Hugo Plcido da Silva

List of Publications by Year in Descending Order

70 papers	823 citations	15 h-index	27 g-index
84 ext. papers	1,148 ext. citations	2.6 avg, IF	4.48 L-index

#	Paper	IF	Citations
70	System on Chip (SoC) for Invisible Electrocardiography (ECG) Biometrics.. *Sensors*, **2022**, 22,	3.8	1
69	Mobile Applications for Epilepsy: Where Are We? Where Should We Go? A Systematic Review. *Signals*, **2022**, 3, 40-65	1.2	1
68	A dissimilarity-based approach to automatic classification of biosignal modalities. *Applied Soft Computing Journal*, **2022**, 115, 108203	7.5	0
67	Equivalent Pipeline Processing for IR-UWB and FMCW Radar Comparison in Vital Signs Monitoring Applications. *IEEE Sensors Journal*, **2022**, 1-1	4	
66	Identity Recognition in Sanitary Facilities Using Invisible Electrocardiography. *Sensors*, **2022**, 22, 4201	3.8	0
65	Automatic Cognitive Fatigue Detection Using Wearable fNIRS and Machine Learning. *Sensors*, **2022**, 22, 4010	3.8	0
64	Invisible ECG for High Throughput Screening in eSports. *Sensors*, **2021**, 21,	3.8	4
63	Design and Evaluation of an Electrodermal Activity Sensor (EDA) With Adaptive Gain. *IEEE Sensors Journal*, **2021**, 21, 8639-8649	4	2
62	e-CoVig: A Novel mHealth System for Remote Monitoring of Symptoms in COVID-19. *Sensors*, **2021**, 21,	3.8	7
61	Optically Instrumented Insole for Gait Plantar and Shear Force Monitoring. *IEEE Access*, **2021**, 1-1	3.5	2
60	Design and evaluation of a novel approach to invisible electrocardiography (ECG) in sanitary facilities using polymeric electrodes. *Scientific Reports*, **2021**, 11, 6222	4.9	5
59	Design and development of a digital stethoscope encapsulation for simultaneous acquisition of phonocardiography and electrocardiography signals: the SmartHeart case study. *Journal of Medical Engineering and Technology*, **2020**, 44, 153-161	1.8	4
58	Comparison of Different Polymeric Materials for Mobile Off-the-Person ECG. *EAI/Springer Innovations in Communication and Computing*, **2020**, 15-22	0.6	1
57	Study of Mechanomyographic Alternatives to EMG Sensors for a Low-Cost Open Source Bionic Hand. *EAI/Springer Innovations in Communication and Computing*, **2020**, 3-14	0.6	1
56	ECG Biometrics Using Deep Learning and Relative Score Threshold Classification. *Sensors*, **2020**, 20,	3.8	11
55	Morphological autoencoders for apnea detection in respiratory gating radiotherapy. *Computer Methods and Programs in Biomedicine*, **2020**, 195, 105675	6.9	1
54	Emotion Assessment Using Feature Fusion and Decision Fusion Classification Based on Physiological Data: Are We There Yet?. *Sensors*, **2020**, 20,	3.8	12

53	Design and Evaluation of a Diaphragm for Electrocardiography in Electronic Stethoscopes. *IEEE Transactions on Biomedical Engineering*, **2020**, 67, 391-398	5	5
52	Developments in Transduction, Connectivity and AI/Machine Learning for Point-of-Care Testing. *Sensors*, **2019**, 19,	3.8	9
51	Benchmarking of the BITalino biomedical toolkit against an established gold standard. *Healthcare Technology Letters*, **2019**, 6, 32-36	1.9	34
50	. *IEEE Access*, **2019**, 7, 140990-141020	3.5	45
49	Heart Rhythm Qualitative Analysis Using Low-Cost and Open Source Electrocardiography: A Study Based on Atrial Fibrillation Detection. *Lecture Notes in Computer Science*, **2019**, 198-217	0.9	
48	Bioinspired optical fiber sensor for simultaneous shear and vertical forces monitoring **2019**,		1
47	Wheelchair Pressure Ulcer Prevention Using FBG Based Sensing Devices. *Sensors*, **2019**, 20,	3.8	11
46	Biosignal-Based Multimodal Emotion Recognition in a Valence-Arousal Affective Framework Applied to Immersive Video Visualization. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference*, **2019**, 2019, 3577-3583	0.9	5
45	SwimBIT: A Novel Approach to Stroke Analysis During Swim Training Based on Attitude and Heading Reference System (AHRS). *Sports*, **2019**, 7,	3	3
44	A simple pendulum studied with a low-cost wireless acquisition board. *Physics Education*, **2019**, 54, 015018	1.8	7
43	Physiological Sensing Now Open to the World: New Resources Are Allowing Us to Learn, Experiment, and Create Imaginative Solutions for Biomedical Applications. *IEEE Pulse*, **2018**, 9, 9-11	0.7	5
42	Experimental characterization and analysis of the BITalino platforms against a reference device. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference*, **2017**, 2017, 2418-2421	0.9	9
41	A novel platform for distributed and remote real-time monitoring of animal model behavior in a bioterium. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference*, **2017**, 2017, 3728-3731	0.9	
40	The Biosignal C.A.O.S.: Reflections on the Usability of Physiological Sensing for Human-Computer Interaction Practitioners and Researchers. *Biosystems and Biorobotics*, **2017**, 807-811	0.2	2
39	Evaluating Template Uniqueness in ECG Biometrics. *Lecture Notes in Electrical Engineering*, **2016**, 111-123	0.2	3
38	Unsupervised Analysis of Morphological ECG Features for Attention Detection. *Studies in Computational Intelligence*, **2016**, 437-453	0.8	3
37	Off-the-person electrocardiography: performance assessment and clinical correlation. *Health and Technology*, **2015**, 4, 309-318	2.1	31
36	Applications and Issues for Physiological Computing Systems: An Introduction to the Special Issue. *Interacting With Computers*, **2015**, 27, 489-491	1.6	

