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	Michaelis–Menten kinetics as a model of doctoral supervisor–supervisee relationship. International Journal of Mathematical Education in Science and Technology, 2023, 54, 145-150.	1.4	0
2	Monoamine neurotransmitters and mood swings: a dynamical systems approach. Mathematical Biosciences and Engineering, 2022, 19, 4075-4083.	1.9	7
3	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
4	A complex network model for a society with socioeconomic classes. Mathematical Biosciences and Engineering, 2022, 19, 6731-6742.	1.9	3
5	An Epidemic Model with Pro and Anti-vaccine Groups. Acta Biotheoretica, 2022, 70, .	1.5	5
6	You can create your own bifurcation. International Journal of Mathematical Education in Science and Technology, 2021, 52, 124-130.	1.4	0
7	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
8	The negative impact of technological advancements on mental health: An epidemiological approach. Applied Mathematics and Computation, 2021, 396, 125905.	2.2	7
9	The co-circulation of two infectious diseases and the impact of vaccination against one of them. Ecological Complexity, 2021, 47, 100941.	2.9	2
10	More guns, less crime? A dynamical systems approach. Applied Mathematics and Computation, 2020, 369, 124804.	2.2	4
11	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
12	A Numerical Study on the Regularity of d-Primes via Informational Entropy and Visibility Algorithms. Complexity, 2020, 2020, 1-5.	1.6	2
13	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
14	On the spread of SARS-CoV-2 under quarantine: A study based on probabilistic cellular automaton. Ecological Complexity, 2020, 44, 100879.	2.9	16
15	A multi-agent system to predict the outcome of a two-round election. Applied Mathematics and Computation, 2020, 386, 125481.	2.2	1
16	An epidemiological model for SARS-CoV-2. Ecological Complexity, 2020, 43, 100836.	2.9	10
17	A discrete-time dynamical system with four types of codimension-one bifurcations. Applied Mathematics and Computation, 2019, 354, 189-191.	2.2	4
18	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

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19	An individual-based model for predicting the prevalence of depression. Ecological Complexity, 2019, 38, 168-172.	2.9	4
20	The impact of imported cases on the persistence of contagious diseases. Ecological Complexity, 2019, 40, 100788.	2.9	9
21	Clustered Breeding Sites: Shelters for Vector-Borne Diseases. Computational and Mathematical Methods in Medicine, 2018, 2018, 1-5.	1.3	3
22	On Synchronizing Coupled Retinogeniculocortical Pathways: A Toy Model. Computational Intelligence and Neuroscience, 2018, 2018, 1-6.	1.7	0
23	Chaotic communications in bandlimited channels. , 2018, , 265-276.		0
24	Overview of dynamical systems and chaos. , 2018, , 83-110.		1
25	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
26	Oscillations in an epidemiological model based on asynchronous probabilistic cellular automaton. Ecological Complexity, 2017, 31, 57-63.	2.9	9
27	White Gaussian Chaos. IEEE Communications Letters, 2017, 21, 1719-1722.	4.1	8
28	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
29	Frank-Starling mechanism and short-term adjustment of cardiac flow. Journal of Experimental Biology, 2017, 220, 4391-4398.	1.7	8
30	On the effects of the spatial distribution in an epidemic model based on cellular automaton. Ecological Complexity, 2017, 31, 144-148.	2.9	2
31	A Linear Analysis of Coupled Wilson-Cowan Neuronal Populations. Computational Intelligence and Neuroscience, 2016, 2016, 1-6.	1.7	11
32	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
33	On considering the influence of recovered individuals in disease propagations. Communications in Nonlinear Science and Numerical Simulation, 2016, 34, 224-230.	3.3	5
34	Population dynamics in educational institutions considering the student satisfaction. Communications in Nonlinear Science and Numerical Simulation, 2016, 30, 236-242.	3.3	6
35	The transfer function of neuron spike. Neural Networks, 2015, 68, 89-95.	5.9	4
36	The grief map. European Physical Journal: Special Topics, 2014, 223, 2897-2902.	2.6	2

