L H A Monteiro

List of Publications by Year
in descending order

112 papers	1,143 citations	430874 18 h-index	526287 27 g-index
113 all docs	113 docs citations	113 times ranked	745 citing authors

#	Article	IF	Citations
1	Epidemiological Models Applied to Viruses in Computer Networks. Journal of Computer Science, 2005, 1, 31-34.	0.6	78
2	On the basic reproduction number and the topological properties of the contact network: An epidemiological study in mainly locally connected cellular automata. Ecological Modelling, 2009, 220, 1034-1042.	2.5	58
3	Adaptations to iron deficiency: cardiac functional responsiveness to norepinephrine, arterial remodeling, and the effect of beta-blockade on cardiac hypertrophy. BMC Physiology, 2002, 2, 1.	3.6	42
4	Considering second-harmonic terms in the operation of the phase detector for second-order phase-locked loop. IEEE Transactions on Circuits and Systems Part 1: Regular Papers, 2003, 50, 805-809.	0.1	42
5	Chaos-based communication systems in non-ideal channels. Communications in Nonlinear Science and Numerical Simulation, 2012, 17, 4707-4718.	3.3	41
6	Temperature effects on energy metabolism: a dynamic system analysis. Proceedings of the Royal Society B: Biological Sciences, 2002, 269, 15-19.	2.6	37
7	Spectral properties of chaotic signals generated by the skew tent map. Signal Processing, 2010, 90, 385-390.	3.7	35
8	A vaccination game based on public health actions and personal decisions. Ecological Modelling, 2011, 222, 1651-1655.	2.5	34
9	Big cities: Shelters for contagious diseases. Ecological Modelling, 2006, 197, 258-262.	2.5	32
10	Toroidal plasma equilibrium with arbitrary current distribution. Journal of Plasma Physics, 1990, 44, 303-311.	2.1	26
11	Bifurcation Analysis for Third-Order Phase-Locked Loops. IEEE Signal Processing Letters, 2004, 11, 494-496.	3.6	26
12	Analyzing the effect of the phase-jitter in the operation of second order phase-locked loops. IEEE Transactions on Circuits and Systems Part 2: Express Briefs, 2005, 52, 331-335.	2.2	23
13	Global and partial synchronism in phase-locked loop networks. IEEE Transactions on Neural Networks, 2003, 14, 1572-1575.	4.2	21
14	Temperature effects on a whole metabolic reaction cannot be inferred from its components. Proceedings of the Royal Society B: Biological Sciences, 2004, 271, 1415-1419.	2.6	21
15	Computing with phase locked loops: choosing gains and delays. IEEE Transactions on Neural Networks, 2003, 14, 243-247.	4.2	20
16	The influence of immune individuals in disease spread evaluated by cellular automaton and genetic algorithm. Computer Methods and Programs in Biomedicine, 2020, 196, 105707.	4.7	20
17	Zipf's Law Organizes a Psychiatric Ward. Journal of Theoretical Biology, 1999, 198, 439-443.	1.7	19
18	Analytical Results on a Wilson-Cowan Neuronal Network Modified Model. Journal of Theoretical Biology, 2002, 219, 83-91.	1.7	19

