Shijia Pan

List of Publications by Year
in descending order

87 papers	1,253 citations	840776 11 h-index	794594 19 g-index
89 all docs	89 docs citations	89 times ranked	685 citing authors

#	ARTICLE	IF	CITATIONS
1	FootprintID. , 2017, 1, 1-31.		113
2	Indoor Person Identification through Footstep Induced Structural Vibration. , 2015, , .		98
3	Occupant localization using footstep-induced structural vibration. Mechanical Systems and Signal Processing, 2018, 112, 77-97.	8.0	91
4	Do You Feel What I Hear? Enabling Autonomous IoT Device Pairing Using Different Sensor Types. , 2018, , .		70
5	Design Experiences in Minimalistic Flying Sensor Node Platform through SensorFly. ACM Transactions on Sensor Networks, 2017, 13, 1-37.	3.6	64
6	Conductive Thread-Based Textile Sensor for Continuous Perspiration Level Monitoring. Sensors, 2018, 18, 3775.	3.8	47
7	Step-Level Occupant Detection across Different Structures through Footstep-Induced Floor Vibration Using Model Transfer. Journal of Engineering Mechanics - ASCE, 2020, 146, .	2.9	40
8	PANDAA. , 2011, , .		33
9	SurfaceVibe. , 2017, , .		31
10	BOES: Building Occupancy Estimation System using sparse ambient vibration monitoring. Proceedings of SPIE, 2014, , .	0.8	30
11	CAP. , 2019, 3, 1-25.		29
12	Fine-Grained Recognition of Activities of Daily Living through Structural Vibration and Electrical Sensing. , 2019, , .		26
13	SugarTrail: Indoor navigation in retail environments without surveys and maps. , 2013, , .		25
14	PGA. , 2018, , .		25
15	<i>UniverSense</i>. , 2018, , .		24
16	Robust Occupant Detection Through Step-Induced Floor Vibration by Incorporating Structural Characteristics. Conference Proceedings of the Society for Experimental Mechanics, 2016, , 357-367.	0.5	22
17	Polaris. , 2012, , .		21
18	Collaboratively Adaptive Vibration Sensing System for High-fidelity Monitoring of Structural Responses Induced by Pedestrians. Frontiers in Built Environment, 2017, 3, .	2.3	20

#	Article	IF	Citations
19	IDIoT: Towards Ubiquitous Identification of IoT Devices through Visual and Inertial Orientation Matching During Human Activity. , 2020, , .		20
20	VVRRM. , 2018, , .		19
21	IDrone. , 2018, 2, 1-22.		19
22	Structure- and Sampling-Adaptive Gait Balance Symmetry Estimation Using Footstep-Induced Structural Floor Vibrations. Journal of Engineering Mechanics - ASCE, 2021, 147, .	2.9	19
23	Characterizing human activity induced impulse and slip-pulse excitations through structural vibration. Journal of Sound and Vibration, 2018, 414, 61-80.	3.9	18
24	Smart Home Occupant Identification via Sensor Fusion Across On-Object Devices. ACM Transactions on Sensor Networks, 2018, 14, 1-22.	3.6	18
25	Device-free Multiple People Localization through Floor Vibration. , 2019, , .		17
26	Characterizing wave propagation to improve indoor step-level person localization using floor vibration. , 2016, , .		16
27	Headio. , 2013, , .		15
28	Step-level person localization through sparse sensing of structural vibration. , 2015, , .		14
29	Monitoring Hand-Washing Practices using Structural Vibrations. , 0, , .		14
30	OAC: Overlapping Office Activity Classification through IoT-Sensed Structural Vibration. , 2020, , .		13
31	Securitas. , 2013, , .		12
32	<i>Sensetribute</i>. , 2017, , .		12
33	Obstruction-invariant occupant localization using footstep-induced structural vibrations. Mechanical Systems and Signal Processing, 2021, 153, 107499.	8.0	12
34	Characterizing left-right gait balance using footstep-induced structural vibrations. , 2017, , .		12
35	Area Occupancy Counting Through Sparse Structural Vibration Sensing. IEEE Pervasive Computing, 2019, 18, 28-37.	1.3	11
36	Multiple Pedestrian Tracking through Ambient Structural Vibration Sensing. , 2016, , .		11

