Aneta Stefanovska

List of Publications by Year in descending order

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193 papers 8,168 citations

41344 49 h-index 84 g-index

196 all docs

196 docs citations

196 times ranked

4228 citing authors

#	Article	IF	CITATIONS
1	Wavelet analysis of oscillations in the peripheral blood circulation measured by laser Doppler technique. IEEE Transactions on Biomedical Engineering, 1999, 46, 1230-1239.	4.2	576
2	Nonlinear dynamics of cardiovascular ageing. Physics Reports, 2010, 488, 51-110.	25.6	315
3	Low-frequency oscillations of the laser Doppler perfusion signal in human skin. Microvascular Research, 2006, 72, 120-127.	2.5	305
4	Surrogate data for hypothesis testing of physical systems. Physics Reports, 2018, 748, 1-60.	25.6	272
5	Physics of the human cardiovascular system. Contemporary Physics, 1999, 40, 31-55.	1.8	223
6	Linear and synchrosqueezed time–frequency representations revisited: Overview, standards of use, resolution, reconstruction, concentration, and algorithms. , 2015, 42, 1-26.		221
7	Direction of coupling from phases of interacting oscillators: An information-theoretic approach. Physical Review E, 2003, 67, 055201.	2.1	218
8	Oscillations in the Human Cutaneous Blood Perfusion Signal Modified by Endothelium-Dependent and Endothelium-Independent Vasodilators. Microvascular Research, 1999, 57, 298-309.	2.5	216
9	Involvement of sympathetic nerve activity in skin blood flow oscillations in humans. American Journal of Physiology - Heart and Circulatory Physiology, 2003, 284, H1638-H1646.	3.2	210
10	Coupling functions: Universal insights into dynamical interaction mechanisms. Reviews of Modern Physics, 2017, 89, .	45.6	196
11	Wavelet-based Analysis of Human Blood-flow Dynamics. Bulletin of Mathematical Biology, 1998, 60, 919-935.	1.9	187
12	Regulation of human cutaneous circulation evaluated by laser Doppler flowmetry, iontophoresis, and spectral analysis: importance of nitric oxide and prostaglandines. Microvascular Research, 2003, 65, 160-171.	2.5	177
13	Reversible Transitions between Synchronization States of the Cardiorespiratory System. Physical Review Letters, 2000, 85, 4831-4834.	7.8	160
14	Spectral Analysis of the Laser Doppler Perfusion Signal in Human Skin before and after Exercise. Microvascular Research, 1998, 56, 173-182.	2.5	152
15	Synchronization and modulation in the human cardiorespiratory system. Physica A: Statistical Mechanics and Its Applications, 2000, 283, 451-461.	2.6	139
16	Wavelet Phase Coherence Analysis: Application to Skin Temperature and Blood Flow. Cardiovascular Engineering (Dordrecht, Netherlands), 2004, 4, 89-93.	1.0	132
17	Inference of Time-Evolving Coupled Dynamical Systems in the Presence of Noise. Physical Review Letters, 2012, 109, 024101.	7.8	131
18	Spectral components of heart rate variability determined by wavelet analysis. Physiological Measurement, 2000, 21, 441-457.	2.1	128

