Miguel A F Sanjun

List of Publications by Citations

282 papers	4,668 citations	34 h-index	55 g-index
321 ext. papers	5,255 ext. citations	3.2 avg, IF	6.01 L-index

#	Paper	IF	Citations
282	Fractal structures in nonlinear dynamics. *Reviews of Modern Physics*, **2009**, 81, 333-386	40.5	241
281	Map-based models in neuronal dynamics. *Physics Reports*, **2011**, 501, 1-74	27.7	179
280	Wada basins and chaotic invariant sets in the Hénon-Heiles system. *Physical Review E*, **2001**, 64, 066208	2.4	177
279	True and false forbidden patterns in deterministic and random dynamics. *Europhysics Letters*, **2007**, 79, 50001	1.6	128
278	Experimental evidence, numerics, and theory of vibrational resonance in bistable systems. *Physical Review E*, **2003**, 67, 066119	2.4	128
277	Basin entropy: a new tool to analyze uncertainty in dynamical systems. *Scientific Reports*, **2016**, 6, 31416	4.9	101
276	Vibrational resonance in a noise-induced structure. *Physical Review E*, **2002**, 66, 011106	2.4	82
275	Combinatorial detection of determinism in noisy time series. *Europhysics Letters*, **2008**, 83, 60005	1.6	79
274	Theory and numerics of vibrational resonance in Duffing oscillators with time-delayed feedback. *Physical Review E*, **2011**, 83, 066205	2.4	74
273	Single and multiple vibrational resonance in a quintic oscillator with monostable potentials. *Physical Review E*, **2009**, 80, 046608	2.4	71
272	New developments in classical chaotic scattering. *Reports on Progress in Physics*, **2013**, 76, 016001	14.4	68
271	Unpredictable behavior in the Duffing oscillator: Wada basins. *Physica D: Nonlinear Phenomena*, **2002**, 171, 41-51	3.3	67
270	Synchronization and propagation of bursts in networks of coupled map neurons. *Chaos*, **2006**, 16, 013113	3.3	65
269	Nonlinear Resonances. *Springer Series in Synergetics*, **2016**,	0.4	62
268	Analysis of vibrational resonance in a quintic oscillator. *Chaos*, **2009**, 19, 043128	3.3	58
267	Stochastic P-bifurcation and stochastic resonance in a noisy bistable fractional-order system. *Communications in Nonlinear Science and Numerical Simulation*, **2016**, 41, 104-117	3.7	58
266	Basin topology in dissipative chaotic scattering. *Chaos*, **2006**, 16, 023101	3.3	56

247	Effects of the spike timing-dependent plasticity on the synchronisation in a random Hodgkin–Huxley neuronal network. *Communications in Nonlinear Science and Numerical Simulation*, **2016**, 34, 12-22	3.7	31
246	Testing for Basins of Wada. *Scientific Reports*, **2015**, 5, 16579	4.9	31
245	A validated mathematical model of tumor growth including tumor-host interaction, cell-mediated immune response and chemotherapy. *Bulletin of Mathematical Biology*, **2014**, 76, 2884-906	2.1	31
244	Detecting the weak high-frequency character signal by vibrational resonance in the Duffing oscillator. *Nonlinear Dynamics*, **2017**, 89, 2621-2628	5	30
243	Ghost-vibrational resonance. *Communications in Nonlinear Science and Numerical Simulation*, **2014**, 19, 4003-4012	3.7	29
242	Effect of nonlinear dissipation on the basin boundaries of a driven two-well Rayleigh–Duffing oscillator. *Chaos, Solitons and Fractals*, **2009**, 39, 1092-1099	9.3	28
241	Indecomposable continua in dynamical systems with noise: Fluid flow past an array of cylinders. *Chaos*, **1997**, 7, 125-138	3.3	28
240	Integrability and symmetries for the Helmholtz oscillator with friction. *Journal of Physics A*, **2003**, 36, 695-710		28
239	Indecomposable Continua and the Characterization of Strange Sets in Nonlinear Dynamics. *Physical Review Letters*, **1997**, 78, 1892-1895	7.4	27
238	Using nonharmonic forcing to switch the periodicity in nonlinear systems. *Physical Review E*, **1998**, 58, 4377-4382	2.4	27
237	Chaotic dynamics and fractal structures in experiments with cold atoms. *Physical Review A*, **2017**, 95,	2.6	26
236	ESCAPING DYNAMICS IN THE PRESENCE OF DISSIPATION AND NOISE IN SCATTERING SYSTEMS. *International Journal of Bifurcation and Chaos in Applied Sciences and Engineering*, **2010**, 20, 2783-2793	2	26
235	Isochronous synchronization in mutually coupled chaotic circuits. *Chaos*, **2007**, 17, 023128	3.3	26
234	Relation between structure and size in social networks. *Physical Review E*, **2002**, 65, 036107	2.4	26
233	Vibrational subharmonic and superharmonic resonances. *Communications in Nonlinear Science and Numerical Simulation*, **2016**, 30, 362-372	3.7	25
232	Bursting frequency versus phase synchronization in time-delayed neuron networks. *Physical Review E*, **2013**, 87, 052903	2.4	25
231	DETECTING DETERMINISM IN TIME SERIES WITH ORDINAL PATTERNS: A COMPARATIVE STUDY. *International Journal of Bifurcation and Chaos in Applied Sciences and Engineering*, **2010**, 20, 2915-2924	2	25
230	Avoiding escapes in open dynamical systems using phase control. *Physical Review E*, **2008**, 78, 016205	2.4	25

