Alberto Tesi

List of Publications by Year
in descending order

47 papers	2,301 citations	567281 15 h-index	345221 36 g-index
49 all docs	49 docs citations	49 times ranked	1316 citing authors

#	Article	IF	Citations
1	Memristor Neural Networks for Linear and Quadratic Programming Problems. IEEE Transactions on Cybernetics, 2022, 52, 1822-1835.	9.5	13
2	Impact of chaotic dynamics on the performance of metaheuristic optimization algorithms: An experimental analysis. Information Sciences, 2022, 587, 692-719.	6.9	16
3	Oscillatory Circuits With a Real Non-Volatile Stanford Memristor Model. IEEE Access, 2022, 10, 13650-13662.	4.2	8
4	Detection of subcritical Hopf and fold bifurcations in an aeroelastic system via the Describing Function method. Chaos, Solitons and Fractals, 2022, 157, 111892.	5.1	5
5	New method to analyze the invariant manifolds of memristor circuits. Journal of the Franklin Institute, 2022, 359, 11007-11038.	3.4	2
6	Convergence of a Class of Delayed Neural Networks with Real Memristor Devices. Mathematics, 2022, 10, 2439.	2.2	2
7	Transient Control in Targeting Multistable Dynamics of a Memristor Circuit. , 2021, , .		1
8	Memristor Circuits for Simulating Neuron Spiking and Burst Phenomena. Frontiers in Neuroscience, 2021, 15, 681035.	2.8	11
9	Circuits with a mem-element: invariant manifolds control via pulse programmed sources. Nonlinear Dynamics, 2021, 106, 2577-2606.	5.2	5
10	Feedforward control of multistability in memristor circuits. , 2021, , .		1
11	Targeting Multistable Dynamics in a Second-Order Memristor Circuit. , 2020, , .		3
12	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.	1.7	8
13	Input design for controlling dynamics in a second-order memristive circuit. , 2020, , .		5
14	Control Design for Targeting Dynamics of Memristor Murali-Lakshmanan-Chua Circuit. , 2019, , .		7
15	Prediction of period doubling bifurcations in harmonically forced memristor circuits. Nonlinear Dynamics, 2019, 96, 1169-1190.	5.2	19
16	A controlled Murali-Lakshmanan-Chua memristor circuit to mimic neuron dynamics. , 2019, , .		3
17	Harmonic balance method to analyze bifurcations in memristor oscillatory circuits. International Journal of Circuit Theory and Applications, 2018, 46, 66-83.	2.0	20
18	Robust Switching Control: Stability Analysis and Application to Active Disturbance Attenuation. IEEE Transactions on Automatic Control, 2017, 62, 6369-6376.	5.7	5

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19	Hierarchical switching for active disturbance attenuation with fine controller tuning. International Journal of Adaptive Control and Signal Processing, 2017, 31, 742-760.	4.1	5
20	Switching-based adaptive disturbance attenuation with guaranteed robust stability. , 2015, , .		1
21	Design of a switching controller for adaptive disturbance attenuation with guaranteed stability. , 2015, , .		0
22	A hierarchical approach to adaptive disturbance attenuation combining switching and tuning. , 2014, , .		2
23	Adaptive disturbance attenuation via logic-based switching. Systems and Control Letters, 2014, 73, 48-57.	2.3	9
24	Switching Control for Adaptive Disturbance Attenuation. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2014, 47, 1483-1488.	0.4	0
25	Frequency based design of modal controllers for adaptive optics systems. Optics Express, 2012, 20, 27108.	3.4	15
26	An Approach to Robust Control of the Hopf Bifurcation. Journal of Applied Mathematics, 2011, 2011, 1-21.	0.9	2
27	Homogeneous Polynomial Forms for Robustness Analysis of Uncertain Systems. Lecture Notes in Control and Information Sciences, 2009, , .	1.0	164
28	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.	1.7	2
29	A Convex Lower Bound for the Real ${\bf l}_2$ Parametric Stability Margin of Linear Control Systems With Restricted Complexity Controllers. IEEE Transactions on Automatic Control, 2007, 52, 514-520.	5.7	3
30	Robust stability of time-varying polytopic systems via parameter-dependent homogeneous Lyapunov functions. Automatica, 2007, 43, 309-316.	5.0	118
31	Robustness of complete stability for a class of nearly-symmetric cellular neural networks. , 2006, , .		0
32	THE ŁOJASIEWICZ 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.	1.7	19
33	Polynomially parameter-dependent Lyapunov functions for robust stability of polytopic systems: an LMI approach. IEEE Transactions on Automatic Control, 2005, 50, 365-370.	5.7	217
34	Homogeneous Lyapunov functions for systems with structured uncertainties. Automatica, 2003, 39, 1027-1035.	5.0	172
35	Solving quadratic distance problems: an LMI-based approach. IEEE Transactions on Automatic Control, 2003, 48, 200-212.	5.7	146
36	HARMONIC BALANCE APPROACH TO PREDICT PERIOD-DOUBLING BIFURCATIONS IN NEARLY SYMMETRIC CNNs. Journal of Circuits, Systems and Computers, 2003, 12, 435-459.	1.5	16

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37	Sonar-Based Wall-Following Control of Mobile Robots. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 2000, 122, 226-229.	1.6	25
38	A Frequency Method for Predicting Limit Cycle Bifurcations. Nonlinear Dynamics, 1997, 13, 339-360.	5.2	69
39	Harmonic balance analysis of period-doubling bifurcations with implications for control of nonlinear dynamics. Automatica, 1996, 32, 1255-1271.	5.0	121
40	Models of complex dynamics in nonlinear systems. Systems and Control Letters, 1995, 25, 185-192.	2.3	11
41	Regularity Conditions for the Stability Margin Problem with Linear Dependent Perturbations. SIAM Journal on Control and Optimization, 1995, 33, 1000-1016.	2.1	4
42	An overview of extremal properties for robust control of interval plants. Automatica, 1993, 29, 707-721.	5.0	66
43	On the problem of local minima in backpropagation. IEEE Transactions on Pattern Analysis and Machine Intelligence, 1992, 14, 76-86.	13.9	517
44	Frequency response of interval plant-controller families. Systems and Control Letters, 1992, 18, 347-354.	2.3	3
45	Vertices and segments of interval plants are not sufficient for step response analyses. Systems and Control Letters, 1992, 19, 365-370.	2.3	4
46	Harmonic balance methods for the analysis of chaotic dynamics in nonlinear systems. Automatica, 1992, 28, 531-548.	5.0	392
47	Robust stability of state-space models with structured uncertainties. IEEE Transactions on Automatic Control, 1990, 35, 191-195.	5.7	64