Massimo Ruo Roch

List of Publications by Year
in descending order

63 papers	**638** citations	758635 **12** h-index	676716 **22** g-index
65 all docs	**65** docs citations	**65** times ranked	**379** citing authors

#	Article	IF	Citations
1	Motion Analysis for Experimental Evaluation of an Event-Driven FES System. IEEE Transactions on Biomedical Circuits and Systems, 2022, 16, 3-14.	2.7	4
2	VirtLAB: A Low-Cost Platform for Electronics Lab Experiments. Sensors, 2022, 22, 4840.	2.1	6
3	Skyrmion Logic-In-Memory Architecture for Maximum/Minimum Search. Electronics (Switzerland), 2021, 10, 155.	1.8	13
4	Tutorial: A Versatile Bio-Inspired System for Processing and Transmission of Muscular Information. IEEE Sensors Journal, 2021, 21, 22285-22303.	2.4	10
5	Nanomaterials to Fight Cancer: An Overview on Their Multifunctional Exploitability. Journal of Nanoscience and Nanotechnology, 2021, 21, 2760-2777.	0.9	0
6	Octantis: An Exploration Tool for Beyond von Neumann architectures. , 2021, , .		0
7	Controlling Domain-Wall Nucleation in Ta / Co - Fe /	1.5	8
8	VLSI Architectures of a Wiener Filter for Video Coding. Electronics (Switzerland), 2021, 10, 1961.	1.8	2
9	vrLab: A Virtual and Remote Low Cost Electronics Lab Platform. Lecture Notes in Electrical Engineering, 2021, , 213-220.	0.3	2
10	Hybrid-SIMD: a Modular and Reconfigurable approach to Beyond von Neumann Computing. IEEE Transactions on Computers, 2021, , 1-1.	2.4	1
11	Low Latency Protocols Investigation for Event-Driven Wireless Body Area Networks. , 2021, , .		0
12	Live Demonstration: Event-Driven Hand Gesture Recognition for Wearable Human-Machine Interface. , 2021, , .		1
13	Low-Complexity Reconfigurable DCT-V Architecture. IEEE Transactions on Circuits and Systems II: Express Briefs, 2020, 67, 3417-3421.	2.2	0
14	Steerable-Discrete-Cosine-Transform (SDCT): Hardware Implementation and Performance Analysis. Sensors, 2020, 20, 1405.	2.1	3
15	Data Processing and Information Classificationâ€"An In-Memory Approach. Sensors, 2020, 20, 1681.	2.1	2
16	VLSI Architectures for the Steerable-Discrete-Cosine-Transform (SDCT). Lecture Notes in Electrical Engineering, 2020, , 137-143.	0.3	0
17	Edge Computing: A Survey On the Hardware Requirements in the Internet of Things World. Future Internet, 2019, 11, 100.	2.4	80
18	A Low-Power Embedded System for Real-Time sEMG based Event-Driven Gesture Recognition. , 2019, , .		8

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19	Live Demonstration: Low Power Embedded System for Event-Driven Hand Gesture Recognition. , 2019, , .		2
20	Characterisation of a bis‐ferrocene molecular QCA wire on a non‐ideal gold surface. Micro and Nano Letters, 2019, 14, 22-27.	0.6	14
21	A Low Cost ALS and VLC Circuit for Solid State Lighting. Lecture Notes in Electrical Engineering, 2019, , 461-467.	0.3	0
22	Integrated Light Sensing and Communication for LED Lighting. Designs, 2018, 2, 49.	1.3	1
23	MECA, the microelectronics cloud alliance. , 2018, , .		7
24	ToPoliNano: A CAD Tool for Nano Magnetic Logic. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2017, 36, 1061-1074.	1.9	40
25	Work-in-progress: MicroElectronics Cloud Alliance. , 2017, , .		1
26	MagCAD: Tool for the Design of 3-D Magnetic Circuits. IEEE Journal on Exploratory Solid-State Computational Devices and Circuits, 2017, 3, 65-73.	1.1	25
27	Corrections to "MagCAD: A Tool for the Design of 3-D Magnetic Circuits"[2017 65-73]. IEEE Journal on Exploratory Solid-State Computational Devices and Circuits, 2017, 3, 111-111.	1.1	0
28	Performance analysis of transistor-based circuits through TAMAMS Web: From bulk to molecular devices. , 2016, , .		2
29	Reconfigurable Systolic Array: From Architecture to Physical Design for NML. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2016, 24, 3208-3217.	2.1	18
30	Effect of a Clock System on Bis-Ferrocene Molecular QCA. IEEE Nanotechnology Magazine, 2016, 15, 574-582.	1.1	24
31	EE-BESD: molecular FET modeling for efficient and effective nanocomputing design. Journal of Computational Electronics, 2016, 15, 479-491.	1.3	4
32	Computation reduction for turbo decoding through window skipping. Electronics Letters, 2016, 52, 202-204.	0.5	0
33	Understanding CMOS Technology Through TAMTAMS Web. IEEE Transactions on Emerging Topics in Computing, 2016, 4, 392-403.	3.2	5
34	A Framework for Network-On-Chip Comparison Based on OpenSPARC T2 Processor. Lecture Notes in Electrical Engineering, 2016, , 99-105.	0.3	0
35	Implementation of a Spread-Spectrum-Based Smart Lighting System on an Embedded Platform. Lecture Notes in Electrical Engineering, 2016, , 17-23.	0.3	1
36	Exploiting generalized de-Bruijn/Kautz topologies for flexible iterative channel code decoder architectures. The Integration VLSI Journal, 2015, 50, 139-146.	1.3	0

