

Francesco Piazza

List of Publications by Year in descending order

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Version: 2024-02-01

84
papers

1,801
citations

471061

17
h-index

329751

37
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86
all docs

86
docs citations

86
times ranked

1799
citing authors

#	ARTICLE	IF	CITATIONS
1	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
2	Features Extraction Applied to the Analysis of the Sounds Emitted by Honey Bees in a Beehive. , 2019, , .		16
3	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
4	Digital Signal Processing for Audio Applications: Then, Now and the Future. , 2019, , 37-51.		0
5	End-to-End Learning for Physics-Based Acoustic Modeling. IEEE Transactions on Emerging Topics in Computational Intelligence, 2018, 2, 160-170.	3.4	7
6	Human Fall Detection by Using an Innovative Floor Acoustic Sensor. Smart Innovation, Systems and Technologies, 2018, , 97-107.	0.5	8
7	Denoising autoencoders for Non-Intrusive Load Monitoring: Improvements and comparative evaluation. Energy and Buildings, 2018, 158, 1461-1474.	3.1	124
8	Localizing speakers in multiple rooms by using Deep Neural Networks. Computer Speech and Language, 2018, 49, 83-106.	2.9	27
9	Deep Neural Networks for Joint Voice Activity Detection and Speaker Localization. , 2018, , .		2
10	Few-Shot Siamese Neural Networks Employing Audio Features for Human-Fall Detection. , 2018, , .		23
11	Identification of Volterra Models of Tube Audio Devices using Multiple-Variance Method. AES: Journal of the Audio Engineering Society, 2018, 66, 823-838.	0.8	19
12	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
13	Multichannel acoustic echo cancellation exploiting effective fundamental frequency estimation. Speech Communication, 2017, 86, 97-106.	1.6	7
14	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
15	Acoustic novelty detection with adversarial autoencoders. , 2017, , .		30
16	Energy Management with Support of PV Partial Shading Modelling in Micro Grid Environments. Energies, 2017, 10, 453.	1.6	8
17	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
18	A Statistical Framework for Automatic Leakage Detection in Smart Water and Gas Grids. Energies, 2016, 9, 665.	1.6	12

#	ARTICLE	IF	CITATIONS
19	User-aided footprint extraction for appliance modelling in Non-Intrusive Load Monitoring. , 2016, , .		4
20	Exploiting temporal features and pressure data for automatic leakage detection in smart water grids. , 2016, , .		0
21	Acoustic cues from the floor: A new approach for fall classification. Expert Systems With Applications, 2016, 60, 51-61.	4.4	40
22	Improving the performance of the AFAMAP algorithm for Non-Intrusive Load Monitoring. , 2016, , .		8
23	A neural network based algorithm for speaker localization in a multi-room environment. , 2016, , .		47
24	SW framework for simulation and evaluation of partial shading effects in configurable PV systems. , 2016, , .		2
25	Multichannel Double-Talk Detector based on Fundamental Frequency Estimation. IEEE Signal Processing Letters, 2016, 23, 94-97.	2.1	8
26	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
27	An interactive optimization procedure for stereophonic acoustic echo cancellation systems. , 2015, , .		1
28	Energy management with the support of dynamic pricing strategies in real micro-grid scenarios. , 2015, , .		4
29	A novelty detection approach to identify the occurrence of leakage in smart gas and water grids. , 2015, , .		9
30	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
31	A voice activity detection algorithm for multichannel acoustic echo cancellation exploiting fundamental frequency estimation. , 2015, , .		2
32	Short-term load forecasting for smart water and gas grids: A comparative evaluation. , 2015, , .		1
33	A Deep Neural Network approach for Voice Activity Detection in multi-room domestic scenarios. , 2015, , .		14
34	Investigation on crosstalk cancellation introducing loudspeakers directivity in HRTFs approximation. , 2015, , .		0
35	Intelligent Acoustic Interfaces With Multisensor Acquisition for Immersive Reproduction. IEEE Transactions on Multimedia, 2015, 17, 1262-1272.	5.2	10
36	Unsupervised algorithms for non-intrusive load monitoring: An up-to-date overview. , 2015, , .		84

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37	Acoustic template-matching for automatic emergency state detection: An ELM based algorithm. Neurocomputing, 2015, 149, 426-434.	3.5	62
38	Energy-Aware task scheduler for self-powered sensor nodes: From model to firmware. Ad Hoc Networks, 2015, 24, 73-91.	3.4	10
39	Signer independent isolated Italian sign recognition based on hidden Markov models. Pattern Analysis and Applications, 2015, 18, 385-402.	3.1	19
40	Advanced intelligent acoustic interfaces for multichannel audio reproduction. , 2014, , .		2
41	A novel decorrelation approach for multichannel system identification. , 2014, , .		8
42	A real-time implementation of an acoustic novelty detector on the BeagleBoard-xM. , 2014, , .		3
43	Power Normalized Cepstral Coefficients based supervectors and i-vectors for small vocabulary speech recognition. , 2014, , .		7
44	Advanced audio spatializer combined with a multipoint equalization system. , 2014, , .		0
45	A low latency implementation of a non-uniform partitioned convolution algorithm for room acoustic simulation. Signal, Image and Video Processing, 2014, 8, 985-994.	1.7	4
46	Smart Home Task and Energy Resource Scheduling Based on Nonlinear Programming. Smart Innovation, Systems and Technologies, 2014, , 175-185.	0.5	1
47	An efficient time varying hybrid reverberator for room acoustic simulation. , 2014, , .		1
48	Computational framework based on task and resource scheduling for micro grid design. , 2014, , .		5
49	Objective and Subjective Investigation on a Novel Method for Digital Reverberator Parameters Estimation. IEEE/ACM Transactions on Audio Speech and Language Processing, 2014, 22, 441-452.	4.0	5
50	Energy Demand Management Through Uncertain Data Forecasting:. , 2014, , 309-334.		1
51	Learning Capabilities of ELM-Trained Time-Varying Neural Networks. Smart Innovation, Systems and Technologies, 2014, , 41-52.	0.5	0
52	Online sequential extreme learning machine in nonstationary environments. Neurocomputing, 2013, 116, 94-101.	3.5	53
53	Optimization algorithms for home energy resource scheduling in presence of data uncertainty. , 2013, , .		28
54	A Comparison between Different Optimization Techniques for Energy Scheduling in Smart Home Environment. Smart Innovation, Systems and Technologies, 2013, , 311-320.	0.5	6

