Mauro Forti

List of Publications by Year in Descending Order

84 papers	1,786 citations	21 h-index	41 g-index
94 ext. papers	2,076 ext. citations	3.4 avg, IF	5.26 L-index

#	Paper	IF	Citations
84	Oscillatory Circuits With a Real Non-Volatile Stanford Memristor Model. *IEEE Access*, **2022**, 10, 13650-13662		
83	Dynamic Analysis of Memristor Circuits via Input–Output Techniques **2022**, 21-52		
82	Nonlinear Dynamics of Circuits with Mem-Elements **2021**, 387-431		
81	Fundamental Properties of Mem-Elements **2021**, 27-97		
80	Flux-Charge Analysis Method of Memristor Circuits **2021**, 163-217		
79	Memristor Circuits: Invariant Manifolds, Coexisting Attractors, Extreme Multistability, and Bifurcations Without Parameters **2021**, 219-269		1
78	Memristor Cellular Neural Networks Computing in the Flux-charge Domain **2021**, 343-372		0
77	Transient Control in Targeting Multistable Dynamics of a Memristor Circuit **2021**,		1
76	Memristor Circuits for Simulating Neuron Spiking and Burst Phenomena. *Frontiers in Neuroscience*, **2021**, 15, 681035	5.1	3
75	Unfolding Nonlinear Dynamics in Analogue Systems With Mem-Elements. *IEEE Transactions on Circuits and Systems I: Regular Papers*, **2021**, 68, 14-24	3.9	7
74	Nonlinear Circuits and Systems with Memristors **2021**,		9
73	Memristor Neural Networks for Linear and Quadratic Programming Problems. *IEEE Transactions on Cybernetics*, **2020**, PP,	10.2	1
72	Targeting Multistable Dynamics in a Second-Order Memristor Circuit **2020**,		3
71	Input–Output Characterization of the Dynamical Properties of Circuits with a Memelement. *International Journal of Bifurcation and Chaos in Applied Sciences and Engineering*, **2020**, 30, 2050110	2	4
70	Input design for controlling dynamics in a second-order memristive circuit **2020**,		3
69	Nonlinear Networks With Mem-Elements: Complex Dynamics via Flux-Charge Analysis Method. *IEEE Transactions on Cybernetics*, **2020**, 50, 4758-4771	10.2	16
68	Control Design for Targeting Dynamics of Memristor Murali-Lakshmanan-Chua Circuit **2019**,		5

67	**2019**,		1
66	Prediction of period doubling bifurcations in harmonically forced memristor circuits. *Nonlinear Dynamics*, **2019**, 96, 1169-1190	5	15
65	A controlled Murali-Lakshmanan-Chua memristor circuit to mimic neuron dynamics **2019**,		2
64	Stability of memristor neural networks with delays operating in the flux-charge domain. *Journal of the Franklin Institute*, **2018**, 355, 5135-5162	4	11
63	Complex Dynamics in Arrays of Memristor Oscillators via the Flux□Charge Method. *IEEE Transactions on Circuits and Systems I: Regular Papers*, **2018**, 65, 1040-1050	3.9	21
62	Flux-Charge Description of Circuits With Non-Volatile Switching Memristor Devices. *IEEE Transactions on Circuits and Systems II: Express Briefs*, **2018**, 65, 642-646	3.5	9
61	Multistability of delayed neural networks with hard-limiter saturation nonlinearities. *Neurocomputing*, **2018**, 293, 41-54	5.4	4
60	New Conditions for Global Asymptotic Stability of Memristor Neural Networks. *IEEE Transactions on Neural Networks and Learning Systems*, **2018**, 29, 1822-1834	10.3	38
59	Harmonic balance method to analyze bifurcations in memristor oscillatory circuits. *International Journal of Circuit Theory and Applications*, **2018**, 46, 66-83	2	13
58	Memristor Circuits: Pulse Programming via Invariant Manifolds. *IEEE Transactions on Circuits and Systems I: Regular Papers*, **2018**, 65, 1327-1339	3.9	25
57	Memristor Circuits: Bifurcations without Parameters. *IEEE Transactions on Circuits and Systems I: Regular Papers*, **2017**, 64, 1540-1551	3.9	65
56	Memristor standard cellular neural networks computing in the flux-charge domain. *Neural Networks*, **2017**, 93, 152-164	9.1	31
55	Convergence and Multistability of Nonsymmetric Cellular Neural Networks With Memristors. *IEEE Transactions on Cybernetics*, **2017**, 47, 2970-2983	10.2	51
54	Nonlinear dynamics of memristor oscillators via the flux-charge analysis method **2017**,		3
53	Discontinuous Neural Networks for Finite-Time Solution of Time-Dependent Linear Equations. *IEEE Transactions on Cybernetics*, **2016**, 46, 2509-2520	10.2	35
52	. *IEEE Transactions on Circuits and Systems I: Regular Papers*, **2016**, 63, 1997-2009	3.9	79
51	Nonsmooth Neural Network for Convex Time-Dependent Constraint Satisfaction Problems. *IEEE Transactions on Neural Networks and Learning Systems*, **2016**, 27, 295-307	10.3	13
50	Floquet multipliers of a metastable rotating wave in a Chua□ang ring network. *Journal of Mathematical Analysis and Applications*, **2016**, 434, 798-836	1.1	3

