

Lobna

List of Publications by Year in descending order

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141
papers

2,439
citations

201674
27
h-index

254184
43
g-index

143
all docs

143
docs citations

143
times ranked

1013
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 1 | Arithmetic optimization approach for parameters identification of different PV diode models with FOPI-MPPT. Ain Shams Engineering Journal, 2022, 13, 101612. | 6.1 | 10 |
| 2 | FPGA REALIZATION OF COMPLEX LOGISTIC MAP FRACTAL BEHAVIOR. Fractals, 2022, 30, . | 3.7 | 2 |
| 3 | Observability of speed DC motor with self-tuning fuzzy-fractional-order controller. , 2022, , 157-179. | | 1 |
| 4 | Modeling woody plant tissue using different fractional-order circuits. , 2022, , 457-474. | | 1 |
| 5 | Fractional-order oscillators based on a single Op-Amp. , 2022, , 411-439. | | 0 |
| 6 | A survey on memristor active emulation circuits in the fractional-order domain. , 2022, , 375-410. | | 1 |
| 7 | Plant stem tissue modeling and parameter identification using metaheuristic optimization algorithms. Scientific Reports, 2022, 12, 3992. | 3.3 | 9 |
| 8 | FPGA Implementation of Reconfigurable CORDIC Algorithm and a Memristive Chaotic System With Transcendental Nonlinearities. IEEE Transactions on Circuits and Systems I: Regular Papers, 2022, 69, 2885-2892. | 5.4 | 18 |
| 9 | CNTFET-Based Ternary Multiply-and-Accumulate Unit. Electronics (Switzerland), 2022, 11, 1455. | 3.1 | 5 |
| 10 | FPGA realization of fractals based on a new generalized complex logistic map. Chaos, Solitons and Fractals, 2022, 160, 112215. | 5.1 | 2 |
| 11 | Numerical Sensitivity Analysis and Hardware Verification of a Transiently-Chaotic Attractor. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2022, 32, . | 1.7 | 4 |
| 12 | CNTFET-based ternary address decoder design. International Journal of Circuit Theory and Applications, 2022, 50, 3682-3691. | 2.0 | 3 |
| 13 | Review of activated carbon adsorbent material for textile dyes removal: Preparation, and modelling. Current Research in Green and Sustainable Chemistry, 2022, 5, 100325. | 5.6 | 54 |
| 14 | A Unified FPGA Realization for Fractional-Order Integrator and Differentiator. Electronics (Switzerland), 2022, 11, 2052. | 3.1 | 4 |
| 15 | Hardware realization of a secure and enhanced s-box based speech encryption engine. Analog Integrated Circuits and Signal Processing, 2021, 106, 385-397. | 1.4 | 10 |
| 16 | Two implementations of fractional-order relaxation oscillators. Analog Integrated Circuits and Signal Processing, 2021, 106, 421-432. | 1.4 | 7 |
| 17 | Analysis and FPGA of semi-fractal shapes based on complex Gaussian map. Chaos, Solitons and Fractals, 2021, 142, 110493. | 5.1 | 6 |
| 18 | Design and FPGA Verification of Custom-Shaped Chaotic Attractors Using Rotation, Offset Boosting and Amplitude Control. IEEE Transactions on Circuits and Systems II: Express Briefs, 2021, 68, 3466-3470. | 3.0 | 15 |

