MarÃa JosÃ© Avedillo de Juan

List of Publications by Year
in descending order

43 papers	186 citations	1307594 7 h-index	1281871 11 g-index
43 all docs	43 docs citations	43 times ranked	109 citing authors

#	Article	IF	Citations
1	How Frequency Injection Locking Can Train Oscillatory Neural Networks to Compute in Phase. IEEE Transactions on Neural Networks and Learning Systems, 2022, 33, 1996-2009.	11.3	21
2	Oscillatory Neural Networks Using VO2 Based Phase Encoded Logic. Frontiers in Neuroscience, 2021, 15, 655823.	2.8	15
3	Insights Into the Dynamics of Coupled VO2 Oscillators for ONNs. IEEE Transactions on Circuits and Systems II: Express Briefs, 2021, 68, 3356-3360.	3.0	2
4	Approaching the Design of Energy Recovery Logic Circuits Using TFETs. IEEE Nanotechnology Magazine, 2020, 19, 500-507.	2.0	1
5	Phase Transition Device for Phase Storing. IEEE Nanotechnology Magazine, 2020, 19, 107-112.	2.0	3
6	Impact of the RTâ€level architecture on the power performance of tunnel transistor circuits. International Journal of Circuit Theory and Applications, 2018, 46, 647-655.	2.0	3
7	Reducing the Impact of Reverse Currents in Tunnel FET Rectifiers for Energy Harvesting Applications. IEEE Journal of the Electron Devices Society, 2017, 5, 530-534.	2.1	7
8	Impact of pipeline in the power performance of tunnel transistor circuits. , 2016, , .		2
9	Comparative Analysis of Projected Tunnel and CMOS Transistors for Different Logic Application Areas. IEEE Transactions on Electron Devices, 2016, 63, 5012-5020.	3.0	13
10	Experimental Validation of a Two-Phase Clock Scheme for Fine-Grained Pipelined Circuits Based on Monostable to Bistable Logic Elements. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2014, 22, 2238-2242.	3.1	3
11	Novel pipeline architectures based on Negative Differential Resistance devices. Microelectronics Journal, 2013, 44, 807-813.	2.0	2
12	Two-Phase MOBILE Interconnection Schemes for Ultra-Grain Pipeline Applications. Lecture Notes in Computer Science, 2013, , 166-174.	1.3	0
13	Domino inspired MOBILE networks. Electronics Letters, 2012, 48, 292.	1.0	4
14	Two-Phase RTD-CMOS Pipelined Circuits. IEEE Nanotechnology Magazine, 2012, 11, 1063-1066.	2.0	2
15	Bifurcation diagrams in MOS-NDR frequency divider circuits. , 2012, , .		6
16	Compact and Power Efficient MOS-NDR Muller C-Elements. International Federation for Information Processing, 2012, , 437-442.	0.4	1
17	Improved Nanopipelined RTD Adder Using Generalized Threshold Gates. IEEE Nanotechnology Magazine, 2011, 10, 155-162.	2.0	12
18	Evaluation of MOBILE-based gate-level pipelining augmenting CMOS with RTDs. , 2011, , .		0

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19	Efficient realization of RTD-CMOS logic gates. , 2011, , .		0
20	RTD–CMOS Pipelined Networks for Reduced Power Consumption. IEEE Nanotechnology Magazine, 2011, 10, 1217-1220.	2.0	6
21	Simplified single-phase clock scheme for MOBILE networks. Electronics Letters, 2011, 47, 648.	1.0	5
22	Evaluation of RTD-CMOS Logic Gates. , 2010, , .		2
23	Single phase MOS-NDR mobile networks. , 2010, , .		2
24	An improved RNS generator 2<sup>n</sup> &#x00B1; k based on threshold logic. , 2010, , .		1
25	Fast and area efficient multi-input Muller C-element based on MOS-NDR. , 2009, , .		2
26	Operation Limits for RTD-Based MOBILE Circuits. IEEE Transactions on Circuits and Systems I: Regular Papers, 2009, 56, 350-363.	5.4	11
27	Using multi-threshold threshold gates in RTD-based logic design: A case study. Microelectronics Journal, 2008, 39, 241-247.	2.0	28
28	A novel contribution to the RTD-based threshold logic family. , 2008, , .		4
29	Analysis of the critical rise time in MOBILE-based circuits. , 2008, , .		1
30	Limits to a correct operation in RTD-based ternary inverters. , 2008, , .		1
31	Design of RTD-Based NMIN/NMAX Gates. , 2008, , .		2
32	A quasi-differential quantizer based on SMOBILE. , 2007, , .		0
33	Operation limits in RTD-based ternary quantizers. , 2007, , .		0
34	Holding preserving in RTD-based multiple-valued quantizers. , 2007, , .		2
35	Limits to a Correct Evaluation in RTD-Based Quaternary Inverters. Multiple-Valued Logic (ISMVL), Proceedings of the International Symposium on, 2007, , .	0.0	2
36	Correct DC Operation in RTD-based Ternary Inverters. , 2007, , .		6

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37	DC Correct Operation in MOBILE Inverters. Midwest Symposium on Circuits and Systems, 2006, , .	1.0	1
38	Limits to a Correct Evaluation in RTD-based Ternary Inverters. , 2006, , .		2
39	Monostable-Bistable Transition Logic Elements: Threshold Logic vs. Boolean Logic Comparison. , 2006, , .		3
40	A Practical Parallel Architecture for Stacks Filters. Journal of Signal Processing Systems, 2004, 38, 91-100.	1.0	4
41	Pass-transistor based implementations of threshold logic gates for WOS filtering. Microelectronics Journal, 2004, 35, 869-873.	2.0	0
42	LP-LV high-performance monolithic DTMF receiver with on-chip test facilities. , 2003, , .		2
43	COPAS: A New Algorithm for the Partial Input Encoding Problem. VLSI Design, 2002, 14, 171-181.	0.5	2