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37	Feedbacks in QCA: A Quantitative Approach. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2015, 23, 2233-2243.	2.1	28
38	Logic-in-Memory: A Nano Magnet Logic Implementation. , 2015, , .		19
39	Process Variability and Electrostatic Analysis of Molecular QCA. ACM Journal on Emerging Technologies in Computing Systems, 2015, 12, 1-23.	1.8	9
40	Result-Biased Distributed-Arithmetic-Based Filter Architectures for Approximately Computing the DWT. IEEE Transactions on Circuits and Systems I: Regular Papers, 2015, 62, 2103-2113.	3.5	17
41	ToPoliNano: NanoMagnet Logic Circuits Design and Simulation. Lecture Notes in Computer Science, 2014, , 274-306.	1.0	7
42	Fault tolerant nanoarray circuits: Automatic design and verification. , 2014, , .		5
43	Rediscovering Logarithmic Diameter Topologies for Low Latency Network-on-Chip-Based Applications. , 2014, , .		1
44	ToPoliNano: NanoMagnet Logic Circuits Design and Simulation. Lecture Notes in Computer Science, 2014, , 274-306.	1.0	16
45	WindDesigner: An open tool for analysis and design of wind generators. , 2013, , .		2
46	Quantum Dot Cellular Automata Check Node Implementation for LDPC Decoders. IEEE Nanotechnology Magazine, 2013, 12, 368-377.	1.1	47
47	Timeâ€"Frequency Analysis of the Endocavitarian Signal in Paroxysmal Atrial Fibrillation. IEEE Transactions on Biomedical Engineering, 2012, 59, 2838-2844.	2.5	9
48	A NoC-based hybrid message-passing/shared-memory approach to CMP design. Microprocessors and Microsystems, 2011, 35, 261-273.	1.8	14
49	MEDEA: a hybrid shared-memory/message-passing multiprocessor NoC-based architecture. , 2010, , .		21
50	A Case Study for NoC-Based Homogeneous MPSoC Architectures. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2009, 17, 384-388.	2.1	23
51	An Automotive CD-Player Electro-Mechanics Fault Simulation Using VHDL-AMS. Journal of Electronic Testing: Theory and Applications (JETTA), 2008, 24, 539-553.	0.9	1
52	The NoCRay Graphic Accelerator: a Case-study for MP-SoC Network-on-Chip Design Methodology. , 2007, , .		2
53	Power supply wires self-heating analysis. , 2001, , .		0
54	A CMOS power-delay model for CAD optimization tools. , 1999, , .		4

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55	VLSI architectures for turbo codes. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 1999, 7, 369-379.	2.1	109
56	PROXIMA: PROlog eXecutIon MAchine. IEEE Journal of Solid-State Circuits, 1993, 28, 362-370.	3.5	0
57	Performance Evaluation of a VLSI Associative Unifier in a WAM Based Environment. , 1991, , 121-131.		0
58	VLSI design and realisation of a 4 input high speed fuzzy processor. , 0, , .		6
59	New 2 Gbit/s CMOS I/O pads. , 0, , .		0
60	A statistical noise-tolerance analysis and test structure for logic families. , 0, , .		5
61	A high accuracy-low complexity model for CMOS delays. , 0, , .		0
62	A multiprocessor based packet-switch: performance analysis of the communication infrastructure. , 0, , .		5
63	Automotive VHDL-AMS Electro-Mechanics Simulations. , 0, , .		3