

Chaofan Yang

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/9119431/publications.pdf>

Version: 2024-02-01

154
papers

8,986
citations

109321

35
h-index

82547

72
g-index

163
all docs

163
docs citations

163
times ranked

5651
citing authors

#	ARTICLE	IF	CITATIONS
1	From RSSI to CSI. ACM Computing Surveys, 2013, 46, 1-32.	23.0	850
2	Locating in fingerprint space. , 2012, , .		578
3	Incentives for Mobile Crowd Sensing: A Survey. IEEE Communications Surveys and Tutorials, 2016, 18, 54-67.	39.4	416
4	Smartphones Based Crowdsourcing for Indoor Localization. IEEE Transactions on Mobile Computing, 2015, 14, 444-457.	5.8	324
5	WILL: Wireless Indoor Localization without Site Survey. IEEE Transactions on Parallel and Distributed Systems, 2013, 24, 839-848.	5.6	323
6	Zero-Effort Cross-Domain Gesture Recognition with Wi-Fi. , 2019, , .		271
7	Non-Invasive Detection of Moving and Stationary Human With WiFi. IEEE Journal on Selected Areas in Communications, 2015, 33, 2329-2342.	14.0	266
8	Location, Localization, and Localizability. Journal of Computer Science and Technology, 2010, 25, 274-297.	1.5	265
9	Widar2.0. , 2018, , .		252
10	Mobility Increases Localizability. ACM Computing Surveys, 2015, 47, 1-34.	23.0	215
11	Quality of Trilateration: Confidence-Based Iterative Localization. IEEE Transactions on Parallel and Distributed Systems, 2010, 21, 631-640.	5.6	202
12	Widar. , 2017, , .		201
13	Free Market of Crowdsourcing: Incentive Mechanism Design for Mobile Sensing. IEEE Transactions on Parallel and Distributed Systems, 2014, 25, 3190-3200.	5.6	199
14	Does Wireless Sensor Network Scale? A Measurement Study on GreenOrbs. IEEE Transactions on Parallel and Distributed Systems, 2013, 24, 1983-1993.	5.6	189
15	Inferring Motion Direction using Commodity Wi-Fi for Interactive Exergames. , 2017, , .		165
16	Spatial Reusability-Aware Routing in Multi-Hop Wireless Networks. IEEE Transactions on Computers, 2016, 65, 244-255.	3.4	154
17	PADS: Passive detection of moving targets with dynamic speed using PHY layer information. , 2014, , .		149
18	Beyond Trilateration: On the Localizability of Wireless Ad Hoc Networks. IEEE/ACM Transactions on Networking, 2010, 18, 1806-1814.	3.8	142

#	ARTICLE	IF	CITATIONS
19	FEMO. , 2015, , .		129
20	PhaseU: Real-time LOS identification with WiFi. , 2015, , .		127
21	STPP: Spatial-Temporal Phase Profiling-Based Method for Relative RFID Tag Localization. IEEE/ACM Transactions on Networking, 2017, 25, 596-609.	3.8	121
22	Automatic Radio Map Adaptation for Indoor Localization Using Smartphones. IEEE Transactions on Mobile Computing, 2018, 17, 517-528.	5.8	119
23	Energy-Efficient Neighbor Discovery in Mobile Ad Hoc and Wireless Sensor Networks: A Survey. IEEE Communications Surveys and Tutorials, 2014, 16, 1448-1459.	39.4	109
24	Localization of Wireless Sensor Networks in the Wild: Pursuit of Ranging Quality. IEEE/ACM Transactions on Networking, 2013, 21, 311-323.	3.8	100
25	Spatio-Temporal Analysis and Prediction of Cellular Traffic in Metropolis. IEEE Transactions on Mobile Computing, 2019, 18, 2190-2202.	5.8	95
26	Sensorless sensing with WiFi. Tsinghua Science and Technology, 2015, 20, 1-6.	6.1	93
27	High-Accuracy TDOA-Based Localization without Time Synchronization. IEEE Transactions on Parallel and Distributed Systems, 2013, 24, 1567-1576.	5.6	88
28	Towards omnidirectional passive human detection. , 2013, , .		86
29	Peer-to-Peer Indoor Navigation Using Smartphones. IEEE Journal on Selected Areas in Communications, 2017, 35, 1141-1153.	14.0	78
30	Omnidirectional Coverage for Device-Free Passive Human Detection. IEEE Transactions on Parallel and Distributed Systems, 2014, 25, 1819-1829.	5.6	77
31	Sea Depth Measurement with Restricted Floating Sensors. , 2007, , .		75
32	LiFi: Line-Of-Sight identification with WiFi. , 2014, , .		74
33	Gain Without Pain. , 2017, 1, 1-19.		72
34	OTrack: Order tracking for luggage in mobile RFID systems. , 2013, , .		67
35	Understanding Node Localizability of Wireless Ad Hoc and Sensor Networks. IEEE Transactions on Mobile Computing, 2012, 11, 1249-1260.	5.8	66
36	Enabling Contactless Detection of Moving Humans with Dynamic Speeds Using CSI. Transactions on Embedded Computing Systems, 2018, 17, 1-18.	2.9	65

