Riccardo Barbieri

List of Publications by Year
in descending order

193 papers	**5,443** citations	94381 **37** h-index	106281 **65** g-index
201 all docs	**201** docs citations	**201** times ranked	**4530** citing authors

#	Article	IF	Citations
1	The Time-Rescaling Theorem and Its Application to Neural Spike Train Data Analysis. Neural Computation, 2002, 14, 325-346.	1.3	446
2	Dynamic Analysis of Neural Encoding by Point Process Adaptive Filtering. Neural Computation, 2004, 16, 971-998.	1.3	321
3	Brain correlates of autonomic modulation: Combining heart rate variability with fMRI. NeuroImage, 2008, 42, 169-177.	2.1	304
4	A point-process model of human heartbeat intervals: new definitions of heart rate and heart rate variability. American Journal of Physiology - Heart and Circulatory Physiology, 2005, 288, H424-H435.	1.5	241
5	Dynamic Analyses of Information Encoding in Neural Ensembles. Neural Computation, 2004, 16, 277-307.	1.3	179
6	Construction and analysis of non-Poisson stimulus-response models of neural spiking activity. Journal of Neuroscience Methods, 2001, 105, 25-37.	1.3	174
7	Revealing Real-Time Emotional Responses: a Personalized Assessment based on Heartbeat Dynamics. Scientific Reports, 2014, 4, 4998.	1.6	169
8	The Somatosensory Link in Fibromyalgia: Functional Connectivity of the Primary Somatosensory Cortex Is Altered by Sustained Pain and Is Associated With Clinical/Autonomic Dysfunction. Arthritis and Rheumatology, 2015, 67, 1395-1405.	2.9	124
9	The influence of respiration on brainstem and cardiovagal response to auricular vagus nerve stimulation: A multimodal ultrahigh-field (7T) fMRI study. Brain Stimulation, 2019, 12, 911-921.	0.7	104
10	Analysis of Heartbeat Dynamics by Point Process Adaptive Filtering. IEEE Transactions on Biomedical Engineering, 2006, 53, 4-12.	2.5	100
11	Heart rate control and mechanical cardiopulmonary coupling to assess central volume: a systems analysis. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2002, 283, R1210-R1220.	0.9	99
12	Modulation of brainstem activity and connectivity by respiratory-gated auricular vagal afferent nerve stimulation in migraine patients. Pain, 2017, 158, 1461-1472.	2.0	99
13	A Real-Time Automated Point-Process Method for the Detection and Correction of Erroneous and Ectopic Heartbeats. IEEE Transactions on Biomedical Engineering, 2012, 59, 2828-2837.	2.5	95
14	The central autonomic network at rest: Uncovering functional MRI correlates of time-varying autonomic outflow. NeuroImage, 2019, 197, 383-390.	2.1	92
15	Measures of sympathetic and parasympathetic autonomic outflow from heartbeat dynamics. Journal of Applied Physiology, 2018, 125, 19-39.	1.2	75
16	Construction of Point Process Adaptive Filter Algorithms for Neural Systems Using Sequential Monte Carlo Methods. IEEE Transactions on Biomedical Engineering, 2007, 54, 419-428.	2.5	74
17	Point-Process Nonlinear Models With Laguerre and Volterra Expansions: Instantaneous Assessment of Heartbeat Dynamics. IEEE Transactions on Signal Processing, 2013, 61, 2914-2926.	3.2	71
18	Brain correlates of phasic autonomic response to acupuncture stimulation: An event-related fMRI study. Human Brain Mapping, 2013, 34, 2592-2606.	1.9	67

#	Article	IF	Citations
19	Assessing Autonomic Function from Electrodermal Activity and Heart Rate Variability During Cold-Pressor Test and Emotional Challenge. Scientific Reports, 2020, 10, 5406.	1.6	67
20	Stimulus frequency modulates brainstem response to respiratory-gated transcutaneous auricular vagus nerve stimulation. Brain Stimulation, 2020, 13, 970-978.	0.7	61
21	Changes in cardiovascular function during the sleep onset period in young adults. Journal of Applied Physiology, 2005, 98, 468-476.	1.2	58