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19	Extraction of instantaneous frequencies from ridges in time–frequency representations of signals. Signal Processing, 2016, 125, 290-303.	3.7	127
20	Oscillatory dynamics of vasoconstriction and vasodilation identified by time-localized phase coherence. Physics in Medicine and Biology, 2011, 56, 3583-3601.	3.0	120
21	Discerning non-autonomous dynamics. Physics Reports, 2014, 542, 297-368.	25.6	108
22	Interactions between cardiac, respiratory and EEG-δoscillations in rats during anaesthesia. Journal of Physiology, 2007, 580, 315-326.	2.9	105
23	Coupled Oscillatros: Complex But Not Complicated Cardiovascular and Brain Interactions. IEEE Engineering in Medicine and Biology Magazine, 2007, 26, 25-29.	0.8	105
24	Direction of Coupling from Phases of Interacting Oscillators: A Permutation Information Approach. Physical Review Letters, 2008, 100, 084101.	7.8	100
25	Low-frequency blood flow oscillations in congestive heart failure and after \hat{l}^21 -blockade treatment. Microvascular Research, 2008, 76, 224-232.	2.5	95
26	Evolution of cardiorespiratory interactions with age. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2013, 371, 20110622.	3.4	95
27	Nonlinear mode decomposition: A noise-robust, adaptive decomposition method. Physical Review E, 2015, 92, 032916.	2.1	94
28	The Effects of General Anesthesia on Human Skin Microcirculation Evaluated by Wavelet Transform. Anesthesia and Analgesia, 2007, 105, 1012-1019.	2.2	81
29	Inference of a Nonlinear Stochastic Model of the Cardiorespiratory Interaction. Physical Review Letters, 2005, 94, 098101.	7.8	79
30	Testing for time-localized coherence in bivariate data. Physical Review E, 2012, 85, 046205.	2.1	75
31	The discriminatory value of cardiorespiratory interactions in distinguishing awake from anaesthetised states: a randomised observational study. Anaesthesia, 2015, 70, 1356-1368.	3.8	71
32	Stationary and Traveling Wave States of the Kuramoto Model with an Arbitrary Distribution of Frequencies and Coupling Strengths. Physical Review Letters, 2013, 110, 064101.	7.8	69
33	Treatment of chronic wounds by means of electric and electromagnetic fields. Medical and Biological Engineering and Computing, 1993, 31, 213-220.	2.8	67
34	The cardiovascular system as coupled oscillators?. Physiological Measurement, 2001, 22, 535-550.	2.1	67
35	Chronotaxic Systems: A New Class of Self-Sustained Nonautonomous Oscillators. Physical Review Letters, 2013, 111, 024101.	7.8	66
36	COHERENCE BETWEEN FLUCTUATIONS IN BLOOD FLOW AND OXYGEN SATURATION. Fluctuation and Noise Letters, 2012, 11, 1240013.	1.5	65

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37	Coupling functions in networks of oscillators. New Journal of Physics, 2015, 17, 035002.	2.9	65
38	Nonlinear cardio-respiratory interactions revealed by time-phase bispectral analysis. Physics in Medicine and Biology, 2004, 49, 4407-4425.	3.0	63
39	Human Skin Microcirculation after Brachial Plexus Block Evaluated by Wavelet Transform of the Laser Doppler Flowmetry Signal. Anesthesiology, 2006, 105, 478-484.	2.5	62
40	Alterations in the coupling functions between cortical and cardio-respiratory oscillations due to anaesthesia with propofol and sevoflurane. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2016, 374, 20150186.	3.4	62
41	Therapeutic neural effects of electrical stimulation. IEEE Transactions on Rehabilitation Engineering: A Publication of the IEEE Engineering in Medicine and Biology Society, 1996, 4, 218-230.	1.4	61
42	Skin Blood Flow in the Upper and Lower Extremities of Diabetic Patients with and without Autonomic Neuropathy. Journal of Vascular Research, 2004, 41, 535-545.	1.4	60
43	Enhanced endothelium-dependent vasodilatation in human skin vasculature induced by physical conditioning. European Journal of Applied Physiology, 1998, 79, 30-36.	2.5	59
44	FES and spasticity. IEEE Transactions on Biomedical Engineering, 1989, 36, 738-745.	4.2	58
45	Investigation of skin vasoreactivity and blood flow oscillations in hypertensive patients. Journal of Hypertension, 2011, 29, 1569-1576.	0.5	56
46	Kuramoto model with time-varying parameters. Physical Review E, 2012, 86, 046212.	2.1	53
47	Detecting Chronotaxic Systems from Single-Variable Time Series with Separable Amplitude and Phase. Entropy, 2015, 17, 4413-4438.	2.2	53
48	Neuronal Synchrony during Anesthesia: A Thalamocortical Model. Biophysical Journal, 2008, 95, 2722-2727.	0.5	52
49	Coherence and Coupling Functions Reveal Microvascular Impairment in Treated Hypertension. Frontiers in Physiology, 2017, 8, 749.	2.8	52
50	Correlation Integral and Frequency Analysis of Cardiovascular Functions. Open Systems and Information Dynamics, 1997, 4, 457-478.	1.2	51
51	Dynamical Bayesian inference of time-evolving interactions: From a pair of coupled oscillators to networks of oscillators. Physical Review E, 2012, 86, 061126.	2.1	50
52	Neural Cross-Frequency Coupling Functions. Frontiers in Systems Neuroscience, 2017, 11, 33.	2.5	50
53	Glassy states and super-relaxation in populations of coupled phase oscillators. Nature Communications, 2014, 5, 4118.	12.8	49
54	Modelling couplings among the oscillators of the cardiovascular system. Physiological Measurement, 2001, 22, 551-564.	2.1	47