#	ARTICLE	IF	CITATIONS
37	Acousticcardiogram: Monitoring Heartbeats using Acoustic Signals on Smart Devices. , 2018, , .		65
38	Enhancing wifi-based localization with visual clues. , 2015, , .		63
39	On Reliable Task Assignment for Spatial Crowdsourcing. IEEE Transactions on Emerging Topics in Computing, 2019, 7, 174-186.	4.6	62
40	WiFi-Based Indoor Line-of-Sight Identification. IEEE Transactions on Wireless Communications, 2015, 14, 6125-6136.	9.2	61
41	Static power of mobile devices: Self-updating radio maps for wireless indoor localization. , 2015, , .		59
42	Sleep Hunter: Towards Fine Grained Sleep Stage Tracking with Smartphones. IEEE Transactions on Mobile Computing, 2016, 15, 1514-1527.	5.8	58
43	Intelligent sleep stage mining service with smartphones. , 2014, , .		57
44	A Platform for Free-Weight Exercise Monitoring with Passive Tags. IEEE Transactions on Mobile Computing, 2017, 16, 3279-3293.	5.8	57
45	Detecting Outlier Measurements Based on Graph Rigidity for Wireless Sensor Network Localization. IEEE Transactions on Vehicular Technology, 2013, 62, 374-383.	6.3	54
46	Robust Trajectory Estimation for Crowdsourcing-Based Mobile Applications. IEEE Transactions on Parallel and Distributed Systems, 2014, 25, 1876-1885.	5.6	54
47	Hello: A generic flexible protocol for neighbor discovery. , 2014, , .		53
48	Human Mobility Enhances Global Positioning Accuracy for Mobile Phone Localization. IEEE Transactions on Parallel and Distributed Systems, 2015, 26, 131-141.	5.6	52
49	Indoor localization via multi-modal sensing on smartphones. , 2016, , .		52
50	MoLoc: On Distinguishing Fingerprint Twins. , 2013, , .		51
51	An adaptive wireless passive human detection via fine-grained physical layer information. Ad Hoc Networks, 2016, 38, 38-50.	5.5	48
52	Mitigating Large Errors in WiFi-Based Indoor Localization for Smartphones. IEEE Transactions on Vehicular Technology, 2017, 66, 6246-6257.	6.3	48
53	A Survey on Bluetooth 5.0 and Mesh. ACM Transactions on Sensor Networks, 2019, 15, 1-29.	3.6	48
54	Toward Efficient Mechanisms for Mobile Crowdsensing. IEEE Transactions on Vehicular Technology, 2017, 66, 1760-1771.	6.3	47