229	Energy dissipation in a nonlinearly damped Duffing oscillator. *Physica D: Nonlinear Phenomena*, **2001**, 159, 22-34	3.3	25
228	On the occurrence of chaos in a parametrically driven extended Rayleigh oscillator with three-well potential. *Chaos, Solitons and Fractals*, **2009**, 41, 772-782	9.3	24
227	FRACTAL AND WADA EXIT BASIN BOUNDARIES IN TOKAMAKS. *International Journal of Bifurcation and Chaos in Applied Sciences and Engineering*, **2007**, 17, 4067-4079	2	24
226	Multiple resonance and anti-resonance in coupled Duffing oscillators. *Nonlinear Dynamics*, **2016**, 83, 1803-1814	3	23
225	Effect of multiple time-delay on vibrational resonance. *Chaos*, **2013**, 23, 013136	3.3	23
224	Patterns in inhibitory networks of simple map neurons. *Physical Review E*, **2007**, 75, 041911	2.4	23
223	Vibrational resonance in groundwater-dependent plant ecosystems. *Ecological Complexity*, **2013**, 15, 33-42	2.6	22
222	Hierarchical social networks and information flow. *Physica A: Statistical Mechanics and Its Applications*, **2002**, 316, 695-708	3.3	22
221	Recovering an unknown signal completely submerged in strong noise by a new stochastic resonance method. *Communications in Nonlinear Science and Numerical Simulation*, **2019**, 66, 156-166	3.7	21
220	Finding safety in partially controllable chaotic systems. *Communications in Nonlinear Science and Numerical Simulation*, **2012**, 17, 4274-4280	3.7	21
219	EXPERIMENTAL EVIDENCE FOR VIBRATIONAL RESONANCE AND ENHANCED SIGNAL TRANSMISSION IN CHUA'S CIRCUIT. *International Journal of Bifurcation and Chaos in Applied Sciences and Engineering*, **2013**, 23, 1350189	2	21
218	Role of depth and location of minima of a double-well potential on vibrational resonance. *Journal of Physics A: Mathematical and Theoretical*, **2010**, 43, 465101	2	21
217	Dynamics of partial control. *Chaos*, **2012**, 22, 047507	3.3	21
216	Partial control of chaotic systems. *Physical Review E*, **2008**, 77, 055201	2.4	21
215	Numerical and experimental exploration of phase control of chaos. *Chaos*, **2006**, 16, 013111	3.3	21
214	Wada Basins and Unpredictability in Hamiltonian and Dissipative Systems. *International Journal of Modern Physics B*, **2003**, 17, 4171-4175	1.1	21
213	Effect of noise on the reinjection probability density in intermittency. *Communications in Nonlinear Science and Numerical Simulation*, **2012**, 17, 3587-3596	3.7	20
212	Phase control of excitable systems. *New Journal of Physics*, **2008**, 10, 073030	2.9	20

211	Chaos-induced resonant effects and its control. *Physics Letters, Section A: General, Atomic and Solid State Physics*, **2007**, 366, 428-432	2.3	20
210	Characterization of the local instability in the Hénon–Heiles Hamiltonian. *Physics Letters, Section A: General, Atomic and Solid State Physics*, **2003**, 311, 26-38	2.3	20
209	Crisis-induced intermittency in two coupled chaotic maps: towards understanding chaotic itinerancy. *Physical Review E*, **2005**, 71, 016219	2.4	20
208	Vibrational resonance in the Morse oscillator **2013**, 81, 127-141		19
207	Noise-induced resonance at the subharmonic frequency in bistable systems. *Nonlinear Dynamics*, **2017**, 87, 1721-1730	5	19
206	Exploring partial control of chaotic systems. *Physical Review E*, **2009**, 79, 026217	2.4	19
205	Experimental demonstration of bidirectional chaotic communication by means of isochronal synchronization. *Europhysics Letters*, **2008**, 81, 40005	1.6	19
204	A mechanism for elliptic-like bursting and synchronization of bursts in a map-based neuron network. *Cognitive Processing*, **2009**, 10 Suppl 1, S23-31	1.5	18
203	Analysis of the noise-induced bursting-spiking transition in a pancreatic beta-cell model. *Physical Review E*, **2004**, 69, 041910	2.4	18
202	Controlling chaotic transients: Yorke's game of survival. *Physical Review E*, **2004**, 69, 016203	2.4	18
201	Partially controlling transient chaos in the Lorenz equations. *Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences*, **2017**, 375,	3	17
200	Bifurcation and resonance in a fractional Mathieu-Duffing oscillator. *European Physical Journal B*, **2015**, 88, 1	1.2	17
199	Avoiding healthy cells extinction in a cancer model. *Journal of Theoretical Biology*, **2014**, 349, 74-81	2.3	17
198	Turbo-like structures for chaos encoding and decoding. *IEEE Transactions on Communications*, **2009**, 57, 597-601	6.9	17
197	Chaos-Coded Modulations Over Rician and Rayleigh Flat Fading Channels. *IEEE Transactions on Circuits and Systems II: Express Briefs*, **2008**, 55, 581-585	3.5	16
196	The network of scientific collaborations within the European framework programme. *Physica A: Statistical Mechanics and Its Applications*, **2007**, 384, 675-683	3.3	16
195	Synchronization of electronic genetic networks. *Chaos*, **2006**, 16, 013127	3.3	16
194	Opening a closed Hamiltonian map. *Chaos*, **2003**, 13, 17-24	3.3	16