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55	Detecting couplings between interacting oscillators with time-varying basic frequencies: Instantaneous wavelet bispectrum and information theoretic approach. Physical Review E, 2010, 81, 036207.	2.1	47
56	Reconstructing Time-Dependent Dynamics. Proceedings of the IEEE, 2016, 104, 223-241.	21.3	43
57	Mean-field and mean-ensemble frequencies of a system of coupled oscillators. Physical Review E, 2013, 87, .	2.1	42
58	The effect of low-frequency oscillations on cardio-respiratory synchronization. European Physical Journal B, 2008, 65, 425-433.	1.5	37
59	Time-phase bispectral analysis. Physical Review E, 2003, 68, 016201.	2.1	36
60	Fault diagnosis of a vacuum cleaner motor by means of sound analysis. Journal of Sound and Vibration, 2004, 276, 781-806.	3.9	36
61	A tutorial on time-evolving dynamical Bayesian inference. European Physical Journal: Special Topics, 2014, 223, 2685-2703.	2.6	35
62	Impaired cerebrovascular reactivity after acute traumatic brain injury can be detected by wavelet phase coherence analysis of the intracranial and arterial blood pressure signals. Journal of Clinical Monitoring and Computing, 2013, 27, 375-383.	1.6	34
63	Nonlinear Relationship between Level of Blood Flow and Skin Temperature for Different Dynamics of Temperature Change. Biophysical Journal, 2008, 94, L78-L80.	0.5	33
64	Diverse routes to oscillation death in a coupled-oscillator system. Europhysics Letters, 2009, 85, 38008.	2.0	33
65	Low frequency pulsed current and pressure ulcer healing. IEEE Transactions on Rehabilitation Engineering: A Publication of the IEEE Engineering in Medicine and Biology Society, 1994, 2, 225-233.	1.4	32
66	Change in muscle force following electrical stimulation. Dependence on stimulation waveform and frequency. Journal of Rehabilitation Medicine, 1985, 17, 141-6.	1.1	32
67	Macro- and microcirculation in the lower extremitiesâ€"Possible relationship. Diabetes Research and Clinical Practice, 2006, 73, 166-173.	2.8	30
68	Detecting the harmonics of oscillations with time-variable frequencies. Physical Review E, 2011, 83, 016206.	2.1	30
69	Dynamic markers based on blood perfusion fluctuations for selecting skin melanocytic lesions for biopsy. Scientific Reports, 2015, 5, 12825.	3.3	30
70	Spatial Synchronization in the Human Cardiovascular System. Progress of Theoretical Physics Supplement, 2000, 139, 270-282.	0.1	29
71	Incipient cardiovascular autonomic imbalance revealed by wavelet analysis of heart rate variability in Type 2 diabetic patients. Diabetic Medicine, 2007, 24, 18-26.	2.3	28
72	Human sympathetic outflows to skin and muscle target organs fluctuate concordantly over a wide range of timeâ€varying frequencies. Journal of Physiology, 2012, 590, 363-375.	2.9	28