| # | ARTICLE | IF | CITATIONS |
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| 19 | Fractional-Order Bio-Impedance Modeling for Interdisciplinary Applications: A Review. IEEE Access, 2021, 9, 33158-33168. | 4.2 | 23 |
| 20 | Fractional-Order Edge Detection Masks for Diabetic Retinopathy Diagnosis as a Case Study. Computers, 2021, 10, 30. | 3.3 | 10 |
| 21 | A Modified Differentiator Circuit for Extracting Cole-Impedance Model Parameters Using Meta-heuristic Optimization Algorithms. Arabian Journal for Science and Engineering, 2021, 46, 9945-9951. | 3.0 | 4 |
| 22 | Optimal fractional-order PI with DC-DC converter and PV system. Ain Shams Engineering Journal, 2021, 12, 1895-1906. | 6.1 | 22 |
| 23 | A Comparative Study of Different Human Skin Impedance Models. , 2021, , . | | 2 |
| 24 | CNTFET design of a multiple-port ternary register file. Microelectronics Journal, 2021, 113, 105076. | 2.0 | 5 |
| 25 | Active emulation circuits of fractional-order memristive elements and its applications. AEU - International Journal of Electronics and Communications, 2021, 138, 153855. | 2.9 | 5 |
| 26 | Cancellable face recognition based on fractional-order Lorenz chaotic system and Haar wavelet fusion. , 2021, 116, 103103. | | 39 |
| 27 | FPGA Realizations of Chaotic Epidemic and Disease Models Including Covid-19. IEEE Access, 2021, 9, 21085-21093. | 4.2 | 7 |
| 28 | Memristive Bio-Impedance Modeling of Fruits and Vegetables. IEEE Access, 2021, 9, 21498-21506. | 4.2 | 2 |
| 29 | Reconfigurable FPGA Realization of Fractional-Order Chaotic Systems. IEEE Access, 2021, 9, 89376-89389. | 4.2 | 23 |
| 30 | A Scalable Firmware-Over-The-Air Architecture suitable for Industrial IoT Applications. , 2021, , . | | 3 |
| 31 | Double Fractional-order Masks Image Enhancement. , 2021, , . | | 3 |
| 32 | Design of IoT Microchip AVR Programmer for FOTA Updates based on Unified Programming and Debug Interface using Wi-Fi and LoRa. , 2021, , . | | 1 |
| 33 | A Comparative Study of Different Chaotic Systems in Path Planning for Surveillance Applications. , 2021, , . | | 3 |
| 34 | Vulnerable Road Users Detection and Tracking using YOLOv4 and Deep SORT. , 2021, , . | | 1 |
| 35 | Over-The-Air Firmware Updating Model suitable for Industrial IoT based on Microchip AVR MCU. , 2021, , . | | 2 |
| 36 | MPPT for a Partially Shaded PV System Using Accelerated Particle Swarms. , 2021, , . | | 0 |

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| 37 | On the Approximations of CFOA-Based Fractional-Order Inverse Filters. Circuits, Systems, and Signal Processing, 2020, 39, 2-29. | 2.0 | 28 |
| 38 | A novel image encryption system merging fractional-order edge detection and generalized chaotic maps. Signal Processing, 2020, 167, 107280. | 3.7 | 85 |
| 39 | Design and Implementation of an Optimized Artificial Human Eardrum Model. Circuits, Systems, and Signal Processing, 2020, 39, 3219-3233. | 2.0 | 10 |
| 40 | A general emulator for fractional-order memristive elements with multiple pinched points and application. AEU - International Journal of Electronics and Communications, 2020, 124, 153338. | 2.9 | 21 |
| 41 | Optimized Edge Detection Technique for Brain Tumor Detection in MR Images. IEEE Access, 2020, 8, 136243-136259. | 4.2 | 53 |
| 42 | Enhanced hardware implementation of a mixed-order nonlinear chaotic system and speech encryption application. AEU - International Journal of Electronics and Communications, 2020, 125, 153347. | 2.9 | 38 |
| 43 | Implementation and analysis of tunable fractional-order band-pass filter of order $2\hat{1}\pm$. AEU - International Journal of Electronics and Communications, 2020, 124, 153343. | 2.9 | 15 |
| 44 | Extracting Optimized Bio-Impedance Model Parameters Using Different Topologies of Oscillators. IEEE Sensors Journal, 2020, 20, 9947-9954. | 4.7 | 27 |
| 45 | Memristor-CNTFET based Ternary Full Adders. , 2020, , . | | 12 |
| 46 | Do the Bio-impedance Models Exhibit Pinched Hysteresis?. , 2020, , . | | 1 |
| 47 | Chaotic Dynamics and FPGA Implementation of a Fractional-Order Chaotic System With Time Delay. IEEE Open Journal of Circuits and Systems, 2020, 1, 255-262. | 1.9 | 7 |
| 48 | Identifying the Parameters of Cole Impedance Model Using Magnitude Only and Complex Impedance Measurements: A Metaheuristic Optimization Approach. Arabian Journal for Science and Engineering, 2020, 45, 6541-6558. | 3.0 | 13 |
| 49 | Numerical Simulations and FPGA Implementations of Fractional-Order Systems Based on Product Integration Rules. IEEE Access, 2020, 8, 102093-102105. | 4.2 | 24 |
| 50 | Design and fabrication of CNT/graphene-based polymer nanocomposite applications in nanosensors. , 2020, , 281-294. | | 1 |
| 51 | Emulation circuits of fractional-order memelements with multiple pinched points and their applications. Chaos, Solitons and Fractals, 2020, 138, 109882. | 5.1 | 20 |
| 52 | A study of the nonlinear dynamics of human behavior and its digital hardware implementation. Journal of Advanced Research, 2020, 25, 111-123. | 9.5 | 21 |
| 53 | FPGA Implementation of Delayed Fractional-Order Financial Chaotic System. , 2020, , . | | 2 |
| 54 | Two-Port Network Analysis of Equal Fractional-order Wireless Power Transfer Circuit. , 2020, , . | | 3 |

