

# Wen Hu

## List of Publications by Year in descending order

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Version: 2024-02-01

154  
papers

5,551  
citations

201385

27  
h-index

155451

55  
g-index

161  
all docs

161  
docs citations

161  
times ranked

5053  
citing authors

#	ARTICLE	IF	CITATIONS
1	Ear-phone. , 2010, , .		531
2	A Survey of COVID-19 Contact Tracing Apps. IEEE Access, 2020, 8, 134577-134601.	2.6	469
3	DTLS based security and two-way authentication for the Internet of Things. Ad Hoc Networks, 2013, 11, 2710-2723.	3.4	372
4	Environmental Wireless Sensor Networks. Proceedings of the IEEE, 2010, 98, 1903-1917.	16.4	354
5	Sensing, Computing, and Communications for Energy Harvesting IoTs: A Survey. IEEE Communications Surveys and Tutorials, 2020, 22, 1222-1250.	24.8	184
6	WiFi-ID: Human Identification Using WiFi Signal. , 2016, , .		160
7	Are you contributing trustworthy data?. , 2010, , .		117
8	A DTLS based end-to-end security architecture for the Internet of Things with two-way authentication. , 2012, , .		107
9	Design and evaluation of a hybrid sensor network for cane toad monitoring. ACM Transactions on Sensor Networks, 2009, 5, 1-28.	2.3	103
10	Preserving privacy in participatory sensing systems. Computer Communications, 2010, 33, 1266-1280.	3.1	103
11	Feasibility analysis of using humidex as an indoor thermal comfort predictor. Energy and Buildings, 2013, 64, 17-25.	3.1	85
12	Ear-Phone: A context-aware noise mapping using smart phones. Pervasive and Mobile Computing, 2015, 17, 1-22.	2.1	80
13	Energy efficient information collection in wireless sensor networks using adaptive compressive sensing. , 2009, , .		76
14	ERTP: Energy-efficient and Reliable Transport Protocol for data streaming in Wireless Sensor Networks. Computer Communications, 2009, 32, 1154-1171.	3.1	73
15	Measurement, Characterization, and Modeling of LoRa Technology in Multifloor Buildings. IEEE Internet of Things Journal, 2020, 7, 298-310.	5.5	73
16	LoRa-Key: Secure Key Generation System for LoRa-Based Network. IEEE Internet of Things Journal, 2019, 6, 6404-6416.	5.5	69
17	secFleck: A Public Key Technology Platform for Wireless Sensor Networks. Lecture Notes in Computer Science, 2009, , 296-311.	1.0	65
18	On the need for a reputation system in mobile phone based sensing. Ad Hoc Networks, 2014, 12, 130-149.	3.4	63

#	ARTICLE	IF	CITATIONS
19	The design and evaluation of a mobile sensor/actuator network for autonomous animal control. , 2007, , .		62
20	Talos. , 2015, , .		61
21	Design and Deployment of a Remote Robust Sensor Network: Experiences from an Outdoor Water Quality Monitoring Network. , 2007, , .		56
22	Radio-based device-free activity recognition with radio frequency interference. , 2015, , .		56
23	The Design, Implementation, and Deployment of a Smart Lighting System for Smart Buildings. IEEE Internet of Things Journal, 2019, 6, 7266-7281.	5.5	53
24	Deploying long-lived and cost-effective hybrid sensor networks. Ad Hoc Networks, 2006, 4, 749-767.	3.4	51
25	Walkie-Talkie: Motion-Assisted Automatic Key Generation for Secure On-Body Device Communication. , 2016, , .		51
26	KEH-Gait: Using Kinetic Energy Harvesting for Gait-based User Authentication Systems. IEEE Transactions on Mobile Computing, 2019, 18, 139-152.	3.9	49
27	Novel activity classification and occupancy estimation methods for intelligent HVAC (heating,) Tj ETQq1 1 0.784314 rgBT /Overlock 1 4.58 48		48
28	A privacy-preserving reputation system for participatory sensing. , 2012, , .		47
29	Toward trusted wireless sensor networks. ACM Transactions on Sensor Networks, 2010, 7, 1-25.	2.3	45
30	dRTL. , 2015, , .		45
31	Gait-Key. ACM Transactions on Sensor Networks, 2017, 13, 1-27.	2.3	45
32	SolarGest. , 2019, , .		45
33	A Communication Paradigm for Hybrid Sensor/Actuator Networks*. International Journal of Wireless Information Networks, 2005, 12, 47-59.	1.8	43
34	Efficient background subtraction for real-time tracking in embedded camera networks. , 2012, , .		43
35	Nonuniform Compressive Sensing for Heterogeneous Wireless Sensor Networks. IEEE Sensors Journal, 2013, 13, 2120-2128.	2.4	43
36	Continuous Authentication Using Eye Movement Response of Implicit Visual Stimuli. , 2018, 1, 1-22.		43

