Eli De Poorter

List of Publications by Year
in descending order

65 papers	2,075 citations	236925 25 h-index	254184 43 g-index
65 all docs	65 docs citations	65 times ranked	2051 citing authors

#	Article	IF	Citations
1	A Survey of LoRaWAN for IoT: From Technology to Application. Sensors, 2018, 18, 3995.	3.8	351
2	End-to-End Learning From Spectrum Data: A Deep Learning Approach for Wireless Signal Identification in Spectrum Monitoring Applications. IEEE Access, 2018, 6, 18484-18501.	4.2	236
3	Experimental Evaluation of UWB Indoor Positioning for Sport Postures. Sensors, 2018, 18, 168.	3.8	83
4	Performance analysis of multiple Indoor Positioning Systems in a healthcare environment. International Journal of Health Geographics, 2016, 15, 7.	2.5	77
5	Analysis of the Scalability of UWB Indoor Localization Solutions for High User Densities. Sensors, 2018, 18, 1875.	3.8	71
6	Survey on Wireless Technology Trade-Offs for the Industrial Internet of Things. Sensors, 2020, 20, 488.	3.8	66
7	UWB Localization with Battery-Powered Wireless Backbone for Drone-Based Inventory Management. Sensors, 2019, 19, 467.	3.8	64
8	Performance Evaluation of IEEE 802.11ah Networks With High-Throughput Bidirectional Traffic. Sensors, 2018, 18, 325.	3.8	54
9	Platform for benchmarking of RF-based indoor localization solutions. , 2015, 53, 126-133.		51
10	Flexible Multimodal Sub-Gigahertz Communication for Heterogeneous Internet of Things Applications. IEEE Communications Magazine, 2018, 56, 146-153.	6.1	51
11	Sub-GHz LPWAN Network Coexistence, Management and Virtualization: An Overview and Open Research Challenges. Wireless Personal Communications, 2017, 95, 187-213.	2.7	46
12	Data-Driven Design of Intelligent Wireless Networks: An Overview and Tutorial. Sensors, 2016, 16, 790.	3.8	45
13	Wi-PoS: A Low-Cost, Open Source Ultra-Wideband (UWB) Hardware Platform with Long Range Sub-GHz Backbone. Sensors, 2019, 19, 1548.	3.8	40
14	Self-calibration and Collaborative Localization for UWB Positioning Systems. ACM Computing Surveys, 2022, 54, 1-27.	23.0	40
15	Enhancing the Coexistence of LTE and Wi-Fi in Unlicensed Spectrum Through Convolutional Neural Networks. IEEE Access, 2019, 7, 28464-28477.	4.2	39
16	A Survey on Machine Learning-Based Performance Improvement of Wireless Networks: PHY, MAC and Network Layer. Electronics (Switzerland), 2021, 10, 318.	3.1	39
17	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
18	Experimental Evaluation of UWB Indoor Positioning for Indoor Track Cycling. Sensors, 2019, 19, 2041.	3.8	36

#	Article	IF	Citations
19	An Overview of UWB Standards and Organizations (IEEE 802.15.4, FiRa, Apple): Interoperability Aspects and Future Research Directions. IEEE Access, 2022, 10, 70219-70241.	4.2	35
20	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
21	Badminton Activity Recognition Using Accelerometer Data. Sensors, 2020, 20, 4685.	3.8	29
22	Edge Inference for UWB Ranging Error Correction Using Autoencoders. IEEE Access, 2020, 8, 139143-139155.	4.2	29
23	Extension of the IEEE 802.11ah ns-3 simulation module. , 2018, , .		28
24	Automatic equine activity detection by convolutional neural networks using accelerometer data. Computers and Electronics in Agriculture, 2020, 168, 105139.	7.7	28
25	Energy-Aware Sensing on Battery-Less LoRaWAN Devices with Energy Harvesting. Electronics (Switzerland), 2020, 9, 904.	3.1	28
26	Ultra-Wideband Indoor Positioning and IMU-Based Activity Recognition for Ice Hockey Analytics. Sensors, 2021, 21, 4650.	3.8	28
27	Wireless Technology Recognition Based on RSSI Distribution at Sub-Nyquist Sampling Rate for Constrained Devices. Sensors, 2017, 17, 2081.	3.8	26
28	Towards low-complexity wireless technology classification across multiple environments. Ad Hoc Networks, 2019, 91, 101881.	5.5	26
29	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
30	TAISC: A cross-platform MAC protocol compiler and execution engine. Computer Networks, 2016, 107, 315-326.	5.1	22
31	Self-Organized Energy-Efficient Cross-Layer Optimization for Device to Device Communication in Heterogeneous Cellular Networks. IEEE Access, 2017, 5, 1117-1128.	4.2	22
32	Indoor Drone Positioning: Accuracy and Cost Trade-Off for Sensor Fusion. IEEE Transactions on Vehicular Technology, 2022, 71, 961-974.	6.3	22
33	Energy-Efficient Resource Allocation for Ultra-Dense Licensed and Unlicensed Dual-Access Small Cell Networks. IEEE Transactions on Mobile Computing, 2021, 20, 983-1000.	5.8	20
34	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
35	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
36	A Convolutional Neural Network Approach for Classification of LPWAN Technologies: Sigfox, LoRA and IEEE 802.15.4g. , 2019, , .		16

