Laura Falaschetti

List of Publications by Year
in descending order

50 papers	**486** citations	687363 **13** h-index	794594 **19** g-index
52 all docs	**52** docs citations	**52** times ranked	**357** citing authors

#	Article	IF	Citations
1	Human activity monitoring system based on wearable sEMG and accelerometer wireless sensor nodes. BioMedical Engineering OnLine, 2018, 17, 132.	2.7	49
2	Recurrent Neural Network for Human Activity Recognition in Embedded Systems Using PPG and Accelerometer Data. Electronics (Switzerland), 2021, 10, 1715.	3.1	37
3	Wireless surface electromyograph and electrocardiograph system on 802.15.4. IEEE Transactions on Consumer Electronics, 2016, 62, 258-266.	3.6	29
4	A manifold learning approach to dimensionality reduction for modeling data. Information Sciences, 2019, 491, 16-29.	6.9	24
5	Dataset from PPG wireless sensor for activity monitoring. Data in Brief, 2020, 29, 105044.	1.0	21
6	Classification of Alzheimer's Disease from EEG Signal Using Robust-PCA Feature Extraction. Procedia Computer Science, 2021, 192, 3114-3122.	2.0	21
7	An Investigation on the Accuracy of Truncated DKLT Representation for Speaker Identification With Short Sequences of Speech Frames. IEEE Transactions on Cybernetics, 2017, 47, 4235-4249.	9.5	20
8	EEG-Based Alzheimer's Disease Recognition Using Robust-PCA and LSTM Recurrent Neural Network. Sensors, 2022, 22, 3696.	3.8	20
9	A comparative study of machine learning algorithms for physiological signal classification. Procedia Computer Science, 2018, 126, 1977-1984.	2.0	17
10	A Multi-Channel Electromyography, Electrocardiography and Inertial Wireless Sensor Module Using Bluetooth Low-Energy. Electronics (Switzerland), 2020, 9, 934.	3.1	17
11	A Low-Cost, Low-Power and Real-Time Image Detector for Grape Leaf Esca Disease Based on a Compressed CNN. IEEE Journal on Emerging and Selected Topics in Circuits and Systems, 2021, 11, 468-481.	3.6	16
12	CARMA: A robust motion artifact reduction algorithm for heart rate monitoring from PPG signals. , 2015, , .		14
13	A Rule Based Framework for Smart Training Using sEMG Signal. Smart Innovation, Systems and Technologies, 2015, , 89-99.	0.6	14
14	Human Activity Recognition Using Accelerometer and Photoplethysmographic Signals. Smart Innovation, Systems and Technologies, 2018, , 53-62.	0.6	13
15	Classifier Level Fusion of Accelerometer and sEMG Signals for Automatic Fitness Activity Diarization. Sensors, 2018, 18, 2850.	3.8	12
16	Reduced complexity algorithm for heart rate monitoring from PPG signals using automatic activity intensity classifier. Biomedical Signal Processing and Control, 2019, 52, 293-301.	5.7	12
17	A Comparative Study of Computational Methods for Compressed Sensing Reconstruction of EMG Signal. Sensors, 2019, 19, 3531.	3.8	10
18	Energy and Performance Analysis of Lossless Compression Algorithms for Wireless EMG Sensors. Sensors, 2021, 21, 5160.	3.8	10

