

# Gaetano Valenza

## List of Publications by Year in Descending Order

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**Version:** 2024-04-10

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

172 papers	2,845 citations	29 h-index	47 g-index
190 ext. papers	3,671 ext. citations	3.1 avg, IF	5.65 L-index

#	Paper	IF	Citations
172	Functional assessment of bidirectional cortical and peripheral neural control on heartbeat dynamics: A brain-heart study on thermal stress.. <i>NeuroImage</i> , <b>2022</b> , 251, 119023	7.9	3
171	The NEVERMIND e-health system in the treatment of depressive symptoms among patients with severe somatic conditions: A multicentre, pragmatic randomised controlled trial. <i>EClinicalMedicine</i> , <b>2022</b> , 48, 101423	11.3	0
170	Cardiac sympathetic-vagal activity initiates a functional brain-body response to emotional arousal.. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2022</b> , 119, e2119599119	11.5	1
169	Recognizing motor imagery tasks from EEG oscillations through a novel ensemble-based neural network architecture. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , <b>2021</b> , 2021, 5983-5986	0.9	
168	Heart rate variability and the dawn of complex physiological signal analysis: methodological and clinical perspectives. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , <b>2021</b> , 379, 20200255	3	5
167	Advanced computation in cardiovascular physiology: new challenges and opportunities. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , <b>2021</b> , 379, 20200263	3	3
166	Functional brain-heart interplay extends to the multifractal domain. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , <b>2021</b> , 379, 20200260	3	3
165	Activation of brain-heart axis during REM sleep: a trigger for dreaming. <i>American Journal of Physiology - Regulatory Integrative and Comparative Physiology</i> , <b>2021</b> , 321, R951-R959	3.2	
164	Toward brain-heart computer interfaces: a study on the classification of upper limb movements using multisystem directional estimates. <i>Journal of Neural Engineering</i> , <b>2021</b> ,	5	5
163	Quantifying multidimensional control mechanisms of cardiovascular dynamics during multiple concurrent stressors. <i>Medical and Biological Engineering and Computing</i> , <b>2021</b> , 59, 775-785	3.1	
162	Intensification of functional neural control on heartbeat dynamics in subclinical depression. <i>Translational Psychiatry</i> , <b>2021</b> , 11, 221	8.6	9
161	U-Limb: A multi-modal, multi-center database on arm motion control in healthy and post-stroke conditions. <i>GigaScience</i> , <b>2021</b> , 10,	7.6	6
160	Integral pulse frequency modulation model driven by sympathovagal dynamics: Synthetic vs. real heart rate variability. <i>Biomedical Signal Processing and Control</i> , <b>2021</b> , 68, 102736	4.9	4
159	Heart rate variability analysis for the assessment of immersive emotional arousal using virtual reality: Comparing real and virtual scenarios. <i>PLoS ONE</i> , <b>2021</b> , 16, e0254098	3.7	4
158	Brain Dynamics During Arousal-Dependent Pleasant/Unpleasant Visual Elicitation: An Electroencephalographic Study on the Circumplex Model of Affect. <i>IEEE Transactions on Affective Computing</i> , <b>2021</b> , 12, 417-428	5.7	5
157	Increased functional connectivity within alpha and theta frequency bands in dysphoria: A resting-state EEG study. <i>Journal of Affective Disorders</i> , <b>2021</b> , 281, 199-207	6.6	6
156	Time-Resolved Brain-to-Heart Probabilistic Information Transfer Estimation Using Inhomogeneous Point-Process Models. <i>IEEE Transactions on Biomedical Engineering</i> , <b>2021</b> , 68, 3366-3374	5	4