193	Vibrational resonance in a harmonically trapped potential system. *Communications in Nonlinear Science and Numerical Simulation*, **2017**, 47, 370-378	3.7	15
192	Predictability of orbits in coupled systems through finite-time Lyapunov exponents. *New Journal of Physics*, **2013**, 15, 113064	2.9	15
191	Local predictability and nonhyperbolicity through finite Lyapunov exponent distributions in two-degrees-of-freedom Hamiltonian systems. *Physical Review E*, **2008**, 78, 066204	2.4	15
190	Chaos-Based Turbo Systems in Fading Channels. *IEEE Transactions on Circuits and Systems I: Regular Papers*, **2014**, 61, 530-541	3.9	14
189	When less is more: Partial control to avoid extinction of predators in an ecological model. *Ecological Complexity*, **2014**, 19, 1-8	2.6	14
188	Weakly noisy chaotic scattering. *Physical Review E*, **2013**, 88, 032914	2.4	14
187	Wada property in systems with delay. *Communications in Nonlinear Science and Numerical Simulation*, **2017**, 43, 220-226	3.7	14
186	Frequency dispersion in the time-delayed Kuramoto model. *Physical Review E*, **2014**, 89, 032905	2.4	14
185	Synchronization of uncoupled excitable systems induced by white and coloured noise. *New Journal of Physics*, **2010**, 12, 053040	2.9	14
184	Partial control of chaotic transients using escape times. *New Journal of Physics*, **2010**, 12, 113038	2.9	14
183	BUILDING ELECTRONIC BURSTERS WITH THE MORRIS–ECAR NEURON MODEL. *International Journal of Bifurcation and Chaos in Applied Sciences and Engineering*, **2006**, 16, 3617-3630	2	14
182	Self-similarity and adaptive aperiodic stochastic resonance in a fractional-order system. *Nonlinear Dynamics*, **2018**, 91, 1697-1711	5	14
181	Enhancing the Weak Signal With Arbitrary High-Frequency by Vibrational Resonance in Fractional-Order Duffing Oscillators. *Journal of Computational and Nonlinear Dynamics*, **2017**, 12,	1.4	13
180	Uncertainty dimension and basin entropy in relativistic chaotic scattering. *Physical Review E*, **2018**, 97, 042214	2.4	13
179	Ascertaining when a basin is Wada: the merging method. *Scientific Reports*, **2018**, 8, 9954	4.9	13
178	Controlling unpredictability in the randomly driven Hénon–Heiles system. *Communications in Nonlinear Science and Numerical Simulation*, **2013**, 18, 3449-3457	3.7	13
177	Improving the Performance of Chaos-Based Modulations Via Serial Concatenation. *IEEE Transactions on Circuits and Systems I: Regular Papers*, **2010**, 57, 448-459	3.9	13
176	Applicability of time-average moiré techniques for chaotic oscillations. *Physical Review E*, **2007**, 76, 036208	2.4	13

175	Sensitivity versus resonance in two-dimensional spiking-bursting neuron models. *Physical Review E*, **2007**, 75, 041902	2.4	13
174	WINNERLESS COMPETITION IN NETWORKS OF COUPLED MAP NEURONS. *Modern Physics Letters B*, **2004**, 18, 1347-1366	1.6	13
173	Liénard systems, limit cycles, and Melnikov theory. *Physical Review E*, **1998**, 57, 340-344	2.4	13
172	The topology of fluid flow past a sequence of cylinders. *Topology and Its Applications*, **1999**, 94, 207-242	0.4	13
171	Energy Harvesting Enhancement by Vibrational Resonance. *International Journal of Bifurcation and Chaos in Applied Sciences and Engineering*, **2014**, 24, 1430019	2	12
170	Permutation complexity of spatiotemporal dynamics. *Europhysics Letters*, **2010**, 90, 10007	1.6	12
169	Phase control of intermittency in dynamical systems. *Physical Review E*, **2006**, 74, 016202	2.4	12
168	Intersections of stable and unstable manifolds: the skeleton of Lagrangian chaos. *Chaos, Solitons and Fractals*, **2005**, 24, 947-956	9.3	12
167	Remarks on transitions order-chaos induced by the shape of the periodic excitation in a parametric pendulum. *Chaos, Solitons and Fractals*, **1996**, 7, 435-440	9.3	12
166	Dynamics of the cell-mediated immune response to tumour growth. *Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences*, **2017**, 375,	3	11
165	Predictability of Chaotic Dynamics. *Springer Series in Synergetics*, **2017**,	0.4	11
164	Improving the weak aperiodic signal by three kinds of vibrational resonance. *Nonlinear Dynamics*, **2018**, 91, 2699-2713	5	11
163	Optimizing the Electrical Power in an Energy Harvesting System. *International Journal of Bifurcation and Chaos in Applied Sciences and Engineering*, **2015**, 25, 1550171	2	11
162	Non-smooth transitions in a simple city traffic model analyzed through supertracks. *Communications in Nonlinear Science and Numerical Simulation*, **2013**, 18, 81-88	3.7	11
161	Complex networks and the WWW market. *Physica A: Statistical Mechanics and Its Applications*, **2003**, 324, 754-758	3.3	11
160	Vibrational Resonance in a Duffing System with a Generalized Delayed Feedback. *Journal of Applied Nonlinear Dynamics*, **2013**, 2, 397-408	2	11
159	Signal generation and enhancement in a delayed system. *Communications in Nonlinear Science and Numerical Simulation*, **2015**, 22, 1158-1168	3.7	10
158	Pitchfork bifurcation and vibrational resonance in a fractional-order Duffing oscillator **2013**, 81, 943-957		10

