Manuel Blanco-Velasco

List of Publications by Year
in descending order

64 papers	2,176 citations

393982

19 h-index	

253896

43 g-index	

67 all docs	67 docs citations

67 times ranked	1842 citing authors

#	Article	IF	Citations
1	ECG signal denoising and baseline wander correction based on the empirical mode decomposition. Computers in Biology and Medicine, 2008, 38, 1-13.	3.9	549
2	Dimensionality Reduction of a Pathological Voice Quality Assessment System Based on Gaussian Mixture Models and Short-Term Cepstral Parameters. IEEE Transactions on Biomedical Engineering, 2006, 53, 1943-1953.	2.5	260
3	Compressed sensing based method for ECG compression. , 2011, , .		100
4	Exploiting Prior Knowledge in Compressed Sensing Wireless ECG Systems. IEEE Journal of Biomedical and Health Informatics, 2015, 19, 508-519.	3.9	90
5	ECG compression with retrieved quality guaranteed. Electronics Letters, 2004, 40, 1466.	0.5	87
6	ECG Denoising Based on the Empirical Mode Decomposition. , 2006, 2006, 1-4.		83
7	A low computational complexity algorithm for ECG signal compression. Medical Engineering and Physics, 2004, 26, 553-568.	0.8	74
8	Digital Auscultation Analysis for Heart Murmur Detection. Annals of Biomedical Engineering, 2009, 37, 337-353.	1.3	71
9	Selection of Dynamic Features Based on Time–Frequency Representations for Heart Murmur Detection from Phonocardiographic Signals. Annals of Biomedical Engineering, 2010, 38, 118-137.	1.3	70
10	On the use of PRD and CR parameters for ECG compression. Medical Engineering and Physics, 2005, 27, 798-802.	0.8	68
11	The Effectiveness of the Glottal to Noise Excitation Ratio for the Screening of Voice Disorders. Journal of Voice, 2010, 24, 47-56.	0.6	68
12	Feature Extraction From Parametric Time–Frequency Representations for Heart Murmur Detection. Annals of Biomedical Engineering, 2010, 38, 2716-2732.	1.3	58
13	A Fast Windowing-Based Technique Exploiting Spline Functions for Designing Modulated Filter Banks. IEEE Transactions on Circuits and Systems I: Regular Papers, 2009, 56, 168-178.	3.5	50
14	Wavelet Packets Feasibility Study for the Design of an ECG Compressor. IEEE Transactions on Biomedical Engineering, 2007, 54, 766-769.	2.5	43
15	Nonlinear Trend Estimation of the Ventricular Repolarization Segment for T-Wave Alternans Detection. IEEE Transactions on Biomedical Engineering, 2010, 57, 2402-2412.	2.5	39
16	Embedded filter bank-based algorithm for ECG compression. Signal Processing, 2008, 88, 1402-1412.	2.1	36
17	Sudden Cardiac Risk Stratification with Electrocardiographic Indices - A Review on Computational Processing, Technology Transfer, and Scientific Evidence. Frontiers in Physiology, 2016, 7, 82.	1.3	35
18	Automatic Assessment of Voice Quality According to the GRBAS Scale. , 2006, 2006, 2478-81.		32

#	Article	IF	Citations
19	On the Use of Discrete Cosine Transforms for Multicarrier Communications. IEEE Transactions on Signal Processing, 2012, 60, 6085-6090.	3.2	29
20	Noise Maps for Quantitative and Clinical Severity Towards Long-Term ECG Monitoring. Sensors, 2017, 17, 2448.	2.1	25
21	Pathological Likelihood Index as a Measurement ofÂthe Degree of Voice Normality and Perceived Hoarseness. Journal of Voice, 2010, 24, 667-677.	0.6	24
22	Baseline Wander Correction in ECG by the Empirical Mode Decomposition. , 0, , .		19
23	Single-Carrier and Multicarrier Transceivers Based on Discrete Cosine Transform Type-IV. IEEE Transactions on Wireless Communications, 2013, 12, 6454-6463.	6.1	19
24	Nonparametric Signal Processing Validation in T-Wave Alternans Detection and Estimation. IEEE Transactions on Biomedical Engineering, 2014, 61, 1328-1338.	2.5	17
25	A Wavelet OFDM receiver for baseband power line communications. Journal of the Franklin Institute, 2016, 353, 1654-1671.	1.9	17
26	Effects of Audio Compression in Automatic Detection of Voice Pathologies. IEEE Transactions on Biomedical Engineering, 2008, 55, 2831-2835.	2.5	14
27	Joint use of DFT filter banks and modulated transmultiplexers for multicarrier communications. Signal Processing, 2011, 91, 1622-1635.	2.1	14
28	Retained energy-based coding for EEG signals. Medical Engineering and Physics, 2012, 34, 892-899.	0.8	14
29	Throughput Analysis of Wavelet OFDM in Broadband Power Line Communications. IEEE Access, 2018, 6, 16727-16736.	2.6	13
30	Zero-padding or cyclic prefix for MDFT-based filter bank multicarrier communications. Signal Processing, 2012, 92, 1646-1657.	2.1	11
31	On the Beat Detection Performance in Long-Term ECG Monitoring Scenarios. Sensors, 2018, 18, 1387.	2.1	11
32	Consistent quality control in ECG compression by means of direct metrics. Physiological Measurement, 2015, 36, 1981-1994.	1.2	10
33	Benchmarking of a T-wave alternans detection method based on empirical mode decomposition. Computer Methods and Programs in Biomedicine, 2017, 145, 147-155.	2.6	10
34	Multi-objective optimisation technique to design digital filters for modulated multi-rate systems. Electronics Letters, 2008, 44, 827.	0.5	9
35	Analysis of tractable distortion metrics for EEG compression applications. Physiological Measurement, 2012, 33, 1237-1247.	1.2	9
36	A Flexible 12-Lead/Holter Device with Compression Capabilities for Low-Bandwidth Mobile-ECG Telemedicine Applications. Sensors, 2018, 18, 3773.	2.1	9