#	ARTICLE	IF	CITATIONS
37	H2B. , 2019, , .		42
38	Gait-Watch. , 2017, , .		41
39	Deep Learning for Radio-Based Human Sensing: Recent Advances and Future Directions. IEEE Communications Surveys and Tutorials, 2021, 23, 995-1019.	24.8	38
40	DLINK: Dual link based radio frequency fingerprinting for wearable devices. , 2015, , .		37
41	Accelerometer and Fuzzy Vault-Based Secure Group Key Generation and Sharing Protocol for Smart Wearables. IEEE Transactions on Information Forensics and Security, 2017, 12, 2467-2482.	4.5	37
42	GaitLock: Protect Virtual and Augmented Reality Headsets Using Gait. IEEE Transactions on Dependable and Secure Computing, 2019, 16, 484-497.	3.7	36
43	Real-Time and Robust Compressive Background Subtraction for Embedded Camera Networks. IEEE Transactions on Mobile Computing, 2016, 15, 406-418.	3.9	34
44	Springbrook: Challenges in developing a long-term, rainforest wireless sensor network. , 2008, , .		33
45	KEH-Gait: Towards a Mobile Healthcare User Authentication System by Kinetic Energy Harvesting. , 2017, , .		33
46	A TPM-enabled remote attestation protocol (TRAP) in wireless sensor networks. , 2011, , .		31
47	Sensor-Assisted Multi-View Face Recognition System on Smart Glass. IEEE Transactions on Mobile Computing, 2018, 17, 197-210.	3.9	31
48	Towards privacy-sensitive participatory sensing. , 2009, , .		30
49	SimpleTrack: Adaptive Trajectory Compression With Deterministic Projection Matrix for Mobile Sensor Networks. IEEE Sensors Journal, 2015, 15, 365-373.	2.4	29
50	Face recognition on smartphones via optimised Sparse Representation Classification. , 2014, , .		28
51	Autonomous surveillance for biosecurity. Trends in Biotechnology, 2015, 33, 201-207.	4.9	28
52	Gate-ID: WiFi-Based Human Identification Irrespective of Walking Directions in Smart Home. IEEE Internet of Things Journal, 2021, 8, 7610-7624.	5.5	28
53	Efficient Computation of Robust Average of Compressive Sensing Data in Wireless Sensor Networks in the Presence of Sensor Faults. IEEE Transactions on Parallel and Distributed Systems, 2013, 24, 1525-1534.	4.0	26
54	Real-time classification via sparse representation in acoustic sensor networks. , 2013, , .		24

#	ARTICLE	IF	CITATIONS
55	ViType: A Cost Efficient On-Body Typing System through Vibration. , 2018, , .		24
56	Kryptein. , 2017, , .		23
57	SEHS: Simultaneous Energy Harvesting and Sensing Using Piezoelectric Energy Harvester. , 2018, , .		23
58	From Real to Complex. ACM Transactions on Sensor Networks, 2019, 15, 1-32.	2.3	23
59	A remote attestation protocol with Trusted Platform Modules (TPMs) in wireless sensor networks.. Security and Communication Networks, 2015, 8, 2171-2188.	1.0	22
60	Transportation mode detection using kinetic energy harvesting wearables. , 2016, , .		22
61	Energy efficient GPS acquisition with Sparse-GPS. , 2014, , .		21
62	I Am Alice, I Was in Wonderland: Secure Location Proof Generation and Verification Protocol. , 2016, , .		21
63	CapSense. , 2017, , .		20
64	Predictable Privacy-Preserving Mobile Crowd Sensing: A Tale of Two Roles. IEEE/ACM Transactions on Networking, 2019, 27, 361-374.	2.6	20
65	EnTrans: Leveraging Kinetic Energy Harvesting Signal for Transportation Mode Detection. IEEE Transactions on Intelligent Transportation Systems, 2020, 21, 2816-2827.	4.7	20
66	Seirios. , 2021, , .		20
67	Kinetic-Powered Health Wearables: Challenges and Opportunities. Computer, 2018, 51, 64-74.	1.2	19
68	Sequence Data Matching and Beyond: New Privacy-Preserving Primitives Based on Bloom Filters. IEEE Transactions on Information Forensics and Security, 2020, 15, 2973-2987.	4.5	19
69	Automated Analysis of Secure Internet of Things Protocols. , 2017, , .		18
70	Auto-Key. , 2020, 4, 1-23.		18
71	TinyIPFIX: An efficient application protocol for data exchange in cyber physical systems. Computer Communications, 2016, 74, 63-76.	3.1	17
72	Estimating Calorie Expenditure from Output Voltage of Piezoelectric Energy Harvester - an Experimental Feasibility Study. , 2015, , .		17