157	Subharmonic bifurcations in a pendulum parametrically excited by a non-harmonic perturbation. *Chaos, Solitons and Fractals*, **1998**, 9, 995-1003	9.3	10
156	On the LFM signal improvement by piecewise vibrational resonance using a new spectral amplification factor. *IET Signal Processing*, **2019**, 13, 65-69	1.7	10
155	Measuring the transition between nonhyperbolic and hyperbolic regimes in open Hamiltonian systems. *Nonlinear Dynamics*, **2020**, 99, 3029-3039	5	10
154	Nonlinear cancer chemotherapy: Modelling the Norton-Simon hypothesis. *Communications in Nonlinear Science and Numerical Simulation*, **2019**, 70, 307-317	3.7	10
153	Global relativistic effects in chaotic scattering. *Physical Review E*, **2017**, 95, 032205	2.4	9
152	Time-frequency analysis of a new aperiodic resonance. *Communications in Nonlinear Science and Numerical Simulation*, **2020**, 85, 105258	3.7	9
151	Effects of periodic forcing in chaotic scattering. *Physical Review E*, **2014**, 89, 042909	2.4	9
150	Destruction of solid tumors by immune cells. *Communications in Nonlinear Science and Numerical Simulation*, **2017**, 44, 390-403	3.7	9
149	Bifurcation Transition and Nonlinear Response in a Fractional-Order System. *Journal of Computational and Nonlinear Dynamics*, **2015**, 10,	1.4	9
148	Transport of particles by surface waves: a modification of the classical bouncer model. *New Journal of Physics*, **2008**, 10, 083017	2.9	9
147	The interplay of universities and industry through the FP5 network. *New Journal of Physics*, **2007**, 9, 183-183	2.9	9
146	Parametric partial control of chaotic systems. *Nonlinear Dynamics*, **2016**, 86, 869-876	5	9
145	Delay-Induced Resonance in the Time-Delayed Duffing Oscillator. *International Journal of Bifurcation and Chaos in Applied Sciences and Engineering*, **2020**, 30, 2030007	2	9
144	Wada index based on the weighted and truncated Shannon entropy. *Nonlinear Dynamics*, **2021**, 104, 739-751	5	9
143	Stochastic resonance in overdamped systems with fractional power nonlinearity. *European Physical Journal Plus*, **2017**, 132, 1	3.1	8
142	NONLINEAR RESPONSE OF THE MASS-SPRING MODEL WITH NONSMOOTH STIFFNESS. *International Journal of Bifurcation and Chaos in Applied Sciences and Engineering*, **2012**, 22, 1250006	2	8
141	Effect of the phase on the dynamics of a perturbed bouncing ball system. *Communications in Nonlinear Science and Numerical Simulation*, **2012**, 17, 3279-3286	3.7	8
140	The efficiency of a random and fast switch in complex dynamical systems. *New Journal of Physics*, **2012**, 14, 083022	2.9	8