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37	An epidemic model to evaluate the homogeneous mixing assumption. Communications in Nonlinear Science and Numerical Simulation, 2014, 19, 4042-4047.	3.3	16
38	Self-sustained oscillations in epidemic models with infective immigrants. Ecological Complexity, 2014, 17, 40-45.	2.9	15
39	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
40	Frequency transitions in synchronized neural networks. Communications in Nonlinear Science and Numerical Simulation, 2013, 18, 1786-1791.	3.3	7
41	Chaos-based communication systems in non-ideal channels. Communications in Nonlinear Science and Numerical Simulation, 2012, 17, 4707-4718.	3.3	41
42	Hero's journey in bifurcation diagram. Communications in Nonlinear Science and Numerical Simulation, 2012, 17, 2233-2236.	3.3	4
43	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
44	On estimating the basic reproduction number in distinct stages of a contagious disease spreading. Ecological Modelling, 2012, 240, 156-160.	2.5	8
45	Chaotic Synchronization in Discrete-Time Systems Connected by Bandlimited Channels. IEEE Communications Letters, 2011, 15, 671-673.	4.1	19
46	A vaccination game based on public health actions and personal decisions. Ecological Modelling, 2011, 222, 1651-1655.	2.5	34
47	Synaptic compensation on Hopfield network: implications for memory rehabilitation. Neural Computing and Applications, 2011, 20, 753-757.	5.6	2
48	System Identification and Prediction of Dengue Fever Incidence in Rio de Janeiro. Mathematical Problems in Engineering, 2011, 2011, 1-13.	1.1	7
49	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
50	Spectral properties of chaotic signals generated by the skew tent map. Signal Processing, 2010, 90, 385-390.	3.7	35
51	A Model of Intelligent Controller for Hypothyroidism Treatment. , 2010, , .		0
52	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
53	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
54	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

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55	Recognition of noisy images by PLL networks. Signal Processing, 2009, 89, 1311-1319.	3.7	9
56	Route to chaos in a third-order phase-locked loop network. Signal Processing, 2009, 89, 1678-1682.	3.7	11
57	Schrödinger's dog. Physics World, 2009, 22, 52-52.	0.0	0
58	Linear Approach for Synchronous State Stability in Fully Connected PLL Networks. Mathematical Problems in Engineering, 2008, 2008, 1-13.	1.1	3
59	Border Figure Detection Using a Phase Oscillator Network with Dynamical Coupling. Mathematical Problems in Engineering, 2008, 2008, 1-8.	1.1	1
60	Simple answers to usual questions about unusual forms of the Evans' root locus plot. Controle and Automacao, 2008, 19, 444-449.	0.2	1
61	OSCILLATION DEATH IN A TWO-NEURON NETWORK WITH DELAY IN A SELF-CONNECTION. Journal of Biological Systems, 2007, 15, 49-61.	1.4	11
62	Double-frequency jitter in synchronous networks. System Theory, Proceedings of the Southeastern Symposium on, 2007, , .	0.0	0
63	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
64	Double-frequency jitter figures in master–slave PLL networks. AEU - International Journal of Electronics and Communications, 2007, 61, 678-683.	2.9	8
65	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
66	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
67	SPREADING DEPRESSION IN MAINLY LOCALLY CONNECTED CELLULAR AUTOMATON. Journal of Biological Systems, 2006, 14, 617-629.	1.4	12
68	Synchronous state in a fully connected phase-locked loop network. Mathematical Problems in Engineering, 2006, 2006, 1-12.	1.1	11
69	Biological models: Measuring variability with classical and quantum information. Journal of Theoretical Biology, 2006, 242, 309-313.	1.7	8
70	Big cities: Shelters for contagious diseases. Ecological Modelling, 2006, 197, 258-262.	2.5	32
71	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
72	Epidemiological Models Applied to Viruses in Computer Networks. Journal of Computer Science, 2005, 1, 31-34.	0.6	78

