

Ahmed G Radwan

List of Publications by Citations

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

333
papers

6,650
citations

45
h-index

67
g-index

379
ext. papers

8,091
ext. citations

3.1
avg, IF

6.72
L-index

#	Paper	IF	Citations
333	On the stability of linear systems with fractional-order elements. <i>Chaos, Solitons and Fractals</i> , 2009 , 40, 2317-2328	9.3	225
332	. <i>IEEE Transactions on Circuits and Systems I: Regular Papers</i> , 2008 , 55, 2051-2063	3.9	205
331	FIRST-ORDER FILTERS GENERALIZED TO THE FRACTIONAL DOMAIN. <i>Journal of Circuits, Systems and Computers</i> , 2008 , 17, 55-66	0.9	172
330	ON THE GENERALIZATION OF SECOND-ORDER FILTERS TO THE FRACTIONAL-ORDER DOMAIN. <i>Journal of Circuits, Systems and Computers</i> , 2009 , 18, 361-386	0.9	167
329	Fractional-Order RC and RL Circuits. <i>Circuits, Systems, and Signal Processing</i> , 2012 , 31, 1901-1915	2.2	148
328	Fractional Order Butterworth Filter: Active and Passive Realizations. <i>IEEE Journal on Emerging and Selected Topics in Circuits and Systems</i> , 2013 , 3, 346-354	5.2	138
327	FPGA implementation of two fractional order chaotic systems. <i>AEU - International Journal of Electronics and Communications</i> , 2017 , 78, 162-172	2.8	129
326	Design equations for fractional-order sinusoidal oscillators: Four practical circuit examples. <i>International Journal of Circuit Theory and Applications</i> , 2008 , 36, 473-492	2	102
325	. <i>IEEE Transactions on Circuits and Systems I: Regular Papers</i> , 2011 , 58, 2388-2397	3.9	99
324	The fractional-order modeling and synchronization of electrically coupled neuron systems. <i>Computers and Mathematics With Applications</i> , 2012 , 64, 3329-3339	2.7	96
323	Review of fractional-order electrical characterization of supercapacitors. <i>Journal of Power Sources</i> , 2018 , 400, 457-467	8.9	92
322	Optimization of Fractional-Order RLC Filters. <i>Circuits, Systems, and Signal Processing</i> , 2013 , 32, 2097-2118.2	8.2	85
321	Control and switching synchronization of fractional order chaotic systems using active control technique. <i>Journal of Advanced Research</i> , 2014 , 5, 125-32	13	83
320	A Simple Model of Double-Loop Hysteresis Behavior in Memristive Elements. <i>IEEE Transactions on Circuits and Systems II: Express Briefs</i> , 2013 , 60, 487-491	3.5	83
319	Resonance and Quality Factor of the $RL_{\alpha}C_{\alpha}$ Fractional Circuit. <i>IEEE Journal on Emerging and Selected Topics in Circuits and Systems</i> , 2013 , 3, 377-385	5.2	79
318	Power and energy analysis of fractional-order electrical energy storage devices. <i>Energy</i> , 2016 , 111, 785-792	7.9	78
317	Theory of Fractional Order Elements Based Impedance Matching Networks. <i>IEEE Microwave and Wireless Components Letters</i> , 2011 , 21, 120-122	2.6	75

3 ¹⁶	On The Optimization of Fractional Order Low-Pass Filters. <i>Circuits, Systems, and Signal Processing</i> , 2016 , 35, 2017-2039	2.2	73
3 ¹⁵	Fractional Order SallenKey and KHN Filters: Stability and Poles Allocation. <i>Circuits, Systems, and Signal Processing</i> , 2015 , 34, 1461-1480	2.2	72
3 ¹⁴	Fractional order filter with two fractional elements of dependant orders. <i>Microelectronics Journal</i> , 2012 , 43, 818-827	1.8	72
3 ¹³	Generalized model for Memristor-based Wien family oscillators. <i>Microelectronics Journal</i> , 2011 , 42, 1032-1038	1.8	72
3 ¹²	A Novel Chaotic System without Equilibrium: Dynamics, Synchronization, and Circuit Realization. <i>Complexity</i> , 2017 , 2017, 1-11	1.6	68
3 ¹¹	Biological inspired optimization algorithms for cole-impedance parameters identification. <i>AEU - International Journal of Electronics and Communications</i> , 2017 , 78, 79-89	2.8	67
3 ¹⁰	Experimental comparison of integer/fractional-order electrical models of plant. <i>AEU - International Journal of Electronics and Communications</i> , 2017 , 80, 1-9	2.8	65
3 ⁰⁹	Non linear dynamics of memristor based 3rd order oscillatory system. <i>Microelectronics Journal</i> , 2012 , 43, 169-175	1.8	64
3 ⁰⁸	Generalized fractional logistic map encryption system based on FPGA. <i>AEU - International Journal of Electronics and Communications</i> , 2017 , 80, 114-126	2.8	63
3 ⁰⁷	Generalized double-humped logistic map-based medical image encryption. <i>Journal of Advanced Research</i> , 2018 , 10, 85-98	13	62
3 ⁰⁶	Charge controlled memristor-less memcapacitor emulator. <i>Electronics Letters</i> , 2012 , 48, 1454	1.1	62
3 ⁰⁵	Symmetric encryption algorithms using chaotic and non-chaotic generators: A review. <i>Journal of Advanced Research</i> , 2016 , 7, 193-208	13	61
3 ⁰⁴	Fractional order oscillators based on operational transresistance amplifiers. <i>AEU - International Journal of Electronics and Communications</i> , 2015 , 69, 988-1003	2.8	61
3 ⁰³	On the Mathematical Modeling of Memristor, Memcapacitor, and Meminductor. <i>Studies in Systems, Decision and Control</i> , 2015 ,	0.8	58
3 ⁰²	Stability and non-standard finite difference method of the generalized Chua's circuit. <i>Computers and Mathematics With Applications</i> , 2011 , 62, 961-970	2.7	58
3 ⁰¹	Fractional Smith Chart Theory. <i>IEEE Microwave and Wireless Components Letters</i> , 2011 , 21, 117-119	2.6	57
3 ⁰⁰	A novel image encryption system merging fractional-order edge detection and generalized chaotic maps. <i>Signal Processing</i> , 2020 , 167, 107280	4.4	57
299	CCII based fractional filters of different orders. <i>Journal of Advanced Research</i> , 2014 , 5, 157-64	13	54