22	Characterization of Depressive States in Bipolar Patients Using Wearable Textile Technology and Instantaneous Heart Rate Variability Assessment. IEEE Journal of Biomedical and Health Informatics, 2015, 19, 263-274.	3.9	58
23	Estimation of Instantaneous Complex Dynamics through Lyapunov Exponents: A Study on Heartbeat Dynamics. PLoS ONE, 2014, 9, e105622.	1.1	53
24	Inhomogeneous point-process entropy: An instantaneous measure of complexity in discrete systems. Physical Review E, 2014, 89, 052803.	0.8	53
25	Statistical Inference for Assessing Functional Connectivity of Neuronal Ensembles With Sparse Spiking Data. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2011, 19, 121-135.	2.7	51
26	Assessment of Autonomic Control and Respiratory Sinus Arrhythmia Using Point Process Models of Human Heart Beat Dynamics. IEEE Transactions on Biomedical Engineering, 2009, 56, 1791-1802.	2.5	50
27	Psychophysiological signals associated with affective states. , 2010, 2010, 3563-6.		49
28	An analysis of hippocampal spatio-temporal representations using a Bayesian algorithm for neural spike train decoding. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2005, 13, 131-136.	2.7	48
29	Characterizing cardiac autonomic dynamics of fear learning in humans. Psychophysiology, 2022, 59, .	1.2	47
30	Dynamic Assessment of Baroreflex Control of Heart Rate During Induction of Propofol Anesthesia Using a Point Process Method. Annals of Biomedical Engineering, 2011, 39, 260-276.	1.3	46
31	Characterizing Nonlinear Heartbeat Dynamics Within a Point Process Framework. IEEE Transactions on Biomedical Engineering, 2010, 57, 1335-1347.	2.5	45
32	Complexity Variability Assessment of Nonlinear Time-Varying Cardiovascular Control. Scientific Reports, 2017, 7, 42779.	1.6	44
33	Multivariate time-variant identification of cardiovascular variability signals: a beat-to-beat spectral parameter estimation in vasovagal syncope. IEEE Transactions on Biomedical Engineering, 1997, 44, 978-989.	2.5	42
34	EEG-based index for engagement level monitoring during sustained attention. , 2015, 2015, 1512-5.		42
35	Globally conditioned Granger causality in brain–brain and brain–heart interactions: a combined heart rate variability/ultra-high-field (7 T) functional magnetic resonance imaging study. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2016, 374, 20150185.	1.6	42
36	EEG Analysis During Active and Assisted Repetitive Movements: Evidence for Differences in Neural Engagement. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2017, 25, 761-771.	2.7	42

#	Article	IF	Citations
37	Uncovering complex central autonomic networks at rest: a functional magnetic resonance imaging study on complex cardiovascular oscillations. Journal of the Royal Society Interface, 2020, 17, 20190878.	1.5	42
38	Predicting Bradycardia in Preterm Infants Using Point Process Analysis of Heart Rate. IEEE Transactions on Biomedical Engineering, 2017, 64, 2300-2308.	2.5	41
39	Enhanced Vagal Withdrawal During Mild Orthostatic Stress in Adolescents with Chronic Fatigue. Annals of Noninvasive Electrocardiology, 2008, 13, 67-73.	0.5	40
40	Blood pressure variability and closed-loop baroreflex assessment in adolescent chronic fatigue syndrome during supine rest and orthostatic stress. European Journal of Applied Physiology, 2011, 111, 497-507.	1.2	40
41	Brain Circuitry Supporting Multi-Organ Autonomic Outflow in Response to Nausea. Cerebral Cortex, 2016, 26, bhu172.	1.6	40
42	Motion sickness increases functional connectivity between visual motion and nausea-associated brain regions. Autonomic Neuroscience: Basic and Clinical, 2017, 202, 108-113.	1.4	40
