

Mohammed A Zidan

List of Publications by Year in descending order

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44
papers

3,471
citations

430874
18
h-index

713466
21
g-index

46
all docs

46
docs citations

46
times ranked

3541
citing authors

#	ARTICLE	IF	CITATIONS
1	The future of electronics based on memristive systems. Nature Electronics, 2018, 1, 22-29.	26.0	1,369
2	Reservoir computing using dynamic memristors for temporal information processing. Nature Communications, 2017, 8, 2204.	12.8	547
3	Memristor-based memory: The sneak paths problem and solutions. Microelectronics Journal, 2013, 44, 176-183.	2.0	347
4	A general memristor-based partial differential equation solver. Nature Electronics, 2018, 1, 411-420.	26.0	183
5	Thin PZT-Based Ferroelectric Capacitors on Flexible Silicon for Nonvolatile Memory Applications. Advanced Electronic Materials, 2015, 1, 1500045.	5.1	99
6	Parasitic Effect Analysis in Memristor-Array-Based Neuromorphic Systems. IEEE Nanotechnology Magazine, 2018, 17, 184-193.	2.0	76
7	Memristor Multiport Readout: A Closed-Form Solution for Sneak Paths. IEEE Nanotechnology Magazine, 2014, 13, 274-282.	2.0	73
8	On the mathematical modeling of memristors. , 2010, , .		67
9	HP Memristor mathematical model for periodic signals and DC. , 2010, , .		65
10	A family of memristor-based reactance-less oscillators. International Journal of Circuit Theory and Applications, 2014, 42, 1103-1122.	2.0	59
11	Memristor-based reactance-less oscillator. Electronics Letters, 2011, 47, 1220.	1.0	57
12	CONTROLLABLE V-SHAPE MULTISCROLL BUTTERFLY ATTRACTOR: SYSTEM AND CIRCUIT IMPLEMENTATION. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2012, 22, 1250143.	1.7	57
13	Memristive computing devices and applications. Journal of Electroceramics, 2017, 39, 4-20.	2.0	47
14	Single-Readout High-Density Memristor Crossbar. Scientific Reports, 2016, 6, 18863.	3.3	42
15	Neuromorphic computing with memristive devices. Science China Information Sciences, 2018, 61, 1.	4.3	35
16	The effect of numerical techniques on differential equation based chaotic generators. , 2011, , .		32
17	Random number generation based on digital differential chaos. , 2011, , .		31
18	Compensated Readout for High-Density MOS-Gated Memristor Crossbar Array. IEEE Nanotechnology Magazine, 2015, 14, 3-6.	2.0	28

#	ARTICLE	IF	CITATIONS
19	Field-Programmable Crossbar Array (FPCA) for Reconfigurable Computing. IEEE Transactions on Multi-Scale Computing Systems, 2018, 4, 698-710.	2.4	28
20	Fully digital jerk-based chaotic oscillators for high throughput pseudo-random number generators up to 8.77Gbits/s. Microelectronics Journal, 2013, 44, 744-752.	2.0	27
21	Temporal Learning Using Second-Order Memristors. IEEE Nanotechnology Magazine, 2017, 16, 721-723.	2.0	27
22	Hardware Acceleration of Simulated Annealing of Spin Glass by RRAM Crossbar Array. , 2018, , .		25
23	Towards neuromorphic electronics: Memristors on foldable silicon fabric. Microelectronics Journal, 2014, 45, 1392-1395.	2.0	22
24	Analysis of bus width and delay on a fully digital signum nonlinearity chaotic oscillator. , 2011, , .		17
25	An Adaptive Hybrid Multiprocessor technique for bioinformatics sequence alignment. , 2010, , .		15
26	A Crossbar-Based In-Memory Computing Architecture. IEEE Transactions on Circuits and Systems I: Regular Papers, 2020, 67, 4224-4232.	5.4	15
27	High performance technique for database applications using a hybrid GPU/CPU platform. , 2011, , .		13
28	Device nonideality effects on image reconstruction using memristor arrays. , 2016, , .		12
29	Memristor based crossbar memory array sneak path estimation. , 2014, , .		11
30	Design and analysis of 2T-2M Ternary content addressable memories. , 2017, , .		10
31	Pilot assisted readout for passive memristor crossbars. Microelectronics Journal, 2016, 54, 48-58.	2.0	8
32	Secure DS-CDMA spreading codes using fully digital multidimensional multiscroll chaos. , 2013, , .		5
33	TAICHI: A Tiled Architecture for In-Memory Computing and Heterogeneous Integration. IEEE Transactions on Circuits and Systems II: Express Briefs, 2022, 69, 559-563.	3.0	5
34	RRAM fabric for neuromorphic and reconfigurable compute-in-memory systems. , 2018, , .		3
35	Leakage analysis of crossbar memristor arrays. , 2014, , .		2
36	Hybrid neural network using binary RRAM devices. , 2017, , .		2

#	ARTICLE	IF	CITATIONS
37	Vector multiplications using memristive devices and applications thereof. , 2020, , 221-254.		2
38	Fibonacci-Based Hardware Post-Processing for Non-Autonomous Signum Hyperchaotic System. , 2013, , .		1
39	On the short-term predictability of fully digital chaotic oscillators for pseudo-random number generation. , 2013, , .		1
40	Channel equalization techniques for non-volatile memristor memories. , 2016, , .		1
41	RRAM fabric for neuromorphic and reconfigurable compute-in-memory systems. , 2019, , .		1
42	Low pull-in voltage electrostatic MEMS switch using liquid dielectric. , 2014, , .		0
43	Foldable neuromorphic memristive electronics. , 2014, , .		0
44	Memristive Computing Devices and Applications. Kluwer International Series in Electronic Materials: Science and Technology, 2022, , 5-32.	0.5	0