298	Three Fractional-Order-Capacitors-Based Oscillators with Controllable Phase and Frequency. <i>Journal of Circuits, Systems and Computers</i> , 2017 , 26, 1750160	0.9	52
297	On the mathematical modeling of memristors 2010 ,		51
296	CONTROLLABLE V-SHAPE MULTISCROLL BUTTERFLY ATTRACTOR: SYSTEM AND CIRCUIT IMPLEMENTATION. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 2012 , 22, 1250143	2	50
295	On some generalized discrete logistic maps. <i>Journal of Advanced Research</i> , 2013 , 4, 163-71	13	48
294	Modeling and analysis of fractional order DC-DC converter. <i>ISA Transactions</i> , 2018 , 82, 184-199	5.5	47
293	Hardware stream cipher with controllable chaos generator for colour image encryption. <i>IET Image Processing</i> , 2014 , 8, 33-43	1.7	47
292	HP Memristor mathematical model for periodic signals and DC 2010 ,		47
291	MOS realization of the modified Lorenz chaotic system. <i>Chaos, Solitons and Fractals</i> , 2004 , 21, 553-561	9.3	47
290	Generalized Hardware Post-processing Technique for Chaos-Based Pseudorandom Number Generators. <i>ETRI Journal</i> , 2013 , 35, 448-458	1.4	45
289	Reconfigurable chaotic pseudo random number generator based on FPGA. <i>AEU - International Journal of Electronics and Communications</i> , 2019 , 98, 174-180	2.8	45
288	Memristor-based reactance-less oscillator. <i>Electronics Letters</i> , 2011 , 47, 1220	1.1	44
287	Approximation of the Fractional-Order Laplacian s^α As a Weighted Sum of First-Order High-Pass Filters. <i>IEEE Transactions on Circuits and Systems II: Express Briefs</i> , 2018 , 65, 1114-1118	3.5	43
286	A fractal-based image encryption system. <i>IET Image Processing</i> , 2014 , 8, 742-752	1.7	43
285	1-D DIGITALLY-CONTROLLED MULTISCROLL CHAOS GENERATOR. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 2007 , 17, 227-242	2	43
284	Fractional-order mutual inductance: analysis and design. <i>International Journal of Circuit Theory and Applications</i> , 2016 , 44, 85-97	2	42
283	Optimization of Cadmium (CD(2+)) removal from aqueous solutions by novel biosorbent. <i>International Journal of Phytoremediation</i> , 2016 , 18, 619-25	3.9	42
282	An inductorless CMOS realization of Chua's circuit. <i>Chaos, Solitons and Fractals</i> , 2003 , 18, 149-158	9.3	42
281	MOS realization of the double-scroll-like chaotic equation. <i>IEEE Transactions on Circuits and Systems Part 1: Regular Papers</i> , 2003 , 50, 285-288		42

280	Two-port two impedances fractional order oscillators. <i>Microelectronics Journal</i> , 2016 , 55, 40-52	1.8	41
279	Chaotic Flower Pollination and Grey Wolf Algorithms for parameter extraction of bio-impedance models. <i>Applied Soft Computing Journal</i> , 2019 , 75, 750-774	7.5	41
278	A family of memristor-based reactance-less oscillators. <i>International Journal of Circuit Theory and Applications</i> , 2014 , 42, 1103-1122	2	39
277	Fractional Order Oscillator Design Based on Two-Port Network. <i>Circuits, Systems, and Signal Processing</i> , 2016 , 35, 3086-3112	2.2	38
276	On inverse problem of generalized synchronization between different dimensional integer-order and fractional-order chaotic systems 2016 ,		38
275	Fractional-order Memristor Response Under DC and Periodic Signals. <i>Circuits, Systems, and Signal Processing</i> , 2015 , 34, 961-970	2.2	37
274	Capacitive behavior and stored energy in supercapacitors at power line frequencies. <i>Journal of Power Sources</i> , 2018 , 390, 142-147	8.9	37
273	. <i>IEEE Transactions on Circuits and Systems I: Regular Papers</i> , 2013 , 60, 2701-2708	3.9	37
272	. <i>IEEE Transactions on Circuits and Systems I: Regular Papers</i> , 2019 , 66, 1484-1495	3.9	34
271	Chaos synchronisation of continuous systems via scalar signal 2017 ,		32
270	Fractional controllable multi-scroll V-shape attractor with parameters effect 2017 ,		32
269	All Possible Topologies of the Fractional-Order Wien Oscillator Family Using Different Approximation Techniques. <i>Circuits, Systems, and Signal Processing</i> , 2019 , 38, 3931-3951	2.2	32
268	Fractional X-shape controllable multi-scroll attractor with parameter effect and FPGA automatic design tool software. <i>Chaos, Solitons and Fractals</i> , 2019 , 126, 292-307	9.3	31
267	Memristor-based voltage-controlled relaxation oscillators. <i>International Journal of Circuit Theory and Applications</i> , 2014 , 42, 1092-1102	2	31
266	Effect of Different Approximation Techniques on Fractional-Order KHN Filter Design. <i>Circuits, Systems, and Signal Processing</i> , 2018 , 37, 5222-5252	2.2	31
265	Generalized two-port network based fractional order filters. <i>AEU - International Journal of Electronics and Communications</i> , 2019 , 104, 128-146	2.8	30
264	Partial fraction expansionBased realizations of fractional-order differentiators and integrators using active filters. <i>International Journal of Circuit Theory and Applications</i> , 2019 , 47, 513-531	2	30
263	Pinched hysteresis with inverse-memristor frequency characteristics in some nonlinear circuit elements. <i>Microelectronics Journal</i> , 2015 , 46, 834-838	1.8	30

