Dirk Pesch

List of Publications by Year
in descending order

130 papers	1,992 citations	394421 19 h-index	377865 34 g-index
133 all docs	133 docs citations	133 times ranked	1956 citing authors

#	Article	IF	Citations
1	FallDeFi. , 2018, 1, 1-25.		155
2	6G for Vehicle-to-Everything (V2X) Communications: Enabling Technologies, Challenges, and Opportunities. Proceedings of the IEEE, 2022, 110, 712-734.	21.3	131
3	TS-LoRa: Time-slotted LoRaWAN for the Industrial Internet of Things. Computer Communications, 2020, 153, 1-10.	5.1	109
4	5G NR-V2X: Toward Connected and Cooperative Autonomous Driving. IEEE Communications Standards Magazine, 2021, 5, 48-54.	4.9	97
5	Fair Adaptive Data Rate Allocation and Power Control in LoRaWAN. , 2018, , .		71
6	$FREE$ â€"Fine-Grained Scheduling for Reliable and Energy-Efficient Data Collection in LoRaWAN. IEEE Internet of Things Journal, 2020, 7, 669-683.	8.7	69
7	A Survey on Resource Allocation in Vehicular Networks. IEEE Transactions on Intelligent Transportation Systems, 2022, 23, 701-721.	8.0	69
8	Duty cycle learning algorithm (DCLA) for IEEE 802.15.4 beacon-enabled wireless sensor networks. Ad Hoc Networks, 2012, 10, 664-679.	5.5	62
9	Broadcast Performance Analysis and Improvements of the LTE-V2V Autonomous Mode at Road Intersection. IEEE Transactions on Vehicular Technology, 2019, 68, 9359-9369.	6.3	54
10	Service Discovery Protocols for Constrained Machine-to-Machine Communications. IEEE Communications Surveys and Tutorials, 2014, 16, 41-60.	39.4	50
11	InRout â€" A QoS aware route selection algorithm for industrial wireless sensor networks. Ad Hoc Networks, 2012, 10, 458-478.	5.5	49
12	Recent advances in RF-based passive device-free localisation for indoor applications. Ad Hoc Networks, 2017, 64, 80-98.	5.5	49
13	Influence of Predicted and Measured Fingerprint on the Accuracy of RSSI-based Indoor Location Systems. , 2007, , .		46
14	A wireless sensor network design tool to support building energy management. , 2009, , .		43
15	Environmental monitoring aware routing: making environmental sensor networks more robust. Telecommunication Systems, 2010, 43, 3-11.	2.5	41
16	Virtual lifeline: Multimodal sensor data fusion for robust navigation in unknown environments. Pervasive and Mobile Computing, 2012, 8, 388-401.	3.3	36
17	Performance evaluation of SIP-based multimedia services in UMTS. Computer Networks, 2005, 49, 385-403.	5.1	35
18	AvroraZ. , 2008, , .		35

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19	Towards a wireless sensor platform for energy efficient building operation. Tsinghua Science and Technology, 2008, 13, 381-386.	6.1	34
20	Constrained Application Protocol for Low Power Embedded Networks: A Survey. , 2012, , .		32
21	Agent-Based Optimization for Large Scale WLAN Design. IEEE Transactions on Evolutionary Computation, 2011, 15, 470-486.	10.0	25
22	Analyzing LoRa: A use case perspective. , 2018, , .		23
23	MeshMAC: Enabling Mesh Networking over IEEE 802.15.4 through Distributed Beacon Scheduling. Lecture Notes of the Institute for Computer Sciences, Social-Informatics and Telecommunications Engineering, 2010, , 561-575.	0.3	23
24	A Bayesian Approach for RF-Based Indoor Localisation. , 2007, , .		22
25	Experimental Evaluation of Beacon Scheduling Mechanisms for Multihop IEEE 802.15.4 Wireless Sensor Networks. , 2010, , .		22
26	Sensor Fusion and State Estimation of IoT Enabled Wind Energy Conversion System. Sensors, 2019, 19, 1566.	3.8	22
27	Channel State Information Based Human Presence Detection using Non-linear Techniques. , 2016, , .		21
28	Call Admission and Handover in Heterogeneous Wireless Networks. IEEE Internet Computing, 2007, 11, 44-52.	3.3	20
29	A Data Dissemination Strategy for Cooperative Vehicular Systems. IEEE Vehicular Technology Conference, 2007, , .	0.4	19
30	Optimal Data Collection Time in LoRa Networksâ€"A Time-Slotted Approach. Sensors, 2021, 21, 1193.	3.8	19
31	Scalability of dense wireless lighting control networks. , 2015, 53, 157-165.		17
32	Reliable State Estimation of an Unmanned Aerial Vehicle Over a Distributed Wireless IoT Network. IEEE Transactions on Reliability, 2019, 68, 1061-1069.	4.6	17
33	How to Make Firmware Updates over LoRaWAN Possible. , 2020, , .		17
34	Loneliness and Social Isolation Detection Using Passive Sensing Techniques: Scoping Review. JMIR MHealth and UHealth, 2022, 10, e34638.	3.7	17
35	Service Provisioning for the WSN Cloud. , 2012, , .		15
36	Impact of Big Vehicle Shadowing on Vehicle-to-Vehicle Communications. IEEE Transactions on Vehicular Technology, 2020, 69, 6902-6915.	6.3	15

