

Francesco Fioranelli

List of Publications by Year in descending order

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133
papers

3,790
citations

186265

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168389

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137
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137
docs citations

137
times ranked

2215
citing authors

#	ARTICLE	IF	CITATIONS
1	Semisupervised Human Activity Recognition With Radar Micro-Doppler Signatures. IEEE Transactions on Geoscience and Remote Sensing, 2022, 60, 1-12.	6.3	24
2	Roadmap on signal processing for next generation measurement systems. Measurement Science and Technology, 2022, 33, 012002.	2.6	12
3	Data portability for activities of daily living and fall detection in different environments using radar micro-doppler. Neural Computing and Applications, 2022, 34, 7933-7953.	5.6	12
4	Elderly Care - Human Activity Recognition Using Radar with an Open Dataset and Hybrid Maps. Lecture Notes of the Institute for Computer Sciences, Social-Informatics and Telecommunications Engineering, 2022, , 39-51.	0.3	2
5	Distributed radar fusion and recurrent networks for classification of continuous human activities. IET Radar, Sonar and Navigation, 2022, 16, 1144-1161.	1.8	5
6	Radar-based Human Activities Classification with Complex-valued Neural Networks. , 2022, , .		7
7	Evaluation Metrics for Continuous Human Activity Classification Using Distributed Radar Networks. , 2022, , .		1
8	Calibration of Cognitive Classification Systems for Radar Networks for Increased Reliability. , 2022, , .		0
9	Angle-Insensitive Human Motion and Posture Recognition Based on 4D Imaging Radar and Deep Learning Classifiers. IEEE Sensors Journal, 2022, 22, 12173-12182.	4.7	16
10	Distributed Radar-based Human Activity Recognition using Vision Transformer and CNNs. , 2022, , .		10
11	Radar Perception for Autonomous Unmanned Aerial Vehicles: a Survey. , 2022, , .		1
12	Continuous Human Activity Recognition With Distributed Radar Sensor Networks and CNNâ€‘RNN Architectures. IEEE Transactions on Geoscience and Remote Sensing, 2022, 60, 1-15.	6.3	20
13	Human Motion Recognition With Limited Radar Micro-Doppler Signatures. IEEE Transactions on Geoscience and Remote Sensing, 2021, 59, 6586-6599.	6.3	22
14	Simulation framework for activity recognition and benchmarking in different radar geometries. IET Radar, Sonar and Navigation, 2021, 15, 390-401.	1.8	10
15	Phase-Based Classification for Arm Gesture and Gross-Motor Activities Using Histogram of Oriented Gradients. IEEE Sensors Journal, 2021, 21, 7918-7927.	4.7	15
16	Sequential Human Gait Classification With Distributed Radar Sensor Fusion. IEEE Sensors Journal, 2021, 21, 7590-7603.	4.7	46
17	Practical Investigation of a MIMO radar system capabilities for small drones detection. IET Radar, Sonar and Navigation, 2021, 15, 760-774.	1.8	8
18	Measurements and discrimination of drones and birds with a multi-frequency multistatic radar system. IET Radar, Sonar and Navigation, 2021, 15, 841-852.	1.8	15

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19	Radar-PointGNN: Graph Based Object Recognition for Unstructured Radar Point-cloud Data. , 2021, , .		19
20	An LSTM Approach to Short-range personnel recognition using Radar Signals. , 2021, , .		2
21	Continuous human activity recognition for arbitrary directions with distributed radars. , 2021, , .		20
22	Can Radar Remote Life Sensing Technology Help Combat COVID-19?. Frontiers in Communications and Networks, 2021, 2, .	3.0	11
23	Open Radar Initiative: Large Scale Dataset for Benchmarking of micro-Doppler Recognition Algorithms. , 2021, , .		17
24	Chebyshev moments based Drone Classification, Recognition and Fingerprinting. , 2021, , .		2
25	Classification of micro-Doppler radar hand-gesture signatures by means of Chebyshev moments. , 2021, , .		7
26	A One-Class Classification Method for Human Gait Authentication Using Micro-Doppler Signatures. IEEE Signal Processing Letters, 2021, 28, 2182-2186.	3.6	6
27	Radar sensing for human healthcare: challenges and results. , 2021, , .		9
28	Domain adaptation for target classification using micro-Doppler spectra in radar networks. , 2021, , .		0
29	Bi-LSTM Network for Multimodal Continuous Human Activity Recognition and Fall Detection. IEEE Sensors Journal, 2020, 20, 1191-1201.	4.7	149
30	Hierarchical Sensor Fusion for Micro-Gesture Recognition With Pressure Sensor Array and Radar. IEEE Journal of Electromagnetics, RF and Microwaves in Medicine and Biology, 2020, 4, 225-232.	3.4	16
31	Hierarchical Radar Data Analysis for Activity and Personnel Recognition. Remote Sensing, 2020, 12, 2237.	4.0	19
32	Elderly Care: Using Deep Learning for Multi-Domain Activity Classification. , 2020, , .		4
33	Human activity classification with radar signal processing and machine learning. , 2020, , .		20
34	Distributed Radar Information Fusion for Gait Recognition and Fall Detection. , 2020, , .		8
35	Guest Editorial: Innovative Radar Detection, Tracking and Classification for Small UAVs as an Emerging Class of Targets. IET Radar, Sonar and Navigation, 2020, 14, 503-504.	1.8	0
36	Dopâ€NET: a microâ€Doppler radar data challenge. Electronics Letters, 2020, 56, 568-570.	1.0	25