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37	Embedded AI-Based Digi-Healthcare. Applied Sciences (Switzerland), 2022, 12, 519.	2.5	16
38	WiFi ad-hoc mesh network and MAC protocol solution for UWB indoor localization systems. , 2016, , .		15
39	A semi-supervised learning approach towards automatic wireless technology recognition. , 2019, , .		14
40	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
41	A framework for energy-efficient equine activity recognition with leg accelerometers. Computers and Electronics in Agriculture, 2021, 183, 106020.	7.7	13
42	Multistatic UWB Radar-Based Passive Human Tracking Using COTS Devices. IEEE Antennas and Wireless Propagation Letters, 2022, 21, 695-699.	4.0	13
43	Multi-objective surrogate modeling for real-time energy-efficient station grouping in IEEEÂ802.11ah. Pervasive and Mobile Computing, 2019, 57, 33-48.	3.3	10
44	Benchmarking of Localization Solutions: Guidelines for the Selection of Evaluation Points. Ad Hoc Networks, 2017, 59, 86-96.	5.5	8
45	Efficient Vertical Handover in Heterogeneous Low-Power Wide-Area Networks. IEEE Internet of Things Journal, 2020, 7, 1960-1973.	8.7	8
46	Adaptive multi-PHY IEEE802.15.4 TSCH in sub-GHz industrial wireless networks. Ad Hoc Networks, 2021, 111, 102330.	5.5	8
47	Bluetooth-Low-Energy-Based Fall Detection and Warning System for Elderly People in Nursing Homes. Journal of Sensors, 2022, 2022, 1-14.	1.1	8
48	Device-Free Pedestrian Tracking Using Low-Cost Ultrawideband Devices. IEEE Transactions on Instrumentation and Measurement, 2022, 71, 1-4.	4.7	8
49	Anchor Pair Selection for Error Correction in Time Difference of Arrival (TDoA) Ultra Wideband (UWB) Positioning Systems. , 2021, , .		8
50	Interactive web visualizer for IEEE 802.11ah ns-3 module. , 2018, , .		6
51	Enabling Wireless Closed Loop Communication: Optimal Scheduling Over IEEE 802.11ah Networks. IEEE Access, 2021, 9, 9084-9100.	4.2	6
52	Human Sensing in Reverberant Environments: RF-Based Occupancy and Fall Detection in Ships. IEEE Transactions on Vehicular Technology, 2021, 70, 4512-4522.	6.3	6
53	Machine Learning-Based Angle of Arrival Estimation for Ultra-Wide Band Radios. IEEE Communications Letters, 2022, 26, 1273-1277.	4.1	6
54	Feasibility of Wireless Horse Monitoring Using a Kinetic Energy Harvester Model. Electronics (Switzerland), 2020, 9, 1730.	3.1	5

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55	Horse Jumping and Dressage Training Activity Detection Using Accelerometer Data. Animals, 2021, 11, 2904.	2.3	5
56	UWB-MAC: MAC protocol for UWB localization using ultra-low power anchor nodes. Ad Hoc Networks, 2021, 123, 102637.	5.5	4
57	Low power, portable and infrastructure light indoor UWB ranging solution. , 2019, , .		3
58	Intra-Network Interference Robustness: An Empirical Evaluation of IEEE 802.15.4-2015 SUN-OFDM. Electronics (Switzerland), 2020, 9, 1691.	3.1	3
59	Taking a closer look at indoor route guidance; usability study to compare an adapted and non-adapted mobile prototype. Spatial Cognition and Computation, 2022, 22, 51-73.	1.2	3
60	Fully Flexible Textile Antenna-Backed Sensor Node for Body-Worn UWB Localization. Sensors, 2021, 21, 1641.	3.8	3
61	Device Discovery and Context Registration in Static Context Header Compression Networks. Information (Switzerland), 2021, 12, 83.	2.9	3
62	Deep Learning Enables Robust Drone-based UHF-RFID Localization in Warehouses. , 2022, , .		3
63	Parent and PHY Selection in Slot Bonding IEEE 802.15.4e TSCH Networks. Sensors, 2021, 21, 5150.	3.8	2
64	Slot Bonding for Adaptive Modulations in IEEE 802.15.4e TSCH Networks. IEEE Internet of Things Journal, 2021, 8, 10714-10730.	8.7	1
65	DRiPLOF: An RPL Extension for Multi-Interface Wireless Sensor Networks in Interference-Prone Environments. Sensors, 2022, 22, 3906.	3.8	1