#	ARTICLE	IF	CITATIONS
55	Edge Assisted Mobile Semantic Visual SLAM. , 2020, , .		46
56	SpatialRecruiter: Maximizing Sensing Coverage in Selecting Workers for Spatial Crowdsourcing. IEEE Transactions on Vehicular Technology, 2017, 66, 5229-5240.	6.3	40
57	Passenger Demand Forecasting with Multi-Task Convolutional Recurrent Neural Networks. Lecture Notes in Computer Science, 2019, , 29-42.	1.3	40
58	Location, Localization, and Localizability. , 2011, , .		39
59	Crowdsensing 2.0. Communications of the ACM, 2021, 64, 76-80.	4.5	37
60	Quality of Trilateration: Confidence Based Iterative Localization. , 2008, , .		35
61	Beyond triangle inequality. ACM Transactions on Sensor Networks, 2013, 9, 1-20.	3.6	35
62	Whistle: Synchronization-Free TDOA for Localization. , 2011, , .		34
63	Vehicle-Based Bi-Objective Crowdsourcing. IEEE Transactions on Intelligent Transportation Systems, 2018, 19, 3420-3428.	8.0	34
64	OTrack: Towards Order Tracking for Tags in Mobile RFID Systems. IEEE Transactions on Parallel and Distributed Systems, 2014, 25, 2114-2125.	5.6	33
65	WILL: Wireless indoor localization without site survey. , 2012, , .		32
66	Understanding Node Localizability of Wireless Ad-hoc Networks. , 2010, , .		30
67	Enabling Phased Array Signal Processing for Mobile WiFi Devices. IEEE Transactions on Mobile Computing, 2018, 17, 1820-1833.	5.8	27
68	iVR. , 2019, 3, 1-22.		27
69	Train Once, Locate Anytime for Anyone: Adversarial Learning based Wireless Localization. , 2021, , .		27
70	Sensor Network Navigation without Locations. IEEE Transactions on Parallel and Distributed Systems, 2013, 24, 1436-1446.	5.6	26
71	Spatio-temporal analysis and prediction of cellular traffic in metropolis. , 2017, , .		26
72	Sherlock: Micro-Environment Sensing for Smartphones. IEEE Transactions on Parallel and Distributed Systems, 2014, 25, 3295-3305.	5.6	24

#	ARTICLE	IF	CITATIONS
73	CrossNavi. , 2014, , .		23
74	DeepKey. ACM Transactions on Intelligent Systems and Technology, 2020, 11, 1-24.	4.5	23
75	Robust Component-Based Localization in Sparse Networks. IEEE Transactions on Parallel and Distributed Systems, 2014, 25, 1317-1327.	5.6	22
76	Receiver Consensus: On-Time Warning Delivery for Vehicular Ad-Hoc Networks. IEEE Transactions on Emerging Topics in Computing, 2013, 1, 57-68.	4.6	20
77	Sea depth measurement with restricted floating sensors. Transactions on Embedded Computing Systems, 2013, 13, 1-21.	2.9	19
78	Embracing Spatial Awareness for Reliable WiFi-Based Indoor Location Systems. , 2018, , .		19
79	Pair-Navi: Peer-to-Peer Indoor Navigation with Mobile Visual SLAM. , 2019, , .		18
80	Beyond Triangle Inequality: Sifting Noisy and Outlier Distance Measurements for Localization. , 2010, , .		17
81	Enhancing the Performance of Indoor Device-Free Passive Localization. International Journal of Distributed Sensor Networks, 2015, 11, 256162.	2.2	17
82	Towards Accurate Object Localization with Smartphones. IEEE Transactions on Parallel and Distributed Systems, 2014, 25, 2731-2742.	5.6	16
83	On Multipath Link Characterization and Adaptation for Device-Free Human Detection. , 2015, , .		16
84	Improving Urban Crowd Flow Prediction on Flexible Region Partition. IEEE Transactions on Mobile Computing, 2020, 19, 2804-2817.	5.8	16
85	Triangle Extension: Efficient Localizability Detection in Wireless Sensor Networks. IEEE Transactions on Wireless Communications, 2017, 16, 7419-7431.	9.2	15
86	ChromaCode: A Fully Imperceptible Screen-Camera Communication System. IEEE Transactions on Mobile Computing, 2021, 20, 861-876.	5.8	15
87	GaitSense: Towards Ubiquitous Gait-Based Human Identification with Wi-Fi. ACM Transactions on Sensor Networks, 2022, 18, 1-24.	3.6	15
88	GaitID: Robust Wi-Fi Based Gait Recognition. Lecture Notes in Computer Science, 2020, , 730-742.	1.3	15
89	Beyond rigidity: obtain localisability with noisy ranging measurement. International Journal of Ad Hoc and Ubiquitous Computing, 2011, 8, 114.	0.5	13
90	Localization-Oriented Network Adjustment in Wireless Ad Hoc and Sensor Networks. IEEE Transactions on Parallel and Distributed Systems, 2014, 25, 146-155.	5.6	13