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73	On the overestimation of the correlation dimension. Physics Letters, Section A: General, Atomic and Solid State Physics, 1997, 235, 24-30.	2.1	26
74	The contribution of lumbar sympathetic neurones activity to rat's skin blood flow oscillations. Pflugers Archiv European Journal of Physiology, 2000, 439, r158-r160.	2.8	26
75	Enhanced endothelial activity reflected in cutaneous blood flow oscillations of athletes. European Journal of Applied Physiology, 2003, 90, 16-22.	2.5	26
76	Time-frequency methods and voluntary ramped-frequency breathing: a powerful combination for exploration of human neurophysiological mechanisms. Journal of Applied Physiology, 2013, 115, 1806-1821.	2.5	26
77	Coupling Functions Enable Secure Communications. Physical Review X, 2014, 4, .	8.9	25
78	Skin Blood Flow and Its Oscillatory Components in Patients with Acute Myocardial Infarction. Journal of Vascular Research, 2008, 45, 164-172.	1.4	24
79	Noise and determinism in cardiovascular dynamics. Physica A: Statistical Mechanics and Its Applications, 2002, 314, 69-76.	2.6	23
80	Wavelet bispectral analysis for the study of interactions among oscillators whose basic frequencies are significantly time variable. Physical Review E, 2007, 76, 046221.	2.1	22
81	Competition between noise and coupling in the induction of synchronisation. Europhysics Letters, 2009, 88, 30005.	2.0	22
82	Asymmetry-induced effects in coupled phase-oscillator ensembles: Routes to synchronization. Physical Review E, 2009, 79, 046210.	2.1	22
83	Biochemical, morphological, and functional changes during peripheral nerve regeneration. Molecular and Chemical Neuropathology, 1991, 15, 143-157.	1.0	21
84	Synchronization transitions caused by time-varying coupling functions. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2019, 377, 20190275.	3.4	21
85	Nonlinear Dynamics of the Blood Flow Studied by Lyapunov Exponents. Bulletin of Mathematical Biology, 1998, 60, 417-433.	1.9	20
86	Physics of brain dynamics: Fokker–Planck analysis reveals changes in EEG δ–θ interactions in anæsthesia. New Journal of Physics, 2009, 11, 103051.	2.9	20
87	Discussion of "Time-frequency Techniques in Biomedical Signal Analysis: A Tutorial Review of Similarities and Differences― Methods of Information in Medicine, 2013, 52, 297-307.	1.2	20
88	Dynamical inference: Where phase synchronization and generalized synchronization meet. Physical Review E, 2014, 89, 062909.	2.1	20
89	Modelling chronotaxicity of cellular energy metabolism to facilitate the identification of altered metabolic states. Scientific Reports, 2016, 6, 29584.	3.3	20
90	Continuous wavelet transform of laser-Doppler signals from facial microcirculation reveals vasomotion asymmetry. Microvascular Research, 2007, 74, 45-50.	2.5	19

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91	Routes to synchrony between asymmetrically interacting oscillator ensembles. Physical Review E, 2008, 78, 025201.	2.1	19
92	Reconstructing cardiovascular dynamics. Control Engineering Practice, 1999, 7, 161-172.	5.5	18
93	Nonlinear statistical modeling and model discovery for cardiorespiratory data. Physical Review E, 2005, 72, 021905.	2.1	18
94	Left-right asymmetry of the facial microvascular control. Clinical Autonomic Research, 2006, 16, 58-60.	2.5	18
95	Inverse approach to chronotaxic systems for single-variable time series. Physical Review E, 2014, 89, 032904.	2.1	18
96	Human subarachnoid space width oscillations in the resting state. Scientific Reports, 2018, 8, 3057.	3.3	18
97	Reproducibility of LDF blood flow measurements: Dynamical characterization versus averaging. Microvascular Research, 2011, 82, 274-276.	2.5	17
98	Coupling functions: dynamical interaction mechanisms in the physical, biological and social sciences. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2019, 377, 20190039.	3.4	17
99	Some properties of spastic ankle joint muscles in hemiplegia. Medical and Biological Engineering and Computing, 1986, 24, 19-26.	2.8	16
100	Karhunen–LoÔve decomposition of peripheral blood flow signal. Physica A: Statistical Mechanics and Its Applications, 2000, 280, 587-601.	2.6	16
101	Effects of stimulation parameters on modification of spinal spasticity. Medical and Biological Engineering and Computing, 1987, 25, 439-442.	2.8	15
102	Phase coupling in the cardiorespiratory interaction. IET Systems Biology, 2008, 2, 48-54.	1.5	15
103	Stabilization of dynamics of oscillatory systems by nonautonomous perturbation. Physical Review E, 2018, 97, 042209.	2.1	15
104	Nonautonomous driving induces stability in network of identical oscillators. Physical Review E, 2019, 99, 012309.	2.1	15
105	Wavelet analysis of blood flow dynamics: effect on the individual oscillatory components of iontophoresis with pharmacologically neutral electrolytes. Physics in Medicine and Biology, 2004, 49, N111-N117.	3.0	14
106	Importance of wavelet analysis in laser Doppler flowmetry time series. Annual International Conference of the IEEE Engineering in Medicine and Biology Society, 2007, 2007, 4064-7.	0.5	14
107	Pulse transit times to the capillary bed evaluated by laser Doppler flowmetry. Physiological Measurement, 2009, 30, 245-260.	2.1	14
108	Basal sympathetic activity to the microcirculation in tetraplegic man revealed by wavelet transform of laser Doppler flowmetry. Microvascular Research, 2011, 81, 313-318.	2.5	14

