## **Antonio Lanat**

## List of Publications by Year in Descending Order

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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.

106<br/>papers2,319<br/>citations26<br/>h-index45<br/>g-index111<br/>ext. papers2,788<br/>ext. citations3<br/>avg, IF5.05<br/>L-index

#	Paper	IF	Citations
106	HRV analysis: a non-invasive approach to discriminate between newborns with and without seizures. <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, 52-55	0.9	O
105	Automatic Detection of Epileptic Seizures in Neonatal Intensive Care Units Through EEG, ECG and Video Recordings: A Survey. <i>IEEE Access</i> , <b>2021</b> , 9, 138174-138191	3.5	O
104	Linear and non linear measures of pupil size as a function of hypnotizability. <i>Scientific Reports</i> , <b>2021</b> , 11, 5196	4.9	1
103	Rein Tension Signals Elicit Different Behavioral Responses When Comparing Bitted Bridle and Halter. <i>Frontiers in Veterinary Science</i> , <b>2021</b> , 8, 652015	3.1	1
102	Smart textiles biotechnology for electrocardiogram monitoring in horses during exercise on treadmill: Validation tests. <i>Equine Veterinary Journal</i> , <b>2021</b> , 53, 373-378	2.4	4
101	Interspecific two-dimensional visual discrimination of faces in horses (Equus caballus). <i>PLoS ONE</i> , <b>2021</b> , 16, e0247310	3.7	О
100	Multiscale Entropy Analysis of Heart Rate Variability in Neonatal Patients with and without Seizures. <i>Bioengineering</i> , <b>2021</b> , 8,	5.3	1
99	A Generalized Linear Model for an ECG-based Neonatal Seizure Detector. <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, 471-474	0.9	О
98	Inside the Interaction: Contact With Familiar Humans Modulates Heart Rate Variability in Horses. <i>Frontiers in Veterinary Science</i> , <b>2020</b> , 7, 582759	3.1	5
97	A tool for the real-time evaluation of ECG signal quality and activity: Application to submaximal treadmill test in horses. <i>Biomedical Signal Processing and Control</i> , <b>2020</b> , 56, 101666	4.9	11
96	Brain Dynamics Induced by Pleasant/Unpleasant Tactile Stimuli Conveyed by Different Fabrics. <i>IEEE Journal of Biomedical and Health Informatics</i> , <b>2019</b> , 23, 2417-2427	7.2	5
95	Nonlinear Analysis of Eye-Tracking Information for Motor Imagery Assessments. <i>Frontiers in Neuroscience</i> , <b>2019</b> , 13, 1431	5.1	8
94	Inter- and Intra-Species Communication of Emotion: Chemosignals as the Neglected Medium. <i>Animals</i> , <b>2019</b> , 9,	3.1	13
93	Combining Electrodermal Activity and Speech Analysis towards a more Accurate Emotion Recognition System. Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference, 2019,	0.9	6
92	2019, 229-232 Emotional Transfer in Human-Horse Interaction: New Perspectives on Equine Assisted Interventions. <i>Animals</i> , <b>2019</b> , 9,	3.1	14
91	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</i> Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and	0.9	9
90	Real-time Evaluation of ECG Acquisition Systems through Signal Quality Assessment in Horses during Submaximal Treadmill Test. Annual International Conference of the IEEE Engineering in Medicine and Biology Society Annual International	0.9	

## (2016-2017)

89	Monitoring voluntary blink magnitude through a wearable eye-tracking system: A preliminary 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>2017</b> , 2017, 1583-1586	0.9	
88	Causal brain-heart information transfer during visual emotional elicitation in healthy subjects: Preliminary evaluations and future perspectives. Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual	0.9	3
87	Applications of Heartbeat Complexity Analysis to Depression and Bipolar Disorder <b>2017</b> , 345-374		
86	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
85	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
84	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
83	The role of nonlinear coupling in Human-Horse Interaction: A preliminary 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>2017</b> , 2017, 1320-1323	0.9	6
82	Consistency and flexibility in solving spatial tasks: different horses show different cognitive styles. <i>Scientific Reports</i> , <b>2017</b> , 7, 16557	4.9	12
81	Heartbeat Complexity Modulation in Bipolar Disorder during Daytime and Nighttime. <i>Scientific Reports</i> , <b>2017</b> , 7, 17920	4.9	13
80	Instantaneous Assessment of Hedonic Olfactory Perception Using Heartbeat Nonlinear Dynamics: a Preliminary Study <b>2017</b> ,		3
79	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	
78	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	0.9	4
77	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
76	Predicting Mood Changes in Bipolar Disorder through Heartbeat Nonlinear Dynamics. <i>IEEE Journal of Biomedical and Health Informatics</i> , <b>2016</b> , 20, 1034-1043	7.2	35
75	cvxEDA: A Convex Optimization Approach to Electrodermal Activity Processing. <i>IEEE Transactions on Biomedical Engineering</i> , <b>2016</b> , 63, 797-804	5	145
74	Skin Admittance Measurement for Emotion Recognition: A Study over Frequency Sweep. <i>Electronics (Switzerland)</i> , <b>2016</b> , 5, 46	2.6	25
73	A Wearable System for the Evaluation of the Human-Horse Interaction: A Preliminary Study. <i>Electronics (Switzerland)</i> , <b>2016</b> , 5, 63	2.6	18
7 <del>2</del>	Quantitative heartbeat coupling measures in human-horse interaction. <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>2016</b> , 2016, 2696-2699	0.9	8