49	Complete stability of feedback CNNs with dynamic memristors and second-order cells. *International Journal of Circuit Theory and Applications*, **2016**, 44, 1959-1981	2	21
48	Long transient oscillations in a class of cooperative cellular neural networks. *International Journal of Circuit Theory and Applications*, **2015**, 43, 635-655	2	6
47	Necessary and sufficient condition for multistability of neural networks evolving on a closed hypercube. *Neural Networks*, **2014**, 54, 38-48	9.1	27
46	Convergent Dynamics of Nonreciprocal Differential Variational Inequalities Modeling Neural Networks. *IEEE Transactions on Circuits and Systems I: Regular Papers*, **2013**, 60, 3227-3238	3.9	7
45	Multiple metastable rotating waves and long transients in cooperative CNN rings **2013**,		1
44	Łojasiewicz inequality and exponential convergence of the full-range model of CNNs. *International Journal of Circuit Theory and Applications*, **2012**, 40, 409-419	2	4
43	An experimental study on long transient oscillations in cooperative CNN rings **2012**,		4
42	. *IEEE Transactions on Circuits and Systems I: Regular Papers*, **2012**, 59, 772-783	3.9	19
41	Limit set dichotomy and multistability for a class of cooperative neural networks with delays. *IEEE Transactions on Neural Networks and Learning Systems*, **2012**, 23, 1473-85	10.3	42
40	A study on semiflows generated by cooperative full-range CNNs. *International Journal of Circuit Theory and Applications*, **2012**, 40, 1191-1208	2	3
39	Comparison of convergence and stability properties for the state and output solutions of neural networks. *International Journal of Circuit Theory and Applications*, **2011**, 39, 751-774	2	1
38	Limit Set Dichotomy and Convergence of Cooperative Piecewise Linear Neural Networks. *IEEE Transactions on Circuits and Systems I: Regular Papers*, **2011**, 58, 1052-1062	3.9	24
37	Further results on convergence of cooperative standard cellular neural networks **2011**,		3
36	Common asymptotic behavior of solutions and almost periodicity for discontinuous, delayed, and impulsive neural networks. *IEEE Transactions on Neural Networks*, **2010**, 21, 1110-25		64
35	LIMIT SET DICHOTOMY AND CONVERGENCE OF SEMIFLOWS DEFINED BY COOPERATIVE STANDARD CNNs. *International Journal of Bifurcation and Chaos in Applied Sciences and Engineering*, **2010**, 20, 3549-3563	2	12
34	Extended LaSalle's Invariance Principle for Full-Range Cellular Neural Networks. *Eurasip Journal on Advances in Signal Processing*, **2009**, 2009,	1.9	1
33	Convergence of a subclass of Cohen-Grossberg neural networks via the Łojasiewicz inequality. *IEEE Transactions on Systems, Man, and Cybernetics*, **2008**, 38, 252-7		13
32	ON THE MARGIN OF COMPLETE STABILITY FOR A CLASS OF CELLULAR NEURAL NETWORKS. *International Journal of Bifurcation and Chaos in Applied Sciences and Engineering*, **2008**, 18, 1343-1361	2	2

