Francesco Renna

List of Publications by Year
in descending order

53 papers	**1,036** citations	758635 **12** h-index	752256 **20** g-index
55 all docs	**55** docs citations	**55** times ranked	**1143** citing authors

#	Article	IF	Citations
1	The CirCor DigiScope Dataset: From Murmur Detection to Murmur Classification. IEEE Journal of Biomedical and Health Informatics, 2022, 26, 2524-2535.	3.9	31
2	Classifying the content of social media images to support cultural ecosystem service assessments using deep learning models. Ecosystem Services, 2022, 54, 101410.	2.3	20
3	Joint Training of Hidden Markov Model and Neural Network for Heart Sound Segmentation. , 2021, , .		3
4	Characterizing Parkinsonâ€™s Disease from Speech Samples Using Deep Structured Learning. Advances in Intelligent Systems and Computing, 2020, , 137-146.	0.5	0
5	Source Separation With Side Information Based on Gaussian Mixture Models With Application in Art Investigation. IEEE Transactions on Signal Processing, 2020, 68, 558-572.	3.2	10
6	Deep learningâ€based methods for individual recognition in small birds. Methods in Ecology and Evolution, 2020, 11, 1072-1085.	2.2	93
7	On instabilities of deep learning in image reconstruction and the potential costs of AI. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 30088-30095.	3.3	384
8	Accurate, Very Low Computational Complexity Spike Sorting Using Unsupervised Matched Subspace Learning. IEEE Transactions on Biomedical Circuits and Systems, 2020, 14, 221-231.	2.7	13
9	Adaptive Sojourn Time HSMM for Heart Sound Segmentation. IEEE Journal of Biomedical and Health Informatics, 2019, 23, 642-649.	3.9	37
10	Using Soft Attention Mechanisms to Classify Heart Sounds. , 2019, 2019, 6669-6672.		2
11	Deep Convolutional Neural Networks for Heart Sound Segmentation. IEEE Journal of Biomedical and Health Informatics, 2019, 23, 2435-2445.	3.9	58
12	A Subject-Driven Unsupervised Hidden Semi-Markov Model and Gaussian Mixture Model for Heart Sound Segmentation. IEEE Journal on Selected Topics in Signal Processing, 2019, 13, 323-331.	7.3	7
13	Assessment of Sound Features for Needle Perforation Event Detection. , 2019, 2019, 2597-2600.		2
14	Reconstruction of Optical Vector-Fields With Applications in Endoscopic Imaging. IEEE Transactions on Medical Imaging, 2019, 38, 955-967.	5.4	12
15	Compressive Sensing With Side Information: How to Optimally Capture This Extra Information for GMM Signals?. IEEE Transactions on Signal Processing, 2018, 66, 2314-2329.	3.2	4
16	Convolutional Neural Networks for Heart Sound Segmentation. , 2018, , .		3
17	SOURCE SEPARATION IN THE PRESENCE OF SIDE INFORMATION: NECESSARY AND SUFFICIENT CONDITIONS FOR RELIABLE DE-MIXING. , 2018, , .		3
18	On modifying the temporal modeling of HSMMs for pediatric heart sound segmentation. , 2017, , .		4

#	Article	IF	Citations
19	Query Processing for the Internet-of-Things: Coupling of Device Energy Consumption and Cloud Infrastructure Billing. , 2016, , .		7
20	Media Query Processing for the Internet-of-Things: Coupling of Device Energy Consumption and Cloud Infrastructure Billing. IEEE Transactions on Multimedia, 2016, 18, 2537-2552.	5.2	9
21	Bounds on the Number of Measurements for Reliable Compressive Classification. IEEE Transactions on Signal Processing, 2016, 64, 5778-5793.	3.2	18
22	On the design of linear projections for compressive sensing with side information. , 2016, , .		4
23	Classification and Reconstruction of High-Dimensional Signals From Low-Dimensional Features in the Presence of Side Information. IEEE Transactions on Information Theory, 2016, 62, 6459-6492.	1.5	31
24	A general framework for reconstruction and classification from compressive measurements with side information. , 2016, , .		1
25	Signal reconstruction in the presence of side information: The impact of projection kernel design. , 2016, , .		2
26	Mismatch in the Classification of Linear Subspaces: Sufficient Conditions for Reliable Classification. IEEE Transactions on Signal Processing, 2016, 64, 3035-3050.	3.2	3
27	Classification and reconstruction of compressed GMM signals with side information. , 2015, , .		3
28	Mismatch in the classification of linear subspaces: Upper bound to the probability of error. , 2015, , .		0
29	Compressive Classification: Where Wireless Communications Meets Machine Learning. Applied and Numerical Harmonic Analysis, 2015, , 451-468.	0.1	0
30	Resource allocation for secret transmissions on parallel Rayleigh channels. , 2014, , .		8
31	Achievable secrecy rates over MIMOME Gaussian channels with GMM signals in low-noise regime. , 2014, , .		2
32	Reconstruction of Signals Drawn From a Gaussian Mixture Via Noisy Compressive Measurements. IEEE Transactions on Signal Processing, 2014, 62, 2265-2277.	3.2	34
33	Secrecy Transmission on Parallel Channels: Theoretical Limits and Performance of Practical Codes. IEEE Transactions on Information Forensics and Security, 2014, 9, 1765-1779.	4.5	33
34	Semi-Blind Key-Agreement over MIMO Fading Channels. IEEE Transactions on Communications, 2013, 61, 620-627.	4.9	26
35	Low-power secret-key agreement over OFDM. , 2013, , .		7
36	Power allocation strategies for OFDM Gaussian wiretap channels with a friendly jammer. , 2013, , .		9

#	Article	IF	Citations
37	Compressive classification. , 2013, , .		19
38	Projections designs for compressive classification. , 2013, , .		7
39	Compressive sensing for incoherent imaging systems with optical constraints. , 2013, , .		1
40	Reconstruction of Gaussian mixture models from compressive measurements: A phase transition view. , 2013, , .		1
41	Physical-Layer Secrecy for OFDM Transmissions Over Fading Channels. IEEE Transactions on Information Forensics and Security, 2012, 7, 1354-1367.	4.5	87
42	The jamming Game in an OFDM setting. , 2012, , .		2
43	Achievable secrecy rates for wiretap OFDM with QAM constellations. , 2012, , .		2
44	A prototype of a free-space QKD scheme based on the B92 protocol. , 2011, , .		2
45	Semi-Blind Key-Agreement over MIMO Fading Channels. , 2011, , .		2
46	Physical layer secrecy for OFDM systems. , 2010, , .		13
47	High SNR secrecy rates with OFDM signaling over fading channels. , 2010, , .		9
48	On Schmidl-Cox-like frequency estimation applied to UWB Impulse Radio systems. , 2009, , .		1
49	Time synchronization for OFDM systems in very dispersive channels. , 2009, , .		0
50	A tool for the fast distortion evaluation of non linear amplifiers in broadband transmission systems. , 2008, , .		0
51	Estimation of carrier and sampling frequency offset for Ultra Wide Band multiband OFDM systems. , 2008, , .		3
52	A Gaussian Approximation of High-Order Distortion Spectrum in Broadband Amplifiers. IEEE Transactions on Circuits and Systems II: Express Briefs, 2008, 55, 700-704.	2.2	3
53	A Data-Driven Feature Extraction Method for Enhanced Phonocardiogram Segmentation. , 0, , .		0