Jeroen Hoebeke

List of Publications by Year
in descending order

85 papers	2,443 citations	304743 22 h-index	214800 47 g-index
85 all docs	85 docs citations	85 times ranked	2350 citing authors

#	ARTICLE	IF	CITATIONS
1	A Survey of LoRaWAN for IoT: From Technology to Application. Sensors, 2018, 18, 3995.	3.8	351
2	Scalability Analysis of Large-Scale LoRaWAN Networks in ns-3. IEEE Internet of Things Journal, 2017, 4, 2186-2198.	8.7	243
3	LoRa Scalability: A Simulation Model Based on Interference Measurements. Sensors, 2017, 17, 1193.	3.8	210
4	IETF Standardization in the Field of the Internet of Things (IoT): A Survey. Journal of Sensor and Actuator Networks, 2013, 2, 235-287.	3.9	177
5	Low Overhead Scheduling of LoRa Transmissions for Improved Scalability. IEEE Internet of Things Journal, 2019, 6, 3097-3109.	8.7	102
6	Experimental Evaluation of UWB Indoor Positioning for Sport Postures. Sensors, 2018, 18, 168.	3.8	83
7	Survey on Wireless Technology Trade-Offs for the Industrial Internet of Things. Sensors, 2020, 20, 488.	3.8	66
8	UWB Localization with Battery-Powered Wireless Backbone for Drone-Based Inventory Management. Sensors, 2019, 19, 467.	3.8	64
9	The Bluetooth Mesh Standard: An Overview and Experimental Evaluation. Sensors, 2018, 18, 2409.	3.8	60
10	Performance Evaluation of IEEE 802.11ah Networks With High-Throughput Bidirectional Traffic. Sensors, 2018, 18, 325.	3.8	54
11	Flexible Multimodal Sub-Gigahertz Communication for Heterogeneous Internet of Things Applications. IEEE Communications Magazine, 2018, 56, 146-153.	6.1	51
12	Sub-GHz LPWAN Network Coexistence, Management and Virtualization: An Overview and Open Research Challenges. Wireless Personal Communications, 2017, 95, 187-213.	2.7	46
13	Internet of Things Virtual Networks: Bringing Network Virtualization to Resource-Constrained Devices. , 2012, , .		39
14	Impact of EU duty cycle and transmission power limitations for sub-GHz LPWAN SRDs: an overview and future challenges. Eurasip Journal on Wireless Communications and Networking, 2019, 2019, .	2.4	37
15	Experimental Evaluation of UWB Indoor Positioning for Indoor Track Cycling. Sensors, 2019, 19, 2041.	3.8	36
16	Modelling the energy consumption for over-the-air software updates in LPWAN networks: SigFox, LoRa and IEEE 802.15.4g. Internet of Things (Netherlands), 2018, 3-4, 104-119.	7.7	34
17	In-Band Network Telemetry in Industrial Wireless Sensor Networks. IEEE Transactions on Network and Service Management, 2020, 17, 517-531.	4.9	32
18	ReLoc: Hybrid RSSI-and Phase-based Relative UHF-RFID Tag Localization with COTS Devices. IEEE Transactions on Instrumentation and Measurement, 2020, , 1-1.	4.7	32

