

# Emanuele Principi

## List of Publications by Year in descending order

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Version: 2024-02-01

60  
papers

1,089  
citations

686830

13  
h-index

476904

29  
g-index

62  
all docs

62  
docs citations

62  
times ranked

1106  
citing authors

#	ARTICLE	IF	CITATIONS
1	Non-intrusive load monitoring by using active and reactive power in additive Factorial Hidden Markov Models. Applied Energy, 2017, 208, 1590-1607.	5.1	162
2	Unsupervised electric motor fault detection by using deep autoencoders. IEEE/CAA Journal of Automatica Sinica, 2019, 6, 441-451.	8.5	133
3	Denoising autoencoders for Non-Intrusive Load Monitoring: Improvements and comparative evaluation. Energy and Buildings, 2018, 158, 1461-1474.	3.1	124
4	Acoustic template-matching for automatic emergency state detection: An ELM based algorithm. Neurocomputing, 2015, 149, 426-434.	3.5	62
5	A neural network based algorithm for speaker localization in a multi-room environment. , 2016, , .		47
6	An integrated system for voice command recognition and emergency detection based on audio signals. Expert Systems With Applications, 2015, 42, 5668-5683.	4.4	44
7	Acoustic cues from the floor: A new approach for fall classification. Expert Systems With Applications, 2016, 60, 51-61.	4.4	40
8	Polyphonic Sound Event Detection by Using Capsule Neural Networks. IEEE Journal on Selected Topics in Signal Processing, 2019, 13, 310-322.	7.3	39
9	Acoustic novelty detection with adversarial autoencoders. , 2017, , .		30
10	A Combined One-Class SVM and Template-Matching Approach for User-Aided Human Fall Detection by Means of Floor Acoustic Features. Computational Intelligence and Neuroscience, 2017, 2017, 1-13.	1.1	28
11	Localizing speakers in multiple rooms by using Deep Neural Networks. Computer Speech and Language, 2018, 49, 83-106.	2.9	27
12	A Non-Intrusive Load Monitoring Algorithm Based on Non-Uniform Sampling of Power Data and Deep Neural Networks. Energies, 2019, 12, 1371.	1.6	25
13	Few-Shot Siamese Neural Networks Employing Audio Features for Human-Fall Detection. , 2018, , .		23
14	Signer independent isolated Italian sign recognition based on hidden Markov models. Pattern Analysis and Applications, 2015, 18, 385-402.	3.1	19
15	Exploiting the Reactive Power in Deep Neural Models for Non-Intrusive Load Monitoring. , 2018, , .		19
16	Environmental robust speech and speaker recognition through multi-channel histogram equalization. Neurocomputing, 2012, 78, 111-120.	3.5	16
17	Infant Cry Detection in Adverse Acoustic Environments by Using Deep Neural Networks. , 2018, , .		15
18	A Deep Neural Network approach for Voice Activity Detection in multi-room domestic scenarios. , 2015, , .		14

#	ARTICLE	IF	CITATIONS
19	Audio Metric Learning by Using Siamese Autoencoders for One-Shot Human Fall Detection. IEEE Transactions on Emerging Topics in Computational Intelligence, 2021, 5, 108-118.	3.4	14
20	Automatic Detection of Cry Sounds in Neonatal Intensive Care Units by Using Deep Learning and Acoustic Scene Simulation. IEEE Access, 2019, 7, 51982-51993.	2.6	13
21	Comparative Evaluation of Single-Channel MMSE-Based Noise Reduction Schemes for Speech Recognition. Journal of Electrical and Computer Engineering, 2010, 2010, 1-6.	0.6	12
22	A Real-Time Speech Enhancement Framework in Noisy and Reverberated Acoustic Scenarios. Cognitive Computation, 2013, 5, 504-516.	3.6	11
23	Deep neural networks for Multi-Room Voice Activity Detection: Advancements and comparative evaluation. , 2016, , .		10
24	A distributed system for recognizing home automation commands and distress calls in the Italian language. , 0, , .		10
25	A robust iterative inverse filtering approach for speech dereverberation in presence of disturbances. , 2008, , .		9
26	An End-To-End Unsupervised Approach Employing Convolutional Neural Network Autoencoders for Human Fall Detection. Smart Innovation, Systems and Technologies, 2019, , 185-196.	0.5	9
27	Keyword spotting based system for conversation fostering in tabletop scenarios: Preliminary evaluation. , 2009, , .		8
28	Energy Management with Support of PV Partial Shading Modelling in Micro Grid Environments. Energies, 2017, 10, 453.	1.6	8
29	Human Fall Detection by Using an Innovative Floor Acoustic Sensor. Smart Innovation, Systems and Technologies, 2018, , 97-107.	0.5	8
30	Detection of activity and position of speakers by using deep neural networks and acoustic data augmentation. Expert Systems With Applications, 2019, 134, 53-65.	4.4	8
31	Convolutional Neural Networks with 3-D Kernels for Voice Activity Detection in a Multiroom Environment. Smart Innovation, Systems and Technologies, 2018, , 161-170.	0.5	8
32	A New Italian Sign Language Database. Lecture Notes in Computer Science, 2012, , 164-173.	1.0	8
33	A Multichannel Noise Reduction Front-End Based on Psychoacoustics for Robust Speech Recognition in Highly Noisy Environments. , 2008, , .		7
34	Power Normalized Cepstral Coefficients based supervectors and i-vectors for small vocabulary speech recognition. , 2014, , .		7
35	A neural network approach for sound event detection in real life audio. , 2017, , .		7
36	Snore Sounds Excitation Localization by Using Scattering Transform and Deep Neural Networks. , 2018, , .		7

