

Leon O Chua

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.

185 papers	8,971 citations	42 h-index	91 g-index
198 ext. papers	10,651 ext. citations	3 avg, IF	6.87 L-index

#	Paper	IF	Citations
185	Resistance switching memories are memristors. <i>Applied Physics A: Materials Science and Processing</i> , 2011 , 102, 765-783	2.6	961
184	MEMRISTOR OSCILLATORS. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 2008 , 18, 3183-3206	2	692
183	Circuit Elements With Memory: Memristors, Memcapacitors, and Meminductors. <i>Proceedings of the IEEE</i> , 2009 , 97, 1717-1724	14.3	670
182	SIMPLEST CHAOTIC CIRCUIT. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 2010 , 20, 1567-1580	2	349
181	. <i>IEEE Transactions on Circuits and Systems I: Regular Papers</i> , 2013 , 60, 3008-3021	3.9	326
180	If it's pinched it's a memristor. <i>Semiconductor Science and Technology</i> , 2014 , 29, 104001	1.8	290
179	Cellular neural networks with non-linear and delay-type template elements and non-uniform grids. <i>International Journal of Circuit Theory and Applications</i> , 1992 , 20, 469-481	2	267
178	Neural Synaptic Weighting With a Pulse-Based Memristor Circuit. <i>IEEE Transactions on Circuits and Systems I: Regular Papers</i> , 2012 , 59, 148-158	3.9	254
177	Two centuries of memristors. <i>Nature Materials</i> , 2012 , 11, 478-81	27	250
176	Memristor Emulator for Memristor Circuit Applications. <i>IEEE Transactions on Circuits and Systems I: Regular Papers</i> , 2012 , 59, 2422-2431	3.9	245
175	SPREAD SPECTRUM COMMUNICATION THROUGH MODULATION OF CHAOS. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 1993 , 03, 469-477	2	217
174	Memristor Bridge Synapses. <i>Proceedings of the IEEE</i> , 2012 , 100, 2061-2070	14.3	186
173	HODGKIN-HUXLEY AXON IS MADE OF MEMRISTORS. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 2012 , 22, 1230011	2	168
172	HYPERCHAOTIC ATTRACTORS OF UNIDIRECTIONALLY-COUPLED CHUA'S CIRCUITS. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 1994 , 04, 477-482	2	147
171	CONDITIONS FOR IMPULSIVE SYNCHRONIZATION OF CHAOTIC AND HYPERCHAOTIC SYSTEMS. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 2001 , 11, 551-560	2	139
170	Impulsive Control and Synchronization of Nonlinear Dynamical Systems and Application to Secure Communication. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 1997 , 07, 645-664	2	133
169	LOCAL ACTIVITY IS THE ORIGIN OF COMPLEXITY. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 2005 , 15, 3435-3456	2	133

168	Memristor, Hodgkin-Huxley, and edge of chaos. <i>Nanotechnology</i> , 2013 , 24, 383001	3.4	132
167	CLARIFYING CHAOS: EXAMPLES AND COUNTEREXAMPLES. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 1996 , 06, 219-249	2	109
166	NEURONS ARE POISED NEAR THE EDGE OF CHAOS. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 2012 , 22, 1250098	2	94
165	A Circuit-Based Learning Architecture for Multilayer Neural Networks With Memristor Bridge Synapses. <i>IEEE Transactions on Circuits and Systems I: Regular Papers</i> , 2015 , 62, 215-223	3.9	93
164	ADAPTIVE SYNCHRONIZATION OF CHUA'S OSCILLATORS. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 1996 , 06, 189-201	2	91
163	Chua's circuit 10 years later. <i>International Journal of Circuit Theory and Applications</i> , 1994 , 22, 279-305	2	86
162	On the universe of stable cellular neural networks. <i>International Journal of Circuit Theory and Applications</i> , 1992 , 20, 497-517	2	85