43	Discrete- and Continuous-Time Probabilistic Models and Algorithms for Inferring Neuronal UP and DOWN States. Neural Computation, 2009, 21, 1797-1862.	1.3	39
44	Neuroimaging brainstem circuitry supporting cardiovagal response to pain: a combined heart rate variability/ultrahigh-field (7 T) functional magnetic resonance imaging study. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2016, 374, 20150189.	1.6	39
45	Characterization of affective states by pupillary dynamics and autonomic correlates. Frontiers in Neuroengineering, 2013, 6, 9.	4.8	37
46	Point-process Nonlinear Autonomic Assessment of Depressive States in Bipolar Patients. Methods of Information in Medicine, 2014, 53, 296-302.	0.7	37
47	Likelihood Methods for Point Processes with Refractoriness. Neural Computation, 2014, 26, 237-263.	1.3	34
48	Characterization of fear conditioning and fear extinction by analysis of electrodermal activity. , 2015, 2015, 7814-8.		34
49	Uncovering brain–heart information through advanced signal and image processing. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2016, 374, 20160020.	1.6	34
50	A nonlinear heartbeat dynamics model approach for personalized emotion recognition. , 2013, 2013, 2579-82.		32
51	Multivariate Granger causality unveils directed parietal to prefrontal cortex connectivity during task-free MRI. Scientific Reports, 2018, 8, 5571.	1.6	32
52	Lateralization of directional brain-heart information transfer during visual emotional elicitation. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2019, 317, R25-R38.	0.9	32
53	Mortality Prediction in Severe Congestive Heart Failure Patients With Multifractal Point-Process Modeling of Heartbeat Dynamics. IEEE Transactions on Biomedical Engineering, 2018, 65, 2345-2354.	2.5	30
54	Continuous Quantification of Baroreflex and Respiratory Control of Heart Rate by Use of Bivariate Autoregressive Techniques. Annals of Noninvasive Electrocardiology, 1996, 1, 264-277.	0.5	29

#	Article	IF	Citations
55	Fig. A. Aviation, Space, and Environmental Medicine, 2011, 82, 424-33.	0.6	29
56	Patient-Specific Classification of ICU Sedation Levels From Heart Rate Variability*. Critical Care Medicine, 2017, 45, e683-e690.	0.4	28
57	Functional assessment of bidirectional cortical and peripheral neural control on heartbeat dynamics: A brain-heart study on thermal stress. NeuroImage, 2022, 251, 119023.	2.1	28
58	Assessment of spontaneous cardiovascular oscillations in Parkinson's disease. Biomedical Signal Processing and Control, 2016, 26, 80-89.	3.5	26
59	Instantaneous nonlinear assessment of complex cardiovascular dynamics by laguerre-volterra point process models. , 2013, 2013, 6131-4.		25
60	Measuring instantaneous frequency of local field potential oscillations using the Kalman smoother. Journal of Neuroscience Methods, 2009, 184, 365-374.	1.3	23
61	Diagnostic methods for statistical models of place cell spiking activity. Neurocomputing, 2001, 38-40, 1087-1093.	3.5	22
62	Characterizing the Frequency Structure of Fast Oscillations in the Rodent Hippocampus. Frontiers in Integrative Neuroscience, 2009, 3, 11.	1.0	22
63	Central modulation of parasympathetic outflow is impaired in de novo Parkinson's disease patients. PLoS ONE, 2019, 14, e0210324.	1.1	22
64	Instantaneous estimation of high-order nonlinear heartbeat dynamics by Lyapunov exponents. , 2012, 2012, 13-6.		21
65	Nonlinear digital signal processing in mental health: characterization of major depression using instantaneous entropy measures of heartbeat dynamics. Frontiers in Physiology, 2015, 6, 74.	1.3	21
66	A multivariate time-frequency method to characterize the influence of respiration over heart period and arterial pressure. Eurasip Journal on Advances in Signal Processing, 2012, 2012, .	1.0	20