#	ARTICLE	IF	CITATIONS
55	Hybrid soft computing algorithmic framework for smart home energy management. <i>Soft Computing</i> , 2013, 17, 1983-2005.	2.1	22
56	Evaluation of a channel decorrelation approach for stereo acoustic echo cancellation. , 2013, , .		0
57	Wireless M-Bus sensor nodes in smart water grids: The energy issue. , 2013, , .		19
58	Identification of Hammerstein model using cubic splines and FIR filtering. , 2013, , .		8
59	Home energy resource scheduling algorithms and their dependency on the battery model. , 2013, , .		14
60	Energy-aware lazy scheduling algorithm for energy-harvesting sensor nodes. <i>Neural Computing and Applications</i> , 2013, 23, 1899-1908.	3.2	22
61	Action dependent heuristic dynamic programming for home energy resource scheduling. <i>International Journal of Electrical Power and Energy Systems</i> , 2013, 48, 148-160.	3.3	128
62	Adaptive Dynamic Programming Algorithm for Renewable Energy Scheduling and Battery Management. <i>Cognitive Computation</i> , 2013, 5, 264-277.	3.6	75
63	A Combined Approach for Channel Decorrelation in Stereo Acoustic Echo Cancellation Exploiting Time-Varying Frequency Shifting. <i>IEEE Signal Processing Letters</i> , 2013, 20, 717-720.	2.1	10
64	Optimal Home Energy Management Under Dynamic Electrical and Thermal Constraints. <i>IEEE Transactions on Industrial Informatics</i> , 2013, 9, 1518-1527.	7.2	225
65	Ontologies for Smart Homes and energy management: An implementation-driven survey. , 2013, , .		13
66	Hybrid Reverberator Using Multiple Impulse Responses for Audio Rendering Improvement. , 2013, , .		1
67	Networked Beagleboards for wireless music applications. , 2012, , .		5
68	Low power high-performance computing on the Beagleboard platform. , 2012, , .		4
69	Low-complexity implementation of a real-time decorrelation algorithm for stereophonic acoustic echo cancellation. <i>Signal Processing</i> , 2012, 92, 2668-2675.	2.1	15
70	Environmental robust speech and speaker recognition through multi-channel histogram equalization. <i>Neurocomputing</i> , 2012, 78, 111-120.	3.5	16
71	A Mixed Decorrelation Approach for Stereo Acoustic Echo Cancellation Based on the Estimation of the Fundamental Frequency. <i>IEEE Transactions on Audio Speech and Language Processing</i> , 2012, 20, 690-698.	3.8	25
72	Optimal Task and Energy Scheduling in Dynamic Residential Scenarios. <i>Lecture Notes in Computer Science</i> , 2012, , 650-658.	1.0	11

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73	An Energy Aware Approach for Task Scheduling in Energy-Harvesting Sensor Nodes. Lecture Notes in Computer Science, 2012, , 601-610.	1.0	2
74	A New Italian Sign Language Database. Lecture Notes in Computer Science, 2012, , 164-173.	1.0	8
75	Ontology-Based Semantic Affective Tagging. Lecture Notes in Computer Science, 2012, , 386-393.	1.0	1
76	A Combined Psychoacoustic Approach for Stereo Acoustic Echo Cancellation. IEEE Transactions on Audio Speech and Language Processing, 2011, 19, 1530-1539.	3.8	18
77	Sentic Web: A New Paradigm for Managing Social Media Affective Information. Cognitive Computation, 2011, 3, 480-489.	3.6	93
78	ELM-Based Time-Variant Neural Networks with Incremental Number of Output Basis Functions. Lecture Notes in Computer Science, 2011, , 403-410.	1.0	3
79	Towards an RDF Encoding of ConceptNet. Lecture Notes in Computer Science, 2011, , 558-565.	1.0	5
80	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
81	Robust speech recognition using feature-domain multi-channel bayesian estimators. , 2010, , .		4
82	Keyword spotting based system for conversation fostering in tabletop scenarios: Preliminary evaluation. , 2009, , .		8
83	An extreme learning machine approach for training Time Variant Neural Networks. , 2008, , .		7
84	A distributed system for recognizing home automation commands and distress calls in the Italian language. , 0, , .		10