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	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
2	Self-calibration and Collaborative Localization for UWB Positioning Systems. ACM Computing Surveys, 2022, 54, 1-27.	23.0	40
3	Indoor Drone Positioning: Accuracy and Cost Trade-Off for Sensor Fusion. IEEE Transactions on Vehicular Technology, 2022, 71, 961-974.	6.3	22
4	Embedded AI-Based Digi-Healthcare. Applied Sciences (Switzerland), 2022, 12, 519.	2.5	16
5	Multistatic UWB Radar-Based Passive Human Tracking Using COTS Devices. IEEE Antennas and Wireless Propagation Letters, 2022, 21, 695-699.	4.0	13
6	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
7	Device-Free Pedestrian Tracking Using Low-Cost Ultrawideband Devices. IEEE Transactions on Instrumentation and Measurement, 2022, 71, 1-4.	4.7	8
8	Machine Learning-Based Angle of Arrival Estimation for Ultra-Wide Band Radios. IEEE Communications Letters, 2022, 26, 1273-1277.	4.1	6
9	DRiPLOF: An RPL Extension for Multi-Interface Wireless Sensor Networks in Interference-Prone Environments. Sensors, 2022, 22, 3906.	3.8	1
10	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
11	Deep Learning Enables Robust Drone-based UHF-RFID Localization in Warehouses. , 2022, , .		3
12	Adaptive multi-PHY IEEE802.15.4 TSCH in sub-GHz industrial wireless networks. Ad Hoc Networks, 2021, 111, 102330.	5.5	8
13	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
14	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
15	Enabling Wireless Closed Loop Communication: Optimal Scheduling Over IEEE 802.11ah Networks. IEEE Access, 2021, 9, 9084-9100.	4.2	6
16	Fully Flexible Textile Antenna-Backed Sensor Node for Body-Worn UWB Localization. Sensors, 2021, 21, 1641.	3.8	3
17	Device Discovery and Context Registration in Static Context Header Compression Networks. Information (Switzerland), 2021, 12, 83.	2.9	3
18	A framework for energy-efficient equine activity recognition with leg accelerometers. Computers and Electronics in Agriculture, 2021, 183, 106020.	7.7	13

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19	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
20	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
21	Ultra-Wideband Indoor Positioning and IMU-Based Activity Recognition for Ice Hockey Analytics. Sensors, 2021, 21, 4650.	3.8	28
22	Slot Bonding for Adaptive Modulations in IEEE 802.15.4e TSCH Networks. IEEE Internet of Things Journal, 2021, 8, 10714-10730.	8.7	1
23	Parent and PHY Selection in Slot Bonding IEEE 802.15.4e TSCH Networks. Sensors, 2021, 21, 5150.	3.8	2
24	UWB-MAC: MAC protocol for UWB localization using ultra-low power anchor nodes. Ad Hoc Networks, 2021, 123, 102637.	5.5	4
25	A Survey on Machine Learning-Based Performance Improvement of Wireless Networks: PHY, MAC and Network Layer. Electronics (Switzerland), 2021, 10, 318.	3.1	39
26	Horse Jumping and Dressage Training Activity Detection Using Accelerometer Data. Animals, 2021, 11, 2904.	2.3	5
27	Anchor Pair Selection for Error Correction in Time Difference of Arrival (TDoA) Ultra Wideband (UWB) Positioning Systems. , 2021, , .		8
28	Automatic equine activity detection by convolutional neural networks using accelerometer data. Computers and Electronics in Agriculture, 2020, 168, 105139.	7.7	28
29	Efficient Vertical Handover in Heterogeneous Low-Power Wide-Area Networks. IEEE Internet of Things Journal, 2020, 7, 1960-1973.	8.7	8
30	Badminton Activity Recognition Using Accelerometer Data. Sensors, 2020, 20, 4685.	3.8	29
31	Edge Inference for UWB Ranging Error Correction Using Autoencoders. IEEE Access, 2020, 8, 139143-139155.	4.2	29
32	Intra-Network Interference Robustness: An Empirical Evaluation of IEEE 802.15.4-2015 SUN-OFDM. Electronics (Switzerland), 2020, 9, 1691.	3.1	3
33	Feasibility of Wireless Horse Monitoring Using a Kinetic Energy Harvester Model. Electronics (Switzerland), 2020, 9, 1730.	3.1	5
34	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
35	Energy-Aware Sensing on Battery-Less LoRaWAN Devices with Energy Harvesting. Electronics (Switzerland), 2020, 9, 904.	3.1	28
36	Survey on Wireless Technology Trade-Offs for the Industrial Internet of Things. Sensors, 2020, 20, 488.	3.8	66