#	Article	IF	Citations
37	Fine-grained activities recognition with coarse-grained labeled multi-modal data. , 2020, , .		11
38	AIM3S. , 2019, , .		11
39	Occupant Activity Level Estimation Using Floor Vibration. , 2018, , .		10
40	Structural Property Guided Gait Parameter Estimation Using Footstep-Induced Floor Vibrations. Conference Proceedings of the Society for Experimental Mechanics, 2020, , 191-194.	0.5	10
41	Gait health monitoring through footstep-induced floor vibrations. , 2019, , .		8
42	Autonomous Inventory Monitoring through Multi-Modal Sensing (AIM3S) for Cashier-Less Stores. , 2019, , .		8
43	Occupant traffic estimation through structural vibration sensing. Proceedings of SPIE, 2016, , .	0.8	7
44	A Signal Quality Assessment Metrics for Vibration-based Human Sensing Data Acquisition. , 2019, , .		7
45	Deskbuddy. , 2019, , .		6
46	PigNet. , 2021, , .		6
47	Demo Abstract: PosePair: Pairing IoT Devices through Visual Human Pose Analysis. , 2018, , .		5
48	AutoQual: task-oriented structural vibration sensing quality assessment leveraging co-located mobile sensing context. CCF Transactions on Pervasive Computing and Interaction, 2021, 3, 378-396.	2.6	5
49	Fine-Grained Activity of Daily Living (ADL) Recognition Through Heterogeneous Sensing Systems With Complementary Spatiotemporal Characteristics. Frontiers in Built Environment, 2020, 6, .	2.3	5
50	Adding directional context to gestures using doppler effect. , 2014, , .		4
51	WhereWear. , 2019, , .		4
52	Structures as Sensors: Indirect Sensing for Inferring Users and Environments. Computer, 2019, 52, 84-88.	1.1	4
53	FAIM: Vision and Weight Sensing Fusion Framework for Autonomous Inventory Monitoring in Convenience Stores. Frontiers in Built Environment, 2020, 6, .	2.3	4
54	Device-free Sleep Stage Recognition through Bed Frame Vibration Sensing. , 2019, , .		4

#	Article	IF	Citations
55	Demo abstract. , 2013, , .		3
56	Structural vibration sensing to evaluate animal activity on a pig farm. , 2018, , .		3
57	Moisture Based Perspiration Level Estimation. , 2018, , .		3
58	Secure pairing via video and IMU verification. , 2019, , .		3
59	JawSense. , 2021, , .		3
60	Vibration-Based Indoor Human Sensing Quality Reinforcement via Thompson Sampling. , 2021, , .		3
61	Vibration-based Indoor Occupant Gait Monitoring with Robot Vacuum Cleaners. , 2021, , .		3
62	Vibration Source Separation for Multiple People Gait Monitoring Using Footstep-Induced Floor Vibrations. , 0, , .		3
63	Data Quality-Informed Multiple Occupant Localization using Floor Vibration Sensing. , 2020, , .		3
64	Structural sensing system with networked dynamic sensing configuration. , 2015, , .		2
65	Vibration-Based Occupant Activity Level Monitoring System. , 2018, , .		2
66	Dependable Sensing System for Pig Farming. , 2019, , .		2
67	Opportunities in the Cross-Scale Collaborative Human Sensing of 'Developing' Device-Free and Wearable Systems. , 2020, , .		2
68	Using Mobile Sensing to Enable the Signal Quality Assessment for Infrastructure Sensing Systems. , 2020, , .		2
69	A window-based sequence-to-one approach with dynamic voting for nurse care activity recognition using acceleration-based wearable sensor. , 2020, , .		2
70	Footstep-Induced Floor Vibration Dataset. , 2021, , .		2
71	MODES. , 2022, , .		2
72	Occupant-induced office floor vibration dataset for activity level monitoring. , 2018, , .		1

#	Article	IF	Citations
73	Poster Abstract: Using Deep Learning to Classify The Acceleration Measurement Devices. , 2020, , .		1
74	CML-IOT 2020. , 2020, , .		1
75	SCSV 2. , 2020, , .		1
76	Decoupling the unfairness propagation chain in crowd sensing and learning systems for spatio-temporal urban monitoring. , 2021, , .		1
77	iCEnergy. , 2012, , .		0
78	Heart and sole - shoe-based heart monitoring. , 2017, , .		0
79	CPD 2018. , 2018, , .		0
80	Seat vibration for heart monitoring in a moving automobile. , 2018, , .		0
81	CML-IOT 2019. , 2019, , .		0
82	JawSense. , 2021, , .		0
83	CPD 2019. , 2019, , .		0
84	Physics-Guided Model Transfer for Human Gait Monitoring using Footstep-Induced Floor Vibration. , 0, , .		0
85	Editorial for special issue on mobile intelligence: sensing, computing and networking. CCF Transactions on Pervasive Computing and Interaction, 2021, 3, 341-343.	2.6	0
86	CPD 2020. , 2020, , .		0
87	AutoLoc: Autonomous Sensor Location Configuration via Cross Modal Sensing. Frontiers in Big Data, 2022, 5, 835949.	2.9	0