#	ARTICLE	IF	CITATIONS
91	FollowUpAR. , 2021, , .		13
92	ChromaCode. , 2018, , .		13
93	Sensor network navigation without locations. , 2008, , .		12
94	Tuning by turning: Enabling phased array signal processing for WiFi with inertial sensors. , 2016, , .		12
95	Detecting radio frequency interference for CSI measurements on COTS WiFi devices. , 2017, , .		12
96	WiSH: WiFi-based real-time human detection. Tsinghua Science and Technology, 2019, 24, 615-629.	6.1	12
97	Localization in non-localizable sensor and ad-hoc networks: A Localizability-aided approach. , 2011, , .		11
98	OFA: An optimistic approach to conquer flip ambiguity in network localization. Computer Networks, 2013, 57, 1529-1544.	5.1	11
99	Temporal understanding of human mobility: A multi-time scale analysis. PLoS ONE, 2018, 13, e0207697.	2.5	11
100	XGest: Enabling Cross-Label Gesture Recognition with RF Signals. ACM Transactions on Sensor Networks, 2021, 17, 1-23.	3.6	11
101	Passenger Demand Prediction with Cellular Footprints. , 2018, , .		9
102	CellTrans. , 2019, 3, 1-26.		9
103	Smartphone-Based Indoor Visual Navigation with Leader-Follower Mode. ACM Transactions on Sensor Networks, 2021, 17, 1-22.	3.6	9
104	Footprints elicit the truth: Improving global positioning accuracy via local mobility. , 2013, , .		8
105	Boosting Mobile Apps under Imbalanced Sensing Data. IEEE Transactions on Mobile Computing, 2015, 14, 1151-1161.	5.8	8
106	CellTradeMap: Delineating Trade Areas for Urban Commercial Districts with Cellular Networks. , 2019, , .		8
107	ETOC: Obtaining robustness in component-based localization. , 2010, , .		7
108	Guest editorial: Special issue on wireless sensor networks, cyber-physical systems, and internet of things. Tsinghua Science and Technology, 2011, 16, 559-560.	6.1	7

#	ARTICLE	IF	CITATIONS
109	Ambient rendezvous: Energy-efficient neighbor discovery via acoustic sensing. , 2015, , .		7
110	Fuzzy Integral Optimization with Deep Q-Network for EEG-Based Intention Recognition. Lecture Notes in Computer Science, 2018, , 156-168.	1.3	7
111	Passenger Demand Prediction with Cellular Footprints. IEEE Transactions on Mobile Computing, 2020, , 1-1.	5.8	7
112	Urban Scale Trade Area Characterization for Commercial Districts with Cellular Footprints. ACM Transactions on Sensor Networks, 2020, 16, 1-20.	3.6	7
113	Wireless Localization with Spatial-Temporal Robust Fingerprints. ACM Transactions on Sensor Networks, 2022, 18, 1-23.	3.6	7
114	ToAuth: Towards Automatic Near Field Authentication for Smartphones. , 2014, , .		6
115	ppNav: Peer-to-Peer Indoor Navigation for Smartphones. , 2016, , .		6
116	Wi-Dog: Monitoring School Violence with Commodity WiFi Devices. Lecture Notes in Computer Science, 2017, , 47-59.	1.3	6
117	TUM: Towards ubiquitous multi-device localization for cross-device interaction. , 2017, , .		6
118	Enabling Surveillance Cameras to Navigate. , 2020, , .		5
119	Receiver Consensus: On-time Warning Delivery for Vehicular Ad-hoc Networks. , 2012, , .		4
120	SmartGuide. , 2015, , .		4
121	Enhancing Industrial Video Surveillance over Wireless Mesh Networks. , 2016, , .		4
122	Combating Cross-Technology Interference for Robust Wireless Sensing with COTS WiFi. , 2018, , .		4
123	Improving the Efficiency of Localization-Oriented Network Adjustment in Wireless Sensor Networks. IEEE Communications Letters, 2011, 15, 983-985.	4.1	3
124	Ad-hoc Anonymity: Privacy Preservation for Location-based Services in Mobile Networks. , 2012, , .		3
125	airFinger: Micro Finger Gesture Recognition via NIR Light Sensing for Smart Devices. , 2020, , .		3
126	Wireless Indoor Localization. , 2018, , .		2