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37	Continuous Human Activity Classification From FMCW Radar With Bi-LSTM Networks. IEEE Sensors Journal, 2020, 20, 13607-13619.	4.7	129
38	Use of Symmetrical Peak Extraction in Drone Micro-Doppler Classification for Staring Radar. , 2020, , .		9
39	Suppression of Mainbeam Deceptive Jammer With FDA-MIMO Radar. IEEE Transactions on Vehicular Technology, 2020, 69, 11584-11598.	6.3	149
40	Spatial images from temporal data. Optica, 2020, 7, 900.	9.3	23
41	Cross-frequency training with adversarial learning for radar micro-Doppler signature classification (Rising Researcher). , 2020, , .		18
42	Multimodal sensing for assisted living using radar. , 2020, , 181-215.		0
43	Derivative Target Line (DTL) for Continuous Human Activity Detection and Recognition. , 2020, , .		3
44	Parametric Investigation on Simulated Staring FMCW Radar for Anti-Drone Swarms. , 2020, , .		1
45	Obtaining Images by Measuring Time. Optics and Photonics News, 2020, 31, 50.	0.5	0
46	Radar-based evaluation of lameness detection in ruminants: preliminary results. , 2019, , .		3
47	Activities Recognition and Fall Detection in Continuous Data Streams Using Radar Sensor. , 2019, , .		15
48	Accuracy Evaluation on the Respiration Rate Estimation using Off-the-shelf Pulse-Doppler Radar. , 2019, , .		0
49	Fusion of Deep Representations in Multistatic Radar Networks to Counteract the Presence of Synthetic Jamming. IEEE Sensors Journal, 2019, 19, 6362-6370.	4.7	8
50	Radar Signal Processing for Sensing in Assisted Living: The Challenges Associated With Real-Time Implementation of Emerging Algorithms. IEEE Signal Processing Magazine, 2019, 36, 29-41.	5.6	111
51	Radar for Health Care: Recognizing Human Activities and Monitoring Vital Signs. IEEE Potentials, 2019, 38, 16-23.	0.3	66
52	Eliminate Aspect Angle Variations for Human Activity Recognition using Unsupervised Deep Adaptation Network. , 2019, , .		8
53	Dynamic Hand Gesture Classification Based on Multistatic Radar Micro-Doppler Signatures Using Convolutional Neural Network. , 2019, , .		24
54	Cross-Frequency Classification of Indoor Activities with DNN Transfer Learning. , 2019, , .		11

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55	Fusion of Wearable and Contactless Sensors for Intelligent Gesture Recognition. Advanced Intelligent Systems, 2019, 1, 1900088.	6.1	39
56	Radar Sensing in Assisted Living: an Overview. , 2019, , .		3
57	Multistatic human micro-Doppler classification with degraded/jammed radar data. , 2019, , .		2
58	DopNet: A Deep Convolutional Neural Network to Recognize Armed and Unarmed Human Targets. IEEE Sensors Journal, 2019, 19, 4160-4172.	4.7	13
59	Continuous Human Motion Recognition With a Dynamic Range-Doppler Trajectory Method Based on FMCW Radar. IEEE Transactions on Geoscience and Remote Sensing, 2019, 57, 6821-6831.	6.3	110
60	Micro Doppler Radar and Depth Sensor Fusion for Human Activity Monitoring in AAL. Lecture Notes in Electrical Engineering, 2019, , 519-528.	0.4	1
61	Measurements of Multistatic X&L Band Radar Signatures of UAVS. , 2019, , .		4
62	Elderly care: activities of daily living classification with an S band radar. Journal of Engineering, 2019, 2019, 7601-7606.	1.1	5
63	From Kinect skeleton data to hand gesture recognition with radar. Journal of Engineering, 2019, 2019, 6914-6919.	1.1	9
64	Effective Ground-Truthing of Supervised Machine Learning for Drone Classification. , 2019, , .		13
65	Multi-time frequency analysis and classification of a micro-drone carrying payloads using multistatic radar. Journal of Engineering, 2019, 2019, 7047-7051.	1.1	18
66	Internet of Things and LoRaWAN-Enabled Future Smart Farming. IEEE Internet of Things Magazine, 2019, 2, 14-19.	2.6	52
67	Radar sensing for healthcare. Electronics Letters, 2019, 55, 1022-1024.	1.0	57
68	Human Activity Recognition : Preliminary Results for Dataset Portability using FMCW Radar. , 2019, , .		38
69	Fusion of Wearable and Contactless Sensors for Intelligent Gesture Recognition. Advanced Intelligent Systems, 2019, 1, 1970072.	6.1	5
70	Initial results of Radar-based classification of commercial drone carrying small payloads. , 2019, , .		4
71	Human Activities Classification in a Complex Space Using Raw Radar Data. , 2019, , .		7
72	FMCW radar and inertial sensing synergy for assisted living. Journal of Engineering, 2019, 2019, 6784-6789.	1.1	5