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73	A hybrid sensor network for cane-toad monitoring. , 2005, , .		16
74	Learn to Recognise: Exploring Priors of Sparse Face Recognition on Smartphones. IEEE Transactions on Mobile Computing, 2017, 16, 1705-1717.	3.9	16
75	Energy-Aware Sparse Approximation Technique (EAST) for Rechargeable Wireless Sensor Networks. Lecture Notes in Computer Science, 2010, , 306-321.	1.0	15
76	Efficient cross-correlation via sparse representation in sensor networks. , 2012, , .		15
77	CAPS: Energy-Efficient Processing of Continuous Aggregate Queries in Sensor Networks. , 0, , .		14
78	Outdoor Sensornet Design and Deployment: Experiences from a Sugar Farm. IEEE Pervasive Computing, 2012, 11, 82-91.	1.1	14
79	ESIoT. , 2017, , .		14
80	WiCare. , 2017, , .		14
81	Privacy-preserving sparse representation classification in cloud-enabled mobile applications. Computer Networks, 2018, 133, 59-72.	3.2	14
82	SEDA: Secure Over-the-Air Code Dissemination Protocol for the Internet of Things. IEEE Transactions on Dependable and Secure Computing, 2018, 15, 1041-1054.	3.7	14
83	An Adaptive Algorithm for Compressive Approximation of Trajectory (AACAT) for Delay Tolerant Networks. Lecture Notes in Computer Science, 2011, , 33-48.	1.0	14
84	Capacitor-based Activity Sensing for Kinetic-powered Wearable IoTs. ACM Transactions on Internet of Things, 2020, 1, 1-26.	3.4	14
85	Secure key generation and distribution protocol for wearable devices. , 2016, , .		13
86	VEH-COM: Demodulating vibration energy harvesting for short range communication. , 2017, , .		13
87	KEHKey. , 2020, 4, 1-26.		13
88	Nephalai. , 2020, , .		13
89	A Low Latency On-Body Typing System through Single Vibration Sensor. IEEE Transactions on Mobile Computing, 2020, 19, 2520-2532.	3.9	12
90	Simultaneous Energy Harvesting and Gait Recognition Using Piezoelectric Energy Harvester. IEEE Transactions on Mobile Computing, 2022, 21, 2198-2209.	3.9	12

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91	An empirical study of data collection protocols for wireless sensor networks. , 2008, , .		11
92	Radio diversity for reliable communication in sensor networks. ACM Transactions on Sensor Networks, 2014, 10, 1-29.	2.3	11
93	Human identification using WiFi signal. , 2016, , .		11
94	CardioFi. , 2018, , .		11
95	E-Jacket: Posture Detection with Loose-Fitting Garment using a Novel Strain Sensor. , 2020, , .		11
96	Heterogeneous traffic performance comparison for 6LoWPAN enabled low-power transceivers. , 2010, , .		10
97	Non-uniform compressive sensing in wireless sensor networks: Feasibility and application. , 2011, , .		10
98	Securing the internet of things with DTLS. , 2011, , .		10
99	Sensor-Assisted Face Recognition System on Smart Glass via Multi-View Sparse Representation Classification. , 2016, , .		10
100	PGFit: Static permission analysis of health and fitness apps in IoT programming frameworks. Journal of Network and Computer Applications, 2020, 152, 102509.	5.8	10
101	A Novel Model-Based Security Scheme for LoRa Key Generation. , 2021, , .		10
102	Virtual Keyboard for Wearable Wristbands. , 2017, , .		9
103	Towards a Compressive-Sensing-Based Lightweight Encryption Scheme for the Internet of Things. IEEE Transactions on Mobile Computing, 2021, 20, 3049-3065.	3.9	9
104	A differential privacy-based classification system for edge computing in IoT. Computer Communications, 2022, 182, 117-128.	3.1	9
105	Sparse representation based acoustic rangefinders: from sensor platforms to mobile devices. , 2015, 53, 249-257.		8
106	Adaptive Sampling by Dictionary Learning for Hyperspectral Imaging. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2016, 9, 4501-4509.	2.3	8
107	Exploring the Feasibility of Physical Layer Key Generation for LoRaWAN. , 2018, , .		8
108	Lightweight acoustic classification for cane-toad monitoring. , 2008, , .		7