161	Brains Are Made of Memristors. <i>IEEE Circuits and Systems Magazine</i> , 2014 , 14, 12-36	3.2	83
160	TRANSITIONS IN DYNAMICAL REGIMES BY DRIVING: A UNIFIED METHOD OF CONTROL AND SYNCHRONIZATION OF CHAOS. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 1993 , 03, 479-483	2	73
159	Edge of Chaos and Local Activity Domain of FitzHugh-Nagumo Equation. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 1998 , 08, 211-257	2	72
158	Memristor-based multilevel memory 2010 ,		70
157	Local Activity Principle 2013 ,		69
156	A Theoretical Approach to Memristor Devices. <i>IEEE Journal on Emerging and Selected Topics in Circuits and Systems</i> , 2015 , 5, 123-132	5.2	68
155	Finding all solutions of piecewise-linear circuits. <i>International Journal of Circuit Theory and Applications</i> , 1982 , 10, 201-229	2	68
154	Communication Systems via Chaotic Signals from a Reconstruction Viewpoint. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 1997 , 07, 275-286	2	62
153	Memfractance: A Mathematical Paradigm for Circuit Elements with Memory. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 2014 , 24, 1430023	2	60
152	Chaotic Digital Code-Division Multiple Access (CDMA) Communication Systems. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 1997 , 07, 2789-2805	2	58
151	Associative Learning with Temporal Contiguity in a Memristive Circuit for Large-Scale Neuromorphic Networks. <i>Advanced Electronic Materials</i> , 2015 , 1, 1500125	6.4	57

150	A Universal Mutator for Transformations Among Memristor, Memcapacitor, and Meminductor. <i>IEEE Transactions on Circuits and Systems II: Express Briefs</i> , 2014 , 61, 758-762	3.5	50
149	Cellular neural networks: Theory and circuit design. <i>International Journal of Circuit Theory and Applications</i> , 1992 , 20, 533-553	2	50
148	Impasse points. Part II: Analytical aspects. <i>International Journal of Circuit Theory and Applications</i> , 1989 , 17, 271-282	2	49
147	Composite Behavior of Multiple Memristor Circuits. <i>IEEE Transactions on Circuits and Systems I: Regular Papers</i> , 2013 , 60, 2688-2700	3.9	48
146	Stability analysis of generalized cellular neural networks. <i>International Journal of Circuit Theory and Applications</i> , 1993 , 21, 1-33	2	47
145	CHANNEL-INDEPENDENT CHAOTIC SECURE COMMUNICATION. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 1996 , 06, 2653-2660	2	45
144	Negative resistance devices. <i>International Journal of Circuit Theory and Applications</i> , 1983 , 11, 161-186	2	44
143	Controlling Spiral Waves in a Model of Two-Dimensional Arrays of Chua's Circuits. <i>Physical Review Letters</i> , 1998 , 80, 1884-1887	7.4	41
142	A NONLINEAR DYNAMICS PERSPECTIVE OF WOLFRAM'S NEW KIND OF SCIENCE PART III: PREDICTING THE UNPREDICTABLE. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 2004 , 14, 3689-3820	2	40
141	MEMRISTOR HAMILTONIAN CIRCUITS. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 2011 , 21, 2395-2425	2	39
140	Hysteresis in electronic circuits: A circuit theorist's perspective. <i>International Journal of Circuit Theory and Applications</i> , 1991 , 19, 471-515	2	39
139	NONLINEAR DYNAMICS OF A CLASS OF ANALOG-TO-DIGITAL CONVERTERS. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 1992 , 02, 325-340	2	39
138	History Erase Effect in a Non-Volatile Memristor. <i>IEEE Transactions on Circuits and Systems I: Regular Papers</i> , 2016 , 63, 389-400	3.9	39