262	Parameter identification of fractional-order chaotic systems using different Meta-heuristic Optimization Algorithms. <i>Nonlinear Dynamics</i> , 2019 , 95, 2491-2542	5	30
261	Improved memristor-based relaxation oscillator. <i>Microelectronics Journal</i> , 2013 , 44, 814-820	1.8	28
260	Fractional order integrator/differentiator: FPGA implementation and FOPID controller application. <i>AEU - International Journal of Electronics and Communications</i> , 2019 , 98, 220-229	2.8	28
259	Dead-beat synchronization control in discrete-time chaotic systems 2017 ,		27
258	Fractional-order multi-phase oscillators design and analysis suitable for higher-order PSK applications. <i>Analog Integrated Circuits and Signal Processing</i> , 2016 , 87, 301-312	1.2	27
257	Synchronization and FPGA realization of fractional-order Izhikevich neuron model. <i>Microelectronics Journal</i> , 2019 , 89, 56-69	1.8	26
256	Memristor-CNTFET based ternary logic gates. <i>Microelectronics Journal</i> , 2018 , 72, 74-85	1.8	26
255	Analytical solution for fractional derivative gas-flow equation in porous media. <i>Results in Physics</i> , 2017 , 7, 2432-2438	3.7	25
254	Realization of fractional-order capacitor based on passive symmetric network. <i>Journal of Advanced Research</i> , 2019 , 18, 147-159	13	25
253	Fully digital jerk-based chaotic oscillators for high throughput pseudo-random number generators up to 8.77Gbits/s. <i>Microelectronics Journal</i> , 2013 , 44, 744-752	1.8	24
252	Image encryption using generalized tent map 2013 ,		22
251	FPGA implementation of sound encryption system based on fractional-order chaotic systems. <i>Microelectronics Journal</i> , 2019 , 90, 323-335	1.8	21
250	Comprehensive comparison based on meta-heuristic algorithms for approximation of the fractional-order Laplacian as a weighted sum of first-order high-pass filters. <i>Microelectronics Journal</i> , 2019 , 87, 110-120	1.8	21
249	Random number generation based on digital differential chaos 2011 ,		21
248	FPGA realization of a speech encryption system based on a generalized modified chaotic transition map and bit permutation. <i>Multimedia Tools and Applications</i> , 2019 , 78, 16097-16127	2.5	21
247	On the Approximations of CFOA-Based Fractional-Order Inverse Filters. <i>Circuits, Systems, and Signal Processing</i> , 2020 , 39, 2-29	2.2	21
246	Design of Positive, Negative, and Alternating Sign Generalized Logistic Maps. <i>Discrete Dynamics in Nature and Society</i> , 2015 , 2015, 1-23	1.1	20
245	Amplitude Modulation and Synchronization of Fractional-Order Memristor-Based Chua's Circuit. <i>Abstract and Applied Analysis</i> , 2013 , 2013, 1-10	0.7	20

244	Comparison between three approximation methods on oscillator circuits. <i>Microelectronics Journal</i> , 2018 , 81, 162-178	1.8	20
243	Generalized switched synchronization and dependent image encryption using dynamically rotating fractional-order chaotic systems. <i>AEU - International Journal of Electronics and Communications</i> , 2020 , 123, 153268	2.8	19
242	An expression for the voltage response of a current-excited fractance device based on fractional-order trigonometric identities. <i>International Journal of Circuit Theory and Applications</i> , 2012 , 40, 533-538	2	19
241	The effect of numerical techniques on differential equation based chaotic generators 2011 ,		19
240	A Grunwald–Letnikov based Manta ray foraging optimizer for global optimization and image segmentation. <i>Engineering Applications of Artificial Intelligence</i> , 2021 , 98, 104105	7.2	19
239	Memristor based N-bits redundant binary adder. <i>Microelectronics Journal</i> , 2015 , 46, 207-213	1.8	18
238	Finite Precision Logistic Map between Computational Efficiency and Accuracy with Encryption Applications. <i>Complexity</i> , 2017 , 2017, 1-21	1.6	18
237	High-Frequency Capacitorless Fractional-Order CPE and FI Emulator. <i>Circuits, Systems, and Signal Processing</i> , 2018 , 37, 2694-2713	2.2	18
236	A memristor-based third-order oscillator: beyond oscillation. <i>Applied Nanoscience (Switzerland)</i> , 2011 , 1, 143-145	3.3	18
235	Enhanced hardware implementation of a mixed-order nonlinear chaotic system and speech encryption application. <i>AEU - International Journal of Electronics and Communications</i> , 2020 , 125, 153347	2.8	18
234	Extracting Optimized Bio-Impedance Model Parameters Using Different Topologies of Oscillators. <i>IEEE Sensors Journal</i> , 2020 , 20, 9947-9954	4	18
233	Fundamentals of fractional-order LTI circuits and systems: number of poles, stability, time and frequency responses. <i>International Journal of Circuit Theory and Applications</i> , 2016 , 44, 2114-2133	2	18
232	Novel permutation measures for image encryption algorithms. <i>Optics and Lasers in Engineering</i> , 2016 , 85, 72-83	4.6	18
231	Generalized Synchronization of Different Dimensional Integer-Order and Fractional Order Chaotic Systems. <i>Studies in Computational Intelligence</i> , 2017 , 671-697	0.8	17
230	Resistive-less memcapacitor-based relaxation oscillator. <i>International Journal of Circuit Theory and Applications</i> , 2015 , 43, 959-965	2	17
229	Numerical Simulations and FPGA Implementations of Fractional-Order Systems Based on Product Integration Rules. <i>IEEE Access</i> , 2020 , 8, 102093-102105	3.5	17
228	On the Analysis and Design of Fractional-Order Chebyshev Complex Filter. <i>Circuits, Systems, and Signal Processing</i> , 2018 , 37, 915-938	2.2	17
227	RF MEMS Fractal Capacitors With High Self-Resonant Frequencies. <i>Journal of Microelectromechanical Systems</i> , 2012 , 21, 10-12	2.5	17