71	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
70	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
69	Can a Humanoid Face be Expressive? A Psychophysiological Investigation. <i>Frontiers in Bioengineering and Biotechnology</i> , <b>2015</b> , 3, 64	5.8	23
68	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
67	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
66	. IEEE Transactions on Affective Computing, <b>2015</b> , 6, 385-394	5.7	108
65	Brain dynamics during emotion elicitation in healthy subjects: An EEG study 2015,		2
64	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
63	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
62	Predicting mood changes in bipolar disorder through heartbeat nonlinear dynamics: A preliminary study <b>2015</b> ,		4
61	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
60	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
59	. IEEE Transactions on Intelligent Transportation Systems, <b>2015</b> , 16, 1505-1517	6.1	78
58	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
57	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
56	Revealing real-time emotional responses: a personalized assessment based on heartbeat dynamics. <i>Scientific Reports</i> , <b>2014</b> , 4, 4998	4.9	96
55	Design and preliminary affective characterization of a novel fabric-based tactile display 2014,		28
54	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

53	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, 16	2 <del>3-3</del> 5	99
52	Inference of human affective states from psychophysiological measurements extracted under ecologically valid conditions. <i>Frontiers in Neuroscience</i> , <b>2014</b> , 8, 286	5.1	21
51	Point-process nonlinear autonomic assessment of depressive states in bipolar patients. <i>Methods of Information in Medicine</i> , <b>2014</b> , 53, 296-302	1.5	34
50	XIM-engine <b>2014</b> ,		11
49	A pattern recognition approach based on electrodermal response for pathological mood identification in bipolar disorders <b>2014</b> ,		12
48	Maximal-radius multiscale entropy of cardiovascular variability: a promising biomarker of pathological mood states in bipolar disorders. Annual International Conference of the IEEE Engineering in Medicine and Biology Society Annual	0.9	2
47	Characterization of behavioral activation in non-pathological subjects through Heart Rate Variability monovariate and multivariate multiscale entropy analysis <b>2014</b> ,		1
46	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
45	Temporal trends of neuro-autonomic complexity during severe episodes of bipolar disorders.  Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE  Engineering in Medicine and Biology Society Annual International Conference, 2014, 2014, 2948-51	0.9	3
44	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
43	Mood states modulate complexity in heartbeat dynamics: A multiscale entropy analysis. <i>Europhysics Letters</i> , <b>2014</b> , 107, 18003	1.6	41
42	Poroelastic longitudinal wave equation for soft living tissues. <i>Journal of Biorheology</i> , <b>2014</b> , 28, 29-37	0.3	1
41	Novel Spiking Neuron-Astrocyte Networks based on nonlinear transistor-like models of tripartite synapses. <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>2013</b> , 2013, 6559-62	0.9	8
40	Improving emotion recognition systems by embedding cardiorespiratory coupling. <i>Physiological Measurement</i> , <b>2013</b> , 34, 449-64	2.9	38
39	Eye gaze patterns in emotional pictures. <i>Journal of Ambient Intelligence and Humanized Computing</i> , <b>2013</b> , 4, 705-715	3.7	33
38	Mood recognition in bipolar patients through the PSYCHE platform: preliminary evaluations and perspectives. <i>Artificial Intelligence in Medicine</i> , <b>2013</b> , 57, 49-58	7.4	71
37	Comparitive study on photometric normalization algorithms for an innovative, robust and real-time eye gaze tracker. <i>Journal of Real-Time Image Processing</i> , <b>2013</b> , 8, 21-33	1.9	11
36	Advanced interfaces to stem the data deluge in mixed reality <b>2013</b> ,		10