#	ARTICLE	IF	CITATIONS
127	Enabling Surveillance Cameras to Navigate. ACM Transactions on Sensor Networks, 2021, 17, 1-20.	3.6	2
128	Trall: Pinpoint Trajectory for Indoor Localization. International Journal of Distributed Sensor Networks, 2015, 11, 372425.	2.2	2
129	SymListener: Detecting Respiratory Symptoms via Acoustic Sensing in Driving Environments. ACM Transactions on Sensor Networks, 2023, 19, 1-21.	3.6	2
130	Range-Based Network localization. , 2011, , 37-54.		1
131	Improving the Applicability of Visual Peer-to-Peer Navigation with Crowdsourcing. , 2020, , .		1
132	Decimeter-Level Passive Human Tracking with a Single Wi-Fi Link. , 2021, , 125-154.		1
133	Optimistic Localization: Avoiding Location Ambiguity in Wireless Ad-hoc Networks. , 2010, , .		0
134	Edge Verifiability: Characterizing Outlier Measurements for Wireless Sensor Network Localization. , 2011, , .		0
135	WiSH: The Design and Implementation of a Real-Time System for Whole-Day Human Detection. , 2017, , .		0
136	Background and Overview. , 2018, , 3-16.		0
137	Enhancing WiFi Fingerprinting with Visual Clues. , 2018, , 165-191.		0
138	Adaptive Radio Map Updating. , 2018, , 83-107.		0
139	Radio Map Construction Without Site Survey. , 2018, , 33-57.		0
140	Collective Memory for Detecting Nonconcurrent Clones: A Localized Approach for Global Topology and Identity Tracing in IoT Networks. IEEE Internet of Things Journal, 2021, 8, 5762-5777.	8.7	0
141	Error Control. , 2011, , 75-96.		0
142	Location Privacy. , 2011, , 131-145.		0
143	Range-Free Network Localization. , 2011, , 55-74.		0
144	Mobile Crowdsourcing and Inertial Sensing. , 2018, , 17-30.		0

#	ARTICLE	IF	CITATIONS
145	Mitigating Large Errors in Practice. , 2018, , 193-215.		0
146	Exploiting Spatial Awareness via Fingerprint Spatial Gradient. , 2018, , 139-163.		0
147	Decimeter-Level Passive Human Tracking with Multiple Wi-Fi Links. , 2021, , 101-123.		0
148	Passive Detection of Moving and Stationary Human with Wi-Fi. , 2021, , 67-97.		0
149	Passive Human Detection with Wi-Fi. , 2021, , 25-45.		0
150	Understanding of Channel State Information. , 2021, , 11-21.		0
151	Wireless Sensing Overview. , 2021, , 3-9.		0
152	Inferring Motion Direction with Wi-Fi. , 2021, , 157-182.		0
153	Research Summary and Future Directions. , 2021, , 233-234.		0
154	Human Gesture Recognition with Wi-Fi. , 2021, , 183-214.		0