67	Functional brain–heart interplay extends to the multifractal domain. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2021, 379, 20200260.	1.6	19
68	Application of dynamic point process models to cardiovascular control. BioSystems, 2008, 93, 120-125.	0.9	18
69	EEG indices correlate with sustained attention performance in patients affected by diffuse axonal injury. Medical and Biological Engineering and Computing, 2018, 56, 991-1001.	1.6	18
70	Artificial intelligence-based prediction of transfusion in the intensive care unit in patients with gastrointestinal bleeding. BMJ Health and Care Informatics, 2021, 28, e100245.	1.4	18
71	A polysomnography study examining the association between sleep and postoperative delirium in older hospitalized cardiac surgical patients. Journal of Sleep Research, 2021, 30, e13322.	1.7	18
72	Point process temporal structure characterizes electrodermal activity. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 26422-26428.	3.3	18

#	Article	IF	Citations
73	A multivariate time-variant AR method for the analysis of heart rate and arterial blood pressure. Medical Engineering and Physics, 1997, 19, 109-124.	0.8	16
74	Point process time–frequency analysis of dynamic respiratory patterns during meditation practice. Medical and Biological Engineering and Computing, 2012, 50, 261-275.	1.6	16
75	Instantaneous Transfer Entropy for the Study of Cardiovascular and Cardio-Respiratory Nonstationary Dynamics. IEEE Transactions on Biomedical Engineering, 2017, 65, 1-1.	2.5	16
76	Respiratory-gated Auricular Vagal Afferent Nerve Stimulation (RAVANS) effects on autonomic outflow in hypertension. , 2017, 2017, 3130-3133.		15
77	Time-Resolved Brain-to-Heart Probabilistic Information Transfer Estimation Using Inhomogeneous Point-Process Models. IEEE Transactions on Biomedical Engineering, 2021, 68, 3366-3374.	2.5	15
78	Integral pulse frequency modulation model driven by sympathovagal dynamics: Synthetic vs. real heart rate variability. Biomedical Signal Processing and Control, 2021, 68, 102736.	3.5	15
79	State Space Modeling of Neural Spike Train and Behavioral Data. , 2010, , 175-218.		15
80	Using Laguerre expansion within point-process models of heartbeat dynamics: A comparative study. , 2012, 2012, 29-32.		14
81	A Point Process Characterization Of Electrodermal Activity. , 2018, 2018, 37-40.		14
82	Instantaneous monitoring of heart beat dynamics during anesthesia and sedation. Journal of Computational Surgery, 2014, 1, .	0.6	13
83	Nonlinear analysis of pupillary dynamics. Biomedizinische Technik, 2016, 61, 95-106.	0.9	13
84	A Systematic Method for Preprocessing and Analyzing Electrodermal Activity. , 2019, 2019, 6902-6905.		13
85	An Automated Speech-in-Noise Test for Remote Testing: Development and Preliminary Evaluation. American Journal of Audiology, 2020, 29, 564-576.	0.5	13
86	A novel artificial intelligence based intensive care unit monitoring system: using physiological waveforms to identify sepsis. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2021, 379, 20200252.	1.6	13
87	A study of probabilistic models for characterizing human heart beat dynamics in autonomic blockade control. Proceedings of the IEEE International Conference on Acoustics, Speech, and Signal Processing, 2008, , 481-484.	1.8	12
88	Point Process Modeling of Interbreath Interval: A New Approach for the Assessment of Instability of Breathing in Neonates. IEEE Transactions on Biomedical Engineering, 2013, 60, 2858-2866.	2.5	12
89	Closed-Loop Cardiovascular Interactions and the Baroreflex Cardiac Arm: Modulations Over the 24 h and the Effect of Hypertension. Frontiers in Physiology, 2019, 10, 477.	1.3	12