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| 55 | Comparative Study of CNTFET Implementations of 1-trit Multiplier. , 2020, , . | | 5 |
| 56 | Fractional-Order Generalized Gene Regulation Model CCII-Based Practical Emulator. , 2020, , . | | 0 |
| 57 | Generalized $\hat{1}\pm+\hat{1}^2$ -order Filter Based on Single CCII. , 2020, , . | | 1 |
| 58 | Fractional-order Memristor Emulator with Multiple Pinched Points. , 2020, , . | | 4 |
| 59 | On Series Connections of Fractional-Order Elements and Memristive Elements. , 2020, , . | | 0 |
| 60 | FPGA Implementation of Integer/Fractional Chaotic Systems. Studies in Computational Intelligence, 2020, , 199-229. | 0.9 | 3 |
| 61 | Design of Fractional-Order Differentiator-Lowpass Filters for Extracting the R peaks in ECG Signals. , 2019, , . | | 2 |
| 62 | Center pulse width modulation implementation based on memristor. AEU - International Journal of Electronics and Communications, 2019, 111, 152843. | 2.9 | 0 |
| 63 | Stability analysis of fractional-order Colpitts oscillators. Analog Integrated Circuits and Signal Processing, 2019, 101, 267-279. | 1.4 | 11 |
| 64 | Fractional X-shape controllable multi-scroll attractor with parameter effect and FPGA automatic design tool software. Chaos, Solitons and Fractals, 2019, 126, 292-307. | 5.1 | 43 |
| 65 | Fractional Order Inverse Filters Based on CCII Family. , 2019, , . | | 1 |
| 66 | Toward Portable Bio-impedance devices. , 2019, , . | | 6 |
| 67 | Heating and Freezing Injury to Plant Tissues and Their Effect on Bioimpedance: Experimental Study. , 2019, , . | | 1 |
| 68 | Cole Bio-Impedance Model Variations in <i>Daucus-Carota-Sativus</i> Under Heating and Freezing Conditions. IEEE Access, 2019, 7, 113254-113263. | 4.2 | 24 |
| 69 | Ternary Functions Design Using Memristive Threshold Logic. IEEE Access, 2019, 7, 48371-48381. | 4.2 | 34 |
| 70 | General fractional order mem-elements mutators. Microelectronics Journal, 2019, 90, 211-221. | 2.0 | 21 |
| 71 | Synchronization and FPGA realization of fractional-order Izhikevich neuron model. Microelectronics Journal, 2019, 89, 56-69. | 2.0 | 48 |
| 72 | FPGA implementation of sound encryption system based on fractional-order chaotic systems. Microelectronics Journal, 2019, 90, 323-335. | 2.0 | 37 |