137	STAR CELLULAR NEURAL NETWORKS FOR ASSOCIATIVE AND DYNAMIC MEMORIES. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 2004 , 14, 1725-1772	2	37
136	Dynamic Behavior of Coupled Memristor Circuits. <i>IEEE Transactions on Circuits and Systems I: Regular Papers</i> , 2015 , 62, 1607-1616	3.9	36
135	Global properties of continuous piecewise linear vector fields. Part I: Simplest case in R^2 . <i>International Journal of Circuit Theory and Applications</i> , 1991 , 19, 251-307	2	36
134	EXPERIMENTAL STUDY OF IMPULSIVE SYNCHRONIZATION OF CHAOTIC AND HYPERCHAOTIC CIRCUITS. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 1999 , 09, 1393-1424	2	34
133	All-Optically Controlled Memristor for Optoelectronic Neuromorphic Computing. <i>Advanced Functional Materials</i> , 2021 , 31, 2005582	15.6	34

132	A New Circuit for Emulating Memristors Using Inductive Coupling. <i>IEEE Access</i> , 2017 , 5, 1284-1295	3.5	33
131	Vertical-organic-nanocrystal-arrays for crossbar memristors with tuning switching dynamics toward neuromorphic computing. <i>SmartMat</i> , 2021 , 2, 99-108	22.8	32
130	Chua Corsage Memristor: Phase Portraits, Basin of Attraction, and Coexisting Pinched Hysteresis Loops. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 2017 , 27, 1730011	2	30
129	A Nonlinear Dynamics Perspective of Wolfram's New Kind of Science Part II: Universal Neuron. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 2003 , 13, 2377-2491	2	29
128	What are Memristor, Memcapacitor, and Meminductor?. <i>IEEE Transactions on Circuits and Systems II: Express Briefs</i> , 2015 , 62, 402-406	3.5	28
127	Measuring volterra kernels III: How to estimate the highest significant order. <i>International Journal of Circuit Theory and Applications</i> , 1991 , 19, 189-209	2	28
126	On Local Activity and Edge of Chaos in a NaMLab Memristor. <i>Frontiers in Neuroscience</i> , 2021 , 15, 651452	5.1	28
125	Theoretical Foundations of Memristor Cellular Nonlinear Networks: A DRM2-Based Method to Design Memcomputers With Dynamic Memristors. <i>IEEE Transactions on Circuits and Systems I: Regular Papers</i> , 2020 , 67, 2753-2766	3.9	27
124	A NONLINEAR DYNAMICS PERSPECTIVE OF WOLFRAM'S NEW KIND OF SCIENCE PART VI: FROM TIME-REVERSIBLE ATTRACTORS TO THE ARROW OF TIME. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 2006 , 16, 1097-1373	2	27
123	Properties of admissible symbolic sequences in a second-order digital filter with overflow non-linearity. <i>International Journal of Circuit Theory and Applications</i> , 1993 , 21, 299-307	2	27
122	Theoretical Foundations of Memristor Cellular Nonlinear Networks: Memcomputing With Bistable-Like Memristors. <i>IEEE Transactions on Circuits and Systems I: Regular Papers</i> , 2020 , 67, 502-515	3.9	27
121	Theoretical Foundations of Memristor Cellular Nonlinear Networks: Stability Analysis With Dynamic Memristors. <i>IEEE Transactions on Circuits and Systems I: Regular Papers</i> , 2020 , 67, 1389-1401	3.9	26
120	Turing Patterns in Memristive Cellular Nonlinear Networks. <i>IEEE Transactions on Circuits and Systems I: Regular Papers</i> , 2016 , 63, 1222-1230	3.9	23
119	Gas Discharge Lamps Are Volatile Memristors. <i>IEEE Transactions on Circuits and Systems I: Regular Papers</i> , 2014 , 61, 2066-2073	3.9	23
118	Memristor: Real memristor found. <i>Journal of Applied Physics</i> , 2019 , 125, 054504	2.5	22
117	Generating randomness from chaos and constructing chaos with desired randomness. <i>International Journal of Circuit Theory and Applications</i> , 1990 , 18, 215-240	2	22