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37	Compressive sensing for ECG signals in the presence of electromyographic noise. , 2012, , .		8
38	Design of Two-Dimensional Optical Alignment Signals Robust to Diffractive Effects. Journal of Lightwave Technology, 2008, 26, 1702-1707.	2.7	7
39	P2P Multiuser Low-Cost Universal Solution for On-Demand GPS Positioning and Tracking in Large Environments. IEEE Transactions on Intelligent Transportation Systems, 2011, 12, 1385-1397.	4.7	6
40	Electroencephalographic compression based on modulated filter banks and wavelet transform. , 2011, 2011, 7067-70.		6
41	Efficient thresholding-based ECG compressors for high quality applications using cosine modulated filter banks. , 2011, 2011, 7079-82.		6
42	Target detection for low cost uncooled MWIR cameras based on empirical mode decomposition. Infrared Physics and Technology, 2014, 63, 222-231.	1.3	4
43	On the compression of ECG records employing triangular elements and analysis-by-synthesis modeling. , 2010, , .		3
44	A Single Matrix Representation for General Digital Filter Structures [Lecture Notes]. IEEE Signal Processing Magazine, 2011, 28, 143-148.	4.6	3
45	Simple Algorithms for Estimating the Symbol Timing Offset in DCT-Based Multicarrier Systems. Wireless Communications and Mobile Computing, 2018, 2018, 1-8.	0.8	3
46	Matching Pursuit Decomposition on Electrocardiograms for Joint Compression and QRS Detection. Circuits, Systems, and Signal Processing, 2019, 38, 2653-2676.	1.2	3
47	Comparison of wavelet packets with cosine-modulated pseudo-QMF bank for ECG compression. , 0, , .		2
48	Enhanced Spectral Method for T–Wave Alternans analysis. , 2007, , .		2
49	Atrial fibrillation detection using stationary wavelet transform analysis. , 2008, 2008, 1128-31.		2
50	Assessment of NPR MDFT filter banks for subband coding and data transmission. , 2011, , .		2
51	Compressive sensing exploiting wavelet-domain dependencies for ECG compression. Proceedings of SPIE, 2012, , .	0.8	2
52	Spatial-Temporal Signals and Clinical Indices in Electrocardiographic Imaging (II): Electrogram Clustering and T-Wave Alternans. Sensors, 2020, 20, 3070.	2.1	2
53	Spatial-Temporal Signals and Clinical Indices in Electrocardiographic Imaging (I): Preprocessing and Bipolar Potentials. Sensors, 2020, 20, 3131.	2.1	2
54	MDFT filter bank multicarrier systems with multiple transmission zeros. , 2011, , .		1

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55	Matrix completion based ECG compression. , 2011, 2011, 1757-60.		1
56	On exploiting interbeat correlation in compressive sensing-based ECG compression. , 2012, , .		1
57	Formulation and Performance Analysis of Broadband and Narrowband OFDM-Based PLC Systems. Sensors, 2021, 21, 290.	2.1	1
58	Clinical Severity of Noise in ECG. , 0, , .		1
59	Computational Efficiency and Accuracy for QRS Detection Algorithms on Clinical Long Term Multilead Monitoring. , 0, , .		1
60	Noise cancellation in IR video based on empirical mode decomposition. Proceedings of SPIE, 2013, , .	0.8	0
61	Automatic system for the analysis of flexion angle of the knee using a probabilistic model. , 2017, , .		0
62	Comparing the Wavelet OFDM and Windowed OFDM data rate for in-home PLC. , 2018, , .		0
63	T-Wave Alternans Analysis With Electrocardiographic Imaging. , 0, , .		0
64	Analysis performance of wavelet OFDM in mobility platforms. Vehicular Communications, 2021, 31, 100373.	2.7	0