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109	Characterizing an ensemble of interacting oscillators: The mean-field variability index. Physical Review E, 2013, 87, 012905.	2.1	14
110	Chronotaxic systems with separable amplitude and phase dynamics. Physical Review E, 2014, 89, 012922.	2.1	14
111	Fault diagnosis of vacuum cleaner motors. Control Engineering Practice, 2005, 13, 177-187.	5.5	13
112	On the suitability of laser-Doppler flowmetry for capturing microvascular blood flow dynamics from darkly pigmented skin. Physiological Measurement, 2019, 40, 074005.	2.1	12
113	Coupled oscillators: Complex but not complicated cardiovascular and brain interactions., 2006, 2006, 437-40.		11
114	Raceâ€specific differences in the phase coherence between blood flow and oxygenation: A simultaneous NIRS, white light spectroscopy and LDF study. Journal of Biophotonics, 2020, 13, e201960131.	2.3	11
115	High-order synchronization, transitions, and competition among Arnold tongues in a rotator under harmonic forcing. Physical Review E, 2008, 77, 056203.	2.1	10
116	Dynamics of blood oxygenation gives better insight into tissue hypoxia than averaged values. American Journal of Physiology - Heart and Circulatory Physiology, 2009, 296, H1224-H1226.	3.2	10
117	Generalized chronotaxic systems: Time-dependent oscillatory dynamics stable under continuous perturbation. Physical Review E, 2014, 90, 032921.	2.1	10
118	Ageing of the couplings between cardiac, respiratory and myogenic activity in humans., 2015, 2015, 7366-9.		10
119	Relationship between cardiorespiratory phase coherence during hypoxia and genetic polymorphism in humans. Journal of Physiology, 2020, 598, 2001-2019.	2.9	10
120	Multiscale Time-resolved Analysis Reveals Remaining Behavioral Rhythms in Mice Without Canonical Circadian Clocks. Journal of Biological Rhythms, 2022, 37, 310-328.	2.6	10
121	Characteristic frequencies of the human blood distribution system. AIP Conference Proceedings, 2000, , .	0.4	9
122	Application of an Instrumented Tracer in an Abrasion Mill for Rock Abrasion Studies. Strojniski Vestnik/Journal of Mechanical Engineering, 2012, 58, 263-270.	1.1	8
123	Defining the wavelet bispectrum. Applied and Computational Harmonic Analysis, 2021, 51, 171-224.	2.2	8
124	Modeling Cell Energy Metabolism as Weighted Networks of Non-autonomous Oscillators. Frontiers in Physiology, 2020, 11, 613183.	2.8	8
125	Recent advances in physiological oscillations. Physiological Measurement, 2017, 38, E1-E7.	2.1	7
126	Experimental Realization of the Coupling Function Secure Communications Protocol and Analysis of Its Noise Robustness. IEEE Transactions on Information Forensics and Security, 2018, 13, 2591-2601.	6.9	7