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73	IMPROVING VEHICLE FLOW WITH TRAFFIC LIGHTS. International Journal of Modeling, Simulation, and Scientific Computing, 2005, 08, 59-63.	1.4	3
74	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
75	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
76	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
77	MODELING THE SPREADING OF HIV IN HOMOSEXUAL POPULATIONS WITH HETEROGENEOUS PREVENTIVE ATTITUDE. Journal of Biological Systems, 2004, 12, 439-456.	1.4	19
78	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
79	CELLULAR AUTOMATA CRYPTOGRAPHIC MODEL BASED ON BI-DIRECTIONAL TOGGLE RULES. International Journal of Modern Physics C, 2004, 15, 1061-1068.	1.7	12
80	Conditions for pathogen elimination by immune systems. Theory in Biosciences, 2004, 123, 195-208.	1.4	9
81	Using central manifold theorem in the analysis of master-slave synchronization networks. Journal of Communications and Networks, 2004, 6, 197-202.	2.6	5
82	Bifurcation Analysis for Third-Order Phase-Locked Loops. IEEE Signal Processing Letters, 2004, 11, 494-496.	3.6	26
83	Estimating the critical number of slave nodes in a single-chain PLL network. IEEE Communications Letters, 2003, 7, 449-450.	4.1	16
84	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
85	Computing with phase locked loops: choosing gains and delays. IEEE Transactions on Neural Networks, 2003, 14, 243-247.	4.2	20
86	Global and partial synchronism in phase-locked loop networks. IEEE Transactions on Neural Networks, 2003, 14, 1572-1575.	4.2	21
87	Periodic solutions of pendulum: II. Journal of Physics A, 2003, 36, 6691-6707.	1.6	1
88	Sincronismo em redes mestre-escravo com atraso. Controle and Automacao, 2003, 14, 121-126.	0.2	1
89	Analytical Results on a Wilson-Cowan Neuronal Network Modified Model. Journal of Theoretical Biology, 2002, 219, 83-91.	1.7	19
90	Temperature effects on energy metabolism: a dynamic system analysis. Proceedings of the Royal Society B: Biological Sciences, 2002, 269, 15-19.	2.6	37

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91	Analytical Results on a Wilson-Cowan Neuronal Network Modified Model. Journal of Theoretical Biology, 2002, 219, 83-91.	1.7	13
92	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
93	Oscillatory pattern in oxygen consumption of Hummingbirds. Journal of Thermal Biology, 2002, 27, 371-379.	2.5	10
94	Symmetry Detection Using Global-Locally Coupled Maps. Lecture Notes in Computer Science, 2002, , 75-80.	1.3	1
95	Analytical results on a Wilson-Cowan neuronal network modified model. Journal of Theoretical Biology, 2002, 219, 83-91.	1.7	3
96	The oxygen gain of diving insects. Respiration Physiology, 2001, 128, 229-233.	2.7	15
97	My friend and his hysteretic sandwich. Physics World, 2000, 13, 72-72.	0.0	0
98	A Condition for Successful Escape of a Mutant after Primary HIV Infection. Journal of Theoretical Biology, 2000, 203, 399-406.	1.7	8
99	Periodic solutions of the pendulum. Journal of Physics A, 2000, 33, 8489-8505.	1.6	2
100	Kinematics of eye movement. Ophthalmic and Physiological Optics, 2000, 20, 59-62.	2.0	1
101	Modeling Homopolymer Self-replication: Implications for Early Competition. Journal of Theoretical Biology, 1999, 196, 51-60.	1.7	2
102	Zipf's Law Organizes a Psychiatric Ward. Journal of Theoretical Biology, 1999, 198, 439-443.	1.7	19
103	A Model for the Early Evolution of Self-replicating Polymers. Journal of Theoretical Biology, 1998, 191, 237-248.	1.7	5
104	Numbering Self-replicating Polymers. Journal of Theoretical Biology, 1998, 193, 365-367.	1.7	0
105	Numbering Self-replicating Polymers II. Journal of Theoretical Biology, 1998, 194, 159-161.	1.7	0
106	Coupling of modes in RFPs: an analytical approach. Plasma Physics and Controlled Fusion, 1995, 37, 541-550.	2.1	0
107	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
108	Magnetic surfaces in non-symmetric plasmas. Plasma Physics and Controlled Fusion, 1992, 34, 1067-1088.	2.1	3

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109	Toroidal plasma equilibrium with arbitrary current distribution. Journal of Plasma Physics, 1990, 44, 303-311.	2.1	26
110	Continuous attractors in recurrent neural networks and phase space learning. , 0, , .		0
111	Clustering in coupled maps on small-world networks. , 0, , .		2
112	Considering Double Frequency Terms from Phase Detectors in Synchronous Master-Slave Networks. , 0, , .		3