#	Article	IF	Citations
19	A Portable Wireless sEMG and Inertial Acquisition System for Human Activity Monitoring. Lecture Notes in Computer Science, 2017, , 608-620.	1.3	10
20	Machine learning regression based on particle bernstein polynomials for nonlinear system identification. , 2017, , .		9
21	Machine Learning and Data Fusion Techniques Applied to Physical Activity Classification Using Photoplethysmographic and Accelerometric Signals. Procedia Computer Science, 2020, 176, 3103-3111.	2.0	9
22	An Efficient Technique for Real-Time Human Activity Classification Using Accelerometer Data. Smart Innovation, Systems and Technologies, 2016, , 425-434.	0.6	8
23	Speaker Identification in Noisy Conditions Using Short Sequences of Speech Frames. Smart Innovation, Systems and Technologies, 2018, , 43-52.	0.6	8
24	Motion Artifact Reduction in Photoplethysmography using Bayesian Classification for Physical Exercise Identification. , 2016, , .		8
25	Singular Value Decomposition in Embedded Systems Based on ARM Cortex-M Architecture. Electronics (Switzerland), 2021, 10, 34.	3.1	7
26	Online Learning of Oil Leak Anomalies in Wind Turbines with Block-Based Binary Reservoir. Electronics (Switzerland), 2021, 10, 2836.	3.1	7
27	HMM speech synthesis based on MDCT representation. International Journal of Speech Technology, 2018, 21, 1045-1055.	2.2	6
28	Robust Speaker Identification in a Meeting with Short Audio Segments. Smart Innovation, Systems and Technologies, 2016, , 465-477.	0.6	6
29	A Driving Technique for AC-AC Direct Matrix Converters Based on Sigma-Delta Modulation. Energies, 2019, 12, 1103.	3.1	5
30	A Low-Rank CNN Architecture for Real-Time Semantic Segmentation in Visual SLAM Applications. IEEE Open Journal of Circuits and Systems, 2022, 3, 115-133.	1.9	5
31	Dataset from spirometer and sEMG wireless sensor for diaphragmatic respiratory activity monitoring. Data in Brief, 2019, 25, 104217.	1.0	4
32	Recognition of Daily Human Activities Using Accelerometer and sEMG Signals. Smart Innovation, Systems and Technologies, 2019, , 37-47.	0.6	4
33	Distributed Speech and Speaker Identification System for Personalized Domotic Control. Lecture Notes in Electrical Engineering, 2016, , 159-170.	0.4	4
34	Learning HMM State Sequences from Phonemes for Speech Synthesis. Procedia Computer Science, 2016, 96, 1589-1596.	2.0	3
35	Optimizing linear routing in the ToLHnet protocol to improve performance over long RS-485 buses. Eurasip Journal on Embedded Systems, 2017, 2017, .	1.2	3
36	Multivariate Direction Scoring for Dimensionality Reduction in Classification Problems. Smart Innovation, Systems and Technologies, 2016, , 413-423.	0.6	3

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37	A GPU Parallel Algorithm for Non Parametric Tensor Learning. , 2018, , .		2
38	An acquisition system of in-house parameters from wireless sensors for the identification of an environmental model. Procedia Computer Science, 2018, 126, 1903-1912.	2.0	2
39	A Machine Learning Approach to the Identification of Dynamical Nonlinear Systems. , 2019, , .		2
40	A Compact and Robust Technique for the Modeling and Parameter Extraction of Carbon Nanotube Field Effect Transistors. Electronics (Switzerland), 2020, 9, 2199.	3.1	2
41	A High-Gain CNTFET-Based LNA Developed Using a Compact Design-Oriented Device Model. Electronics (Switzerland), 2021, 10, 2835.	3.1	2
42	Discrete bessel functions for representing the class of finite duration decaying sequences. , 2016, , .		1
43	Sigma-Delta Based Modulation Method for Matrix Converters. , 2018, , .		1
44	An Effective Manifold Learning Approach to Parametrize Data for Generative Modeling of Biosignals. IEEE Access, 2020, 8, 207112-207133.	4.2	1
45	Activity Monitoring and Phase Detection Using a Portable EMG/ECG System. Lecture Notes in Electrical Engineering, 2019, , 187-194.	0.4	1
46	Principal Tensor Embedding for Unsupervised Tensor Learning. IEEE Access, 2020, 8, 225240-225257.	4.2	1
47	Multi-Class ECG Beat Classification Based on a Gaussian Mixture Model of Karhunen-Loève Transform. International Journal of Simulation: Systems, Science and Technology, 0, , .	0.0	1
48	Synthetic image dataset of shaft junctions inside wind turbines in presence or absence of oil leaks. Data in Brief, 2021, 39, 107538.	1.0	1
49	An algorithm for automatic words extraction from a stream of phones in dictionary-based large vocabulary continuous speech recognition systems. , 2015, , .		0
50	A machine learning method to determine intrinsic dimension of time series data. , 2017, , .		0