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127	Stabilization of cyclic processes by slowly varying forcing. Chaos, 2021, 31, 123129.	2.5	7
128	Beyond the Baroreflex: A New Measure of Autonomic Regulation Based on the Time-Frequency Assessment of Variability, Phase Coherence and Couplings. Frontiers in Network Physiology, 0, 2, .	1.8	7
129	Human skeletal muscle: Phasic type of electrical stimulation increases its contractile speed. Annals of Biomedical Engineering, 1990, 18, 479-490.	2.5	6
130	Role of Transdermal Potential Difference During Iontophoretic Drug Delivery. IEEE Transactions on Biomedical Engineering, 2004, 51, 1683-1685.	4.2	6
131	Causality Between the Amplitude and Frequency of Cardiac Oscillations. Cardiovascular Engineering (Dordrecht, Netherlands), 2004, 4, 127-132.	1.0	6
132	Intrinsic dynamics of heart regulatory systems on short timescales: from experiment to modelling. Journal of Statistical Mechanics: Theory and Experiment, 2009, 2009, P01016.	2.3	5
133	Discussion of "time-frequency techniques in biomedical signal analysis: a tutorial review of similarities and differences". Methods of Information in Medicine, 2013, 52, 297-307.	1.2	5
134	Continuous low amplitude direct current stimulation of the crushed peripheral nerve accelerates the early recovery of choline acetyltransferase but not of acetylcholinesterase activity in fast and slow muscles. Restorative Neurology and Neuroscience, 1994, 7, 89-94.	0.7	4
135	Local and Global Lyapunov Exponents of Blood Flow. Open Systems and Information Dynamics, 1997, 4, 435-456.	1.2	4
136	Linear and nonlinear analysis of blood flow in healthy subjects and in subjects with Raynaud's phenomenon. Technology and Health Care, 1999, 7, 225-241.	1.2	4
137	Homogeneous delays in the Kuramoto model with time-variable parameters. Physical Review E, 2014, 90, 052903.	2.1	4
138	Chronic electrical stimulation for the modification of spasticity in hemiplegic patients. Scandinavian Journal of Rehabilitation Medicine Supplement, 1988, 17, 115-21.	0.0	4
139	Rigidity in parkinsonism: characteristics and influences of passive exercise and electrical nerve stimulation. Functional Neurology, 1988, 3, 55-68.	1.3	4
140	Time-delay feedback control of ferroresonant chaotic oscillations. , 0, , .		3
141	Quantitative assessment of oscillatory components in blood circulation: classification of the effect of aging, diabetes, and acute myocardial infarction., 2005, 5692, 163.		3
142	INFERENCE OF SYSTEMS WITH DELAY AND APPLICATIONS TO CARDIOVASCULAR DYNAMICS. Stochastics and Dynamics, 2005, 05, 321-331.	1.2	3
143	Time series analysis of turbulent and non-autonomous systems. , 2012, , .		3
144	Comment on "Inference with minimal Gibbs free energy in information field theory― Physical Review E, 2012, 85, 033101; discussion 033102.	2.1	3

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145	Synchronisation and Non-autonomicity. Understanding Complex Systems, 2021, , 85-110.	0.6	3
146	Coupled Nonautonomous Oscillators. Lecture Notes in Mathematics, 2013, , 163-197.	0.2	3
147	Time-Varying Cardiovascular Oscillations. Solid Mechanics and Its Applications, 2003, , 455-464.	0.2	3
148	Electrical stimulation for control of paralysis and therapy of abnormal movements. Scandinavian Journal of Rehabilitation Medicine Supplement, 1988, 17, 91-7.	0.0	3
149	The contribution of lumbar sympathetic neurones activity to rat's skin blood flow oscillations. Pflugers Archiv European Journal of Physiology, 2000, 439, R158-60.	2.8	3
150	Revealing oscillators calculation of the dimension of attractors. Open Systems and Information Dynamics, 1995, 3, 149-178.	1.2	2
151	INTERACTIONS AND SYNCHRONIZATION IN THE CARDIOVASCULAR SYSTEM. Fluctuation and Noise Letters, 2003, 03, L167-L176.	1.5	2
152	Lyapunov Exponents of Laser Doppler Flowmetry Signals in Healthy and Type 1 Diabetic Subjects. Annals of Biomedical Engineering, 2005, 33, 1574-1581.	2.5	2
153	The cardio-respiratory couplings observed in the LDF signal using wavelet bispectrum. Annual International Conference of the IEEE Engineering in Medicine and Biology Society, 2007, 2007, 4072-5.	0.5	2
154	FLUCTUATIONS AND INTERACTIONS BETWEEN BRAIN WAVES DURING DEEP AND SHALLOW ANESTHESIA. Fluctuation and Noise Letters, 2012, 11, 1240018.	1.5	2
155	THE KURAMOTO MODEL SUBJECT TO A FLUCTUATING ENVIRONMENT: APPLICATION TO BRAINWAVE DYNAMICS. Fluctuation and Noise Letters, 2012, 11, 1240011.	1.5	2
156	Cardiorespiratory coupling functions, synchronization and ageing., 2014,,.		2
157	Maximum amplitude of limit cycles in Liénard systems. Physical Review E, 2015, 91, 012927.	2.1	2
158	Non-asymptotic-time Dynamics. Understanding Complex Systems, 2021, , 111-129.	0.6	2
159	Lyapunov Exponents of Simulated and Measured Quasi-Periodic Flows. Applied and Numerical Harmonic Analysis, 1998, , 479-488.	0.3	2
160	Muscle force recovery after continuous direct current stimulation of a crushed nerve. Restorative Neurology and Neuroscience, 1992, 4, 331-338.	0.7	1
161	Cardiovascular oscillations: in search of a nonlinear parametric model. , 2003, , .		1
162	Noise and synchronization on micro and macroscopic scales. , 2004, 5467, 273.		1