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19	MODELING THE SPREADING OF HIV IN HOMOSEXUAL POPULATIONS WITH HETEROGENEOUS PREVENTIVE ATTITUDE. Journal of Biological Systems, 2004, 12, 439-456.	1.4	19
20	Two-way master-slave double-chain networks: limitations imposed by linear master drift for second order PLLs as slave nodes. IEEE Communications Letters, 2005, 9, 829-831.	4.1	19
21	Chaotic Synchronization in Discrete-Time Systems Connected by Bandlimited Channels. IEEE Communications Letters, 2011, 15, 671-673.	4.1	19
22	Control of metabolic rate is a hidden variable in the allometric scaling of homeotherms. Journal of Experimental Biology, 2005, 208, 1709-1716.	1.7	18
23	All-pole phase-locked loops: calculating lock-in range by using Evan's root-locus. International Journal of Control, 2006, 79, 822-829.	1.9	17
24	Estimating the critical number of slave nodes in a single-chain PLL network. IEEE Communications Letters, 2003, 7, 449-450.	4.1	16
25	An epidemic model to evaluate the homogeneous mixing assumption. Communications in Nonlinear Science and Numerical Simulation, 2014, 19, 4042-4047.	3.3	16
26	On the spread of SARS-CoV-2 under quarantine: A study based on probabilistic cellular automaton. Ecological Complexity, 2020, 44, 100879.	2.9	16
27	The oxygen gain of diving insects. Respiration Physiology, 2001, 128, 229-233.	2.7	15
28	Self-sustained oscillations in epidemic models with infective immigrants. Ecological Complexity, 2014, 17, 40-45.	2.9	15
29	Analytical Results on a Wilson-Cowan Neuronal Network Modified Model. Journal of Theoretical Biology, 2002, 219, 83-91.	1.7	13
30	CELLULAR AUTOMATA CRYPTOGRAPHIC MODEL BASED ON BI-DIRECTIONAL TOGGLE RULES. International Journal of Modern Physics C, 2004, 15, 1061-1068.	1.7	12
31	SPREADING DEPRESSION IN MAINLY LOCALLY CONNECTED CELLULAR AUTOMATON. Journal of Biological Systems, 2006, 14, 617-629.	1.4	12
32	A spatial evolutionary version of the ultimatum game as a toy model of income distribution. Communications in Nonlinear Science and Numerical Simulation, 2019, 76, 132-137.	3.3	12
33	Synchronous state in a fully connected phase-locked loop network. Mathematical Problems in Engineering, 2006, 2006, 1-12.	1.1	11
34	OSCILLATION DEATH IN A TWO-NEURON NETWORK WITH DELAY IN A SELF-CONNECTION. Journal of Biological Systems, 2007, 15, 49-61.	1.4	11
35	Route to chaos in a third-order phase-locked loop network. Signal Processing, 2009, 89, 1678-1682.	3.7	11
36	A Linear Analysis of Coupled Wilson-Cowan Neuronal Populations. Computational Intelligence and Neuroscience, 2016, 2016, 1-6.	1.7	11

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37	Oscillatory pattern in oxygen consumption of Hummingbirds. Journal of Thermal Biology, 2002, 27, 371-379.	2.5	10
38	An epidemiological model for SARS-CoV-2. Ecological Complexity, 2020, 43, 100836.	2.9	10
39	Conditions for pathogen elimination by immune systems. Theory in Biosciences, 2004, 123, 195-208.	1.4	9
40	Continuous and discrete approaches to the epidemiology of viral spreading in populations taking into account the delay of incubation time. Ecological Modelling, 2007, 201, 553-557.	2.5	9
41	Recognition of noisy images by PLL networks. Signal Processing, 2009, 89, 1311-1319.	3.7	9
42	Oscillations in an epidemiological model based on asynchronous probabilistic cellular automaton. Ecological Complexity, 2017, 31, 57-63.	2.9	9
43	The impact of imported cases on the persistence of contagious diseases. Ecological Complexity, 2019, 40, 100788.	2.9	9
44	Magnetic structure of toroidal helical fields in tokamaks. Physics Letters, Section A: General, Atomic and Solid State Physics, 1994, 193, 89-93.	2.1	8
45	A Condition for Successful Escape of a Mutant after Primary HIV Infection. Journal of Theoretical Biology, 2000, 203, 399-406.	1.7	8
46	Biological models: Measuring variability with classical and quantum information. Journal of Theoretical Biology, 2006, 242, 309-313.	1.7	8
47	Double-frequency jitter figures in master–slave PLL networks. AEU - International Journal of Electronics and Communications, 2007, 61, 678-683.	2.9	8
48	Who should wear mask against airborne infections? Altering the contact network for controlling the spread of contagious diseases. Ecological Modelling, 2010, 221, 1329-1332.	2.5	8
49	On estimating the basic reproduction number in distinct stages of a contagious disease spreading. Ecological Modelling, 2012, 240, 156-160.	2.5	8
50	White Gaussian Chaos. IEEE Communications Letters, 2017, 21, 1719-1722.	4.1	8
51	Frank-Starling mechanism and short-term adjustment of cardiac flow. Journal of Experimental Biology, 2017, 220, 4391-4398.	1.7	8
52	Optimization of the Topology of Electric Energy Distribution Networks by Using Algorithm Inspired on Ant Behavior. IEEE Latin America Transactions, 2009, 7, 85-91.	1.6	7
53	System Identification and Prediction of Dengue Fever Incidence in Rio de Janeiro. Mathematical Problems in Engineering, 2011, 2011, 1-13.	1.1	7
54	Frequency transitions in synchronized neural networks. Communications in Nonlinear Science and Numerical Simulation, 2013, 18, 1786-1791.	3.3	7