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73	RF Sensing Technologies for Assisted Daily Living in Healthcare: A Comprehensive Review. IEEE Aerospace and Electronic Systems Magazine, 2019, 34, 26-44.	1.3	108
74	A Secure Occupational Therapy Framework for Monitoring Cancer Patientsâ€™ Quality of Life. Sensors, 2019, 19, 5258.	3.8	19
75	Magnetic and Radar Sensing for Multimodal Remote Health Monitoring. IEEE Sensors Journal, 2019, 19, 8979-8989.	4.7	32
76	Experimental measurements of radar signatures of large wind turbine. Journal of Engineering, 2019, 2019, 7165-7169.	1.1	2
77	Activity recognition with cooperative radar systems at C and K band. Journal of Engineering, 2019, 2019, 7100-7104.	1.1	5
78	Evaluation of lameness detection using radar sensing in ruminants. Veterinary Record, 2019, 185, 572-572.	0.3	9
79	Personnel Recognition and Gait Classification Based on Multistatic Micro-Doppler Signatures Using Deep Convolutional Neural Networks. IEEE Geoscience and Remote Sensing Letters, 2018, 15, 669-673.	3.1	119
80	Multistatic radar classification of armed vs unarmed personnel using neural networks. Evolving Systems, 2018, 9, 135-144.	3.9	13
81	The use of multiple-choice questions in 3rd-year electronic engineering assessment: A case study. , 2018, , .		1
82	Radar for assisted living in the context of Internet of Things for Health and beyond. , 2018, , .		10
83	Mobile Internet Activity Estimation and Analysis at High Granularity: SVR Model Approach. , 2018, , .		3
84	Activity Classification Using Raw Range and I & Q Radar Data with Long Short Term Memory Layers. , 2018, , .		12
85	Hierarchical Classification on Multimodal Sensing for Human Activity Recognition and Fall Detection. , 2018, , .		6
86	Practical classification of different moving targets using automotive radar and deep neural networks. IET Radar, Sonar and Navigation, 2018, 12, 1082-1089.	1.8	89
87	Human Activity Classification With Radar: Optimization and Noise Robustness With Iterative Convolutional Neural Networks Followed With Random Forests. IEEE Sensors Journal, 2018, 18, 9669-9681.	4.7	59
88	Review of radar classification and RCS characterisation techniques for small UAVs or drones. IET Radar, Sonar and Navigation, 2018, 12, 911-919.	1.8	123
89	Suppression Approach to Main-Beam Deceptive Jamming in FDA-MIMO Radar Using Nonhomogeneous Sample Detection. IEEE Access, 2018, 6, 34582-34597.	4.2	72
90	Effect of sparsity-aware time-frequency analysis on dynamic hand gesture classification with radar micro-Doppler signatures. IET Radar, Sonar and Navigation, 2018, 12, 815-820.	1.8	29