35	A Context-Aware Application to Increase Elderly Users Compliance with Physical Rehabilitation Exercises at Home via Animatronic Biofeedback. *Journal of Medical Systems*, **2015**, 39, 135	5.1	15
34	Stress reactivity, distress and attachment in newly diagnosed breast cancer patients. *Health Psychology and Behavioral Medicine*, **2015**, 3, 424-438	2.2	1
33	Introduction to the Special Issue on Physiological Computing for Human-Computer Interaction. *ACM Transactions on Computer-Human Interaction*, **2015**, 21, 1-4	4.7	8
32	BIT: Biosignal Igniter Toolkit. *Computer Methods and Programs in Biomedicine*, **2014**, 115, 20-32	6.9	18
31	**2014**,		1
30	Harnessing the Power of Biosignals. *Computer*, **2014**, 47, 74-77	1.6	3
29	Check your biosignals here: a new dataset for off-the-person ECG biometrics. *Computer Methods and Programs in Biomedicine*, **2014**, 113, 503-14	6.9	58
28	User-tuned Content Customization for Children with Autism Spectrum Disorders. *Procedia Computer Science*, **2014**, 27, 441-448	1.6	4
27	A web-based platform for biosignal visualization and annotation. *Multimedia Tools and Applications*, **2014**, 70, 433-460	2.5	7
26	Alexithymia, Physiological Reactivity and Cognitive Appraisals of Emotional Stimuli in Opiate Dependents: A Pilot Study.. *Journal of Neurology & Neurophysiology*, **2014**, 06,	0.5	1
25	Performance Comparison of Low-cost Hardware Platforms Targeting Physiological Computing Applications. *Procedia Technology*, **2014**, 17, 399-406		14
24	Biosignals for Everyone. *IEEE Pervasive Computing*, **2014**, 13, 64-71	1.3	46
23	HiMotion: a new research resource for the study of behavior, cognition, and emotion. *Multimedia Tools and Applications*, **2014**, 73, 345-375	2.5	7
22	Paper-Based Inkjet Electrodes. *Lecture Notes in Computer Science*, **2014**, 59-70	0.9	1
21	Novel fiducial and non-fiducial approaches to electrocardiogram-based biometric systems. *IET Biometrics*, **2013**, 2, 64-75	2.9	47
20	A Unifying Approach to ECG Biometric Recognition Using the Wavelet Transform. *Lecture Notes in Computer Science*, **2013**, 53-62	0.9	4
19	**2013**,		43
18	Outlier Detection in Non-intrusive ECG Biometric System. *Lecture Notes in Computer Science*, **2013**, 43-52	0.9	21

#	Publication		
17	Towards Improving the Usability of Electromyographic Interfaces. *Biosystems and Biorobotics*, **2013**, 437-441	4.1	2
16	Choosing Between Terminal and Independently Based Gain and Offset Error in the ADC Histogram Test. *IEEE Transactions on Instrumentation and Measurement*, **2012**, 61, 9-16	5.2	3
15	ECG-based biometrics: A real time classification approach **2012**,		14
14	Electrodermal response propagation time as a potential psychophysiological marker. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference*, **2012**, 2012, 6756-9	0.9	3
13	In-vehicle driver recognition based on hand ECG signals **2012**,		18
12	A Web-based Application to Address Individual Interests of Children with Autism Spectrum Disorders. *Procedia Computer Science*, **2012**, 14, 20-27	1.6	23
11	User needs in the performance of prescribed home exercise therapy **2012**,		6
10	Feature extraction for psychophysiological load assessment in unconstrained scenarios. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference*, **2012**, 2012, 4784-7	0.9	4
9	**2011**,		22
8	Unveiling the biometric potential of finger-based ECG signals. *Computational Intelligence and Neuroscience*, **2011**, 2011, 1-8	3	150
7	Accelerometry-based study of body vibration dampening during whole-body vibration training **2011**,		5
6	**2011**,		27
5	Clinical Data Privacy and Customization via Biometrics Based on ECG Signals. *Lecture Notes in Computer Science*, **2011**, 121-132	0.9	8
4	Electromyography in Front Crawl Technique - Case Study~!2009-07-05~!2009-11-01~!2010-04-29~!. *The Open Sports Sciences Journal*, **2010**, 3, 67-69	0.5	2
3	Feature Subspace Ensembles: A Parallel Classifier Combination Scheme Using Feature Selection **2007**, 261-270		10
2	EmotiphAI: a biocybernetic engine for real-time biosignals acquisition in a collective setting. *Neural Computing and Applications*, 1	4.8	0
1	Impact of sampling rate and interpolation on photoplethysmography and electrodermal activity signals waveform morphology and feature extraction. *Neural Computing and Applications*, 1	4.8	0