139	Channel coding in communications using chaos. *Physics Letters, Section A: General, Atomic and Solid State Physics*, **2002**, 295, 185-191	2.3	8
138	Resonant behavior and unpredictability in forced chaotic scattering. *Physical Review E*, **2018**, 98,	2.4	8
137	Wada structures in a binary black hole system. *Physical Review D*, **2018**, 98,	4.9	8
136	The dose-dense principle in chemotherapy. *Journal of Theoretical Biology*, **2017**, 430, 169-176	2.3	7
135	Bifurcation Analysis and Nonlinear Decay of a Tumor in the Presence of an Immune Response. *International Journal of Bifurcation and Chaos in Applied Sciences and Engineering*, **2017**, 27, 1750223	2	7
134	Competitive decoders for turbo-like chaos-based systems. *IET Communications*, **2012**, 6, 1278	1.3	7
133	PARTIAL CONTROL OF TRANSIENT CHAOS IN ELECTRONIC CIRCUITS. *International Journal of Bifurcation and Chaos in Applied Sciences and Engineering*, **2012**, 22, 1250032	2	7
132	SYMMETRY-RESTORING CRISES, PERIOD-ADDING AND CHAOTIC TRANSITIONS IN THE CUBIC VAN DER POL OSCILLATOR. *Journal of Sound and Vibration*, **1996**, 193, 863-875	3.9	7
131	A test for fractal boundaries based on the basin entropy. *Communications in Nonlinear Science and Numerical Simulation*, **2021**, 95, 105588	3.7	7
130	Low-dimensional paradigms for high-dimensional hetero-chaos. *Chaos*, **2018**, 28, 103110	3.3	7
129	The forecast of predictability for computed orbits in galactic models. *Monthly Notices of the Royal Astronomical Society*, **2015**, 447, 3797-3811	4.3	6
128	Adaptive piecewise re-scaled stochastic resonance excited by the LFM signal. *European Physical Journal Plus*, **2020**, 135, 1	3.1	6
127	Saddle-Node Bifurcation and Vibrational Resonance in a Fractional System with an Asymmetric Bistable Potential. *International Journal of Bifurcation and Chaos in Applied Sciences and Engineering*, **2015**, 25, 1550023	2	6
126	Control of collective network chaos. *Chaos*, **2014**, 24, 023127	3.3	6
125	Exploiting symbolic dynamics in chaos coded communications with maximum a posteriori algorithm. *Electronics Letters*, **2006**, 42, 984	1.1	6
124	ITERATIVELLY DECODING CHAOS ENCODED BINARY SIGNALS		6
123	Comments on the Hamiltonian formulation for linear and non-linear oscillators including dissipation. *Journal of Sound and Vibration*, **1995**, 185, 734-735	3.9	6
122	Dissipative hydrodynamic oscillators. *Nuovo Cimento Della Societa Italiana Di Fisica D - Condensed Matter, Atomic, Molecular and Chemical Physics, Biophysics*, **1991**, 13, 913-918		6

121	Decay Dynamics of Tumors. *PLoS ONE*, **2016**, 11, e0157689	3.7	6
120	Stochastic resonance in dissipative drift motion. *Communications in Nonlinear Science and Numerical Simulation*, **2018**, 54, 62-69	3.7	5
119	The role of dose density in combination cancer chemotherapy. *Communications in Nonlinear Science and Numerical Simulation*, **2019**, 79, 104918	3.7	5
118	Predictability of Chaotic Dynamics. *Springer Series in Synergetics*, **2019**,	0.4	5
117	Transition of phase locking modes in a minimal neuronal network. *Neurocomputing*, **2012**, 81, 60-66	5.4	5
116	Vibrational and Ghost-Vibrational Resonances in a Modified Chua's Circuit Model Equation. *International Journal of Bifurcation and Chaos in Applied Sciences and Engineering*, **2014**, 24, 1430031	2	5
115	How to minimize the control frequency to sustain transient chaos using partial control. *Communications in Nonlinear Science and Numerical Simulation*, **2014**, 19, 726-737	3.7	5
114	Evaluation of channel coding and decoding algorithms using discrete chaotic maps. *Chaos*, **2006**, 16, 013103	3.9	5
113	Low-dimensional dynamo modelling and symmetry-breaking bifurcations. *Physica D: Nonlinear Phenomena*, **2006**, 223, 151-162	3.3	5
112	Coupling scheme for complete synchronization of periodically forced chaotic CO2 lasers. *Physical Review E*, **2004**, 70, 036208	2.4	5
111	Information flow in generalized hierarchical networks. *Physica A: Statistical Mechanics and Its Applications*, **2003**, 324, 424-429	3.3	5
110	Basin Entropy, a Measure of Final State Unpredictability and Its Application to the Chaotic Scattering of Cold Atoms. *Understanding Complex Systems*, **2018**, 9-34	0.4	5
109	Transient chaotic transport in dissipative drift motion. *Physics Letters, Section A: General, Atomic and Solid State Physics*, **2016**, 380, 1621-1626	2.3	5
108	How to detect Wada basins. *Discrete and Continuous Dynamical Systems - Series B*, **2021**, 26, 717-739	1.3	5
107	Vibrational Resonance in an Overdamped System with a Fractional Order Potential Nonlinearity. *International Journal of Bifurcation and Chaos in Applied Sciences and Engineering*, **2018**, 28, 1850082	2	4
106	Amplification of the LFM signal by using piecewise vibrational methods. *JVC/Journal of Vibration and Control*, **2019**, 25, 141-150	2	4
105	Impact of quantum-classical correspondence on entanglement enhancement by single-mode squeezing. *Physics Letters, Section A: General, Atomic and Solid State Physics*, **2014**, 378, 2603-2610	2.3	4
104	Electronic circuit implementation of the chaotic Rulkov neuron model. *Journal of the Franklin Institute*, **2013**, 350, 2901-2910	4	4