90	Assessment of cardio-respiratory interactions in preterm infants by bivariate autoregressive modeling and surrogate data analysis. Early Human Development, 2011, 87, 477-487.	0.8	11

#	Article	IF	Citations
91	Reconstruction and analysis of the pupil dilation signal: Application to a psychophysiological affective protocol. , 2013, 2013, 5-8.		11
92	A 'Multiomic' Approach of Saliva Metabolomics, Microbiota, and Serum Biomarkers to Assess the Need of Hospitalization in Coronavirus Disease 2019. , 2022, 1, 194-209.		11
93	A differential autoregressive modeling approach within a point process framework for non-stationary heartbeat intervals analysis. , 2010, 2010, 3567-70.		10
94	Relationship between cardiac vagal activity and mood congruent memory bias in major depression. Journal of Affective Disorders, 2016, 190, 19-25.	2.0	10
95	Automatic Quantitative Evaluation of Emotions in E-learning Applications. , 2006, 2006, 1359-62.		9
96	Impact of sex and depressed mood on the central regulation of cardiac autonomic function. Neuropsychopharmacology, 2020, 45, 1280-1288.	2.8	9
97	Acute Effects of Respiratory-Gated Auricular Vagal Afferent Nerve Stimulation in the Modulation of Blood Pressure in Hypertensive Patients. , 0, , .		9
98	Correction of Erroneous and Ectopic Beats Using a Point Process Adaptive Algorithm. , 2006, 2006, 3373-6.		7
99	Characterizing nonlinear heartbeat dynamics within a point process framework. , 2008, 2008, 2781-4.		7
100	Linear and nonlinear quantification of respiratory sinus arrhythmia during propofol general anesthesia. , 2009, 2009, 5336-9.		7
101	A Unified Point Process Probabilistic Framework to Assess Heartbeat Dynamics and Autonomic Cardiovascular Control. Frontiers in Physiology, 2012, 3, 4.	1.3	7
102	Estimating a dynamic state to relate neural spiking activity to behavioral signals during cognitive tasks. , 2015, 2015, 7808-13.		7
103	e-Health solutions for better care: Characterization of health apps to extract meaningful information and support users' choices. , 2017, , .		7
104	ECG-Derived Sympathetic and Parasympathetic Nervous System Dynamics: A Congestive Heart Failure Study. , 2018, , .		7
105	Development and preliminary evaluation of a novel adaptive staircase procedure for automated speech-in-noise testing. , 2019, 2019, 6991-6994.		7
106	The role of waveform monitoring in Sepsis identification within the first hour of Intensive Care Unit stay. , 2020, , .		7
107	Prediction of Septic Shock Onset in ICU by Instantaneous Monitoring of Vital Signs. , 2020, 2020, 2768-2771.		7
108	Quantitative assessment of the relationship between behavioral and autonomic dynamics during propofol-induced unconsciousness. PLoS ONE, 2021, 16, e0254053.	1.1	7

#	ARTICLE	IF	CITATIONS
109	Respiratory-gated auricular vagal afferent nerve stimulation (RAVANS) modulates brain response to stress in major depression. Journal of Psychiatric Research, 2021, 142, 188-197.	1.5	7
110	Construction and analysis of non-Gaussian spatial models of neural spiking activity. Neurocomputing, 2002, 44-46, 309-314.	3.5	6
111	Autonomic Heart Rate Control at Rest and During Unloading of the Right Ventricle in Repaired Tetralogy of Fallot in Adolescents. American Journal of Cardiology, 2008, 102, 1085-1089.	0.7	6
112	Instantaneous frequency and amplitude modulation of EEG in the hippocampus reveals state dependent temporal structure. , 2008, 2008, 1711-5.		6
113	Assessment of baroreflex control of heart rate during general anesthesia using a point process method. , 2009, 2009, 333-336.		6
114	Instantaneous monitoring of sleep fragmentation by point process heart rate variability and respiratory dynamics. , 2011, 2011, 7735-8.		6
115	Bivariate point process modeling and joint non-stationary analysis of pulse transit time and heart period. , 2012, 2012, 2831-4.		6
