Chih-Yung Chang

List of Publications by Year
in descending order

93	1,506	430754	360920
papers	citations	18 h-index	35 g-index

97	97	97	1471
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	A Comparative Study on Human Activity Recognition Using Inertial Sensors in a Smartphone. IEEE Sensors Journal, 2016, 16, 4566-4578.	2.4	245
2	EAPC: Energy-Aware Path Construction for Data Collection Using Mobile Sink in Wireless Sensor Networks. IEEE Sensors Journal, 2018, 18, 890-901.	2.4	127
3	Obstacle-Resistant Deployment Algorithms for Wireless Sensor Networks. IEEE Transactions on Vehicular Technology, 2009, 58, 2925-2941.	3.9	116
4	Energy-aware node placement, topology control and MAC scheduling for wireless sensor networks. Computer Networks, 2008, 52, 2189-2204.	3.2	91
5	An Obstacle-Free and Power-Efficient Deployment Algorithm for Wireless Sensor Networks. IEEE Transactions on Systems, Man and Cybernetics, Part A: Systems and Humans, 2009, 39, 795-806.	3.4	67
6	Design and Implementation of an IoT Access Point for Smart Home. Applied Sciences (Switzerland), 2015, 5, 1882-1903.	1.3	49
7	Anchor-Guiding Mechanism for Beacon-Assisted Localization in Wireless Sensor Networks. IEEE Sensors Journal, 2012, 12, 1098-1111.	2.4	41
8	Title is missing!. Wireless Networks, 2003, 9, 143-155.	2.0	39
9	SPA: Smart Parking Algorithm Based on Driver Behavior and Parking Traffic Predictions. IEEE Access, 2019, 7, 34275-34288.	2.6	39
10	Enabling Cyber Physical Systems with Wireless Sensor Networking Technologies. International Journal of Distributed Sensor Networks, 2012, 8, 489794.	1.3	33
11	Towards Human Activity Recognition: A Hierarchical Feature Selection Framework. Sensors, 2018, 18, 3629.	2.1	32
12	Latent feature learning for activity recognition using simple sensors in smart homes. Multimedia Tools and Applications, 2018, 77, 15201-15219.	2.6	25
13	Multirate Data Collection Using Mobile Sink in Wireless Sensor Networks. IEEE Sensors Journal, 2020, 20, 8173-8185.	2.4	25
14	Active Route-Guiding Protocols for Resisting Obstacles in Wireless Sensor Networks. IEEE Transactions on Vehicular Technology, 2010, 59, 4425-4442.	3.9	23
15	On-Supporting Energy Balanced k -Barrier Coverage in Wireless Sensor Networks. IEEE Access, 2018, 6, 13261-13274.	2.6	22
16	Activities of Daily Living Recognition With Binary Environment Sensors Using Deep Learning: A Comparative Study. IEEE Sensors Journal, 2021, 21, 5423-5433.	2.4	21
17	DEDC: Joint Density-Aware and Energy-Limited Path Construction for Data Collection Using Mobile Sink in WSNs. IEEE Access, 2020, 8, 78942-78955.	2.6	21
18	Relay reduction and disjoint routes construction for scatternet over Bluetooth radio system. Journal of Network and Computer Applications, 2007, 30, 728-749.	5.8	20

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19	BlueCube: Constructing a hypercube parallel computing and communication environment over Bluetooth radio systems. Journal of Parallel and Distributed Computing, 2006, 66, 1243-1258.	2.7	18
20	Path Construction and Visit Scheduling for Targets by Using Data Mules. IEEE Transactions on Systems, Man, and Cybernetics: Systems, 2014, 44, 1289-1300.	5.9	18
21	TCWTP: Time-Constrained Weighted Targets Patrolling Mechanism in Wireless Mobile Sensor Networks. IEEE Transactions on Systems, Man, and Cybernetics: Systems, 2015, 45, 901-914.	5.9	18
22	Active route-maintenance protocol for signal-based communication path in ad hoc networks. Journal of Network and Computer Applications, 2002, 25, 161-177.	5.8	16
23	ZBP: A Zone-Based Broadcasting Protocol for Wireless Sensor Networks. Wireless Personal Communications, 2005, 33, 53-68.	1.8	16
24	Hierarchical Cellular-Based management for mobile hosts in Ad-Hoc wireless networks. Computer Communications, 2001, 24, 1554-1567.	3.1	14
25	FIID: Feature-Based Implicit Irregularity Detection Using Unsupervised Learning From IoT Data for Homecare of Elderly. IEEE Internet of Things Journal, 2020, 7, 10884-10896.	5.5	14
26	Tone-Based Localization for Distinguishing Relative Locations in Wireless Sensor Networks. IEEE Sensors Journal, 2012, 12, 1058-1070.	2.4	13
27	Monitoring Quality Guaranteed Barrier Coverage Mechanism for Traffic Counting in Wireless Sensor Networks. IEEE Access, 2018, 6, 30778-30792.	2.6	13
28	Priority-Based Dedicated Slot Allocation With Dynamic Superframe Structure in IEEE 802.15.6-Based Wireless Body Area Networks. IEEE Internet of Things Journal, 2022, 9, 4497-4506.	5.5	13
29	Novel route maintenance protocols for the Bluetooth ad hoc network with mobility. Journal of Network and Computer Applications, 2008, 31, 535-558.	5.8	12
30	Hierarchical management protocol for constructing a QoS communication path in wireless Ad Hoc networks. Information Sciences, 2007, 177, 2621-2641.	4.0	11
31	EBDC: An Energy-Balanced Data Collection Mechanism Using a Mobile Data Collector in WSNs. Sensors, 2012, 12, 5850-5871.	2.1	11
32	SRA: A Sensing Radius Adaptation Mechanism for Maximizing Network Lifetime in WSNs. IEEE Transactions on Vehicular Technology, 2016, 65, 9817-9833.	3.9	11
33	Semantic Segmentation of High-Resolution Remote Sensing Images Using Multiscale Skip Connection Network. IEEE Sensors Journal, 2022, 22, 3745-3755.	2.4	11
34	A Location-Aware Routing Protocol for the Bluetooth Scatternet. Wireless Personal Communications, 2006, 40, 117-135.	1.8	10
35	Cooperative Data Collection Mechanism Using Multiple Mobile Sinks in Wireless Sensor Networks. Sensors, 2018, 18, 2627.	2.1	10
36	BIA: <u>B</u>ehavior <u>I</u>dentification <u>A</u>lgorithm Using Unsupervised Learning Based on Sensor Data for Home Elderly. IEEE Journal of Biomedical and Health Informatics, 2020, 24, 1589-1600.	3.9	10