103	STRONG SENSITIVITY OF THE VIBRATIONAL RESONANCE INDUCED BY FRACTAL STRUCTURES. *International Journal of Bifurcation and Chaos in Applied Sciences and Engineering*, **2013**, 23, 1350129	2	4
102	ELECTRONIC DESIGN OF SYNTHETIC GENETIC NETWORKS. *International Journal of Bifurcation and Chaos in Applied Sciences and Engineering*, **2007**, 17, 3507-3511	2	4
101	Controlling chaos in a fluid flow past a movable cylinder. *Chaos, Solitons and Fractals*, **2003**, 15, 255-263	9.3	4
100	Reply to Comment on Liénard systems, limit cycles, and Melnikov theory. *Physical Review E*, **1999**, 59, 2485-2486	2.4	4
99	Homoclinic bifurcation sets of driven nonlinear oscillators. *International Journal of Theoretical Physics*, **1996**, 35, 1745-1752	1.1	4
98	Analysis of Chaos-Based Coded Modulations under Intersymbol Interference. *Journal of Computers*, **2010**, 5,	1.4	4
97	The saddle-straddle method to test for Wada basins. *Communications in Nonlinear Science and Numerical Simulation*, **2020**, 84, 105167	3.7	4
96	Delay-induced resonance suppresses damping-induced unpredictability. *Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences*, **2021**, 379, 20200232	3	4
95	A new approach of the partial control method in chaotic systems. *Nonlinear Dynamics*, **2019**, 98, 873-887	5	3
94	Effects of Different Fast Periodic Excitations on the Pitchfork Bifurcation and Vibrational Resonance. *International Journal of Bifurcation and Chaos in Applied Sciences and Engineering*, **2020**, 30, 2050092	2	3
93	Stochastic resonance induced by an unknown linear frequency modulated signal in a strong noise background. *Chaos*, **2020**, 30, 043128	3.3	3
92	Bogdanov-Takens resonance in time-delayed systems. *Nonlinear Dynamics*, **2018**, 91, 1939-1947	5	3
91	Supply based on demand dynamical model. *Communications in Nonlinear Science and Numerical Simulation*, **2018**, 57, 402-414	3.7	3
90	From local uncertainty to global predictions: Making predictions on fractal basins. *PLoS ONE*, **2018**, 13, e0194926	3.7	3
89	Effect of squeezing and Planck constant dependence in short time semiclassical entanglement. *European Physical Journal D*, **2014**, 68, 1	1.3	3
88	Effect of geometry on the classical entanglement in a chaotic optical fiber. *Optics Express*, **2015**, 23, 32191-32201	3.3	3
87	Mutation-selection equilibrium in finite populations playing a Hawk-Dove game. *Communications in Nonlinear Science and Numerical Simulation*, **2015**, 25, 66-73	3.7	3
86	PARTIAL CONTROL OF ESCAPES IN CHAOTIC SCATTERING. *International Journal of Bifurcation and Chaos in Applied Sciences and Engineering*, **2013**, 23, 1350008	2	3

85	PREDICTING THE SYNCHRONIZATION OF A NETWORK OF ELECTRONIC REPRESSILATORS. *International Journal of Bifurcation and Chaos in Applied Sciences and Engineering*, **2010**, 20, 1751-1760	2	3
84	Noise-induced effects on the chaotic advection of fluid flow. *Physics Letters, Section A: General, Atomic and Solid State Physics*, **2002**, 297, 396-401	2.3	3
83	Congestion schemes and Nash equilibrium in complex networks. *Physica A: Statistical Mechanics and Its Applications*, **2005**, 355, 602-618	3.3	3
82	Influence of the gravitational radius on asymptotic behavior of the relativistic Sitnikov problem. *Physical Review E*, **2020**, 102, 042204	2.4	3
81	Adaptive denoising for strong noisy images by using positive effects of noise. *European Physical Journal Plus*, **2021**, 136, 1	3.1	3
80	Final state sensitivity in noisy chaotic scattering. *Chaos, Solitons and Fractals*, **2021**, 150, 111181	9.3	3
79	Fourier analysis of a delayed Rulkov neuron network. *Communications in Nonlinear Science and Numerical Simulation*, **2019**, 75, 62-75	3.7	2
78	Modulation of synchronization dynamics in a network of self-sustained systems. *Communications in Nonlinear Science and Numerical Simulation*, **2014**, 19, 656-672	3.7	2
77	A new method to reduce the number of time delays in a network. *Scientific Reports*, **2017**, 7, 2744	4.9	2
76	Cyclic motifs as the governing topological factor in time-delayed oscillator networks. *Physical Review E*, **2014**, 90, 052920	2.4	2
75	EFFECT OF STEP SIZE ON BIFURCATIONS AND CHAOS OF A MAP-BASED BVP OSCILLATOR. *International Journal of Bifurcation and Chaos in Applied Sciences and Engineering*, **2010**, 20, 1789-1795	2	2
74	Controlling crisis-induced intermittency using its relation with a boundary crisis. *New Journal of Physics*, **2009**, 11, 023025	2.9	2
73	Role of asymmetries in the chaotic dynamics of the double-well Duffing oscillator **2009**, 72, 927-937		2
72	Basin boundary metamorphoses and phase control. *Europhysics Letters*, **2010**, 90, 30002	1.6	2
71	Publisher's Note: Partial control of chaotic systems [Phys. Rev. E 77, 055201 (2008)]. *Physical Review E*, **2008**, 77,	2.4	2
70	Map-based neuron networks. *AIP Conference Proceedings*, **2007**,	0	2
69	On the estimate of the stochastic layer width for a model of tracer dynamics. *Chaos*, **2003**, 13, 866-73	3.3	2
68	A novel channel coding scheme based on continuous-time chaotic dynamics		2