31	Lyapunov Method and Convergence of the Full-Range Model of CNNs. *IEEE Transactions on Circuits and Systems I: Regular Papers*, **2008**, 55, 3528-3541	3.9	25
30	On global exponential stability of standard and full-range CNNs. *International Journal of Circuit Theory and Applications*, **2008**, 36, 653-680	2	12
29	Dynamical Analysis of Full-Range Cellular Neural Networks by Exploiting Differential Variational Inequalities. *IEEE Transactions on Circuits and Systems Part 1: Regular Papers*, **2007**, 54, 1736-1749		22
28	M-matrices and global convergence of discontinuous neural networks. *International Journal of Circuit Theory and Applications*, **2007**, 35, 105-130	2	39
27	GLOBAL CONSISTENCY OF DECISIONS AND CONVERGENCE OF COMPETITIVE CELLULAR NEURAL NETWORKS. *International Journal of Bifurcation and Chaos in Applied Sciences and Engineering*, **2007**, 17, 3127-3150	2	1
26	Robustness of convergence in finite time for linear programming neural networks. *International Journal of Circuit Theory and Applications*, **2006**, 34, 307-316	2	11
25	Convergence of neural networks for programming problems via a nonsmooth Lojasiewicz inequality. *IEEE Transactions on Neural Networks*, **2006**, 17, 1471-86		75
24	THE □JASIEWICZ EXPONENT AT AN EQUILIBRIUM POINT OF A STANDARD CNN IS 1/2. *International Journal of Bifurcation and Chaos in Applied Sciences and Engineering*, **2006**, 16, 2191-2205	2	17
23	Generalized Lyapunov approach for convergence of neural networks with discontinuous or non-Lipschitz activations. *Physica D: Nonlinear Phenomena*, **2006**, 214, 88-99	3.3	236
22	Global exponential stability and global convergence in finite time of delayed neural networks with infinite gain. *IEEE Transactions on Neural Networks*, **2005**, 16, 1449-63		291
21	FOURTH-ORDER NEARLY-SYMMETRIC CNNS EXHIBITING COMPLEX DYNAMICS. *International Journal of Bifurcation and Chaos in Applied Sciences and Engineering*, **2005**, 15, 1579-1587	2	8
20	ON THE EFFECT OF NEURON ACTIVATION GAIN ON ROBUSTNESS OF COMPLETE STABILITY. *International Journal of Bifurcation and Chaos in Applied Sciences and Engineering*, **2004**, 14, 1807-1811	2	1
19	HARMONIC BALANCE APPROACH TO PREDICT PERIOD-DOUBLING BIFURCATIONS IN NEARLY SYMMETRIC CNNs. *Journal of Circuits, Systems and Computers*, **2003**, 12, 435-459	0.9	13
18	On complete stability of linear and quadratic programming neural networks. *International Journal of Circuit Theory and Applications*, **2002**, 30, 587-593	2	
17	COMPLEX DYNAMICS IN NEARLY SYMMETRIC THREE-CELL CELLULAR NEURAL NETWORKS. *International Journal of Bifurcation and Chaos in Applied Sciences and Engineering*, **2002**, 12, 1357-1362	2	11
16	Some extensions of a new method to analyze complete stability of neural networks. *IEEE Transactions on Neural Networks*, **2002**, 13, 1230-8		33
15	A study on WTA cellular neural networks. *International Journal of Circuit Theory and Applications*, **2001**, 29, 537-552	2	2
14	A NEW METHOD TO ANALYZE COMPLETE STABILITY OF PWL CELLULAR NEURAL NETWORKS. *International Journal of Bifurcation and Chaos in Applied Sciences and Engineering*, **2001**, 11, 655-676	2	35

13	Low-frequency transients and impedance in the power mains considering line loading. *IEEE Transactions on Electromagnetic Compatibility*, **1996**, 38, 310-317	2	1
12	A cellular neural network for packet selection in a fast packet switching fabric with input buffers. *IEEE Transactions on Communications*, **1996**, 44, 1649-1652	6.9	5
11	Efficient fast packet switching fabric using neural networks. *Electronics Letters*, **1994**, 30, 1077-1078	1.1	
10	New linear and quadratic programming neural network. *Electronics Letters*, **1994**, 30, 1693-1694	1.1	1
9	On Global Asymptotic Stability of a Class of Nonlinear Systems Arising in Neural Network Theory. *Journal of Differential Equations*, **1994**, 113, 246-264	2.1	130
8	. *IEEE Transactions on Electromagnetic Compatibility*, **1991**, 33, 113-119	2	2
7	. *IEEE Transactions on Circuits and Systems*, **1991**, 38, 202-209		55
6	A neural network for signal decomposition problems. *International Journal of Circuit Theory and Applications*, **1991**, 19, 65-75	2	5
5	. *IEEE Transactions on Electromagnetic Compatibility*, **1990**, 32, 87-97	2	12
4	. *IEEE Transactions on Electromagnetic Compatibility*, **1990**, 32, 205-216	2	2
3	. *IEEE Transactions on Electromagnetic Compatibility*, **1989**, 31, 245-253	2	9
2	. *IEEE Transactions on Electromagnetic Compatibility*, **1988**, 30, 351-357	2	3
1	Circuits with a mem-element: invariant manifolds control via pulse programmed sources. *Nonlinear Dynamics*,1	5	1