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55	Cash transfer program and education investment: A model for social evolution. Communications in Nonlinear Science and Numerical Simulation, 2014, 19, 570-577.	3.3	7
56	The negative impact of technological advancements on mental health: An epidemiological approach. Applied Mathematics and Computation, 2021, 396, 125905.	2.2	7
57	Monoamine neurotransmitters and mood swings: a dynamical systems approach. Mathematical Biosciences and Engineering, 2022, 19, 4075-4083.	1.9	7
58	Population dynamics in educational institutions considering the student satisfaction. Communications in Nonlinear Science and Numerical Simulation, 2016, 30, 236-242.	3.3	6
59	A Model for the Early Evolution of Self-replicating Polymers. Journal of Theoretical Biology, 1998, 191, 237-248.	1.7	5
60	Using central manifold theorem in the analysis of master-slave synchronization networks. Journal of Communications and Networks, 2004, 6, 197-202.	2.6	5
61	The Effect of Spatial Scale on Predicting Time Series: A Study on Epidemiological System Identification. Mathematical Problems in Engineering, 2009, 2009, 1-10.	1.1	5
62	On considering the influence of recovered individuals in disease propagations. Communications in Nonlinear Science and Numerical Simulation, 2016, 34, 224-230.	3.3	5
63	A Game Theory-Based Model for Predicting Depression due to Frustration in Competitive Environments. Computational and Mathematical Methods in Medicine, 2020, 2020, 1-6.	1.3	5
64	An Epidemic Model with Pro and Anti-vaccine Groups. Acta Biotheoretica, 2022, 70, .	1.5	5
65	Heroâ€™s journey in bifurcation diagram. Communications in Nonlinear Science and Numerical Simulation, 2012, 17, 2233-2236.	3.3	4
66	The transfer function of neuron spike. Neural Networks, 2015, 68, 89-95.	5.9	4
67	A discrete-time dynamical system with four types of codimension-one bifurcations. Applied Mathematics and Computation, 2019, 354, 189-191.	2.2	4
68	An individual-based model for predicting the prevalence of depression. Ecological Complexity, 2019, 38, 168-172.	2.9	4
69	More guns, less crime? A dynamical systems approach. Applied Mathematics and Computation, 2020, 369, 124804.	2.2	4
70	Magnetic surfaces in non-symmetric plasmas. Plasma Physics and Controlled Fusion, 1992, 34, 1067-1088.	2.1	3
71	IMPROVING VEHICLE FLOW WITH TRAFFIC LIGHTS. International Journal of Modeling, Simulation, and Scientific Computing, 2005, 08, 59-63.	1.4	3
72	Considering Double Frequency Terms from Phase Detectors in Synchronous Master-Slave Networks. , 0, , .		3