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37	Virtual Network Embedding for Wireless Sensor Networks Time-Efficient QoS/QoI-Aware Approach. IEEE Internet of Things Journal, 2021, 8, 916-926.	8.7	15
38	Environmental Monitoring Aware Routing in Wireless Sensor Networks. International Federation for Information Processing, 2008, , 5-16.	0.4	15
39	An Infrastructure Enhanced Geographic Routing Protocol for urban vehicular environments. , 2013, , .		13
40	A Search into a Suitable Channel Access Control Protocol for LoRa-Based Networks. , 2018, , .		13
41	Dynamic Context for Static Context Header compression in LPWANs. , 2018, , .		13
42	A Heuristic Relay Positioning Algorithm for Heterogeneous Wireless Networks. , 2009, , .		12
43	LSCHC. , 2017, , .		12
44	Multi-objective Cross-Layer Algorithm for Routing over Wireless Sensor Networks. , 2009, , .		11
45	Design and deployment tool for in-building wireless sensor networks: A performance discussion. , 2011, , .		11
46	DSLs for Model Driven Development of Secure Interoperable Automation Systems with EdgeX Foundry. , 2021, , .		11
47	Hierarchical clustering as an approach for supporting P2P SIP sessions in ubiquitous environments. , 2007, , .		10
48	Distributed Duty Cycle Management (DDCM) for IEEE 802.15.4 Beacon-Enabled Wireless Mesh Sensor Networks. , 2011, , .		10
49	A mobility framework to improve heterogeneous wireless network services. International Journal of Ad Hoc and Ubiquitous Computing, 2011, 7, 60.	0.5	10
50	Robust and Real-Time State Estimation of Unstable Microgrids Over IoT Networks. IEEE Systems Journal, 2021, 15, 2176-2185.	4.6	10
51	A network centric simulation environment for CALM-based cooperative vehicular systems. , 2010, , .		10
52	JudiShare: Judicious resource allocation for QoS-based services in shared wireless sensor networks. , 2018, , .		9
53	Reduced Overhead Routing in Short-Range Low-Power and Lossy Wireless Networks. Sensors, 2019, 19, 1240.	3.8	9
54	A wireless local area network modeling tool for scalable indoor access point placement optimization. , 2010, , .		8

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55	Open framework middleware. , 2009, , .		8
56	Uplink Transmission Policies for LoRa-Based Direct-to-Satellite IoT. IEEE Access, 2022, 10, 72687-72701.	4.2	8
57	Open Framework Middleware for intelligent WSN topology adaption in smart buildings. , 2009, , .		7
58	Application of energy efficient soft-decision error control in wireless sensor networks. Telecommunication Systems, 2013, 52, 2573-2583.	2.5	7
59	DCLA: A Duty-Cycle Learning Algorithm for IEEE 802.15.4 Beacon-Enabled WSNs. Lecture Notes of the Institute for Computer Sciences, Social-Informatics and Telecommunications Engineering, 2010, , 217-232.	0.3	7
60	Reliable Broadcasting for Active Safety Applications in Vehicular Highway Networks. , 2010, , .		6
61	The Presidium of Wireless Sensor Networks - A Software Defined Wireless Sensor Network Architecture. Lecture Notes of the Institute for Computer Sciences, Social-Informatics and Telecommunications Engineering, 2015, , 281-292.	0.3	6
62	Evaluation of Multi-Gateway LoRaWAN with Different Data Traffic Models. , 2018, , .		6
63	Empirical path loss model for 2.4 GHz IEEE 802.15.4 wireless networks in compact cars. , 2018, , .		6
64	RECCE: Deep Reinforcement Learning for Joint Routing and Scheduling in Time-Constrained Wireless Networks. IEEE Access, 2021, 9, 132053-132063.	4.2	6
65	D-SeDGAM: A Dynamic Service Differentiation Based GTS Allocation Mechanism for IEEE 802.15.4 WSN. , 2010, , .		5
66	Wi-Design: A modelling and optimization tool for wireless embedded systems in buildings. , 2011, , .		5
67	Towards Energy Efficient Adaptive Error Control in Indoor WSN: A Fuzzy Logic Based Approach. , 2011, , .		5
68	Serviceware - A service based management approach for WSN cloud infrastructures. , 2013, , .		5
69	Broadcast storm problem in dense wireless lighting control networks. , 2015, , .		5
70	Into the SMOG: The Stepping Stone to Centralized WSN Control. , 2016, , .		5
71	Achieving Optimal Cache Utility in Constrained Wireless Networks through Federated Learning. , 2020, , .		5
72	Hybrid Chirp Signal Design for Improved Long-Range (LoRa) Communications. Signals, 2022, 3, 1-10.	1.9	5