#	ARTICLE	IF	CITATIONS
109	A key distribution protocol for Wireless Sensor Networks. , 2012, , .		7
110	Combating Software and Sybil Attacks to Data Integrity in Crowd-Sourced Embedded Systems. Transactions on Embedded Computing Systems, 2014, 13, 1-19.	2.1	7
111	WiEnhance: Towards Data Augmentation in Human Activity Recognition Using WiFi Signal. , 2019, , .		7
112	RFT. , 2015, , .		7
113	An Energy-efficient Rate Adaptive Media Access Protocol (RA-MAC) for Long-lived Sensor Networks. Sensors, 2010, 10, 5548-5568.	2.1	6
114	Sparsity Based Efficient Cross-Correlation Techniques in Sensor Networks. IEEE Transactions on Mobile Computing, 2017, 16, 2037-2050.	3.9	6
115	HiddenCode: Hidden Acoustic Signal Capture with Vibration Energy Harvesting. , 2018, , .		6
116	Gesture Recognition with Transparent Solar Cells. , 2018, , .		6
117	Acies: A Privacy-Preserving System for Edge-Based Classification. , 2018, , .		6
118	Efficient Indoor Positioning with Visual Experiences via Lifelong Learning. IEEE Transactions on Mobile Computing, 2019, 18, 814-829.	3.9	6
119	Ear-Phone assessment of noise pollution with mobile phones. , 2009, , .		6
120	The design and evaluation of a hybrid sensor network for cane-toad monitoring. , 0, , .		5
121	A model-based routing protocol for a mobile, delay tolerant network. , 2007, , .		5
122	Distributed sparse approximation for frog sound classification. , 2012, , .		5
123	A Bayesian framework for energy-neutral activity monitoring with self-powered wearable sensors. , 2016, , .		5
124	An Efficient Privacy-preserving IoT System for Face Recognition. , 2020, , .		5
125	A Congestion-aware Medium Access Control Protocol for Multi-rate Ad-hoc Networks. Local Computer Networks (LCN), Proceedings of the IEEE Conference on, 2006, , .	0.0	4
126	A public key technology platform for wireless sensor networks. , 2008, , .		4



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127	Learning for Device Pairing in Body Area Networks. , 2018, , .		4
128	Permission Analysis of Health and Fitness Apps in IoT Programming Frameworks. , 2018, , .		4
129	IoT-NetSec: Policy-Based IoT Network Security Using OpenFlow. , 2019, , .		4
130	Design and implementation of a policy-based management system for data reliability in Wireless Sensor Networks. , 2008, , .		3
131	RHA: A robust hybrid architecture for information processing in wireless sensor networks. , 2010, , .		3
132	An RPC-Based Service Framework for Robot and Sensor Network Integration. , 2011, , .		3
133	Optimal Sampling Strategy Enabling Energy-Neutral Operations at Rechargeable Wireless Sensor Networks. IEEE Sensors Journal, 2015, 15, 201-208.	2.4	3
134	Unobtrusive User Verification using Piezoelectric Energy Harvesting. , 2017, , .		3
135	Long-term secure management of large scale Internet of Things applications. Journal of Network and Computer Applications, 2019, 138, 15-26.	5.8	3
136	P4Mobi: A Probabilistic Privacy-Preserving Framework for Publishing Mobility Datasets. IEEE Transactions on Vehicular Technology, 2020, 69, 6987-6999.	3.9	3
137	Skin-MIMO: Vibration-based MIMO Communication over Human Skin. , 2020, , .		3
138	Efficient background subtraction for tracking in embedded camera networks. , 2012, , .		2
139	A virtual sensor scheduling framework for heterogeneous wireless sensor networks. , 2013, , .		2
140	SparseGPS. , 2013, , .		2
141	Demo Abstract: Simultaneous Energy Harvesting and Sensing Using Piezoelectric Energy Harvester. , 2018, , .		2
142	SwingNet. , 2021, 5, 1-21.		2
143	Mobile golf swing tracking using deep learning with data fusion. , 2019, , .		2
144	CScrypt. , 2016, , .		2

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145	Recognizing Hand Gestures Using Solar Cells. IEEE Transactions on Mobile Computing, 2023, 22, 4223-4235.	3.9	2
146	A hardware-based remote attestation protocol in wireless sensor networks. , 2010, , .		1
147	Projection matrix optimisation for compressive sensing based applications in embedded systems. , 2013, , .		1
148	Energy Efficient LPWAN Decoding via Joint Sparse Approximation. , 2018, , .		1
149	NLC: Natural Light Communication using Switchable Glass. , 2020, , .		1
150	Human Context Detection From Kinetic Energy Harvesting Wearables. Advances in Wireless Technologies and Telecommunication Book Series, 2018, , 107-133.	0.3	1
151	EMIoT. , 2020, , .		1
152	SafeGait. , 2022, 6, 1-27.		1
153	Towards a framework for a versatile wireless multimedia sensor network platform. , 2010, , .		0
154	A fast gradient projection algorithm for efficient cross-correlation via sparse representation in sensor networks. , 2012, , .		0