Lei Hu

List of Publications by Year
in descending order

90 papers	2,849 citations	279798 23 h-index	189892 50 g-index
93 all docs	93 docs citations	93 times ranked	3316 citing authors

#	Article	IF	Citations
1	Detection of Faults and Attacks Including False Data Injection Attack in Smart Grid Using Kalman Filter. IEEE Transactions on Control of Network Systems, 2014, 1, 370-379.	3.7	560
2	Deep Learning for Intelligent Wireless Networks: A Comprehensive Survey. IEEE Communications Surveys and Tutorials, 2018, 20, 2595-2621.	39.4	508
3	Congestion-aware, loss-resilient bio-monitoring sensor networking for mobile health applications. IEEE Journal on Selected Areas in Communications, 2009, 27, 450-465.	14.0	123
4	Multiple Human Tracking and Identification With Wireless Distributed Pyroelectric Sensor Systems. IEEE Systems Journal, 2009, 3, 428-439.	4.6	110
5	Editorial: Machine Learning and Intelligent Communications. Mobile Networks and Applications, 2018, 23, 68-70.	3.3	97
6	Low-Power, Intelligent Sensor Hardware Interface for Medical Data Preprocessing. IEEE Transactions on Information Technology in Biomedicine, 2009, 13, 656-663.	3.2	92
7	Defending Resource Depletion Attacks on Implantable Medical Devices. , 2010, , .		80
8	Deep ${Q}$ -Learning-Based Node Positioning for Throughput-Optimal Communications in Dynamic UAV Swarm Network. IEEE Transactions on Cognitive Communications and Networking, 2019, 5, 554-566.	7.9	73
9	A Learning-Based QoE-Driven Spectrum Handoff Scheme for Multimedia Transmissions over Cognitive Radio Networks. IEEE Journal on Selected Areas in Communications, 2014, 32, 2134-2148.	14.0	67
10	Stability-Capacity-Adaptive Routing for High-Mobility Multihop Cognitive Radio Networks. IEEE Transactions on Vehicular Technology, 2011, 60, 2714-2729.	6.3	66
11	Intelligent Cooperative Spectrum Sensing via Hierarchical Dirichlet Process in Cognitive Radio Networks. IEEE Journal on Selected Areas in Communications, 2015, 33, 771-787.	14.0	64
12	Intelligent Spectrum Management Based on Transfer Actor-Critic Learning for Rateless Transmissions in Cognitive Radio Networks. IEEE Transactions on Mobile Computing, 2018, 17, 1204-1215.	5.8	48
13	Bluetooth low energy for wearable sensor-based healthcare systems. , 2014, , .		47
14	Mobile Target Scenario Recognition Via Low-Cost Pyroelectric Sensing System: Toward a Context-Enhanced Accurate Identification. IEEE Transactions on Systems, Man, and Cybernetics: Systems, 2014, 44, 375-384.	9.3	42
15	Intelligent Vehicle Network Routing With Adaptive 3D Beam Alignment for mmWave 5G-Based V2X Communications. IEEE Transactions on Intelligent Transportation Systems, 2021, 22, 2706-2718.	8.0	40
16	Intelligent Software-Defined Mesh Networks With Link-Failure Adaptive Traffic Balancing. IEEE Transactions on Cognitive Communications and Networking, 2018, 4, 266-276.	7.9	36
17	Development of a Remote Monitoring System for Henhouse Environment Based on IoT Technology. Future Internet, 2015, 7, 329-341.	3.8	34
18	Turnout Fault Diagnosis through Dynamic Time Warping and Signal Normalization. Journal of Advanced Transportation, 2017, 2017, 1-8.	1.7	34