155	BHI Estimation Methodology <b>2021</b> , 21-50		0
154	Sympathovagal Changes <b>2021</b> , 53-78		0
153	Psychiatric and Neurological Disorders <b>2021</b> , 117-141		
152	BHI Physiology at a Glance <b>2021</b> , 3-19		0
151	Motor Control <b>2021</b> , 155-173		
150	Bioelectric Impedance Analysis Test Improves the Detection of Prostate Cancer in Biopsy Candidates: A Multifeature Decision Support System. <i>Frontiers in Oncology</i> , <b>2021</b> , 11, 555277	5.3	0
149	The role of electroencephalography electrical reference in the assessment of functional brain-heart interplay: From methodology to user guidelines. <i>Journal of Neuroscience Methods</i> , <b>2021</b> , 360, 109269	3	7
148	Characterization of upper limb movement-related EEG dynamics through fractional integrated autoregressive modeling. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , <b>2021</b> , 2021, 1527-1532	0.9	
147	Quantifying partition-based Kolmogorov-Sinai Entropy on Heart Rate Variability: a young vs. elderly study. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , <b>2021</b> , 2021, 5469-5472	0.9	0
146	Inferring directionality of coupled dynamical systems using Gaussian process priors: Application on neurovascular systems.. <i>Physical Review E</i> , <b>2021</b> , 104, 064208	2.4	1
145	Exploiting upper-limb functional principal components for human-like motion generation of anthropomorphic robots. <i>Journal of NeuroEngineering and Rehabilitation</i> , <b>2020</b> , 17, 63	5.3	15
144	Uncovering complex central autonomic networks at rest: a functional magnetic resonance imaging study on complex cardiovascular oscillations. <i>Journal of the Royal Society Interface</i> , <b>2020</b> , 17, 20190878	4.1	23
143	Assessing Autonomic Function from Electrodermal Activity and Heart Rate Variability During Cold-Pressor Test and Emotional Challenge. <i>Scientific Reports</i> , <b>2020</b> , 10, 5406	4.9	27
142	A protocol for a multicentre, parallel-group, pragmatic randomised controlled trial to evaluate the NEVERMIND system in preventing and treating depression in patients with severe somatic conditions. <i>BMC Psychiatry</i> , <b>2020</b> , 20, 93	4.2	3
141	Intrinsic Complexity of Sympathetic and Parasympathetic Dynamics from HRV series: a Preliminary Study on Postural Changes. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , <b>2020</b> , 2020, 1577-1580	0.9	
140	Quantifying Functional Links between Brain and Heartbeat Dynamics in the Multifractal Domain: a Preliminary Analysis. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , <b>2020</b> , 2020, 561-564	0.9	4
139	Characterizing Functional Directional Brain-Heart Interplay in Subclinical Depression (Dysphoria): a Preliminary Study using EEG and HRV <b>2020</b> ,		2
138	Methodological Considerations on EEG Electrical Reference: A Functional Brain-Heart Interplay Study. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , <b>2020</b> , 2020, 553-556	0.9	4

137	An Inhomogeneous Point-process Model for the Assessment of the Brain-to-Heart Functional Interplay: a Pilot Study. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference, 2020, 2020, 557-560</i>	0.9	2
136	The Role of EEG Electrical Reference in the Assessment of Functional Brain-Heart Interplay: A Preliminary Study <b>2020</b> ,		2
135	Classifying Affective Haptic Stimuli through Gender-Specific Heart Rate Variability Nonlinear Analysis. <i>IEEE Transactions on Affective Computing, 2020, 11, 459-469</i>	5.7	5
134	Central modulation of parasympathetic outflow is impaired in de novo Parkinson's disease patients. <i>PLoS ONE, 2019, 14, e0210324</i>	3.7	8
133	Brain Dynamics Induced by Pleasant/Unpleasant Tactile Stimuli Conveyed by Different Fabrics. <i>IEEE Journal of Biomedical and Health Informatics, 2019, 23, 2417-2427</i>	7.2	5
132	Multichannel Complexity Index (MCI) for a multi-organ physiological complexity assessment. <i>Physica A: Statistical Mechanics and Its Applications, 2019, 530, 121543</i>	3.3	7
131	Lateralization of directional brain-heart information transfer during visual emotional elicitation. <i>American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2019, 317, R25-R38</i>	3.2	14
130	Time-Resolved Directional Brain-Heart Interplay Measurement Through Synthetic Data Generation Models. <i>Annals of Biomedical Engineering, 2019, 47, 1479-1489</i>	4.7	24
129	The central autonomic network at rest: Uncovering functional MRI correlates of time-varying autonomic outflow. <i>NeuroImage, 2019, 197, 383-390</i>	7.9	43
128	Assessment of muscle fatigue during isometric contraction using autonomic nervous system correlates. <i>Biomedical Signal Processing and Control, 2019, 51, 42-49</i>	4.9	11
127	On the Time-Invariance Properties of Upper Limb Synergies. <i>IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2019, 27, 1397-1406</i>	4.8	15
126	Real vs. immersive-virtual emotional experience: Analysis of psycho-physiological patterns in a free exploration of an art museum. <i>PLoS ONE, 2019, 14, e0223881</i>	3.7	19
125	Predicting Object-Mediated Gestures From Brain Activity: An EEG Study on Gender Differences. <i>IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2019, 27, 411-418</i>	4.8	16
124	A functional analysis-based approach to quantify upper limb impairment level in chronic stroke patients: a pilot study. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference, 2019, 2019, 1102-1107</i>	0.9	12
123	Effect of yoga on pulse rate variability measured from a venous pressure waveform. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference, 2019, 2019, 372-375</i>	0.9	2
122	Functional Linear and Nonlinear Brain-Heart Interplay during Emotional Video Elicitation: A Maximum Information Coefficient Study. <i>Entropy, 2019, 21, 892</i>	2.8	14
121	Assessment of linear and nonlinear/complex heartbeat dynamics in subclinical depression (dysphoria). <i>Physiological Measurement, 2018, 39, 034004</i>	2.9	8
120	Simplifying Telerobotics: Wearability and Teleimpedance Improves Human-Robot Interactions in Teleoperation. <i>IEEE Robotics and Automation Magazine, 2018, 25, 77-88</i>	3.4	24