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163	Interactions between cardiac, respiratory, and brain activity in humans., 2005,,.		1
164	Fragmentation of erythrocyte aggregates by low intensity laser heating. Journal of Optics, 2005, 7, S308-S317.	1.5	1
165	Fluctuations in a coupled-oscillator model of the cardiovascular system. , 2007, , .		1
166	Introduction to Chronotaxic Systems – Systems Far from Thermodynamics Equilibrium that Adjust Their Clocks. Understanding Complex Systems, 2016, , 227-246.	0.6	1
167	The contribution of lumbar sympathetic neurones activity to rat's skin blood flow oscillations. Pflugers Archiv European Journal of Physiology, 2000, 439, R158-R160.	2.8	1
168	COHERENCE BETWEEN FLUCTUATIONS IN BLOOD FLOW AND OXYGEN SATURATION. , 2022, , 345-356.		1
169	Linear and nonlinear analysis of blood flow in healthy subjects and in subjects with Raynaud's phenomenon. Technology and Health Care, 1999, 7, 225-41.	1.2	1
170	Physics of cellular energy metabolism. Contemporary Physics, 2021, 62, 125-143.	1.8	1
171	Self-organization Of Pathological Systems Induced By Electric Currents. , 0, , .		0
172	Lyapunov exponents of blood flow. , 0, , .		0
173	Cardiovascular Dynamics — Multiple Time Scales, Oscillations and Noise. AIP Conference Proceedings, 2003, , .	0.4	0
174	Stochastic dynamics of the cardiovascular system. , 2004, , .		0
175	Nonlinear dynamics of congestive heart failure (Invited Paper). , 2005, 5841, 133.		0
176	Brachial plexus blockade impairs sympathetic activity and endothelial function in human skin microcirculation, evaluated by wavelet transform. European Journal of Anaesthesiology, 2005, 22, 99.	1.7	0
177	"1/f Spectra― Noise, Chaotic Dynamics — Or Phase Coupled Oscillators?. AIP Conference Proceedings, 2005, , .	0.4	0
178	Stochastic Dynamics of An $\tilde{A} $ sthesia. AIP Conference Proceedings, 2005, , .	0.4	0
179	Modeling high-order synchronization epochs and transitions in the cardiovascular system. , 2007, 6802, 179.		0
180	The cardiorespiratory interaction: a nonlinear stochastic model and its synchronization properties. , 2007, , .		0

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181	Commentary on Viewpoint: The human cutaneous circulation as a model of generalized microvascular function. Journal of Applied Physiology, 2008, 105, 387-387.	2.5	0
182	â€~Soap, cells and statistics – random patterns in two dimensions' (1984) by D. Weaire and N. Rivier. Contemporary Physics, 2009, 50, 197-197.	1.8	0
183	Extension of the Kuramoto model to encompass time variability in neuronal synchronization and brain dynamics. BMC Neuroscience, $2011,12,.$	1.9	0
184	Modelling the anesthetized brain with ensembles of neuronal and astrocytic oscillators. , 2013, , .		0
185	Introducing time-varying parameters in the Kuramoto model for brain dynamics. , 2013, , .		0
186	Action of the sympathetic and parasympathetic nervous system on cardiovascular dynamics revealed by blocking drugs. , 2014, , .		0
187	The effects of time-varying breathing on human neurophysiological and cardiovascular mechanisms. , 2014, , .		0
188	Noise robustness of communications provided by coupling-function-encryption and dynamical Bayesian inference. , 2017, , .		0
189	Cardiorespiratory interactions during three different temperatures – a case report. , 2020, , .		0
190	Modelling Oscillating Living Systems: Cell Energy Metabolism as Weighted Networks of Nonautonomous Oscillators. MATRIX Book Series, 2021, , 255-264.	0.2	0
191	Phase Coherence Between Cardiovascular Oscillations in Malaria: The Basis for a Possible Diagnostic Test. Understanding Complex Systems, 2021, , 401-419.	0.6	0
192	Understanding ageing: biological and social perspectives. , 2014, , 25-76.		0
193	Coupled oscillators: Complex but not complicated cardiovascular and brain interactions. Annual International Conference of the IEEE Engineering in Medicine and Biology Society, 2006, , .	0.5	O