116	Monitoring heartbeat nonlinear dynamics during general anesthesia by using the instantaneous dominant Lyapunov exponent. , 2012, 2012, 3124-7.		6
117	Uncovering statistical features of bradycardia severity in premature infants using a point process model. , 2015, 2015, 5855-8.		6
118	Improving heart rate estimation in preterm infants with bivariate point process analysis of heart rate and respiration. , 2016, 2016, 920-923.		6
119	Detecting Loss and Regain of Consciousness during Propofol Anesthesia using Multimodal Indices of Autonomic State. , 2020, 2020, 824-827.		6
120	Modulatory Effects of Respiratory-Gated Auricular Vagal Nerve Stimulation on Cardiovagal Activity in Hypertension*. , 2020, 2020, 2581-2584.		6
121	A Model-Based Framework for Assessing the Physiologic Structure of Electrodermal Activity. IEEE Transactions on Biomedical Engineering, 2021, 68, 2833-2845.	2.5	6
122	A regularized point process generalized linear model for assessing the functional connectivity in the cat motor cortex. , 2009, 2009, 5006-9.		5
123	Point process time-frequency analysis of respiratory sinus arrhythmia under altered respiration dynamics. , 2010, 2010, 1622-5.		5
124	Causal brain-heart information transfer during visual emotional elicitation in healthy subjects: Preliminary evaluations and future perspectives. , 2017, 2017, 1559-1562.		5
125	Quantifying Functional Links between Brain and Heartbeat Dynamics in the Multifractal Domain: a Preliminary Analysis. , 2020, 2020, 561-564.		5
126	Evaluation of a Novel Speech-in-Noise Test for Hearing Screening: Classification Performance and Transducers'™ Characteristics. IEEE Journal of Biomedical and Health Informatics, 2021, 25, 4300-4307.	3.9	5

#	ARTICLE	IF	CITATIONS
127	Unsupervised Machine Learning Methods for Artifact Removal in Electrodermal Activity. , 2021, 2021, 399-402.		5
128	Combining sudomotor nerve impulse estimation with fMRI to investigate the central sympathetic response to nausea. , 2015, 2015, 4683-6.		4
129	Instantaneous transfer entropy for the study of cardio-respiratory dynamics. , 2015, 2015, 7885-8.		4
130	Instantaneous bispectral analysis of heartbeat dynamics for the assessment of major depression. , 2015, , .		4
131	Assessment of instantaneous cardiovascular dynamics from video plethysmography. , 2017, 2017, 1776-1779.		4
132	ECG-Derived Sympathetic and Parasympathetic Activity in the Healthy: an Early Lower-Body Negative Pressure Study Using Adaptive Kalman Prediction. , 2018, 2018, 5628-5631.		4
133	Analyzing Transitions in Anesthesia by Multimodal Characterization of Autonomic State. , 2020, , .		4
134	Bayesian supervised machine learning classification of neural networks with pathological perturbations. Biomedical Physics and Engineering Express, 2021, 7, 065021.	0.6	4
135	Investigating Phasic Activity of Time-Varying High-Order Spectra: A Heartbeat Dynamics Study During Cold-Pressure Test. , 0, , .		4
136	Maximal-radius multiscale entropy of cardiovascular variability: A promising biomarker of pathological mood states in bipolar disorders. , 2014, 2014, 6663-6.		3
137	Reconstructing multivariate causal structure between functional brain networks through a Laguerre-Volterra based Granger causality approach. , 2016, 2016, 5477-5480.		3
138	Instantaneous Assessment of Hedonic Olfactory Perception Using Heartbeat Nonlinear Dynamics: a Preliminary Study. , 2017, , .		3
139	Analysis of Instantaneous Linear, Nonlinear and Complex Cardiovascular Dynamics from Videophotoplethysmography. Methods of Information in Medicine, 2018, 57, 135-140.	0.7	3
140	Automatic Detection of General Anesthetic-States using ECG-Derived Autonomic Nervous System Features. , 2019, 2019, 2019-2022.		3
