knowledge Processing</i> , 2010 , 471-486	0.3	4
50	Decomposition-based multi-objective optimization of second-generation current conveyors 2009,		8
49	Optimizing current conveyors by evolutionary algorithms including differential evolution 2009,		13

48	Symbolic behavioral model generation of current-mode analog circuits 2009,		9
47	CHAOTIC COMMUNICATION SYSTEM USING CHUA'S OSCILLATORS REALIZED WITH CCII+s. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2009 , 19, 4217-4226	2	56
46	Symbolic analysis of (MO)(I)CCI(II)(III)-based analog circuits. <i>International Journal of Circuit Theory and Applications</i> , 2009 , 38, n/a-n/a	2	14
45	Multi-scroll Chaotic Oscillator Employing UGCs 2009,		3
44	Non-sorting genetic algorithm in the optimization of unity-gain cells 2009,		2
43	Fuzzy-set based approach to compute optimum sizes of Voltage Followers 2009,		3
42	Symbolic formulation method for mixed-mode analog circuits using nullors 2009,		9
41	A CAD-tool for the design of n-scrolls chaotic systems from behavioral modeling 2009,		3
40	Automatic synthesis of 2D-n-scrolls chaotic systems by behavioral modeling. <i>Journal of Applied Research and Technology</i> , 2009 , 7,	1.7	10
39	Simulation of a parallel mechanical elbow with 3 DOF. <i>Journal of Applied Research and Technology</i> , 2009 , 7,	1.7	3
38	Simulation of Chual chaotic oscillator using unity-gain cells 2008,		4
37	Current conveyor realization of synchronized Chuaß circuits for binary communications 2008,		2
36	Systematic design of CCI(II)(III)s by combining UGCs 2008 ,		2
35	Modeling and Simulation of a Parallel Mechanical Elbow with 3 DOF 2008,		3
34	A novel CMOS exponential transconductor operating in weak inversion. <i>International Journal of Electronics</i> , 2008 , 95, 1221-1228	1.2	1
33	Simulation-based optimization of UGCs performances 2008,		11
32	Synchronization of n-scrolls chaotic systems synthesized from high-level behavioral modeling 2008,		2
31	Synthesis of CCII-s by superimposing VFs and CFs through genetic operations. <i>IEICE Electronics Express</i> , 2008 , 5, 411-417	0.5	17

30	Synthesis of n-scroll attractors using saturated functions from high-level simulation. <i>Journal of Physics: Conference Series</i> , 2008 , 96, 012050	0.3	7
29	Automatic simulation of 1D and 2D chaotic oscillators. <i>Journal of Physics: Conference Series</i> , 2008 , 96, 012059	0.3	
28	Automatic Synthesis of VFs and VMs by Applying Genetic Algorithms. <i>Circuits, Systems, and Signal Processing</i> , 2008 , 27, 391-403	2.2	26
27	Evolutionary Electronics: Automatic Synthesis of Analog Circuits by GAs. <i>Studies in Computational Intelligence</i> , 2008 , 165-187	0.8	15
26	Designing Chual circuit from the behavioral to the transistor level of abstraction. <i>Applied Mathematics and Computation</i> , 2007 , 184, 715-720	2.7	4
25	Simulation of Chual circuit by automatic control of step-size. <i>Applied Mathematics and Computation</i> , 2007 , 190, 1526-1533	2.7	10
24	Frequency scaling simulation of Chual circuit by automatic determination and control of step-size. <i>Applied Mathematics and Computation</i> , 2007 , 194, 486-491	2.7	15
23	Design of a CMOS Compatible CFOA and its Application in Analog Filtering. <i>IEEE Latin America Transactions</i> , 2007 , 5, 71-75	0.7	1
22	Modeling and simulation of a chaotic oscillator by MATLAB. <i>IEEE Latin America Transactions</i> , 2007 , 5, 94-97	0.7	
21	Computing simplified noise-symbolic-expressions in CMOS CCs by applying SPA and SAG 2007,		1
20	Low-Voltage Chaotic Oscillator using Voltage and Current Followers 2007,		3
19	Designing SRCOs by symbolic-behavioral-modeling of unity-gain cells 2007 ,		1
18	Numerical Simulation of Chua's Circuit Oriented to Circuit Synthesis. <i>International Journal of Nonlinear Sciences and Numerical Simulation</i> , 2007 , 8,	1.8	14
17	Designing VFs by applying genetic algorithms from nullator-based descriptions 2007,		6
16	Synthesis of CCIIs and Design of Simulated CCII Based Floating Inductances 2007,		6
15	Designing SRCOs by combining SPICE and Verilog-A. <i>International Journal of Electronics</i> , 2007 , 94, 373-3	37 <u>19</u> 2	14
14	Design of Current-Mode Gm-C Filters from the Transformation of Opamp-RC Filters. <i>Journal of Applied Sciences</i> , 2007 , 7, 1321-1326	0.3	13
13	Symbolic Noise Analysis in Gm-C Filters 2006 ,		3

LIST OF PUBLICATIONS

12	Synthesis of VFs and CFs by Manipulation of Generic Cells. <i>Analog Integrated Circuits and Signal Processing</i> , 2006 , 46, 99-102	1.2	12	
11	Implementation of a chaotic oscillator by designing Chual diode with CMOS CFOAs. <i>Analog Integrated Circuits and Signal Processing</i> , 2006 , 48, 159-162	1.2	32	
10	Automatic biasing and sizing of CMOS analog integrated circuits 2005,		7	
9	On the Computational Synthesis of CMOS Voltage Followers. <i>IEICE Transactions on Fundamentals of Electronics, Communications and Computer Sciences</i> , 2005 , E88-A, 3479-3484	0.4	12	
8	SIASCA: Interactive System for the Symbolic Analysis of Analog Circuits. <i>IEICE Electronics Express</i> , 2004 , 1, 19-23	0.5	9	
7	Behavioral model generation for symbolic analysis of analog integrated circuits		13	
6	Analog implementation of MOS-translinear Morlet Wavelets		2	
5	Symbolic noise analysis in analog integrated circuits		3	
4			2	
3	An efficient biasing technique suitable for any kind of the four basic amplifiers designed at nullor level		5	
2	Biasing analog circuits using the nullor concept		5	
1	Kalman observers in estimating the states of chaotic neurons for image encryption under MQTT for IoT protocol. <i>European Physical Journal: Special Topics</i> ,1	2.3	2	