226	Fractional-Order and Memristive Nonlinear Systems: Advances and Applications. <i>Complexity</i> , 2017 , 2017, 1-2	1.6	17
225	Meminductor Response Under Periodic Current Excitations. <i>Circuits, Systems, and Signal Processing</i> , 2014 , 33, 1573-1583	2.2	17
224	Multiplierless chaotic Pseudo random number generators. <i>AEU - International Journal of Electronics and Communications</i> , 2020 , 113, 152947	2.8	17
223	FPGA realization of Caputo and Gr̄wald-Letnikov operators 2017 ,		16
222	Cole Bio-Impedance Model Variations in \$Daucus~Carota~Sativus\$ Under Heating and Freezing Conditions. <i>IEEE Access</i> , 2019 , 1-1	3.5	16
221	One-terminal electronically controlled fractional-order capacitor and inductor emulator. <i>AEU - International Journal of Electronics and Communications</i> , 2019 , 103, 32-45	2.8	16
220	A study of the nonlinear dynamics of human behavior and its digital hardware implementation. <i>Journal of Advanced Research</i> , 2020 , 25, 111-123	13	16
219	Image encryption in the fractional-order domain 2012 ,		16
218	Low-voltage commercial super-capacitor response to periodic linear-with-time current excitation: a case study. <i>IET Circuits, Devices and Systems</i> , 2017 , 11, 189-195	1.1	15
217	Ternary Functions Design Using Memristive Threshold Logic. <i>IEEE Access</i> , 2019 , 7, 48371-48381	3.5	15
216	General fractional order mem-elements mutators. <i>Microelectronics Journal</i> , 2019 , 90, 211-221	1.8	15
215	Design and analysis of 2T2M hybrid CMOS-Memristor based RRAM. <i>Microelectronics Journal</i> , 2018 , 73, 75-85	1.8	15
214	Low-voltage puzzle-like fractal microelectromechanical system variable capacitor suppressing pull-in. <i>Micro and Nano Letters</i> , 2012 , 7, 965-969	0.9	15
213	Generalized Dynamic Switched Synchronization between Combinations of Fractional-Order Chaotic Systems. <i>Complexity</i> , 2017 , 2017, 1-17	1.6	14
212	An optimal linear system approximation of nonlinear fractional-order memristor-capacitor charging circuit. <i>Microelectronics Journal</i> , 2016 , 51, 58-66	1.8	14
211	A generalized family of memristor-based voltage controlled relaxation oscillator. <i>International Journal of Circuit Theory and Applications</i> , 2018 , 46, 1311-1327	2	14
210	Fractional-order Fitzhugh-Nagumo and Izhikevich neuron models 2016 ,		14
209	Memristor FPGA IP Core Implementation for Analog and Digital Applications. <i>IEEE Transactions on Circuits and Systems II: Express Briefs</i> , 2019 , 66, 1381-1385	3.5	14

208	Biomedical image encryption based on double-humped and fractional logistic maps 2017 ,		13
207	Nonlinear charge-voltage relationship in constant phase element. <i>AEU - International Journal of Electronics and Communications</i> , 2020 , 117, 153104	2.8	13
206	Memcapacitor response under step and sinusoidal voltage excitations. <i>Microelectronics Journal</i> , 2014 , 45, 1372-1379	1.8	13
205	Time domain oscillating poles: Stability redefined in Memristor based Wien-oscillators 2010 ,		13
204	Fractional-Order Two-Port Networks. <i>Mathematical Problems in Engineering</i> , 2016 , 2016, 1-5	1.1	13
203	A Study on Coexistence of Different Types of Synchronization Between Different Dimensional Fractional Chaotic Systems. <i>Studies in Computational Intelligence</i> , 2017 , 637-669	0.8	12
202	On the analysis of current-controlled fractional-order memristor emulator 2017 ,		12
201	Emulation circuits of fractional-order memelements with multiple pinched points and their applications. <i>Chaos, Solitons and Fractals</i> , 2020 , 138, 109882	9.3	12
200	Transient and Steady-State Response of a Fractional-Order Dynamic PV Model Under Different Loads. <i>Journal of Circuits, Systems and Computers</i> , 2018 , 27, 1850023	0.9	12
199	An image encryption system based on generalized discrete maps 2014 ,		12
198	Hardware realization of chaos based block cipher for image encryption 2011 ,		12
197	Generalized family of fractional-order oscillators based on single CFOA and RC network 2017 ,		11
196	Multiple Pinch-Off Points in Memristive Equations: Analysis and Experiments. <i>IEEE Transactions on Circuits and Systems I: Regular Papers</i> , 2019 , 66, 3052-3063	3.9	11
195	Two-Dimensional Rotation of Chaotic Attractors: Demonstrative Examples and FPGA Realization. <i>Circuits, Systems, and Signal Processing</i> , 2019 , 38, 4890-4903	2.2	11
194	Memristor-less current- and voltage-controlled meminductor emulators 2014 ,		11
193	Butterworth passive filter in the fractional-order 2011 ,		11
192	Optimized Edge Detection Technique for Brain Tumor Detection in MR Images. <i>IEEE Access</i> , 2020 , 8, 136243-136259	3.5	11
191	Fractional-order inverting and non-inverting filters based on CFOA 2016 ,		11