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37	CAERM: Coverage Aware Energy Replenishment Mechanism Using Mobile Charger in Wireless Sensor Networks. IEEE Sensors Journal, 2021, 21, 23682-23697.	2.4	10
38	MSQAC: Maximizing the Surveillance Quality of Area Coverage in Wireless Sensor Networks. IEEE Sensors Journal, 2022, 22, 6150-6163.	2.4	10
39	Coverage and Connectivity Aware Energy Charging Mechanism Using Mobile Charger for WRSNs. IEEE Systems Journal, 2022, 16, 3993-4004.	2.9	9
40	A Power Saving MAC Protocol by Increasing Spatial Reuse for IEEE 802.11 Ad Hoc WLANs. , 0, , .		8
41	An efficient cluster-based multi-channel management protocol for wireless Ad Hoc networks. Computer Communications, 2007, 30, 1742-1753.	3.1	8
42	An Efficient Wireless Recharging Mechanism for Achieving Perpetual Lifetime of Wireless Sensor Networks. Sensors, 2017, 17, 13.	2.1	8
43	Implicit Irregularity Detection Using Unsupervised Learning on Daily Behaviors. IEEE Journal of Biomedical and Health Informatics, 2020, 24, 131-143.	3.9	8
44	Location Aware Route Maintenance Protocols for the Mobile Bluetooth Radio Networks. , 2007, , .		7
45	An Optimal Scheduling Algorithm for Maximizing Throughput in WiMAX Mesh Networks. IEEE Systems Journal, 2015, 9, 542-555.	2.9	7
46	A location-aware power saving mechanism based on quorum systems for multi-hop mobile ad hoc networks. Ad Hoc Networks, 2016, 53, 94-109.	3.4	7
47	Impasse-Aware Node Placement Mechanism for Wireless Sensor Networks. IEEE Transactions on Systems, Man, and Cybernetics: Systems, 2018, 48, 1225-1237.	5.9	7
48	A Distributed Barrier Coverage Mechanism for Supporting Full View in Wireless Visual Sensor Networks. IEEE Access, 2019, 7, 156895-156906.	2.6	7
49	GSMS: A Barrier Coverage Algorithm for Joint Surveillance Quality and Network Lifetime in WSNs. IEEE Access, 2019, 7, 159608-159621.	2.6	7
50	Barrier Coverage Mechanism Using Adaptive Sensing Range for Renewable WSNs. IEEE Access, 2020, 8, 86065-86080.	2.6	7
51	A self-regulated learning system with scaffolding support for self-regulated e/t-learning. , 0, , .		6
52	Adaptive role switching protocol for improving scatternet performance in Bluetooth radio networks. IEEE Transactions on Consumer Electronics, 2006, 52, 1229-1238.	3.0	6
53	Bus-based content offloading for vehicular networks. Journal of Communications and Networks, 2017, 19, 250-258.	1.8	6
54	Maximizing Surveillance Quality of Boundary Curve in Solar-Powered Wireless Sensor Networks. IEEE Access, 2019, 7, 77771-77785.	2.6	6