119	Mortality Prediction in Severe Congestive Heart Failure Patients with Multifractal Point-Process Modeling of Heartbeat Dynamics. <i>IEEE Transactions on Biomedical Engineering</i> , <b>2018</b> , 65, 2345-2354	5	21
118	Reliability of Lagged Poincaré Plot Parameters in Ultrashort Heart Rate Variability Series: Application on Affective Sounds. <i>IEEE Journal of Biomedical and Health Informatics</i> , <b>2018</b> , 22, 741-749	7.2	17
117	Measures of sympathetic and parasympathetic autonomic outflow from heartbeat dynamics. <i>Journal of Applied Physiology</i> , <b>2018</b> , 125, 19-39	3.7	29
116	Multivariate Granger causality unveils directed parietal to prefrontal cortex connectivity during task-free MRI. <i>Scientific Reports</i> , <b>2018</b> , 8, 5571	4.9	25
115	Analysis of Instantaneous Linear, Nonlinear and Complex Cardiovascular Dynamics from Videophotoplethysmography. <i>Methods of Information in Medicine</i> , <b>2018</b> , 57, 135-140	1.5	2
114	Affective communication during bad news consultation. Effect on analogue patients heart rate variability and recall. <i>Patient Education and Counseling</i> , <b>2018</b> , 101, 1892-1899	3.1	9
113	Instantaneous Transfer Entropy for the Study of Cardiovascular and Cardiorespiratory Nonstationary Dynamics. <i>IEEE Transactions on Biomedical Engineering</i> , <b>2018</b> , 65, 1077-1085	5	9
112	Assessment of Instantaneous Heartbeat Dynamics in amnesic Mild Cognitive Impairment. <i>IFMBE Proceedings</i> , <b>2018</b> , 366-369	0.2	
111	EEG Complexity Maps to Characterise Brain Dynamics during Upper Limb Motor Imagery. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , <b>2018</b> , 2018, 3060-3063	0.9	6
110	EEG Processing to Discriminate Transitive-Intransitive Motor Imagery Tasks: Preliminary Evidences using Support Vector Machines. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , <b>2018</b> , 2018, 331-334	0.9	3
109	A Case for the Interspecies Transfer of Emotions: A Preliminary Investigation on How Humans Odors Modify Reactions of the Autonomic Nervous System in Horses. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , <b>2018</b> , 2018, 522-525	0.9	9
108	ECG-Derived Sympathetic and Parasympathetic Activity in the Healthy: an Early Lower-Body Negative Pressure Study Using Adaptive Kalman Prediction. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , <b>2018</b> , 2018, 5122-5124	0.9	2
107	Refined Generalized Multivariate Multiscale Fuzzy Entropy: A Preliminary Study on Multichannel Physiological Complexity During Postural Changes <b>2018</b> ,		1
106	Affective computing in virtual reality: emotion recognition from brain and heartbeat dynamics using wearable sensors. <i>Scientific Reports</i> , <b>2018</b> , 8, 13657	4.9	124
105	EEG oscillations during caress-like affective haptic elicitation. <i>Psychophysiology</i> , <b>2018</b> , 55, e13199	4.1	10
104	Complexity Variability Assessment of Nonlinear Time-Varying Cardiovascular Control. <i>Scientific Reports</i> , <b>2017</b> , 7, 42779	4.9	29
103	Perspective: It's All About Time. <i>IEEE Transactions on Nanobioscience</i> , <b>2017</b> , 16, 309-310	3.4	
102	Assessing mood symptoms through heartbeat dynamics: An HRV study on cardiosurgical patients. <i>Journal of Psychiatric Research</i> , <b>2017</b> , 95, 179-188	5.2	5