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| 73 | Generalized two-port network based fractional order filters. AEU - International Journal of Electronics and Communications, 2019, 104, 128-146. | 2.9 | 36 |
| 74 | All Possible Topologies of the Fractional-Order Wien Oscillator Family Using Different Approximation Techniques. Circuits, Systems, and Signal Processing, 2019, 38, 3931-3951. | 2.0 | 45 |
| 75 | N-digits Ternary Carry Lookahead Adder Design. , 2019, , . | | 7 |
| 76 | Generic Hardware of Fractional Order Multi-Scrolls Chaotic Generator Based on FPGA. , 2019, , . | | 2 |
| 77 | Power Tracking Controller Design For Photo-voltaic Systems Based On Particle Swarm Optimization Technique. , 2019, , . | | 2 |
| 78 | Multifunction Fractional Inverse Filter Based on OTRA. , 2019, , . | | 5 |
| 79 | Using Meta-heuristic Optimization to Extract Bio-impedance Parameters from an Oscillator Circuit. , 2019, , . | | 4 |
| 80 | A Universal Fractional-Order Memelement Emulation Circuit. , 2019, , . | | 4 |
| 81 | Analysis and Design of Fractional-order Low-pass Filter with Three Elements of Independent Orders. , 2019, , . | | 3 |
| 82 | CAD Tool for Two-Digit Ternary Functions Design. , 2019, , . | | 0 |
| 83 | A Universal Floating Fractional-Order Elements/Memelements Emulator. , 2019, , . | | 1 |
| 84 | Banana Ripening and Corresponding Variations in Bio-Impedance and Glucose Levels. , 2019, , . | | 4 |
| 85 | Fractional-order Nonminimum-phase Filter Design. , 2019, , . | | 1 |
| 86 | A Simple BJT Inverse Memristor Emulator and Its Application in Chaotic Oscillators. , 2019, , . | | 6 |
| 87 | Design of FOPID Controller for a DC Motor Using Approximation Techniques. , 2019, , . | | 5 |
| 88 | A Digital Hardware Implementation for A new Mixed-Order Nonlinear 3-D Chaotic System. , 2019, , . | | 2 |
| 89 | Tunable Fractional-Order Band-pass Filter of order $2\hat{1}\pm$. , 2019, , . | | 5 |
| 90 | Fractional-Order Oscillators Based on Double Op-Amp. , 2019, , . | | 4 |