190	Memristor: Models, Types, and Applications. <i>Studies in Systems, Decision and Control</i> , 2015 , 13-49	0.8	10
189	Neuron Model with Simplified Memristive Ionic Channels. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 2015 , 25, 1530017	2	10
188	Software and Hardware Implementation Sensitivity of Chaotic Systems and Impact on Encryption Applications. <i>Circuits, Systems, and Signal Processing</i> , 2020 , 39, 5638-5655	2.2	10
187	Identifying the Parameters of Cole Impedance Model Using Magnitude Only and Complex Impedance Measurements: A Metaheuristic Optimization Approach. <i>Arabian Journal for Science and Engineering</i> , 2020 , 45, 6541-6558	2.5	10
186	Design of a generalized bidirectional tent map suitable for encryption applications 2015 ,		10
185	Generalized fractional logistic map suitable for data encryption 2015 ,		10
184	Analysis of bus width and delay on a fully digital signum nonlinearity chaotic oscillator 2011 ,		10
183	A general emulator for fractional-order memristive elements with multiple pinched points and application. <i>AEU - International Journal of Electronics and Communications</i> , 2020 , 124, 153338	2.8	10
182	Aging effect on apples bio-impedance using AD5933 2016 ,		10
181	Generalized Smooth Transition Map Between Tent and Logistic Maps. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 2017 , 27, 1730004	2	9
180	Enhanced FPGA realization of the fractional-order derivative and application to a variable-order chaotic system. <i>Nonlinear Dynamics</i> , 2020 , 99, 3143-3154	5	9
179	A low start up voltage charge pump for thermoelectric energy scavenging 2011 ,		9
178	2007 ,		9
177	Memristor-based quinary half adder. <i>AEU - International Journal of Electronics and Communications</i> , 2019 , 98, 123-130	2.8	9
176	Fractional-Order Bio-Impedance Modeling for Interdisciplinary Applications: A Review. <i>IEEE Access</i> , 2021 , 9, 33158-33168	3.5	9
175	Biologically Inspired Optimization Algorithms for Fractional-Order Bioimpedance Models Parameters Extraction 2018 , 125-162		9
174	Controlled Picard Method for Solving Nonlinear Fractional ReactionDiffusion Models in Porous Catalysts. <i>Chemical Engineering Communications</i> , 2017 , 204, 635-647	2.2	8
173	Applications of Continuous-time Fractional Order Chaotic Systems 2018 , 409-449		8

172	Fractional order oscillator with independent control of phase and frequency 2014 ,		8
171	Effect of boundary on controlled memristor-based oscillator 2012 ,		8
170	Memristor-based balanced ternary adder 2013 ,		8
169	Memristor-based relaxation oscillators using digital gates 2012 ,		8
168	Design and Implementation of an Optimized Artificial Human Eardrum Model. <i>Circuits, Systems, and Signal Processing</i> , 2020 , 39, 3219-3233	2.2	8
167	Fractional-order oscillator based on single CCII 2016 ,		8
166	. <i>IEEE Access</i> , 2021 , 9, 89376-89389	3.5	8
165	Memristor and Inverse Memristor: Modeling, Implementation and Experiments. <i>Studies in Computational Intelligence</i> , 2017 , 371-392	0.8	7
164	Fractional-order impedance transformation based on three port mutators. <i>AEU - International Journal of Electronics and Communications</i> , 2017 , 81, 12-22	2.8	7
163	Fractional order Chebyshev-like low-pass filters based on integer order poles. <i>Microelectronics Journal</i> , 2019 , 90, 72-81	1.8	7
162	Conditions and Emulation of Double Pinch-off Points in Fractional-order Memristor 2018 ,		7
161	Chaos-based hardware speech encryption scheme using modified tent map and bit permutation 2018 ,		7
160	Stability analysis of fractional-order Colpitts oscillators. <i>Analog Integrated Circuits and Signal Processing</i> , 2019 , 101, 267-279	1.2	7
159	Boundary Dynamics of Memcapacitor in Voltage-Excited Circuits and Relaxation Oscillators. <i>Circuits, Systems, and Signal Processing</i> , 2015 , 34, 2765-2783	2.2	7
158	A chess-based chaotic block cipher 2014 ,		7
157	Analog fault diagnosis by inverse problem technique 2011 ,		7
156	Design, implementation and analysis of fully digital 1-D controllable multiscroll chaos 2011 ,		7
155	Underwater Soft Robotics: A Review of Bioinspiration in Design, Actuation, Modeling, and Control.. <i>Micromachines</i> , 2022 , 13,	3.3	7