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19	Towards a social and context-aware multi-sensor fall detection and risk assessment platform. Computers in Biology and Medicine, 2015, 64, 307-320.	7.0	31
20	Facilitating the creation of IoT applications through conditional observations in CoAP. Eurasip Journal on Wireless Communications and Networking, 2013, 2013, .	2.4	30
21	Sensor Function Virtualization to Support Distributed Intelligence in the Internet of Things. Wireless Personal Communications, 2015, 81, 1415-1436.	2.7	28
22	Experimental Evaluation of Unicast and Multicast CoAP Group Communication. Sensors, 2016, 16, 1137.	3.8	28
23	Extension of the IEEE 802.11ah ns-3 simulation module. , 2018, , .		28
24	ReLoc 2.0: UHF-RFID Relative Localization for Drone-Based Inventory Management. IEEE Transactions on Instrumentation and Measurement, 2021, 70, 1-13.	4.7	23
25	Flexible Unicast-Based Group Communication for CoAP-Enabled Devices. Sensors, 2014, 14, 9833-9877.	3.8	22
26	Design and evaluation of a scalable Internet of Things backend for smart ports. Software - Practice and Experience, 2021, 51, 1557-1579.	3.6	22
27	Indoor Drone Positioning: Accuracy and Cost Trade-Off for Sensor Fusion. IEEE Transactions on Vehicular Technology, 2022, 71, 961-974.	6.3	22
28	Strategies and Challenges for Interconnecting Wireless Mesh and Wireless Sensor Networks. Wireless Personal Communications, 2010, 53, 443-463.	2.7	20
29	Integration of Heterogeneous Devices and Communication Models via the Cloud in the Constrained Internet of Things. International Journal of Distributed Sensor Networks, 2015, 2015, 1-16.	2.2	20
30	Experimental characterisation of the off-body wireless channel at 2.4 GHz for dairy cows in barns and pastures. Computers and Electronics in Agriculture, 2016, 127, 593-605.	7.7	19
31	Hybrid Schedule Management in 6TiSCH Networks: The Coexistence of Determinism and Flexibility. IEEE Access, 2018, 6, 33941-33952.	4.2	19
32	Virtual Private Ad Hoc Networking. Wireless Personal Communications, 2006, 38, 125-141.	2.7	17
33	Observing CoAP groups efficiently. Ad Hoc Networks, 2016, 37, 368-388.	5.5	17
34	In-Band Network Monitoring Technique to Support SDN-Based Wireless Networks. IEEE Transactions on Network and Service Management, 2021, 18, 627-641.	4.9	17
35	UWB anchor nodes self-calibration in NLOS conditions: a machine learning and adaptive PHY error correction approach. Wireless Networks, 2021, 27, 3007-3023.	3.0	17
36	Sub-Gigahertz Inter-Technology Interference. How Harmful is it for LoRa?. , 2018, , .		16

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37	Evaluating the Suitability of IEEE 802.11ah for Low-Latency Time-Critical Control Loops. IEEE Internet of Things Journal, 2019, 6, 7839-7848.	8.7	16
38	Using SCHC for an optimized protocol stack in multimodal LPWAN solutions. , 2019, , .		16
39	ORCHESTRA: Enabling Inter-Technology Network Management in Heterogeneous Wireless Networks. IEEE Transactions on Network and Service Management, 2018, 15, 1733-1746.	4.9	15
40	LoRaWAN Scheduling: From Concept to Implementation. IEEE Internet of Things Journal, 2021, 8, 12919-12933.	8.7	14
41	Assessing the Coexistence of Heterogeneous Wireless Technologies With an SDR-Based Signal Emulator: A Case Study of Wi-Fi and Bluetooth. IEEE Transactions on Wireless Communications, 2017, 16, 1755-1766.	9.2	13
42	Measurement‐based wireless network planning, monitoring, and reconfiguration solution for robust radio communications in indoor factories. IET Science, Measurement and Technology, 2016, 10, 375-382.	1.6	12
43	Light-weight streaming protocol for the Internet of Multimedia Things: Voice streaming over NB-IoT. Pervasive and Mobile Computing, 2019, 59, 101044.	3.3	12
44	Hardware Efficient Clock Synchronization Across Wi-Fi and Ethernet-Based Network Using PTP. IEEE Transactions on Industrial Informatics, 2022, 18, 3808-3819.	11.3	12
45	snapMac: A generic MAC/PHY architecture enabling flexible MAC design. Ad Hoc Networks, 2014, 17, 37-59.	5.5	11
46	A Cloud-based Virtual Network Operator for Managing Multimodal LPWA Networks and Devices. , 2018, , .		10
47	Seamless roaming and guaranteed communication using a synchronized single-hop multi-gateway 802.15.4e TSCH network. Ad Hoc Networks, 2019, 86, 1-14.	5.5	10
48	Fine-grained management of CoAP interactions with constrained IoT devices. , 2014, , .		9
49	Secure communication in IP-based wireless sensor networks via a trusted gateway. , 2015, , .		9
50	Flexible Wi-Fi Communication among Mobile Robots in Indoor Industrial Environments. Mobile Information Systems, 2018, 2018, 1-19.	0.6	9
51	An End-To-End LwM2M-Based Communication Architecture for Multimodal NB-IoT/BLE Devices. Sensors, 2020, 20, 2239.	3.8	9
52	Enabling TSN over IEEE 802.11: Low-overhead Time Synchronization for Wi-Fi Clients. , 2021, , .		9
53	Bringing Time-Sensitive Networking to Wireless Professional Private Networks. Wireless Personal Communications, 2021, 121, 1255-1271.	2.7	9
54	Managed Ecosystems of Networked Objects. Wireless Personal Communications, 2011, 58, 125-143.	2.7	8