116	Oscillator Made of Only One Memristor and One Battery. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 2015 , 25, 1530010	2	21
115	Design of high-speed, high-density CNNs in cmos technology. <i>International Journal of Circuit Theory and Applications</i> , 1992 , 20, 555-572	2	21

114	A NONLINEAR DYNAMICS PERSPECTIVE OF WOLFRAM'S NEW KIND OF SCIENCE PART VIII: MORE ISLES OF EDEN. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 2007 , 17, 3741-3894	2	20
113	Complete stability of autonomous reciprocal nonlinear networks. <i>International Journal of Circuit Theory and Applications</i> , 1978 , 6, 211-241	2	20
112	Microtubules as Sub-Cellular Memristors. <i>Scientific Reports</i> , 2020 , 10, 2108	4.9	19
111	The First Ever Real Bistable MemristorsPart I: Theoretical Insights on Local Fading Memory. <i>IEEE Transactions on Circuits and Systems II: Express Briefs</i> , 2016 , 63, 1091-1095	3.5	19
110	A memristive circuit model for p-n junction diodes. <i>International Journal of Circuit Theory and Applications</i> , 1974 , 2, 367-389	2	19
109	Transient Behaviors of Multiple Memristor Circuits Based on Flux Charge Relationship. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 2014 , 24, 1430006	2	18
108	EXACT SYNCHRONIZATION OF MISMATCHED CHAOTIC SYSTEMS. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 1996 , 06, 569-580	2	18
107	ARNOLD TONGUES, DEVIL'S STAIRCASE, AND SELF-SIMILARITY IN THE DRIVEN CHUA'S CIRCUIT. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 1994 , 04, 1743-1753	2	18
106	Canonical piecewise-linear analysis: Generalized breakpoint hopping algorithm. <i>International Journal of Circuit Theory and Applications</i> , 1986 , 14, 35-52	2	18
105	A NONLINEAR DYNAMICS PERSPECTIVE OF WOLFRAM'S NEW KIND OF SCIENCE PART IX: QUASI-ERGODICITY. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 2008 , 18, 2487-2642	2	17
104	Parasitic Effects on Memristor Dynamics. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 2016 , 26, 1630014	2	16
103	Global properties of continuous piecewise linear vector fields. Part II: Simplest symmetric case in R^2 . <i>International Journal of Circuit Theory and Applications</i> , 1992 , 20, 9-46	2	16
102	The First Ever Real Bistable MemristorsPart II: Design and Analysis of a Local Fading Memory System. <i>IEEE Transactions on Circuits and Systems II: Express Briefs</i> , 2016 , 63, 1096-1100	3.5	16
101	PRACTICAL STABILITY OF IMPULSIVE SYNCHRONIZATION BETWEEN TWO NONAUTONOMOUS CHAOTIC SYSTEMS. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 2000 , 10, 859-867	2	15
100	Non-linear op-amp circuits: Existence and uniqueness of solution by inspection. <i>International Journal of Circuit Theory and Applications</i> , 1984 , 12, 145-173	2	15
99	Hidden Bifurcations in the Multispiral Chua Attractor. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 2016 , 26, 1630039	2	15
98	ON THE GENERALITY OF THE UNFOLDED CHUA'S CIRCUIT. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 1996 , 06, 801-832	2	14
97	EXPERIMENTAL STUDY OF FORCED CHUA'S OSCILLATOR. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 1994 , 04, 1721-1742	2	14

96	A CNN handwritten character recognizer. <i>International Journal of Circuit Theory and Applications</i> , 1992 , 20, 601-612	2	14
95	Transfer maps and return maps for piecewise-linear three-region dynamical systems. <i>International Journal of Circuit Theory and Applications</i> , 1987 , 15, 23-49	2	14