67	PARTIAL CONTROL OF CHAOTIC SYSTEMS. *Series on Stability, Vibration and Control of Systems - Series B*, **2010**, 315-335		2
66	A new mechanism of the chaos suppression. *Discrete and Continuous Dynamical Systems - Series B*, **2007**, 7, 275-284	1.3	2
65	Control of Transient Chaos Using Safe Sets in Simple Dynamical Systems **2007**, 425-435		2
64	Tumor Stabilization Induced by T-Cell Recruitment Fluctuations. *International Journal of Bifurcation and Chaos in Applied Sciences and Engineering*, **2020**, 30, 2050179	2	2
63	Fractional damping enhances chaos in the nonlinear Helmholtz oscillator. *Nonlinear Dynamics*, **2020**, 102, 2323-2337	5	2
62	The effect of time ordering and concurrency in a mathematical model of chemoradiotherapy. *Communications in Nonlinear Science and Numerical Simulation*, **2021**, 96, 105693	3.7	2
61	Role of dark matter haloes on the predictability of computed orbits. *Astronomy and Astrophysics*, **2016**, 595, A68	5.1	2
60	Entanglement Entropy in a Triangular Billiard. *Entropy*, **2016**, 18, 79	2.8	2
59	Transient chaos in time-delayed systems subjected to parameter drift. *Journal of Physics Complexity*, **2021**, 2, 025001	1.8	2
58	Trapping enhanced by noise in nonhyperbolic and hyperbolic chaotic scattering. *Communications in Nonlinear Science and Numerical Simulation*, **2021**, 102, 105905	3.7	2
57	Stochastic resetting in the Kramers problem: A Monte Carlo approach. *Chaos, Solitons and Fractals*, **2021**, 152, 111342	9.3	2
56	Modern Dynamics. *Contemporary Physics*, **2016**, 57, 242-245	3.3	1
55	Transient chaos under coordinate transformations in relativistic systems. *Physical Review E*, **2020**, 101, 062212	2.4	1
54	Partial control of delay-coordinate maps. *Nonlinear Dynamics*, **2018**, 92, 1419-1429	5	1
53	Vibrational Resonance in Monostable Systems. *Springer Series in Synergetics*, **2016**, 83-117	0.4	1
52	Harmonic and Nonlinear Resonances. *Springer Series in Synergetics*, **2016**, 1-38	0.4	1
51	Preface to the Special Issue: Nonlinear systems theory and applications in engineering, control and life sciences. *Nonlinear Dynamics*, **2019**, 97, 1783-1784	5	1
50	Effective suppressibility of chaos. *Chaos*, **2013**, 23, 023107	3.3	1

49	PHASE CONTROL IN THE MASS-SPRING MODEL WITH NONSMOOTH STIFFNESS AND EXTERNAL EXCITATION. *International Journal of Bifurcation and Chaos in Applied Sciences and Engineering*, **2013**, 23, 1330042	2	1
48	PHASE CONTROL IN NONLINEAR SYSTEMS. *Series on Stability, Vibration and Control of Systems - Series B*, **2010**, 147-187		1
47	Entraining synthetic genetic oscillators. *Chaos*, **2009**, 19, 033139	3.3	1
46	Effects of intersymbol interference on chaos-based modulations **2008**,		1
45	HIERARCHICAL MODELING OF A FORCED ROBERTS DYNAMO. *International Journal of Bifurcation and Chaos in Applied Sciences and Engineering*, **2007**, 17, 3589-3593	2	1
44	ADAPTIVE PROCEDURE FOR THE PARAMETER ESTIMATION OF A MODEL OF A CO2 CHAOTIC LASER. *International Journal of Bifurcation and Chaos in Applied Sciences and Engineering*, **2007**, 17, 3639-3643	2	1
43	Parallel concatenated chaos coded modulations **2007**,		1
42	Weak dissipation drives and enhances Wada basins in three-dimensional chaotic scattering. *Chaos, Solitons and Fractals*, **2022**, 156, 111891	9.3	1
41	The role of noise in the tumor dynamics under chemotherapy treatment. *European Physical Journal Plus*, **2021**, 136, 1	3.1	1
40	Beyond partial control: controlling chaotic transients with the safety function. *Nonlinear Dynamics*,1	5	1
39	Noise activates escapes in closed Hamiltonian systems. *Communications in Nonlinear Science and Numerical Simulation*, **2022**, 105, 106074	3.7	1
38	Lyapunov Exponents. *Springer Series in Synergetics*, **2017**, 25-59	0.4	1
37	Predictability. *Springer Series in Synergetics*, **2017**, 91-127	0.4	1
36	Improvement in the stochastic resonance in the Duffing oscillator subjected to a Poisson white noise excitation. *European Physical Journal Plus*, **2021**, 136, 1	3.1	1
35	Exploring Chaos and Entanglement in the Hénon-Heiles System Using Squeezed Coherent States. *International Journal of Bifurcation and Chaos in Applied Sciences and Engineering*, **2016**, 26, 1650052	2	1
34	Transient Dynamics of the Lorenz System with a Parameter Drift. *International Journal of Bifurcation and Chaos in Applied Sciences and Engineering*, **2021**, 31, 2150029	2	1
33	Computing Complex Horseshoes by Means of Piecewise Maps. *International Journal of Bifurcation and Chaos in Applied Sciences and Engineering*, **2018**, 28, 1830039	2	1
32	Artificial Intelligence, Chaos, Prediction and Understanding in Science. *International Journal of Bifurcation and Chaos in Applied Sciences and Engineering*, **2021**, 31, 2150173	2	1