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55	Secure Service Proxy: A CoAP(s) Intermediary for a Securer and Smarter Web of Things. Sensors, 2017, 17, 1609.	3.8	8
56	Low Overhead, Fine-grained End-to-end Monitoring of Wireless Networks using In-band Telemetry. , 2019, , .		8
57	Efficient Vertical Handover in Heterogeneous Low-Power Wide-Area Networks. IEEE Internet of Things Journal, 2020, 7, 1960-1973.	8.7	8
58	Adaptive multi-PHY IEEE802.15.4 TSCH in sub-GHz industrial wireless networks. Ad Hoc Networks, 2021, 111, 102330.	5.5	8
59	A Multimodal Localization Framework Design for IoT Applications. Sensors, 2020, 20, 4622.	3.8	7
60	QoS Enabled Heterogeneous BLE Mesh Networks. Journal of Sensor and Actuator Networks, 2021, 10, 24.	3.9	7
61	Network virtualization as an integrated solution for emergency communication. Telecommunication Systems, 2013, 52, 1859-1876.	2.5	6
62	Enabling the web of things: facilitating deployment, discovery and resource access to IoT objects using embedded web services. International Journal of Web and Grid Services, 2014, 10, 218.	0.5	6
63	Bindings and RESTlets: A Novel Set of CoAP-Based Application Enablers to Build IoT Applications. Sensors, 2016, 16, 1217.	3.8	6
64	Interactive web visualizer for IEEE 802.11ah ns-3 module. , 2018, , .		6
65	Enabling Wireless Closed Loop Communication: Optimal Scheduling Over IEEE 802.11ah Networks. IEEE Access, 2021, 9, 9084-9100.	4.2	6
66	Extensions to LwM2M for Intermittent Connectivity and Improved Efficiency. , 2018, , .		5
67	Analysis of decentralized resource and service discovery mechanisms in wireless multi-hop networks. Computer Communications, 2006, 29, 2710-2720.	5.1	4
68	Broadcast Aggregation to Improve Quality of Service in Wireless Sensor Networks. International Journal of Distributed Sensor Networks, 2014, 10, 383678.	2.2	4
69	Wireless handover performance in industrial environments: A case study. , 2016, , .		4
70	Tighter application-network interfacing to drive innovation in networked systems. , 2021, , .		4
71	Intelligent TDMA heuristic scheduling by taking into account physical layer interference for an industrial IoT environment. Telecommunication Systems, 2018, 67, 605-617.	2.5	3
72	Appdaptivity: An Internet of Things Device-Decoupled System for Portable Applications in Changing Contexts. Sensors, 2018, 18, 1345.	3.8	3

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73	Light-Weight Integration and Interoperation of Localization Systems in IoT. Sensors, 2018, 18, 2142.	3.8	3
74	Low power, portable and infrastructure light indoor UWB ranging solution. , 2019, , .		3
75	Intra-Network Interference Robustness: An Empirical Evaluation of IEEE 802.15.4-2015 SUN-OFDM. Electronics (Switzerland), 2020, 9, 1691.	3.1	3
76	Device Discovery and Context Registration in Static Context Header Compression Networks. Information (Switzerland), 2021, 12, 83.	2.9	3
77	Deep Learning Enables Robust Drone-based UHF-RFID Localization in Warehouses. , 2022, , .		3
78	Flexible, Direct Interactions between CoAP-enabled IoT Devices. , 2014, , .		2
79	Adaptive Transport Layer Protocols using In-band Network Telemetry and eBPF. , 2021, , .		2
80	Impactless Beacon-Based Wireless TSN Association Procedure. , 2022, , .		2
81	An Energy-Efficient Multi-Modal IoT System Leveraging NB-IoT and BLE. , 2021, , .		1
82	A Digital Communication Twin for Performance Prediction and Management of Bluetooth Mesh Networks. , 2021, , .		1
83	DRiPLOF: An RPL Extension for Multi-Interface Wireless Sensor Networks in Interference-Prone Environments. Sensors, 2022, 22, 3906.	3.8	1
84	Multimodal Network Architecture for Shared Situational Awareness amongst Vessels. Sensors, 2021, 21, 6556.	3.8	0
85	FLINT: Flows for the Internet of Things. Applied Sciences (Switzerland), 2021, 11, 9303.	2.5	0