94	High-speed non-linear circuit models for p-n junction diodes. <i>International Journal of Circuit Theory and Applications</i> , 1988 , 16, 157-190	2	14
93	On the Thermal Models for Resistive Random Access Memory Circuit Simulation. <i>Nanomaterials</i> , 2021 , 11,	5.4	14
92	Third-Order Memristive Morris-Lecar Model of Barnacle Muscle Fiber. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 2017 , 27, 1730015	2	13
91	Memristive Model of the Barnacle Giant Muscle Fibers. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 2016 , 26, 1630001	2	13
90	COMPLEXITY OF REACTION-DIFFUSION CNN. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 2006 , 16, 2499-2527	2	13
89	Experimental evaluation of the dynamic route map in the reset transition of memristive ReRAMs. <i>Chaos, Solitons and Fractals</i> , 2020 , 139, 110288	9.3	12
88	Global dynamics of Chua Corsage Memristor circuit family: fixed-point loci, Hopf bifurcation, and coexisting dynamic attractors. <i>Nonlinear Dynamics</i> , 2020 , 99, 3169-3196	5	12
87	Fractional memristor. <i>Applied Physics Letters</i> , 2017 , 111, 243502	3.4	12
86	A Circuit-Based Neural Network with Hybrid Learning of Backpropagation and Random Weight Change Algorithms. <i>Sensors</i> , 2016 , 17,	3.8	12
85	TOPOLOGICAL ANALYSIS OF CHAOTIC SOLUTION OF A THREE-ELEMENT MEMRISTIVE CIRCUIT. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 2010 , 20, 3819-3827	2	12
84	RECONSTRUCTION AND SYNCHRONIZATION OF HYPERCHAOTIC CIRCUITS VIA ONE STATE VARIABLE. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 2002 , 12, 2069-2085	2	12
83	CNN: A PARADIGM FOR COMPLEXITY. <i>World Scientific Series on Nonlinear Science, Series A</i> , 1999 , 529-833	3.3	12
82	The overdamped double-scroll family. Part I: Piecewise-linear geometry and normal form. <i>International Journal of Circuit Theory and Applications</i> , 1988 , 16, 233-302	2	12
81	Hopf bifurcation via Volterra series. <i>IEEE Transactions on Automatic Control</i> , 1983 , 28, 42-53	5.9	12
80	TIME-DELAYED IMPULSIVE CONTROL OF CHAOTIC HYBRID SYSTEMS. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 2004 , 14, 1091-1104	2	11
79	TESTING FOR LOCAL ACTIVITY AND EDGE OF CHAOS. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 2001 , 11, 1495-1591	2	11

78	Error Performance of Chaotic Digital Code-Division Multiple Access (CDMA) Systems. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 1998 , 08, 2047-2059	2	11
77	HOPF BIFURCATIONS AND DEGENERACIES IN CHUA'S CIRCUIT: A PERSPECTIVE FROM A FREQUENCY DOMAIN APPROACH. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 1999 , 09, 295-303	2	11
76	FROM ALMOST PERIODIC TO CHAOTIC: THE FUNDAMENTAL MAP. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 1996 , 06, 1111-1125	2	11
75	High-order non-linear circuit elements: Circuit-theoretic properties. <i>International Journal of Circuit Theory and Applications</i> , 1983 , 11, 187-206	2	11
74	NbO ₂ -Mott Memristor: A Circuit- Theoretic Investigation. <i>IEEE Transactions on Circuits and Systems I: Regular Papers</i> , 2021 , 68, 4979-4992	3.9	11
73	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
72	Morris-Lecar model of third-order barnacle muscle fiber is made of volatile memristors. <i>Science China Information Sciences</i> , 2018 , 61, 1	3.4	10