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19	Key Agreement Algorithms for Vehicular Communication Networks Based on Reciprocity and Diversity Theorems. IEEE Transactions on Vehicular Technology, 2013, 62, 4020-4027.	6.3	33
20	Cross-Layer Forward Error Correction Scheme Using Raptor and RCPC Codes for Prioritized Video Transmission Over Wireless Channels. IEEE Transactions on Circuits and Systems for Video Technology, 2014, 24, 1047-1060.	8.3	33
21	Optimal Spectrum Handoff Control for CRN Based on Hybrid Priority Queuing and Multi-Teacher Apprentice Learning. IEEE Transactions on Vehicular Technology, 2017, 66, 2630-2642.	6.3	31
22	Dynamic Spectrum Access for Multimedia Transmission Over Multi-User, Multi-Channel Cognitive Radio Networks. IEEE Transactions on Multimedia, 2020, 22, 201-214.	7.2	30
23	A survey of anonymity in wireless communication systems. Security and Communication Networks, 2009, 2, 427-444.	1.5	28
24	Active Compressive Sensing via Pyroelectric Infrared Sensor for Human Situation Recognition. IEEE Transactions on Systems, Man, and Cybernetics: Systems, 2017, 47, 3340-3350.	9.3	26
25	Human Movement Modeling and Activity Perception Based on Fiber-Optic Sensing System. IEEE Transactions on Human-Machine Systems, 2014, 44, 743-754.	3.5	25
26	Deep reinforcement learning approach for autonomous vehicle systems for maintaining security and safety using LSTM-GAN. Vehicular Communications, 2020, 26, 100266.	4.0	25
27	Combating False Data Injection Attacks in Smart Grid using Kalman Filter. , 2014, , .		23
28	A privacy preserving scheme for vehicle-to-everything communications using 5G mobile edge computing. Computer Networks, 2020, 176, 107283.	5.1	23
29	Dual-Polarized Hexaferrite Antenna for Unmanned Aerial Vehicle (UAV) Applications. IEEE Antennas and Wireless Propagation Letters, 2013, 12, 765-768.	4.0	22
30	Existing Mobile Phone Apps for Self-Care Management of People With Alzheimer Disease and Related Dementias: Systematic Analysis. JMIR Aging, 2020, 3, e15290.	3.0	22
31	Improving robustness of key extraction from wireless channels with differential techniques. , 2012, , .		19
32	Intelligent super-fast Vehicle-to-Everything 5G communications with predictive switching between mmWave and THz links. Vehicular Communications, 2021, 27, 100303.	4.0	19
33	Apprenticeship Learning Based Spectrum Decision in Multi-Channel Wireless Mesh Networks with Multi-Beam Antennas. IEEE Transactions on Mobile Computing, 2017, 16, 314-325.	5.8	17
34	Trustworthy Data Collection From Implantable Medical Devices Via High-Speed Security Implementation Based on IEEE 1363. IEEE Transactions on Information Technology in Biomedicine, 2010, 14, 1397-1404.	3.2	16
35	Skeleton-Based Swarm Routing (SSR): Intelligent Smooth Routing for Dynamic UAV Networks. IEEE Access, 2021, 9, 1286-1303.	4.2	16
36	Multimedia over cognitive radio networks: Towards a cross-layer scheduling under Bayesian traffic learning. Computer Communications, 2014, 51, 48-59.	5.1	15