31	Ergodic decay laws in Newtonian and relativistic chaotic scattering. *Communications in Nonlinear Science and Numerical Simulation*, **2021**, 103, 105987	3.7	1
30	Controlling Infectious Diseases: The Decisive Phase Effect on a Seasonal Vaccination Strategy. *International Journal of Bifurcation and Chaos in Applied Sciences and Engineering*, **2021**, 31,	2	1
29	Classifying basins of attraction using the basin entropy. *Chaos, Solitons and Fractals*, **2022**, 159, 112112	9.3	1
28	Time-dependent effects hinder cooperation on the public goods game. *Chaos, Solitons and Fractals*, **2022**, 160, 112206	9.3	1
27	Modelling Cancer Dynamics Using Cellular Automata. *STEAM-H: Science, Technology, Engineering, Agriculture, Mathematics & Health*, **2019**, 159-205	0.2	0
26	Reducing the number of time delays in coupled dynamical systems. *European Physical Journal: Special Topics*, **2018**, 227, 1281-1289	2.3	0
25	A novel adaptive moving average method for signal denoising in strong noise background. *European Physical Journal Plus*, **2022**, 137, 1	3.1	0
24	Physics of cancer: the new adventure of physicists against cancer. *Contemporary Physics*, **2017**, 58, 176-178		
23	Infinite horseshoes and complex dynamics in physical systems. *Communications in Nonlinear Science and Numerical Simulation*, **2015**, 22, 866-871	3.7	
22	Coherence and Chaotic Resonances. *Springer Series in Synergetics*, **2016**, 333-350	0.4	
21	Escaping from a chaotic saddle in the presence of noise. *International Journal of Nonlinear Dynamics and Control*, **2017**, 1, 78	0.2	
20	Dynamics of Partial Control of Chaotic Systems. *Advances in Intelligent Systems and Computing*, **2013**, 3-4	0.4	
19	A New Mechanical Model for Particle Transport by Surface Waves and Applications. *Mathematical Problems in Engineering*, **2009**, 2009, 1-17	1.1	
18	Chaotic pattern of unsmoothed isochromatics around the regions of concentrated stresses. *Computers and Graphics*, **2008**, 32, 116-119	1.8	
17	Corrections to "Chaos-Coded Modulation Over Rician and Rayleigh Flat Fading Channels". *IEEE Transactions on Circuits and Systems II: Express Briefs*, **2008**, 55, 1314-1314	3.5	
16	A stochastic hybrid model with a fast concentration bias for chemotactic cellular attraction. *Chaos, Solitons and Fractals*, **2022**, 156, 111792	9.3	
15	Predictability. *Springer Series in Synergetics*, **2019**, 101-129	0.4	
14	Lyapunov Exponents. *Springer Series in Synergetics*, **2019**, 33-69	0.4	

13	A Detailed Example: Galactic Dynamics. *Springer Series in Synergetics*, **2019**, 151-188	0.4
12	Dynamical Regimes and Timescales. *Springer Series in Synergetics*, **2019**, 71-99	0.4
11	Forecasting and Chaos. *Springer Series in Synergetics*, **2019**, 1-31	0.4
10	Phase Control of Chaotic Maps. *Advances in Dynamics, Patterns, Cognition*, **2015**, 175-193	0.7
9	Dynamical Regimes and Time Scales. *Springer Series in Synergetics*, **2017**, 61-89	0.4
8	Forecasting and Chaos. *Springer Series in Synergetics*, **2017**, 1-24	0.4
7	When the firm prevents the crash: Avoiding market collapse with partial control. *PLoS ONE*, **2017**, 12, e0181925	3.7
6	Corrigendum to "The saddle-straddle method to test for Wada basins"[Commun. Nonlinear Sci. Numer. Simulat. 84 (2020) 105167]. *Communications in Nonlinear Science and Numerical Simulation*, **2020**, 90, 105334	3.7
5	Forcing the escape: Partial control of escaping orbits from a transient chaotic region. *Nonlinear Dynamics*, **2021**, 104, 1603-1612	5
4	A modern approach to teaching classical mechanics. *Contemporary Physics*,1-4	3.3
3	Vibrational resonance by using a real-time scale transformation method. *Physica Scripta*, **2022**, 97, 045207	2.6
2	Relativistic Chaotic Scattering. *Advances in Dynamics, Patterns, Cognition*, **2022**, 33-62	0.7
1	Controlling chaotic transients in the Hénon and the Lozi map with the safety function. *Journal of Difference Equations and Applications*,1-9	1