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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	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
39	A Convolutional Neural Network Approach for Classification of LPWAN Technologies: Sigfox, LoRA and IEEE 802.15.4g. , 2019, , .		16
40	Low power, portable and infrastructure light indoor UWB ranging solution. , 2019, , .		3
41	Experimental Evaluation of UWB Indoor Positioning for Indoor Track Cycling. Sensors, 2019, 19, 2041.	3.8	36
42	Towards low-complexity wireless technology classification across multiple environments. Ad Hoc Networks, 2019, 91, 101881.	5.5	26
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	Enhancing the Coexistence of LTE and Wi-Fi in Unlicensed Spectrum Through Convolutional Neural Networks. IEEE Access, 2019, 7, 28464-28477.	4.2	39
45	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
46	UWB Localization with Battery-Powered Wireless Backbone for Drone-Based Inventory Management. Sensors, 2019, 19, 467.	3.8	64
47	A semi-supervised learning approach towards automatic wireless technology recognition. , 2019, , .		14
48	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
49	A Survey of LoRaWAN for IoT: From Technology to Application. Sensors, 2018, 18, 3995.	3.8	351
50	Experimental Evaluation of UWB Indoor Positioning for Sport Postures. Sensors, 2018, 18, 168.	3.8	83
51	Analysis of the Scalability of UWB Indoor Localization Solutions for High User Densities. Sensors, 2018, 18, 1875.	3.8	71
52	Flexible Multimodal Sub-Gigahertz Communication for Heterogeneous Internet of Things Applications. IEEE Communications Magazine, 2018, 56, 146-153.	6.1	51
53	Interactive web visualizer for IEEE 802.11ah ns-3 module. , 2018, , .		6
54	Extension of the IEEE 802.11ah ns-3 simulation module. , 2018, , .		28

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55	Performance Evaluation of IEEE 802.11ah Networks With High-Throughput Bidirectional Traffic. Sensors, 2018, 18, 325.	3.8	54
56	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
57	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
58	Benchmarking of Localization Solutions: Guidelines for the Selection of Evaluation Points. Ad Hoc Networks, 2017, 59, 86-96.	5.5	8
59	Sub-GHz LPWAN Network Coexistence, Management and Virtualization: An Overview and Open Research Challenges. Wireless Personal Communications, 2017, 95, 187-213.	2.7	46
60	Wireless Technology Recognition Based on RSSI Distribution at Sub-Nyquist Sampling Rate for Constrained Devices. Sensors, 2017, 17, 2081.	3.8	26
61	Data-Driven Design of Intelligent Wireless Networks: An Overview and Tutorial. Sensors, 2016, 16, 790.	3.8	45
62	WiFi ad-hoc mesh network and MAC protocol solution for UWB indoor localization systems. , 2016, , .		15
63	Performance analysis of multiple Indoor Positioning Systems in a healthcare environment. International Journal of Health Geographics, 2016, 15, 7.	2.5	77
64	TAISC: A cross-platform MAC protocol compiler and execution engine. Computer Networks, 2016, 107, 315-326.	5.1	22
65	Platform for benchmarking of RF-based indoor localization solutions. , 2015, 53, 126-133.		51