141	Improved tracking of sevoflurane anesthetic states with drug-specific machine learning models. Journal of Neural Engineering, 2020, 17, 046020.	1.8	3
142	Development and Evaluation of a Novel Method for Adult Hearing Screening: Towards a Dedicated Smartphone App. Lecture Notes of the Institute for Computer Sciences, Social-Informatics and Telecommunications Engineering, 2021, , 3-19.	0.2	3
143	Analysis of physiological and non-contact signals to evaluate the emotional component in consumer preferences. PLoS ONE, 2022, 17, e0267429.	1.1	3
144	A time-dependent analysis of spatial information encoding in the rat hippocampus. Neurocomputing, 2000, 32-33, 629-635.	3.5	2

#	Article	IF	Citations
145	Instantaneous assessment of autonomic cardiovascular control during general anesthesia. , 2011, 2011, 8444-7.		2
146	Point-process analysis of neural spiking activity of muscle spindles recorded from thin-film longitudinal intrafascicular electrodes. , 2011, 2011, 2311-4.		2
147	A point process approach for analyzing gait variability dynamics. , 2011, 2011, 1648-51.		2
148	Measuring Complexity of Heart Rate Variability in NaÃ¯ve Yoga Practitioners with Insomnia and PTSD. Journal of Alternative and Complementary Medicine, 2014, 20, A132-A132.	2.1	2
149	Assessing instantaneous QT variability dynamics within a point-process nonlinear framework. , 2014, , .		2
150	Validation of instantaneous bispectral high-frequency power of heartbeat dynamics as a marker of cardiac vagal activity. , 2017, 2017, 3765-3768.		2
151	A Point Process Framework for the Characterization of Sleep States in Early Infancy. , 2019, 2019, 3645-3648.		2
152	An Inhomogeneous Point-process Model for the Assessment of the Brain-to-Heart Functional Interplay: a Pilot Study. , 2020, 2020, 557-560.		2
153	Effects of Respiratory-Gated Auricular Vagal Nerve Stimulation (RAVANS) on Nonlinear Heartbeat Dynamics of Hypertensive Patients. , 0, , .		2
154	A Novel Approach for Segment-Length Selection Based on Stationarity to Perform Effective Connectivity Analysis Applied to Resting-State EEG Signals. Sensors, 2022, 22, 4747.	2.1	2
155	A unified point process framework for assessing heartbeat dynamics and cardiovascular control. , 2009, , .		1
156	A point process model of respiratory dynamics in early physiological development. , 2011, 2011, 3804-7.		1
157	Editorial: engineering approaches to study cardiovascular physiology: modeling, estimation, and signal processing. Frontiers in Physiology, 2012, 3, 425.	1.3	1
158	Assessment of gait nonlinear dynamics by inhomogeneous point-process models. , 2014, 2014, 6973-6.		1
159	Lower instantaneous entropy of heartbeat dynamics during seizures in untreated temporal lobe epilepsy. , 2015, , .		1
160	Disentanglement of sympathetic and parasympathetic activity by instantaneous analysis of human heartbeat dynamics. , 2016, 2016, 932-935.		1
161	Introduction to Complex Cardiovascular Physiology. , 2017, , 3-42.		1
162	An Algorithm for Risk Stratification of Preterm Infants. , 2017, , .		1

#	Article	IF	Citations
163	A Stimulus-Response Processing Framework for Pupil Dynamics Assessment during Iso-Luminant Stimuli. , 2018, 2018, 400-403.		1
164	A Parsimonious Granger Causality Formulation for Capturing Arbitrarily Long Multivariate Associations. Entropy, 2019, 21, 629.	1.1	1
165	A Point Process Framework for the Characterization of Fetal Sleep States. , 2020, 2020, 612-615.		1
166	Instantaneous Brain-to-Heart Functional Assessment using Inhomogeneous Point-process Models: a Proof of Concept Study. , 2020, , .		1
167	Analysis of physiological and non-contact signals for the assessment of emotional components in consumer preference. , 2020, , .		1