#	ARTICLE	IF	CITATIONS
37	Networked Beagleboards for wireless music applications. , 2012, , .		5
38	Robust speech recognition using feature-domain multi-channel bayesian estimators. , 2010, , .		4
39	Multi-channel Feature Enhancement for Robust Speech Recognition. , 2011, , .		4
40	Low power high-performance computing on the Beagleboard platform. , 2012, , .		4
41	Real-Time Activity Detection in a Multi-Talker Reverberated Environment. Cognitive Computation, 2012, 4, 386-397.	3.6	4
42	Advanced integration of multimedia assistive technologies: A prospective outlook. , 2014, , .		4
43	User-aided footprint extraction for appliance modelling in Non-Intrusive Load Monitoring. , 2016, , .		4
44	Hierarchic Conv Nets Framework for Rare Sound Event Detection. , 2018, , .		4
45	A real-time implementation of an acoustic novelty detector on the BeagleBoard-xM. , 2014, , .		3
46	An experimental study on new features for activity of daily living recognition. , 2016, , .		2
47	Deep Neural Networks for Joint Voice Activity Detection and Speaker Localization. , 2018, , .		2
48	Real-Time Joint Blind Speech Separation and Dereverberation in Presence of Overlapping Speakers. Lecture Notes in Computer Science, 2011, , 437-446.	1.0	2
49	Real-Time Speech Recognition in a Multi-talker Reverberated Acoustic Scenario. Lecture Notes in Computer Science, 2012, , 379-386.	1.0	2
50	Multi-Household Energy Management in a Smart Neighborhood in the Presence of Uncertainties and Electric Vehicles. Electronics (Switzerland), 2021, 10, 3186.	1.8	2
51	A Real-Time Speech Enhancement Front-End for Multi-Talker Reverberated Scenarios. , 2012, , .		1
52	A Novel Adversarial Training Scheme for Deep Neural Network based Speech Enhancement. , 2020, , .		1
53	Dominance Detection in a Reverberated Acoustic Scenario. Lecture Notes in Computer Science, 2012, , 394-402.	1.0	1
54	A Real-Time Speech Enhancement Framework for Multi-party Meetings. Lecture Notes in Computer Science, 2011, , 80-87.	1.0	1

#	ARTICLE	IF	CITATIONS
55	Neural Beamforming for Speech Enhancement: Preliminary Results. Smart Innovation, Systems and Technologies, 2019, , 37-47.	0.5	1
56	Conversational Speech Recognition in Non-stationary Reverberated Environments. Lecture Notes in Computer Science, 2012, , 50-59.	1.0	0
57	Who Cried When: Infant Cry Diarization with Dilated Fully-Convolutional Neural Networks. , 2020, , .		0
58	Efficient SNR Driven SPLICE Implementation for Robust Speech Recognition. Lecture Notes in Computer Science, 2011, , 70-80.	1.0	0
59	BAR LIS: A Web Tool for Italian Sign Language Synthesis and Interaction. , 2014, , 251-261.		0
60	ELM Based Algorithms for Acoustic Template Matching in Home Automation Scenarios: Advancements and Performance Analysis. Smart Innovation, Systems and Technologies, 2016, , 159-168.	0.5	0