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37	Diamond-Shaped Mesh Network Routing with Cross-Layer Design to Explore the Benefits of Multi-Beam Smart Antennas. , 2016, , .		15
38	Enhanced OLSR routing for airborne networks with multi-beam directional antennas. Ad Hoc Networks, 2020, 102, 102116.	5.5	15
39	Space encoding based compressive multiple human tracking with distributed binary pyroelectric infrared sensor networks. , 2012, , .		14
40	Spectrum handoffs with mixed-priority queueing model over Cognitive Radio Networks. , 2013, , .		14
41	Knowledge-Enhanced Mobile Video Broadcasting Framework With Cloud Support. IEEE Transactions on Circuits and Systems for Video Technology, 2017, 27, 6-18.	8.3	14
42	Systematic Medium Access Control in Hierarchical Airborne Networks With Multibeam and Single-Beam Antennas. IEEE Transactions on Aerospace and Electronic Systems, 2019, 55, 706-717.	4.7	14
43	NTRU-based sensor network security: a low-power hardware implementation perspective. Security and Communication Networks, 2009, 2, 71-81.	1.5	13
44	Distributed multiple human tracking with wireless binary pyroelectric infrared (PIR) sensor networks. , 2010, , .		13
45	3-ent (resilient, intelligent, and efficient) medium access control for full-duplex, jamming-aware, directional airborne networks. Computer Networks, 2017, 129, 251-260.	5.1	13
46	Rate-Adaptive Feedback with Bayesian Compressive Sensing in Multiuser MIMO Beamforming Systems. IEEE Transactions on Wireless Communications, 2016, , 1-1.	9.2	12
47	QoE-Driven UAV-Enabled Pseudo-Analog Wireless Video Broadcast: A Joint Optimization of Power and Trajectory. IEEE Transactions on Multimedia, 2021, 23, 2398-2412.	7.2	12
48	Minimal Euclidean distanceâ€inspired optimal and suboptimal modulation schemes for vector OFDM system. International Journal of Communication Systems, 2011, 24, 553-567.	2.5	11
49	Multi-agent based wireless pyroelectric infrared sensor networks for multi-human tracking and self-calibration. , 2013, , .		11
50	3D Transformative Routing for UAV Swarming Networks: A Skeleton-Guided, GPS-Free Approach. IEEE Transactions on Vehicular Technology, 2021, 70, 3685-3701.	6.3	11
51	Primate-inspired adaptive routing in intermittently connected mobile communication systems. Wireless Networks, 2014, 20, 1939-1954.	3.0	10
52	Human-Perception-Oriented Pseudo Analog Video Transmissions With Deep Learning. IEEE Transactions on Vehicular Technology, 2020, 69, 9896-9909.	6.3	10
53	An Intelligent Thermal Sensing System for Automatic, Quantitative Assessment of Motion Training in Lower-Limb Rehabilitation. IEEE Transactions on Systems, Man, and Cybernetics: Systems, 2018, 48, 661-669.	9.3	8
54	Channel/Beam Handoff Control in Multi-Beam Antenna Based Cognitive Radio Networks. IEEE Transactions on Cognitive Communications and Networking, 2018, 4, 30-42.	7.9	7

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55	Attack detection in Water Supply Systems using Kalman filter estimator. , 2012, , .		6
56	AI-Augmented, Ripple-Diamond-Chain Shaped, Rateless Routing in Wireless Mesh Networks With Multibeam Directional Antennas. IEEE Access, 2018, 6, 24311-24324.	4.2	5
57	Moth and Ant Inspired Routing in Hierarchical Airborne Networks with Multi-Beam Antennas. IEEE Transactions on Mobile Computing, 2019, 18, 910-922.	5.8	5
58	Volcano Routing: A Multi-Pipe High-Throughput Routing Protocol with Hole Avoidance for Multi-Beam Directional Mesh Networks. IEEE Transactions on Mobile Computing, 2020, 19, 2981-2996.	5.8	5
59	Mobile targets region-of-interest via distributed pyroelectric sensor network: Towards a robust, real-time context reasoning. , 2010, , .		4
60	A compressive eletroencephalography (EEG) sensor design. , 2010, , .		4
61	Optimal Antenna Deployment for Multiuser MIMO Systems Based on Random Matrix Theory. IEEE Transactions on Vehicular Technology, 2016, 65, 8155-8162.	6.3	4
62	Static Human Detection and Scenario Recognition via Wearable Thermal Sensing System. Computers, 2017, 6, 3.	3.3	4
63	Secure Dynamic Big Graph Data: Scalable, Low-Cost Remote Data Integrity Checking. IEEE Access, 2019, 7, 12888-12900.	4.2	4
64	Intelligent Multibeam Transmissions for Mission-Oriented Airborne Networks. IEEE Transactions on Aerospace and Electronic Systems, 2019, 55, 619-630.	4.7	4
65	Hardware-Based Emulator with Deep Learning Model for Building Energy Control and Prediction Based on Occupancy Sensorsâ€™ Data. Information (Switzerland), 2021, 12, 499.	2.9	4
66	Modulated Coded OFDM Systems with Special Precoder. Wireless Personal Communications, 2011, 60, 635-648.	2.7	3
67	Measuring activities and counting steps with the SmartSocks - An unobtrusive and accurate method. , 2014, , .		3
68	A sensor-based virtual piano biofeedback system for stroke rehabilitation. , 2014, , .		3
69	Dynamic centered group key management for unmanned aerial vehicle networks with multibeam concurrent transmissions. , 2017, , .		3
70	Adaptive Batch Coding: A Balanced Congestion Control Strategy for Multi-Beam Antenna Networks. IEEE Transactions on Vehicular Technology, 2018, 67, 3575-3585.	6.3	3
71	Global Variable Partition with Virtually Shared Scratch Pad Memory to Minimize Schedule Length. , 2009, , .		2
72	Rotated precoder-based OFDM system robust to channel spectral nulls and with reduced PAPR. Annales Des Telecommunications/Annals of Telecommunications, 2010, 65, 375-383.	2.5	2