101	Causal brain-heart information transfer during visual emotional elicitation in healthy subjects: Preliminary evaluations and future perspectives. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , <b>2017</b> , 2017, 1559-1562	0.9	3
100	Applications of Heartbeat Complexity Analysis to Depression and Bipolar Disorder <b>2017</b> , 345-374		
99	Exploiting Physiological Sensors and Biosignal Processing to Enhance Monitoring Care in Mental Health. <i>Scalable Computing and Communications</i> , <b>2017</b> , 515-550	0.2	1
98	Time-Varying Cardiovascular Complexity with Focus on Entropy and Lyapunov Exponents <b>2017</b> , 233-256		
97	Heart rate variability analysis during muscle fatigue due to prolonged isometric contraction. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , <b>2017</b> , 2017, 1324-1327	0.9	0
96	Longitudinal monitoring of heartbeat dynamics predicts mood changes in bipolar patients: A pilot study. <i>Journal of Affective Disorders</i> , <b>2017</b> , 209, 30-38	6.6	12
95	Arousal and Valence Recognition of Affective Sounds Based on Electrodermal Activity. <i>IEEE Sensors Journal</i> , <b>2017</b> , 17, 716-725	4	55
94	Validation of smart textile electrodes for electrocardiogram monitoring in free-moving horses. <i>Journal of Veterinary Behavior: Clinical Applications and Research</i> , <b>2017</b> , 17, 19-23	1.9	12
93	On the Role of Affective Properties in Hedonic and Discriminant Haptic Systems. <i>International Journal of Social Robotics</i> , <b>2017</b> , 9, 87-95	4	9
92	Nonlinear analysis of heart rate variability for the assessment of Dysphoria. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , <b>2017</b> , 2017, 3170-3173	0.9	
91	Self-reported well-being score modelling and prediction: Proof-of-concept of an approach based on linear dynamic systems. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , <b>2017</b> , 2017, 2205-2208	0.9	1
90	Muscle fatigue assessment through electrodermal activity analysis during isometric contraction. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , <b>2017</b> , 2017, 398-401	0.9	1
89	Heartbeat Complexity Modulation in Bipolar Disorder during Daytime and Nighttime. <i>Scientific Reports</i> , <b>2017</b> , 7, 17920	4.9	13
88	Recognition of affective haptic stimuli conveyed by different fabrics sing EEG-based sparse SVM <b>2017</b> ,		2
87	Force/Velocity Assessment of Caress-Like Stimuli Through the Electrodermal Activity Processing: Advantages of a Convex Optimization Approach. <i>IEEE Transactions on Human-Machine Systems</i> , <b>2016</b> , 1-10	4.1	15
86	Guest Editorial Sensor Informatics for Managing Mental Health. <i>IEEE Journal of Biomedical and Health Informatics</i> , <b>2016</b> , 20, 975-976	7.2	
85	Advances in Electrodermal Activity Processing with Applications for Mental Health <b>2016</b> ,		29
84	Electrodermal Phenomena and Recording Techniques <b>2016</b> , 1-17		1



83 Emotions and Mood States: Modeling, Elicitation, and Recognition **2016**, 45-54

82 Experimental Applications on Multi-Sensory Affective Stimulation **2016**, 55-109

81 Gender-specific automatic valence recognition of affective olfactory stimulation through the analysis of the electrodermal activity. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference, 2016*, 2016, 399-402 0.9 4

80 Exploratory analysis of nonlinear coupling between EEG global field power and end-tidal carbon dioxide in free breathing and breath-hold tasks. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference, 2016*, 2016, 3559-3562 0.9 1