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| 91 | FPGA Implementation of the Fractional Order Integrator/Differentiator: Two Approaches and Applications. IEEE Transactions on Circuits and Systems I: Regular Papers, 2019, 66, 1484-1495. | 5.4 | 50 |
| 92 | Chaotic Flower Pollination and Grey Wolf Algorithms for parameter extraction of bio-impedance models. Applied Soft Computing Journal, 2019, 75, 750-774. | 7.2 | 52 |
| 93 | Parameter identification of fractional-order chaotic systems using different Meta-heuristic Optimization Algorithms. Nonlinear Dynamics, 2019, 95, 2491-2542. | 5.2 | 46 |
| 94 | Fractional order integrator/differentiator: FPGA implementation and FOPID controller application. AEU - International Journal of Electronics and Communications, 2019, 98, 220-229. | 2.9 | 43 |
| 95 | Generalized double-humped logistic map-based medical image encryption. Journal of Advanced Research, 2018, 10, 85-98. | 9.5 | 93 |
| 96 | Fractional-Order Relaxation Oscillators Based on Op-Amp and OTRA. , 2018, , . | | 4 |
| 97 | Memristor-CNTFET based Ternary Comparator unit. , 2018, , . | | 6 |
| 98 | FPGA Speech Encryption Realization Based on Variable S-Box and Memristor Chaotic Circuit. , 2018, , . | | 4 |
| 99 | Incremental Grounded Voltage Controlled Memristor Emulator. , 2018, , . | | 8 |
| 100 | FPGA Implementation of Fractional-Order Chaotic Systems. , 2018, , 33-62. | | 3 |
| 101 | Biologically Inspired Optimization Algorithms for Fractional-Order Bioimpedance Models Parameters Extraction. , 2018, , 125-162. | | 11 |
| 102 | On the Approximation of Fractional-Order Circuit Design. , 2018, , 239-270. | | 6 |
| 103 | Survey on Two-Port Network-Based Fractional-Order Oscillators. , 2018, , 305-327. | | 8 |
| 104 | Fractional-Order Filter Design. , 2018, , 357-382. | | 5 |
| 105 | Comparison between three approximation methods on oscillator circuits. Microelectronics Journal, 2018, 81, 162-178. | 2.0 | 26 |
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| 107 | FPGA Implementation of X- and Heart-shapes Controllable Multi-Scroll Attractors. , 2018, , . | | 9 |
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| 109 | FPGA implementation of fractional-order Chua's chaotic system. , 2018, , . | | 7 |
| 110 | Mathematical analysis of gene regulation activator model. , 2018, , . | | 1 |
| 111 | A generalized family of memristor-based voltage controlled relaxation oscillator. International Journal of Circuit Theory and Applications, 2018, 46, 1311-1327. | 2.0 | 23 |
| 112 | On the Fractional Order Generalized Discrete Maps. , 2018, , 375-408. | | 5 |
| 113 | Biological inspired optimization algorithms for cole-impedance parameters identification. AEU - International Journal of Electronics and Communications, 2017, 78, 79-89. | 2.9 | 80 |
| 114 | FPGA implementation of two fractional order chaotic systems. AEU - International Journal of Electronics and Communications, 2017, 78, 162-172. | 2.9 | 155 |
| 115 | Experimental comparison of integer/fractional-order electrical models of plant. AEU - International Journal of Electronics and Communications, 2017, 80, 1-9. | 2.9 | 80 |
| 116 | Generalized family of fractional-order oscillators based on single CFOA and RC network. , 2017, , . | | 16 |
| 117 | Biomedical image encryption based on double-humped and fractional logistic maps. , 2017, , . | | 20 |
| 118 | FPGA realization of Caputo and Grunwald-Letnikov operators. , 2017, , . | | 19 |
| 119 | Fractional controllable multi-scroll V-shape attractor with parameters effect. , 2017, , . | | 34 |
| 120 | Fractional order four-phase oscillator based on double integrator topology. , 2017, , . | | 6 |
| 121 | Three Fractional-Order-Capacitors-Based Oscillators with Controllable Phase and Frequency. Journal of Circuits, Systems and Computers, 2017, 26, 1750160. | 1.5 | 65 |
| 122 | Generalized fractional logistic map encryption system based on FPGA. AEU - International Journal of Electronics and Communications, 2017, 80, 114-126. | 2.9 | 76 |
| 123 | FPGA implementation of fractional-order integrator and differentiator based on Grunwald Letnikov's definition. , 2017, , . | | 9 |
| 124 | Two-port two impedances fractional order oscillators. Microelectronics Journal, 2016, 55, 40-52. | 2.0 | 49 |
| 125 | Fractional-order inverting and non-inverting filters based on CFOA. , 2016, , . | | 14 |
| 126 | Fractional-order oscillator based on single CCII. , 2016, , . | | 15 |

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| 128 | Fractional Order Oscillator Design Based on Two-Port Network. Circuits, Systems, and Signal Processing, 2016, 35, 3086-3112. | 2.0 | 44 |
| 129 | Generalized delayed logistic map suitable for pseudo-random number generation. , 2015, , . | | 5 |
| 130 | Fractional order oscillators with single non-zero transmission matrix element. , 2015, , . | | 5 |
| 131 | Generalized fractional logistic map suitable for data encryption. , 2015, , . | | 11 |
| 132 | Fractional order oscillators based on operational transresistance amplifiers. AEU - International Journal of Electronics and Communications, 2015, 69, 988-1003. | 2.9 | 78 |
| 133 | Current feedback operational amplifier (CFOA) based fractional order oscillators. , 2014, , . | | 6 |
| 134 | Fractional order two port network oscillator with equal order. , 2014, , . | | 4 |
| 135 | Two-port oscillators based on three impedance structure. , 2014, , . | | 0 |
| 136 | Current feedback operational amplifier(CFOA) based programmable lossless floating inductor realization. , 2014, , . | | 3 |
| 137 | Fractional order oscillator with independent control of phase and frequency. , 2014, , . | | 12 |
| 138 | Digitally programmable lossless floating inductor realization using current differential amplifier (CDA). , 2012, , . | | 0 |
| 139 | Two port network analysis for three impedance based oscillators. , 2011, , . | | 2 |
| 140 | Active realization of doubly terminated LC ladder filters using current feedback operational amplifier (CFOA) via linear transformation. AEU - International Journal of Electronics and Communications, 2011, 65, 753-762. | 2.9 | 25 |
| 141 | CMOS digitally programmable lossless floating inductor. , 2010, , . | | 4 |