168	Frequency-Dependent Effects of Exhalatory-Gated Transcutaneous Vagus Nerve Stimulation on Cardiac Autonomic Regulation in Hypertension. , 2020, , .		1
169	Elementary integrate-and-fire process underlies pulse amplitudes in Electrodermal activity. PLoS Computational Biology, 2021, 17, e1009099.	1.5	1
170	Feature-continuous motion judgements: Assessing different random dot motion displays. Journal of Vision, 2018, 18, 668.	0.1	1
171	Characterization of Eye Gaze and Pupil Diameter Measurements from Remote and Mobile Eye-Tracking Devices. IFMBE Proceedings, 2020, , 201-208.	0.2	1
172	A Combined fMRI and Heart Rate Variability Paradigm for Assessment of Central Autonomic Modulation. , 2007, , .		0
173	Assessment of hippocampal and autonomic neural activity by point process models. , 2008, 2008, 3679.		0
174	Tracking instantaneous entropy in heartbeat dynamics through inhomogeneous point-process nonlinear models. , 2014, 2014, 6369-72.		0
175	Defining an instantaneous complexity measure for heartbeat dynamics: The inhomogeneous point-process entropy. , 2014, , .		0
176	Modeling heart beat dynamics and fMRI signals during carotid stimulation by neck suction. , 2014, 2014, 6647-50.		0
177	Changes in instantaneous complex dynamics during exercise in Chronic Mountain Sickness. , 2015, , .		0
178	Globally conditioned causality in estimating directed brain-heart interactions through joint MRI and RR series analysis. , 2015, 2015, 3795-8.		0
179	A LightWAVE client for semi-automated annotation of Heart Beats from ECG Time Series. , 2015, , .		0
180	Applications of Heartbeat Complexity Analysis to Depression and Bipolar Disorder. , 2017, , 345-374.		0

#	Article	IF	Citations
181	Time-Varying Cardiovascular Complexity with Focus on Entropy and Lyapunov Exponents. , 2017, , 233-256.		0
182	Corrections to "EEG Analysis During Active and Assisted Repetitive Movements: Evidence for Differences in Neural Engagement" IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2018, 26, 1311-1311.	2.7	0
183	Intrinsic Complexity of Sympathetic and Parasympathetic Dynamics from HRV series: a Preliminary Study on Postural Changes. , 2020, 2020, 2577-2580.		0
184	Irregularity Analysis of Sympathetic and Parasympathetic Activity Indices from HRV: A Pilot Study on Postural Changes. , 2020, , .		0
185	Frequency dependent functional brain reorganization in anesthesia is specific to drug concentration. , 2020, 2020, 2921-2924.		0
186	Effects of Respiratory-Gated Auricular Vagal Afferent Nerve Stimulation (RAVANS) in Hypertensive Patients during the Handgrip experiment. , 2020, , .		0
187	Quantifying multidimensional control mechanisms of cardiovascular dynamics during multiple concurrent stressors. Medical and Biological Engineering and Computing, 2021, 59, 775-785.	1.6	0
188	Assessment of Instantaneous Heartbeat Dynamics in amnestic Mild Cognitive Impairment. IFMBE Proceedings, 2018, , 366-369.	0.2	0
189	Inhomogeneous Heart Rate Variability Spectral Complexity: A Preliminary Evaluation With Gravitational Stimuli Under Selective Autonomic Blockade. , 0, , .		0
190	Analysis of the Effect of Emotion Elicitation on the Cardiovascular System. , 2021, , .		0
191	Automatic Quantitative Evaluation of Emotions in E-learning Applications. Annual International Conference of the IEEE Engineering in Medicine and Biology Society, 2006, , .	0.5	0
192	Correction of Erroneous and Ectopic Beats Using a Point Process Adaptive Algorithm. Annual International Conference of the IEEE Engineering in Medicine and Biology Society, 2006, , .	0.5	0
193	Abstract 21014: Respiratory-Gated Auricular Vagal Nerve Stimulation Lowers Blood Pressure in Hypertensive Patients. Circulation, 2017, 136, .	1.6	0