79 On the pleasantness of a haptic stimulation: how different textures can be recognized through heart rate variability nonlinear analysis. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference, 2016*, 2016, 3560-3563 0.9 1

78 Stochastic modeling of spontaneous bursting activity to simulate neural responses of in-vitro networks on multielectrode arrays. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference, 2016*, 2016, 3564-3567 0.9

77 Reconstructing multivariate causal structure between functional brain networks through a Laguerre-Volterra based Granger causality approach. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference, 2016*, 2016, 5477-5480 0.9 1

76 Automatic recognition of pleasant content of odours through ElectroEncephaloGraphic activity analysis. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference, 2016*, 2016, 4519-4522 0.9 7

75 Predicting Mood Changes in Bipolar Disorder through Heartbeat Nonlinear Dynamics. *IEEE Journal of Biomedical and Health Informatics*, **2016**, 20, 1034-1043 7.2 35

74 Assessment of spontaneous cardiovascular oscillations in Parkinson's disease. *Biomedical Signal Processing and Control*, **2016**, 26, 80-89 4.9 22

73 cvxEDA: A Convex Optimization Approach to Electrodermal Activity Processing. *IEEE Transactions on Biomedical Engineering*, **2016**, 63, 797-804 5 145

72 Relationship between cardiac vagal activity and mood congruent memory bias in major depression. *Journal of Affective Disorders*, **2016**, 190, 19-25 6.6 5

71 Modeling for the Analysis of the EDA **2016**, 19-33 1

70 Skin Admittance Measurement for Emotion Recognition: A Study over Frequency Sweep. *Electronics (Switzerland)*, **2016**, 5, 46 2.6 25

69 A Wearable System for the Evaluation of the Human-Horse Interaction: A Preliminary Study. *Electronics (Switzerland)*, **2016**, 5, 63 2.6 18

68 Valence-dependent changes in visual arousing elicitation: an exploratory study in EEG gamma oscillations. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference, 2016*, 2016, 4555-4558 0.9 1

67 Neuron-glia cross talk revealed in reverberating networks by simultaneous extracellular recording of spikes and astrocytes Tglutamate transporter and K<sup>+</sup> currents. *Journal of Neurophysiology*, **2016**, 116, 2706-2719 3.2 8

66 Investigating mechanical properties of a fabric-based affective haptic display through electrodermal activity analysis. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference, 2016*, 2016, 4107-4110 0.9

65	Combining electroencephalographic activity and instantaneous heart rate for assessing brain-heart dynamics during visual emotional elicitation in healthy subjects. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , <b>2016</b> , 374,	3	61
64	The heart side of brain neuromodulation. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , <b>2016</b> , 374,	3	28
63	Uncovering brain-heart information through advanced signal and image processing. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , <b>2016</b> , 374,	3	26
62	Gender-specific velocity recognition of caress-like stimuli through nonlinear analysis of Heart Rate Variability. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , <b>2015</b> , 2015, 298-301	0.9	8
61	Electroencephalographic spectral correlates of caress-like affective haptic stimuli. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , <b>2015</b> , 2015, 4733-6	0.9	3
60	Characterizing psychological dimensions in non-pathological subjects through autonomic nervous system dynamics. <i>Frontiers in Computational Neuroscience</i> , <b>2015</b> , 9, 37	3.5	13
59	A Novel Algorithm for Movement Artifact Removal in ECG Signals Acquired from Wearable Systems Applied to Horses. <i>PLoS ONE</i> , <b>2015</b> , 10, e0140783	3.7	24
58	Nonlinear digital signal processing in mental health: characterization of major depression using instantaneous entropy measures of heartbeat dynamics. <i>Frontiers in Physiology</i> , <b>2015</b> , 6, 74	4.6	17
57	. <i>IEEE Transactions on Affective Computing</i> , <b>2015</b> , 6, 385-394	5.7	108
56	Instantaneous transfer entropy for the study of cardio-respiratory dynamics. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , <b>2015</b> , 2015, 7885-8	0.9	4
55	Brain dynamics during emotion elicitation in healthy subjects: An EEG study <b>2015</b> ,		2
54	Electrodermal activity analysis during affective haptic elicitation. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , <b>2015</b> , 2015, 5777-80	0.9	10
53	On the tridimensional estimation of the gaze point by a stereoscopic wearable eye tracker. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , <b>2015</b> , 2015, 2283-6	0.9	2
52	<b>2015</b> ,		3
51	Predicting mood changes in bipolar disorder through heartbeat nonlinear dynamics: A preliminary study <b>2015</b> ,		4
50	<b>2015</b> ,		1
49	Arousal recognition system based on heartbeat dynamics during auditory elicitation. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , <b>2015</b> , 2015, 6110-3	0.9	2
48	Removing movement artifacts from equine ECG recordings acquired with textile electrodes. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , <b>2015</b> , 2015, 1955-8	0.9	5