71	Awakening dynamics via passive coupling and synchronization mechanism in oscillatory cellular neural/nonlinear networks. <i>International Journal of Circuit Theory and Applications</i> , 2008 , 36, 525-553	2	10
70	ADVANCED IMAGE PROCESSING CELLULAR NEURAL NETWORKS. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 2007 , 17, 1109-1150	2	10
69	CNN Genes for One-Dimensional Cellular Automata: A Multi-Nested Piecewise-Linear Approach. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 1998 , 08, 1987-2001	2	9
68	Edge of Chaos Theory Resolves Smale Paradox. <i>IEEE Transactions on Circuits and Systems I: Regular Papers</i> , 2022 , 1-14	3.9	9
67	How to Build a Memristive Integrate-and-Fire Model for Spiking Neuronal Signal Generation. <i>IEEE Transactions on Circuits and Systems I: Regular Papers</i> , 2021 , 68, 4837-4850	3.9	9
66	Dynamics of Hamiltonian Systems and Memristor Circuits. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 2017 , 27, 1730005	2	8
65	Memristor circuit for artificial synaptic weighting of pulse inputs 2012 ,		8
64	LOCAL ACTIVITY CRITERIA FOR DISCRETE-MAP CNN. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 2002 , 12, 1227-1272	2	8
63	Efficient solution of the variational equation for piecewise-linear differential equations. <i>International Journal of Circuit Theory and Applications</i> , 1986 , 14, 305-314	2	8
62	Analog Neural Computing With Super-Resolution Memristor Crossbars. <i>IEEE Transactions on Circuits and Systems I: Regular Papers</i> , 2021 , 1-12	3.9	8
61	Taming Spatiotemporal Chaos in Forced Memristive Arrays. <i>IEEE Transactions on Very Large Scale Integration (VLSI) Systems</i> , 2018 , 26, 2947-2954	2.6	8

60	A NONLINEAR DYNAMICS PERSPECTIVE OF WOLFRAM'S NEW KIND OF SCIENCE PART XI: PERIOD-2 RULES. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 2009 , 19, 1751-1930	2	7
59	IMAGE PROCESSING AND SELF-ORGANIZING CNN. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 2005 , 15, 2939-2958	2	7
58	EMERGENCE OF UNICELLULAR ORGANISMS FROM A SIMPLE GENERALIZED CELLULAR AUTOMATA. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 1999 , 09, 1219-1236	2	7
57	Multimode oscillator analysis via integral manifolds part I: Non-resonant case. <i>International Journal of Circuit Theory and Applications</i> , 1988 , 16, 25-58	2	7
56	DIFFERENCE EQUATIONS FOR CELLULAR AUTOMATA. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 2009 , 19, 805-830	2	6
55	Multimode oscillator analysis via integral manifolds part II: Resonant case. <i>International Journal of Circuit Theory and Applications</i> , 1988 , 16, 59-92	2	6
54	. <i>IEEE Transactions on Circuits and Systems II: Express Briefs</i> , 2021 , 68, 1133-1137	3.5	6
53	Research Progress on Memristor: From Synapses to Computing Systems. <i>IEEE Transactions on Circuits and Systems I: Regular Papers</i> , 2022 , 1-13	3.9	6
52	A NONLINEAR DYNAMICS PERSPECTIVE OF WOLFRAM'S NEW KIND OF SCIENCE. PART X: PERIOD-1 RULES. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 2009 , 19, 1425-1654	2	5
51	ANALOGUE COMBINATORICS AND CELLULAR AUTOMATA KEY ALGORITHMS AND LAY-OUT DESIGN. <i>International Journal of Circuit Theory and Applications</i> , 1996 , 24, 145-164	2	5
50	SYNCHRONIZING NONAUTONOMOUS CHAOTIC SYSTEMS WITHOUT PHASE-LOCKING. <i>Journal of Circuits, Systems and Computers</i> , 1996 , 06, 227-241	0.9	5
49	HORSESHOES IN THE TWIST-AND-FLIP MAP. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 1991 , 01, 235-252	2	5