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73	Linear Approach for Synchronous State Stability in Fully Connected PLL Networks. Mathematical Problems in Engineering, 2008, 2008, 1-13.	1.1	3
74	On the dynamics of axonal membrane: Ion channel as the basic unit of a deterministic model. Applied Mathematics and Computation, 2016, 291, 292-302.	2.2	3
75	Clustered Breeding Sites: Shelters for Vector-Borne Diseases. Computational and Mathematical Methods in Medicine, 2018, 2018, 1-5.	1.3	3
76	Analytical results on a Wilson-Cowan neuronal network modified model. Journal of Theoretical Biology, 2002, 219, 83-91.	1.7	3
77	A complex network model for a society with socioeconomic classes. Mathematical Biosciences and Engineering, 2022, 19, 6731-6742.	1.9	3
78	Modeling Homopolymer Self-replication: Implications for Early Competition. Journal of Theoretical Biology, 1999, 196, 51-60.	1.7	2
79	Periodic solutions of the pendulum. Journal of Physics A, 2000, 33, 8489-8505.	1.6	2
80	Clustering in coupled maps on small-world networks. , 0, , .		2
81	Synaptic compensation on Hopfield network: implications for memory rehabilitation. Neural Computing and Applications, 2011, 20, 753-757.	5.6	2
82	A scheme for synchronizing clocks connected by a packet communication network. Communications in Nonlinear Science and Numerical Simulation, 2012, 17, 2722-2727.	3.3	2
83	The grief map. European Physical Journal: Special Topics, 2014, 223, 2897-2902.	2.6	2
84	Learning process as an interplay between understanding and doubt: A dynamical systems approach. Communications in Nonlinear Science and Numerical Simulation, 2017, 47, 416-420.	3.3	2
85	On the effects of the spatial distribution in an epidemic model based on cellular automaton. Ecological Complexity, 2017, 31, 144-148.	2.9	2
86	A Numerical Study on the Regularity of d-Primes via Informational Entropy and Visibility Algorithms. Complexity, 2020, 2020, 1-5.	1.6	2
87	A note on the impact of a behavioral side-effect of vaccine failure on the spread of a contagious disease. Ecological Complexity, 2021, 46, 100929.	2.9	2
88	The co-circulation of two infectious diseases and the impact of vaccination against one of them. Ecological Complexity, 2021, 47, 100941.	2.9	2
89	On the criteria for diagnosing depression in bereaved individuals: a self-organizing map approach. Mathematical Biosciences and Engineering, 2022, 19, 5380-5392.	1.9	2
90	Kinematics of eye movement. Ophthalmic and Physiological Optics, 2000, 20, 59-62.	2.0	1

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91	Periodic solutions of pendulum: II. Journal of Physics A, 2003, 36, 6691-6707.	1.6	1
92	Sincronismo em redes mestre-escravo com atraso. Controle and Automacao, 2003, 14, 121-126.	0.2	1
93	Usando redes neurais diretas e regras de produção no controle da concentração de hormônios tireoideanos. Controle and Automacao, 2007, 18, 292-300.	0.2	1
94	Border Figure Detection Using a Phase Oscillator Network with Dynamical Coupling. Mathematical Problems in Engineering, 2008, 2008, 1-8.	1.1	1
95	Simple answers to usual questions about unusual forms of the Evans' root locus plot. Controle and Automacao, 2008, 19, 444-449.	0.2	1
96	Typical frequency-current curves of neurons obtained from a model based on cellular automaton. Applied Mathematics and Computation, 2017, 304, 136-141.	2.2	1
97	A multi-agent system to predict the outcome of a two-round election. Applied Mathematics and Computation, 2020, 386, 125481.	2.2	1
98	Symmetry Detection Using Global-Locally Coupled Maps. Lecture Notes in Computer Science, 2002, , 75-80.	1.3	1
99	Overview of dynamical systems and chaos. , 2018, , 83-110.		1
100	Coupling of modes in RFPs: an analytical approach. Plasma Physics and Controlled Fusion, 1995, 37, 541-550.	2.1	0
101	Numbering Self-replicating Polymers. Journal of Theoretical Biology, 1998, 193, 365-367.	1.7	0
102	Numbering Self-replicating Polymers II. Journal of Theoretical Biology, 1998, 194, 159-161.	1.7	0
103	My friend and his hysteretic sandwich. Physics World, 2000, 13, 72-72.	0.0	0
104	Continuous attractors in recurrent neural networks and phase space learning. , 0, , .		0
105	Double-frequency jitter in synchronous networks. System Theory, Proceedings of the Southeastern Symposium on, 2007, , .	0.0	0
106	Schrödinger's dog. Physics World, 2009, 22, 52-52.	0.0	0
107	A Model of Intelligent Controller for Hypothyroidism Treatment. , 2010, , .		0
108	On Synchronizing Coupled Retinogeniculocortical Pathways: A Toy Model. Computational Intelligence and Neuroscience, 2018, 2018, 1-6.	1.7	0

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109	You can create your own bifurcation. International Journal of Mathematical Education in Science and Technology, 2021, 52, 124-130.	1.4	0
110	Rotation-Invariant Pattern Recognition: A Procedure Slightly Inspired on Olfactory System and Based on Kohonen Network. Lecture Notes in Computer Science, 2006, , 444-450.	1.3	0
111	Chaotic communications in bandlimited channels. , 2018, , 265-276.		0
112	Michaelisâ€"Menten kinetics as a model of doctoral supervisorâ€"supervisee relationship. International Journal of Mathematical Education in Science and Technology, 2023, 54, 145-150.	1.4	0