154	A fractional-order dynamic PV model 2016,		7
153	Modified methods for solving two classes of distributed order linear fractional differential equations. <i>Applied Mathematics and Computation</i> , 2018 , 323, 106-119	2.7	7
152	Experimental Verification of Triple Lobes Generation in Fractional Memristive Circuits. <i>IEEE Access</i> , 2018 , 6, 75169-75180	3.5	7
151	Survey on Two-Port Network-Based Fractional-Order Oscillators 2018 , 305-327		7
150	Charging and discharging RC circuit under Riemann-Liouville and Caputo fractional derivatives 2016,		6
149	Fractional-order mathematical model for Chronic Myeloid Leukaemia 2017,		6
148	State space modeling of Memristor-based Wien oscillator 2011,		6
147	Implementation and analysis of tunable fractional-order band-pass filter of order 2α <i>AEU - International Journal of Electronics and Communications</i> , 2020 , 124, 153343	2.8	6
146	On the Approximation of Fractional-Order Circuit Design 2018 , 239-270		6
145	FPGA realization of speech encryption based on modified chaotic logistic map 2018,		6
144	Cancellable face recognition based on fractional-order Lorenz chaotic system and Haar wavelet fusion 2021 , 116, 103103		6
143	Toward Portable Bio-impedance devices 2019,		5
142	Low-voltage and low-power fractional-order parallel tunable resonator. <i>Microelectronics Journal</i> , 2019 , 88, 108-116	1.8	5
141	Fractional chaos maps with flower pollination algorithm for chaotic systems parameters identification. <i>Neural Computing and Applications</i> , 2020 , 32, 16291-16327	4.8	5
140	Optimal Charging and Discharging of Supercapacitors. <i>Journal of the Electrochemical Society</i> , 2020 , 167, 110521	3.9	5
139	FPGA implementation of fractional-order integrator and differentiator based on Gr̄wald Letnikov's definition 2017,		5
138	Memristor-based redundant binary adder 2014,		5
137	Rectangular waveguides in the fractional-order domain 2012,		5

136	Chaos and Bifurcation in Controllable Jerk-Based Self-Excited Attractors. <i>Studies in Systems, Decision and Control</i> , 2018 , 45-70	0.8	5
135	Modelling and implementation of soft bio-mimetic turtle using echo state network and soft pneumatic actuators. <i>Scientific Reports</i> , 2021 , 11, 12076	4.9	5
134	Generalized synchronization involving a linear combination of fractional-order chaotic systems 2016 ,		5
133	Modified kinetic-hydraulic UASB reactor model for treatment of wastewater containing biodegradable organic substrates. <i>Water Science and Technology</i> , 2016 , 73, 1560-71	2.2	5
132	Switched active control synchronization of three fractional order chaotic systems 2016 ,		5
131	Trajectory control and image encryption using affine transformation of lorenz system. <i>Egyptian Informatics Journal</i> , 2021 , 22, 155-166	3.1	5
130	Analysis and FPGA of semi-fractal shapes based on complex Gaussian map. <i>Chaos, Solitons and Fractals</i> , 2021 , 142, 110493	9.3	5
129	Design and FPGA Verification of Custom-Shaped Chaotic Attractors Using Rotation, Offset Boosting and Amplitude Control. <i>IEEE Transactions on Circuits and Systems II: Express Briefs</i> , 2021 , 1-1	3.5	5
128	Hardware Speech Encryption Using a Chaotic Generator, Dynamic Shift and Bit Permutation 2018 ,		5
127	Chaotic systems based on jerk equation and discrete maps with scaling parameters 2017 ,		4
126	Fractional order four-phase oscillator based on double integrator topology 2017 ,		4
125	2T2M memristor-based memory cell for higher stability RRAM modules 2015 ,		4
124	Fractional-Order Model (FOM) for high-strength substrate biodegradation in conventional UASB reactor. <i>Biochemical Engineering Journal</i> , 2018 , 133, 39-46	4.2	4
123	Study of fractional flux-controlled memristor emulator connections 2018 ,		4
122	On the mathematical modeling of series and parallel memcapacitors 2013 ,		4
121	Series and parallel circuit models containing memristors and inverse memristors 2015 ,		4
120	Fractional order oscillators with single non-zero transmission matrix element 2015 ,		4
119	Multi-phase oscillator for higher-order PSK applications 2014 ,		4

118	The effect of multi-scrolls distribution on image encryption 2014,		4
117	Fully digital 1-D, 2-D and 3-D multiscroll chaos as hardware pseudo random number generators 2012,		4
116	Transient-Time Fractional-Space Trigonometry and Application. <i>Lecture Notes in Computer Science,</i> 2012, 40-47	0.9	4
115	A low start-up voltage charge pump for energy harvesting applications 2012,		4
114	General procedure for two integrator loops fractional order oscillators with controlled phase difference 2013,		4
113	CCII based KHN fractional order filter 2013,		4
112	Optimal fractional-order PI with DC-DC converter and PV system. <i>Ain Shams Engineering Journal,</i> 2021, 12, 1895-1906	4.4	4
111	CFOA-based fractional order simulated inductor 2016,		4
110	Design of FOPID Controller for a DC Motor Using Approximation Techniques 2019,		4
109	Digital Emulation of a Versatile Memristor With Speech Encryption Application. <i>IEEE Access,</i> 2019, 7, 174280-174297	3.5	4
108	Hardware realization of a secure and enhanced s-box based speech encryption engine. <i>Analog Integrated Circuits and Signal Processing,</i> 2021, 106, 385-397	1.2	4
107	Two implementations of fractional-order relaxation oscillators. <i>Analog Integrated Circuits and Signal Processing,</i> 2021, 106, 421-432	1.2	4
106	Tactile sensing biohybrid soft E-skin based on bioimpedance using aloe vera pulp tissues. <i>Scientific Reports,</i> 2021, 11, 3054	4.9	4
105	Fractional-Order Edge Detection Masks for Diabetic Retinopathy Diagnosis as a Case Study. <i>Computers,</i> 2021, 10, 30	1.9	4
104	FPGA Speech Encryption Realization Based on Variable S-Box and Memristor Chaotic Circuit 2018,		4
103	Fractional-Order Filter Design 2018, 357-382		4
102	FPGA Implementation of X- and Heart-shapes Controllable Multi-Scroll Attractors 2018,		4
101	FPGA Implementation of Reconfigurable CORDIC Algorithm and a Memristive Chaotic System With Transcendental Nonlinearities. <i>IEEE Transactions on Circuits and Systems I: Regular Papers,</i> 2022, 1-8	3.9	4