48	Multilevel and non-ideal quantization in Σ modulation. <i>International Journal of Circuit Theory and Applications</i> , 1993 , 21, 61-83	2	5
47	A new approach to overcome the overflow problem in computer-aided analysis of nonlinear resistive circuits. <i>International Journal of Circuit Theory and Applications</i> , 1975 , 3, 261-284	2	5
46	Memristor bridge circuit for neural synaptic weighting 2012 ,		5
45	Hearts are Poised Near the Edge of Chaos. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 2020 , 30, 2030023	2	5
44	A NONLINEAR DYNAMICS PERSPECTIVE OF WOLFRAM'S NEW KIND OF SCIENCE PART XIV: MORE BERNOULLI SHIFT RULES. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 2010 , 20, 2253-2425	2	4
43	A unified framework for multilayer high order CNN. <i>International Journal of Circuit Theory and Applications</i> , 1998 , 26, 567-592	2	4

42	Road Boundary Detection Based on the Dynamic Programming and the Randomized Hough Transform 2007 ,		4
41	BOIDS CONTROL OF CHAOS. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 2007 , 17, 427-444	2	4
40	EVALUATION OF A CONTINUOUS VALUED CHAOTIC SPREADER USED IN A CHAOTIC DIGITAL CODE-DIVISION MULTIPLE ACCESS ((CD)2MA) SYSTEM. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 2000 , 10, 1933-1950	2	4
39	ON THE GENERATION OF SCROLL WAVES IN A THREE-DIMENSIONAL DISCRETE ACTIVE MEDIUM. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 1995 , 05, 313-320	2	4
38	DERIVATIVES FOR THE STABLE AND UNSTABLE MANIFOLDS OF A Cr Diffeomorphism of \mathbb{R}^2 . <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 1993 , 03, 1601-1605	2	4
37	CHAOS OR TURBULENCE?. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 1992 , 02, 1005-1009	2	4
36	An IC diode for Chua's circuit. <i>International Journal of Circuit Theory and Applications</i> , 1993 , 21, 309-316	2	4
35	Bifurcation analysis of a cusp-constrained piecewise-linear circuit. <i>International Journal of Circuit Theory and Applications</i> , 1989 , 17, 283-346	2	4
34	A unified theory of symmetry for nonlinear multiport and multiterminal resistors. <i>International Journal of Circuit Theory and Applications</i> , 1979 , 7, 337-371	2	4
33	Reply to comment on "It's pinched it's a memristor" <i>Semiconductor Science and Technology</i> , 2019 , 34, 098002	1.8	3
32	ISLES OF EDEN AND THE ZUK THEOREM IN \mathbb{R}^d . <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 2008 , 18, 2951-2963	2	3
31	OSCILLATIONS ON THE EDGE OF CHAOS VIA DISSIPATION AND DIFFUSION. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 2007 , 17, 1531-1573	2	3
30	EXPERIMENTAL CONTROL OF CHAOS IN CHUA'S CIRCUIT VIA TUNNELS. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 1994 , 04, 741-750	2	3
29	Design of a Low-Frequency Oscillator with PTC Memristor and an Inductor. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 2016 , 26, 1630021	2	3
28	Cyclic voltammetry of volatile memristors in the Venus flytrap: short-term memory. <i>Functional Plant Biology</i> , 2021 , 48, 567-572	2.7	3
27	PMED-Net: Pyramid Based Multi-Scale Encoder-Decoder Network for Medical Image Segmentation. <i>IEEE Access</i> , 2021 , 9, 55988-55998	3.5	3
26	Experimental validation of state equations and dynamic route maps for phase change memristive devices.. <i>Scientific Reports</i> , 2022 , 12, 6488	4.9	3
25	Generalized reconfigurable memristive dynamical system (MDS) for neuromorphic applications. <i>Frontiers in Neuroscience</i> , 2015 , 9, 409	5.1	2