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91	A Multisensory Approach for Remote Health Monitoring of Older People. IEEE Journal of Electromagnetics, RF and Microwaves in Medicine and Biology, 2018, 2, 102-108.	3.4	49
92	Animal Lameness Detection With Radar Sensing. IEEE Geoscience and Remote Sensing Letters, 2018, 15, 1189-1193.	3.1	24
93	Measurements and modelling of radar signatures of large wind turbine using multiple sensors. , 2018, , .		2
94	Radar and RGB-Depth Sensors for Fall Detection: A Review. IEEE Sensors Journal, 2017, 17, 3585-3604.	4.7	157
95	Bistatic human micro-Doppler signatures for classification of indoor activities. , 2017, , .		19
96	Correlation analysis of simultaneously collected bistatic and monostatic sea clutter. , 2017, , .		7
97	First measurements with NeXtRAD, a polarimetric X/L Band radar network. , 2017, , .		6
98	Feature Diversity for Optimized Human Micro-Doppler Classification Using Multistatic Radar. IEEE Transactions on Aerospace and Electronic Systems, 2017, 53, 640-654.	4.7	66
99	Practical investigation of multiband mono- and bistatic radar signatures of wind turbines. IET Radar, Sonar and Navigation, 2017, 11, 909-921.	1.8	12
100	Simultaneous data collection of small maritime targets using multistatic radar and forward scatter radar. IET Radar, Sonar and Navigation, 2017, 11, 937-945.	1.8	1
101	Multistatic micro-Doppler radar feature extraction for classification of unloaded/loaded micro-drones. IET Radar, Sonar and Navigation, 2017, 11, 116-124.	1.8	110
102	Multisensor data fusion for human activities classification and fall detection. , 2017, , .		49
103	Feature diversity for fall detection and human indoor activities classification using radar systems. , 2017, , .		27
104	Gait analysis of horses for lameness detection with radar sensors. , 2017, , .		7
105	Micro UAV Crime Prevention: Can We Help Princess Leia?. , 2017, , 359-376.		15
106	Bistatic Radar Configuration for Human Body and Limb Motion Detection and Classification. , 2017, , 179-198.		1
107	Gait classification based on micro-Doppler features. , 2016, , .		8
108	Monostatic and bistatic radar measurements of birds and micro-drone. , 2016, , .		55

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109	Experimental analysis of multistatic multiband radar signatures of wind turbines. IET Radar, Sonar and Navigation, 2016, 10, 1400-1410.	1.8	6
110	Performance Analysis of Centroid and SVD Features for Personnel Recognition Using Multistatic Micro-Doppler. IEEE Geoscience and Remote Sensing Letters, 2016, 13, 725-729.	3.1	52
111	Experimental analysis of multistatic wind turbine radar clutter statistics. Electronics Letters, 2016, 52, 226-228.	1.0	5
112	Micro-Doppler based detection and tracking of UAVs with multistatic radar. , 2016, , .		102
113	Copolar calibration of multistatic radar in the presence of multipath. , 2016, , .		4
114	Dynamic hand gesture classification based on radar micro-Doppler signatures. , 2016, , .		46
115	Analysis of polarimetric bistatic sea clutter using the NetRAD radar system. IET Radar, Sonar and Navigation, 2016, 10, 1356-1366.	1.8	15
116	Centroid features for classification of armed/unarmed multiple personnel using multistatic human micro-Doppler. IET Radar, Sonar and Navigation, 2016, 10, 1702-1710.	1.8	39
117	Analysis of multiband monostatic and bistatic radar signatures of wind turbines. , 2015, , .		4
118	Personnel recognition based on multistatic micro-Doppler and singular value decomposition features. Electronics Letters, 2015, 51, 2143-2145.	1.0	15
119	Simultaneous data collection of small maritime targets using multistatic and forward scatter radar. , 2015, , .		3
120	Database design for an experimental, dual band, polarimetric radar. , 2015, , .		0
121	Micro-drone RCS analysis. , 2015, , .		97
122	Classification of loaded/unloaded micro-drones using multistatic radar. Electronics Letters, 2015, 51, 1813-1815.	1.0	113
123	Through-The-Wall Detection With Gated FMCW Signals Using Optimized Patch-Like and Vivaldi Antennas. IEEE Transactions on Antennas and Propagation, 2015, 63, 1106-1117.	5.1	44
124	Multistatic human micro-Doppler classification of armed/unarmed personnel. IET Radar, Sonar and Navigation, 2015, 9, 857-865.	1.8	60
125	Classification of Unarmed/Armed Personnel Using the NetRAD Multistatic Radar for Micro-Doppler and Singular Value Decomposition Features. IEEE Geoscience and Remote Sensing Letters, 2015, 12, 1933-1937.	3.1	122
126	Analysis of polarimetric multistatic human micro-Doppler classification of armed/unarmed personnel. , 2015, , .		13

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127	Measurement and analysis of multiband bistatic and monostatic radar signatures of wind turbines. Electronics Letters, 2015, 51, 1112-1113.	1.0	7
128	Aspect angle dependence and multistatic data fusion for micro-Doppler classification of armed/unarmed personnel. IET Radar, Sonar and Navigation, 2015, 9, 1231-1239.	1.8	50
129	Multistatic radar: System requirements and experimental validation. , 2014, , .		27
130	Frequency-Modulated Interrupted Continuous Wave as Wall Removal Technique in Through-the-Wall Imaging. IEEE Transactions on Geoscience and Remote Sensing, 2014, 52, 6272-6283.	6.3	22
131	Frequency modulated interrupted continuous wave signals in different radar imaging applications. , 2014, , .		2
132	Optimized patch-like antennas for through the wall radar imaging and preliminary results with frequency modulated interrupted continuous wave. , 2012, , .		3
133	Radar for Indoor Monitoring. , 0, , .		83