#	Article	IF	Citations
73	A reconfigurable hardware platform for cognitive sensor networks towards behavioral biometrics. , 2012, , .		2
74	Multi-Class "Channel+Beam" Handoff in Cognitive Radio Networks with Multi-Beam Smart Antennas. , 2016, , .		2
75	Simulation methodology and performance analysis of network coding based transport protocol in wireless big data networks. Simulation Modelling Practice and Theory, 2018, 84, 38-49.	3.8	2
76	SECURE, LOW-COST PROTOTYPE DESIGN OF UNDERWATER ACOUSTIC SENSOR NETWORKS. Journal of Circuits, Systems and Computers, 2008, 17, 1203-1208.	1.5	1
77	Voltage Assignment for Soft Real-Time Embedded Systems with Continuous Probability Distribution. , 2009, , .		1
78	Energy Aware Loop Scheduling for High Performance Multi-Module Memory. , 2009, , .		1
79	A priority-aware channel selection scheme for real-time data transmission in cognitive radio networks. , 2013, , .		1
80	Low-Cost Pyroelectric Sensor Networks for Bayesian Crowded Scene Analysis. , 2014, , .		1
81	Model and simulations of multipath bridge routing for inter-swarm UAV communications in EMANE/CORE. International Journal of Modelling and Simulation, 2022, 42, 485-505.	3.3	1
82	Design of measurement and control system for sling stretch test machine based on LabVIEW. , 2010, , .		0
83	Design of the Tensile Testing Machine Computer Control System Based on MCGS. , 2010, , .		0
84	Optimal packet size design for multimedia transmissions in cognitive radio networks. , 2011, , .		0
85	Quorum-based channel hopping scheme for cognitive radio networks. Science China Information Sciences, 2013, 56, 1-6.	4.3	0
86	Editorial for Chinacom2015 Special Issue. Mobile Networks and Applications, 2016, 21, 905-907.	3.3	0
87	Dual-Mode Binary Thermal Sensing for Indoor Human Scenario Recognition with Pyroelectric Infrared Sensors. , 2019, , .		0
88	Big data over wireless pipe-Path: Queuing model for multi-Directional radio links. Simulation Modelling Practice and Theory, 2020, 103, 102079.	3.8	0
89	Deep learning (DL)-based adaptive transport layer control in UAV swarm networks. Computer Networks, 2021, 201, 108511.	5.1	0
90	SECURITY IMPLEMENTATION IN REAL WIRELESS SENSORS: A REVIEW. , 2011, , 529-551.		0