24	Memristance drift avoidance with charge bouncing for memristor-based nonvolatile memories. <i>Journal of the Korean Physical Society</i> , 2012 , 61, 1418-1421	0.6	2
23	APPLICATIONS OF LOCAL ACTIVITY THEORY OF CNN TO CONTROLLED COUPLED OREGONATOR SYSTEMS. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 2008 , 18, 3233-3297	2	2
22	SPHERICAL CELLULAR NONLINEAR NETWORKS. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 2001 , 11, 241-257	2	2
21	SPREAD SPECTRUM COMMUNICATION THROUGH MODULATION OF CHAOS IN CHUA'S CIRCUIT. <i>World Scientific Series on Nonlinear Science, Series B</i> , 1993 , 379-394	0.3	2
20	A simple dynamic circuit model for mos structure. <i>International Journal of Circuit Theory and Applications</i> , 1987 , 15, 143-170	2	2
19	A Compact and Continuous Reformulation of the Strachan TaOx Memristor Model With Improved Numerical Stability. <i>IEEE Transactions on Circuits and Systems I: Regular Papers</i> , 2021 , 1-12	3.9	2
18	Classification of mem-devices 2015 ,		1
17	Image Processing in Tunneling Phase Logic Cellular Nonlinear Networks. <i>World Scientific Series on Nonlinear Science, Series B</i> , 2002 , 577-591	0.3	1
16	EGLOBALLY ATTRACTIVE EQUILIBRIUM POINTS OF THE CNN. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 1999 , 09, 671-693	2	1
15	Topological conditions for a resistive circuit containing negative non-linear resistors to have a unique solution. <i>International Journal of Circuit Theory and Applications</i> , 1987 , 15, 193-210	2	1
14	Editorial Special Issue for 50th Birthday of Memristor Theory and Application of Neuromorphic Computing Based on Memristor - Part II. <i>IEEE Transactions on Circuits and Systems I: Regular Papers</i> , 2021 , 68, 4835-4836	3.9	1
13	Optoelectronic Neuromorphic Computing: All-Optically Controlled Memristor for Optoelectronic Neuromorphic Computing (Adv. Funct. Mater. 4/2021). <i>Advanced Functional Materials</i> , 2021 , 31, 2170027 ^{15.6}		1
12	Implementation of Neuro-Memristive Synapse for Long-and Short-Term Bio-Synaptic Plasticity. <i>Sensors</i> , 2021 , 21,	3.8	1
11	A Purely Digital Memristor Emulator based on a Flux-Charge Model 2018 ,		1
10	Using Self-heating Resistors as a case study for Memristor Compact Modelling. <i>IEEE Journal of the Electron Devices Society</i> , 2022 , 1-1	2.3	1
9	Empirical Characterization of ReRAM Devices Using Memory Maps and a Dynamic Route Map. <i>Electronics (Switzerland)</i> , 2022 , 11, 1672	2.6	1
8	A promising route to neuromorphic vision. <i>National Science Review</i> , 2021 , 8, nwaa182	10.8	0
7	ON A VARIATION OF THE HUBERMAN-LUMER ADAPTIVE SCHEME. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 1996 , 06, 1397-1407	2	

6	NONLINEAR PATTERN CLASSIFICATION ASSOCIATED WITH CELLULAR NEURAL NETWORKS-BASED DYNAMIC PROGRAMMING. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 2005 , 15, 169-179	2
5	NONLINEAR OSCILLATORS WITH HYSTERETIC CHUA'S DIODES. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 2005 , 15, 1709-1735	2
4	CHUA'S CIRCUIT: CHAOTIC PHENOMENA AND APPLICATIONS 1995 , 265-300	
3	Fundamental Properties of Mem-Elements 2021 , 27-97	
2	Editorial Special Issue for 50th Birthday of Memristor Theory and Application of Neuromorphic Computing Based on Memristor Part I. <i>IEEE Transactions on Circuits and Systems I: Regular Papers</i> , 2021 , 68, 4417-4418	3.9
1	ENIGMA OF THE DOUBLE-SCROLL CHUA'S ATTRACTOR. <i>World Scientific Series on Nonlinear Science, Series B</i> , 1993 , 754-765	0.3