35	The social perceptual salience effect. <i>Journal of Experimental Psychology: Human Perception and Performance</i> , <b>2013</b> , 39, 62-74	2.6	15
34	A sensing architecture for empathetic data systems <b>2013</b> ,		7
33	A nonlinear heartbeat dynamics model approach for personalized emotion recognition. <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>2013</b> , 2013, 2579-82	0.9	27
32	Quantitative EEG analysis in minimally conscious state patients during 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>2013</b> , 2013, 6313-6	0.9	3
31	Assessment of sensing fire fighters uniforms for physiological parameter measurement in harsh environment. <i>IEEE Transactions on Information Technology in Biomedicine</i> , <b>2012</b> , 16, 501-11		15
30	. IEEE Transactions on Affective Computing, <b>2012</b> , 3, 237-249	5.7	132
29	Oscillations of heart rate and respiration synchronize during affective visual stimulation. <i>IEEE Transactions on Information Technology in Biomedicine</i> , <b>2012</b> , 16, 683-90		46
28	Robotic Social Therapy on Children with Autism: Preliminary Evaluation through Multi-parametric Analysis <b>2012</b> ,		4
27	Smart Textiles: Technology and Wireless System Network Applications. <i>Springer Series on Chemical Sensors and Biosensors</i> , <b>2012</b> , 127-158	2	2
26	A novel EDA glove based on textile-integrated electrodes for affective computing. <i>Medical and Biological Engineering and Computing</i> , <b>2012</b> , 50, 1163-72	3.1	41
25	On the deconvolution analysis of electrodermal activity in bipolar patients. <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>2012</b> , 2012, 6691-4	0.9	30
24	Speech analysis for mood state characterization in bipolar patients. <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>2012</b> , 2012, 2104-7	0.9	39
23	Dominant Lyapunov exponent and approximate entropy in heart rate variability during emotional visual elicitation. <i>Frontiers in Neuroengineering</i> , <b>2012</b> , 5, 3		61
22	Robotic Social Therapy on Children with Autism: Preliminary Evaluation through Multi-parametric Analysis <b>2012</b> ,		9
21	Sensors for Wearable Systems <b>2011</b> , 3-25		8
20	Eye tracking and pupil size variation as response to affective stimuli: a preliminary study <b>2011</b> ,		14
19	SoC CMOS UWB Pulse Radar Sensor for Contactless Respiratory Rate Monitoring. <i>IEEE Transactions on Biomedical Circuits and Systems</i> , <b>2011</b> , 5, 503-10	5.1	151
18	Robust multiple cardiac arrhythmia detection through bispectrum analysis. <i>Expert Systems With Applications</i> , <b>2011</b> , 38, 6798-6804	7.8	41

## LIST OF PUBLICATIONS

17	EEG complexity drug-induced changes in disorders of consciousness: a preliminary report. <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>2011</b> , 2011, 3724-7	0.9	5
16	Electrodermal Responses Through Textile Electrodes. <i>Research Journal of Textile and Apparel</i> , <b>2010</b> , 14, 81-88	1.1	3
15	Towards a smart glove: arousal recognition based on textile Electrodermal Response. <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>2010</b> , 2010, 3598-601	0.9	26
14	High frequency poroelastic waves in hydrogels. <i>Journal of the Acoustical Society of America</i> , <b>2010</b> , 127, 1197-207	2.2	11
13	The contribution of the phase spectrum in automatic multiple cardiac arrhythmias recognition in wearable systems <b>2010</b> ,		2
12	Enabling technology for heart health wireless assistance <b>2010</b> ,		11
11	A multimodal transducer for cardiopulmonary activity monitoring in emergency. <i>IEEE Transactions on Information Technology in Biomedicine</i> , <b>2010</b> , 14, 817-25		41
10	Comparative evaluation of susceptibility to motion artifact in different wearable systems for monitoring respiratory rate. <i>IEEE Transactions on Information Technology in Biomedicine</i> , <b>2010</b> , 14, 378-86		66
9	An FPGA Based Arrhythmia Recognition System for Wearable Applications 2009,		9
8	Acoustic waves in hydrogels: A bi-phasic model for ultrasound tissue-mimicking phantom. <i>Materials Science and Engineering C</i> , <b>2009</b> , 29, 899-907	3.3	10
7	Real-Time Discrimination of Multiple Cardiac Arrhythmias for Wearable Systems Based on Neural Networks <b>2008</b> ,		18
6	Feasibility Study and Design of a Wearable System-on-a-Chip Pulse Radar for Contactless Cardiopulmonary Monitoring. <i>International Journal of Telemedicine and Applications</i> , <b>2008</b> , 328597	2.6	22
5	Wearable System-on-a-Chip Pulse Radar Sensors for the Health Care: System Overview 2007,		6
4	Wearable system-on-a-chip UWB radar for health care and its application to the safety improvement of emergency operators. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society</i> , <b>2007</b> , 2007, 2651-4		18
3	Wearable system-on-a-chip radiometer for remote temperature sensing and its application to the safeguard of emergency operators. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society</i> , <b>2007</b> , 2007, 5716-9		3
2	Performance analysis and early validation of a bi-modal ultrasound transducer. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society</i> , <b>2006</b> , 2006, 1858-61		1
1	New Ultrasound-Based Wearable System for Cardiac Monitoring <b>2006</b> ,		3