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55	DBDC: A Distributed Bus-Based Data Collection Mechanism for Maximizing Throughput and Lifetime in WSNs. IEEE Access, 2019, 7, 160506-160522.	2.6	6
56	MCDP: Maximizing Cooperative Detection Probability for Barrier Coverage in Rechargeable Wireless Sensor Networks. IEEE Sensors Journal, 2021, 21, 7080-7092.	2.4	6
57	ZBP: a zone-based broadcasting protocol for wireless sensor networks. , 0, , .		5
58	A distributed slots reservation protocol for QoS routing on TDMA-based mobile ad hoc networks. , 0, , .		5
59	LARP: a novel routing protocol for the bluetooth scatternet. , 0, , .		5
60	MCDA: An Efficient Multi-Channel MAC Protocol for 802.11 Wireless LAN with Directional Antenna. , 0, , .		5
61	On Avoiding RTS Collisions for IEEE 802.11-BasedWireless Ad Hoc Networks. , 2006, , .		5
62	On Providing Temporal Full-Coverage by Applying Energy-Efficient Hole-Movement Strategies for Mobile WSNs. , 2007, , .		5
63	A placement mechanism for relay stations in 802.16j WiMAX networks. Wireless Networks, 2014, 20, 227-243.	2.0	5
64	A Location Aware Mobility based Routing Protocol for the Bluetooth Scatternet. Wireless Personal Communications, 2008, 47, 541-566.	1.8	4
65	Cooperative MAC Protocol for Multi-Channel Wireless Networks. , 2012, , .		4
66	Piconet construction and restructuring mechanisms for interference avoiding in bluetooth PANs. Journal of Network and Computer Applications, 2016, 75, 89-100.	5.8	4
67	PCF: on exploiting spatial reuse and power conservation opportunities with power control and fairness mechanism for 802.11 WLAN. , 0, , .		3
68	TARP: A traffic-aware restructuring protocol for Bluetooth radio networks. Computer Networks, 2007, 51, 4070-4091.	3.2	3
69	Reduced Idle Listening Based Medium Access Control Protocol for Wireless Sensor Networks. , 2010, , .		3
70	Multiantenna Relay Beamforming Design for QoS Discrimination in Two-Way Relay Networks. Scientific World Journal, The, 2013, 2013, 1-8.	0.8	3
71	Bus-based content downloading for Vehicular Ad Hoc Networks. , 2015, , .		3
72	Development and Evaluation of a Self-Regulatory-Learning-Cycle-Based System for Self-Regulated e/m-Learning. , 2007, , .		2

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73	Energy-Efficient Mechanisms for Coverage Recovery in WSNs. , 2008, , .		2
74	An energy-balanced swept-coverage mechanism for mobile WSNs. Wireless Networks, 2013, 19, 871-889.	2.0	2
75	Data Collection for Robot Movement Mechanisms in Wireless Sensor and Robot Networks. , 2016, , .		2
76	A Distributed Multilevel Data Collection Mechanism Using Bus in WSNs. IEEE Systems Journal, 2021, 15, 4554-4565.	2.9	2
77	TCSAR: Target Coverage Mechanism for Sensors With Adjustable Sensing Range in WRSNs. IEEE Sensors Journal, 2022, 22, 3756-3765.	2.4	2
78	PAMP: a power-aware multicast protocol for Bluetooth radio systems. , 2004, , .		1
79	A study of self-regulated learning in high school students’ english learning with system support. , 2008, , .		1
80	ORZBP: An Obstacle-Resistant Zone-based Broadcasting Protocol for Wireless Sensor Networks. , 2012, , .		1
81	A MAC protocol by applying staggered channel model for cognitive radio networks. Wireless Networks, 2014, 20, 1873-1888.	2.0	1
82	Virtual Grid-Based Data Collection Using Mobile Sink in Wireless Sensor Networks. , 2020, , .		1
83	CORL 2: Exploring Cooperative Opportunities, Reducing Latency and Prolonging Network Lifetime for Data Collection Using Mobile Sinks in Wireless Sensor Networks. IEEE Sensors Journal, 2021, 21, 19596-19610.	2.4	1
84	On-Demand Recharge Scheduling Algorithm in Wireless Sensor Networks. , 2022, , .		1
85	Obstacle-free geocasting protocol for ad hoc wireless networks. , 0, , .		0
86	On Improving Network Connectivity by Power-Control and Code-Switching Schemes for Multihop Packet Radio Networks. , 0, , .		0
87	A frequencyâ€aware dataâ€centric mechanism for wireless sensor networks. Wireless Communications and Mobile Computing, 2010, 10, 1078-1101.	0.8	0
88	Using Pinch Technology to Achieve Augmented Reality in Multiple Devices. , 2016, , .		0
89	Joint Sensor Energy Conservation and Mobile Sink Cooperation for Data Collection in WSNs. , 2019, , .		0
90	An Energy Balanced Data Collection Mechanism for Maximizing Throughput using Uncontrolled Mobile Sink in WSNs. , 2020, , .		0

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91	Irregularity Detection of Daily Behavior Patterns Based on Unsupervised Learning. , 2020, , .		0
92	Obstacle-Resist Routing Protocols for Wireless Sensor Networks. , 2010, , 117-139.		0
93	JSQE: Joint Surveillance Quality and Energy Conservation for Barrier Coverage in WSNs. Sensors, 2022, 22, 4120.	2.1	0