100	Control and Synchronization of Fractional-Order Chaotic Systems. <i>Studies in Computational Intelligence</i> , 2017 , 325-355	0.8	3
99	Image encryption based on double-humped and delayed logistic maps for biomedical applications 2017 ,		3
98	Memristor Mathematical Models and Emulators. <i>Studies in Systems, Decision and Control</i> , 2015 , 51-84	0.8	3
97	New Trends on Modeling, Design, and Control of Chaotic Systems. <i>Mathematical Problems in Engineering</i> , 2017 , 2017, 1-3	1.1	3
96	FPGA implementation of fractional-order Chua's chaotic system 2018 ,		3
95	The modified single input Op-Amps memristor based oscillator 2013 ,		3
94	Design of pseudo random keystream generator using fractals 2013 ,		3
93	Power Dissipation of Memristor-Based Relaxation Oscillators. <i>Radioengineering</i> , 2015 , 24, 968-973	0.8	3
92	Generalized delayed logistic map suitable for pseudo-random number generation 2015 ,		3
91	Current feedback operational amplifier (CFOA) based fractional order oscillators 2014 ,		3
90	Utilizing LFSR and Feistel networks in image encryption 2013 ,		3
89	MOS Realization of the Conjectured Simplest Chaotic Equation. <i>Circuits, Systems, and Signal Processing</i> , 2003 , 22, 277	2.2	3
88	Chaotic Dynamics and FPGA Implementation of a Fractional-Order Chaotic System With Time Delay. <i>IEEE Open Journal of Circuits and Systems</i> , 2020 , 1, 255-262	1.7	3
87	Reactance-less RM relaxation oscillator using exponential memristor model 2016 ,		3
86	Multifunction Fractional Inverse Filter Based on OTRA 2019 ,		3
85	Using Meta-heuristic Optimization to Extract Bio-impedance Parameters from an Oscillator Circuit 2019 ,		3
84	Analysis and Design of Fractional-order Low-pass Filter with Three Elements of Independent Orders 2019 ,		3
83	Fractional-Order Relaxation Oscillators Based on Op-Amp and OTRA 2018 ,		3

82	Incremental Grounded Voltage Controlled Memristor Emulator 2018 ,		3
81	FPGA Realizations of Chaotic Epidemic and Disease Models Including Covid-19. <i>IEEE Access</i> , 2021 , 9, 21085-21093		3
80	Comparison and Database Development of Four Recent ASM3 Model Extensions. <i>Journal of Environmental Engineering, ASCE</i> , 2016 , 142, 04016021	2	2
79	On the Fractional Order Generalized Discrete Maps 2018 , 375-408		2
78	Chaotic Properties of Various Types of Hidden Attractors in Integer and Fractional Order Domains 2018 , 503-528		2
77	Cole-Cole Bio-Impedance Parameters Extraction From a Single Time-Domain Measurement 2019 ,		2
76	Speech Encryption on FPGA Using a Chaotic Generator and S-Box Table 2019 ,		2
75	Single and dual solutions of fractional order differential equations based on controlled Picard method with Simpson rulePeer review under responsibility of University of Bahrain.View all notes. <i>Journal of the Association of Arab Universities for Basic and Applied Sciences</i> , 2017 , 24, 247-253		2
74	Low pass filter design based on fractional power chebyshev polynomial 2015 ,		2
73	Review of the missing mechanical element: Memdamper 2015 ,		2
72	Fractional order two port network oscillator with equal order 2014 ,		2
71	Memristor-based oscillator using Deboo integrator 2012 ,		2
70	2012 ,		2
69	Secure DS-CDMA spreading codes using fully digital multidimensional multiscroll chaos 2013 ,		2
68	Analog fault diagnosis and testing by inverse problem technique 2012 ,		2
67	LOW-VOLTAGE MOS CHAOTIC OSCILLATOR BASED ON THE NONLINEARITY OF Gm. <i>Journal of Circuits, Systems and Computers</i> , 2004 , 13, 101-120	0.9	2
66	FPGA Implementation of Integer/Fractional Chaotic Systems. <i>Studies in Computational Intelligence</i> , 2020 , 199-229	0.8	2
65	Pinched hysteresis loops in non-linear resonators. <i>IET Circuits, Devices and Systems</i> , 2021 , 15, 88-93	1.1	2

64	2020,		2
63	Self-Reproducing Hidden Attractors in Fractional-Order Chaotic Systems Using Affine Transformations. <i>IEEE Open Journal of Circuits and Systems</i> , 2020 , 1, 243-254	1.7	2
62	2016,		2
61	2016,		2
60	Comparative study of fractional filters for Alzheimer disease detection on MRI images 2016,		2
59	Double-sided bifurcations in tent maps: Analysis and applications 2016,		2
58	Permutation techniques based on discrete chaos and their utilization in image encryption 2016,		2
57	N-digits Ternary Carry Lookahead Adder Design 2019,		2
56	On the Implementation of a Rotated Chaotic Lorenz System on FPGA 2019,		2
55	A Universal Fractional-Order Memelement Emulation Circuit 2019,		2
54	Banana Ripening and Corresponding Variations in Bio-Impedance and Glucose Levels 2019,		2
53	Tunable Fractional-Order Band-pass Filter of order 2 2019,		2
52	Fractional-Order Oscillators Based on Double Op-Amp 2019,		2
51	A switched chaotic encryption scheme using multi-mode generalized modified transition map. <i>Multimedia Tools and Applications</i> , 2021 , 80, 5373-5402	2.5	2
50	Optimal charging of fractional-order circuits with Cuckoo search. <i>Journal of Advanced Research</i> , 2021 , 32, 119-131	13	2
49	On-the-Fly Parallel Processing IP-Core for Image Blur Detection, Compression, and Chaotic Encryption Based on FPGA. <i>IEEE Access</i> , 2021 , 9, 82726-82746	3.5	2
48	FPGA Implementation of Fractional-Order Chaotic Systems 2018, 33-62		2
47	CNTFET design of a multiple-port ternary register file. <i>Microelectronics Journal</i> , 2021 , 113, 105076	1.8	2