47	. <i>IEEE Transactions on Intelligent Transportation Systems</i> , <b>2015</b> , 16, 1505-1517	6.1	78
46	Characterization of depressive States in bipolar patients using wearable textile technology and instantaneous heart rate variability assessment. <i>IEEE Journal of Biomedical and Health Informatics</i> , <b>2015</b> , 19, 263-74	7.2	48
45	Complexity index from a personalized wearable monitoring system for assessing remission in mental health. <i>IEEE Journal of Biomedical and Health Informatics</i> , <b>2015</b> , 19, 132-9	7.2	100
44	Revealing real-time emotional responses: a personalized assessment based on heartbeat dynamics. <i>Scientific Reports</i> , <b>2014</b> , 4, 4998	4.9	96
43	Advanced technology meets mental health: how smartphones, textile electronics, and signal processing can serve mental health monitoring, diagnosis, and treatment. <i>IEEE Pulse</i> , <b>2014</b> , 5, 56-9	0.7	3
42	Autonomic effects of cognitive reappraisal and acceptance in social anxiety: evidence for common and distinct pathways for parasympathetic reactivity. <i>Journal of Anxiety Disorders</i> , <b>2014</b> , 28, 795-803	10.9	11
41	Wearable monitoring for mood recognition in bipolar disorder based on history-dependent long-term heart rate variability analysis. <i>IEEE Journal of Biomedical and Health Informatics</i> , <b>2014</b> , 18, 1625-35	7.3	99
40	Inhomogeneous point-process entropy: an instantaneous measure of complexity in discrete systems. <i>Physical Review E</i> , <b>2014</b> , 89, 052803	2.4	45
39	Tracking instantaneous entropy in heartbeat dynamics through inhomogeneous point-process nonlinear models. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , <b>2014</b> , 2014, 6369-72	0.9	
38	A pattern recognition approach based on electrodermal response for pathological mood identification in bipolar disorders <b>2014</b> ,		12
37	Maximal-radius multiscale entropy of cardiovascular variability: a promising biomarker of pathological mood states in bipolar disorders. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , <b>2014</b> , 2014, 6663-6	0.9	2
36	Characterization of behavioral activation in non-pathological subjects through Heart Rate Variability monovariate and multivariate multiscale entropy analysis <b>2014</b> ,		1
35	Electrodermal activity in bipolar patients during affective elicitation. <i>IEEE Journal of Biomedical and Health Informatics</i> , <b>2014</b> , 18, 1865-73	7.2	60
34	Temporal trends of neuro-autonomic complexity during severe episodes of bipolar disorders. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , <b>2014</b> , 2014, 2948-51	0.9	3
33	Assessing instantaneous QT variability dynamics within a point-process nonlinear framework <b>2014</b> ,		2
32	Electrodermal activity processing: a convex optimization approach. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , <b>2014</b> , 2014, 2290-3	0.9	15
31	Assessment of gait nonlinear dynamics by inhomogeneous point-process models. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , <b>2014</b> , 2014, 6973-6	0.9	1
30	Decoding underlying brain activities in time and frequency domains through complex independent component analysis of EEG signals. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , <b>2014</b> , 2014, 3192-5	0.9	

29	Estimation of instantaneous complex dynamics through Lyapunov exponents: a study on heartbeat dynamics. <i>PLoS ONE</i> , <b>2014</b> , 9, e105622	3.7	40
28	Instantaneous monitoring of heart beat dynamics during anesthesia and sedation. <i>Journal of Computational Surgery</i> , <b>2014</b> , 1,		8
27	Mood states modulate complexity in heartbeat dynamics: A multiscale entropy analysis. <i>Europhysics Letters</i> , <b>2014</b> , 107, 18003	1.6	41
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