46	Simple MOS Transistor-Based Realization of Fractional-Order Capacitors 2019 ,		1
45	Memcapacitor: Modeling, Analysis, and Emulators. <i>Studies in Systems, Decision and Control</i> , 2015 , 151-185.8		1
44	FPGA realization of ALU for mobile GPU 2016 ,		1
43	Speech encryption using generalized modified chaotic logistic and tent maps 2018 ,		1
42	Two topologies of fractional-order oscillators based on CFOA and RC networks 2018 ,		1
41	Nonlinear Fractional Order Boundary-Value Problems With Multiple Solutions 2018 , 37-74		1
40	Log-Domain Implementation of Fractional-Order Element Emulators 2019 ,		1
39	Generalized chaotic maps and elementary functions between analysis and implementation 2015 ,		1
38	Elmore delay in the fractional order domain 2017 ,		1
37	On the generalization of fractional-order transmission lines 2014 ,		1
36	2014 ,		1
35	2010 ,		1
34	Built-in-current-sensor for testing short and open faults in CMOS digital circuits 2010 ,		1
33	FPGA REALIZATION OF COMPLEX LOGISTIC MAP FRACTAL BEHAVIOR. <i>Fractals</i> ,	3.2	1
32	Discrete fractional-order Caputo method to overcome trapping in local optima: Manta Ray Foraging Optimizer as a case study. <i>Expert Systems With Applications</i> , 2022 , 192, 116355	7.8	1
31	Generalized α -Order Filter Based on Single CCII 2020 ,		1
30	Self-Excited Attractors in Jerk Systems: Overview and Numerical Investigation of Chaos Production. <i>Studies in Systems, Decision and Control</i> , 2018 , 71-86	0.8	1
29	Fractional derivative modeling of double-diffusive free convection with von Neumann stability analysis. <i>International Journal of Modelling and Simulation</i> , 2020 , 1-12	1.5	1

28	A Comparative Study of Different Human Skin Impedance Models 2021 ,		1
27	Fractional-order synchronization of two neurons using Fitzhugh-Nagumo neuron model 2016 ,		1
26	Fractional Derivative Modeling of Free Convective Flow over a Vertical Plate with Stability Analysis 2019 ,		1
25	All-Dynamic Synchronization of Rotating Fractional-Order Chaotic Systems 2019 ,		1
24	Fractional-order Nonminimum-phase Filter Design 2019 ,		1
23	Impact of Oustaloup and Matsuda Approximations on Fractional PID Controller of PV Panel 2019 ,		1
22	A Digital Hardware Implementation for A new Mixed-Order Nonlinear 3-D Chaotic System 2019 ,		1
21	Programmable constant phase element realization with crossbar arrays. <i>Journal of Advanced Research</i> , 2021 , 29, 137-145	13	1
20	Memristor-CNTFET based Ternary Comparator unit 2018 ,		1
19	An Automated Lightweight UVM Tool 2018 ,		1
18	Active emulation circuits of fractional-order memristive elements and its applications. <i>AEU - International Journal of Electronics and Communications</i> , 2021 , 138, 153855	2.8	1
17	Memristive Bio-Impedance Modeling of Fruits and Vegetables. <i>IEEE Access</i> , 2021 , 9, 21498-21506	3.5	1
16	Plant stem tissue modeling and parameter identification using metaheuristic optimization algorithms.. <i>Scientific Reports</i> , 2022 , 12, 3992	4.9	1
15	The minimax approach for a class of variable order fractional differential equation. <i>Mathematical Methods in the Applied Sciences</i> , 2019 , 42, 2734-2745	2.3	0
14	A survey on memristor active emulation circuits in the fractional-order domain 2022 , 375-410		0
13	A Modified Differentiator Circuit for Extracting Cole-Impedance Model Parameters Using Meta-heuristic Optimization Algorithms. <i>Arabian Journal for Science and Engineering</i> , 2021 , 46, 9945-9951	2.5	0
12	Modified fractional-order model for biomass degradation in an up-flow anaerobic sludge blanket reactor at Zenein Wastewater Treatment Plant.. <i>Environmental Science and Pollution Research</i> , 2022 , 29, 25980	5.1	0
11	CNTFET-Based Ternary Multiply-and-Accumulate Unit. <i>Electronics (Switzerland)</i> , 2022 , 11, 1455	2.6	0

- 10 FPGA realization of fractals based on a new generalized complex logistic map. *Chaos, Solitons and Fractals*, **2022**, 160, 112215 9.3 0
- 9 Meminductor: Modeling, Analysis, and Emulators. *Studies in Systems, Decision and Control*, **2015**, 207-227 0.8
- 8 Memristor-Based Relaxation Oscillator Circuits. *Studies in Systems, Decision and Control*, **2015**, 85-119 0.8
- 7 Memcapacitor Based Applications. *Studies in Systems, Decision and Control*, **2015**, 187-205 0.8
- 6 Center pulse width modulation implementation based on memristor. *AEU - International Journal of Electronics and Communications*, **2019**, 111, 152843 2.8
- 5 Memristor-Based Multilevel Digital Systems. *Studies in Systems, Decision and Control*, **2015**, 121-150 0.8
- 4 Parametric Control on Fractional-Order Response for L¹Chaotic System. *Journal of Physics: Conference Series*, **2013**, 423, 012024 0.3
- 3 Modeling woody plant tissue using different fractional-order circuits **2022**, 457-474
- 2 Fractional-order oscillators based on a single Op-Amp **2022**, 411-439
- 1 Two-Dimensional Steady-State Analysis of Selected Wastewater State Variables Using ASM3. *International Journal of Engineering Research in Africa*, **54**, 176-186 0.7