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73	Service provision for next generation mobile communication systems - the Telecommunication Service Exchange. IEEE Transactions on Network and Service Management, 2006, 3, 2-12.	4.9	4
74	Adaptive Cross-Layer Routing for HWN with Dedicated Relay Station. , 2006, , .		4
75	User Demand Based WLAN Design and Optimisation. IEEE Vehicular Technology Conference, 2007, , .	0.4	4
76	Reliable Delay Constrained Multihop Broadcasting in VANETs. Eurasip Journal on Advances in Signal Processing, 2010, 2010, .	1.7	4
77	Wi-design, Wi-manage, why bother?. , 2011, , .		4
78	A systematic engineering tool chain approach for self-organizing building automation systems. , 2013, , .		4
79	Tales from the C130 Horror Room. , 2017, , .		4
80	Formation Control of Automated Guided Vehicles in the Presence of Packet Loss. Sensors, 2022, 22, 3552.	3.8	4
81	Resource Sharing via Planed Relay for. Eurasip Journal on Advances in Signal Processing, 2008, 2008, .	1.7	3
82	Joint duty cycle and link adaptation for IEEE 802.15.4 beacon-enabled networks. , 2010, , .		3
83	A energy efficient TDMA scheduling scheme for large-scale WSAN. , 2010, , .		3
84	Stability of wireless networked control system using energy-efficient fuzzy based adaptive error control. , 2011, , .		3
85	Hybrid geo-routing in urban vehicular networks. , 2013, , .		3
86	Source localization using graph-based optimization technique. , 2013, , .		3
87	Architecture for self-organizing, co-operative and robust Building Automation Systems. , 2013, , .		3
88	Smart error-control strategy for low-power communication in wireless networked control system. Telecommunication Systems, 2014, 55, 253-269.	2.5	3
89	Modeling WiFi Traffic for White Space Prediction in Wireless Sensor Networks. , 2017, , .		3
90	Intra-Vehicle Wireless Sensor Network Communication Quality Assessment via Packet Delivery Ratio Measurements. Lecture Notes of the Institute for Computer Sciences, Social-Informatics and Telecommunications Engineering, 2017, , 88-101.	0.3	3

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91	Machine Learning in Event-Triggered Control: Recent Advances and Open Issues. IEEE Access, 2022, 10, 74671-74690.	4.2	3
92	A Distributed Routing Approach for Vehicle Routing in Logistic Networks. , 2006, , .		2
93	A service oriented marketplace for next generation networks. , 2007, , .		2
94	Market-Based Service Orchestration for Next Generation Mobile Networks. IEEE Vehicular Technology Conference, 2007, , .	0.4	2
95	WLAN Design: A Distributed Approach. IEEE Vehicular Technology Conference, 2008, , .	0.4	2
96	Energy efficient soft-decision error control in wireless sensor networks. , 2010, , .		2
97	Fuzzy Inference Based Delay and Channel Aware Communication in Low-Power Sensor Networks. , 2012, , .		2
98	A Resource Efficient Model of Spatially Correlated Shadowing in Semi-mobile Ad-hoc Network Simulations. , 2013, , .		2
99	Communication management for cooperative vehicular systems. , 2013, , .		2
100	ERPL: An Enhanced Peer-to-Peer Routing Mechanism for Low-Power and Lossy Networks. , 2018, , .		2
101	The Approach of European Network of ExcellenceCRUISE to Heterogeneous Wireless Sensor Networks Design and Integration. , 2007, , .		1
102	Guaranteeing Reliable Communications in Mesh Beacon-Enabled IEEE802.15.4 WSN for Industrial Monitoring Applications. Lecture Notes of the Institute for Computer Sciences, Social-Informatics and Telecommunications Engineering, 2010, , 359-370.	0.3	1
103	A vision for Wireless Sensor Networks: Hybrid architecture, model framework and service based systems. , 2010, , .		1
104	Enhancement of IEEE 802.15.4 MAC layer to combat correlated channel errors. , 2011, , .		1
105	Commissioning of low power embedded devices with IPv6/CoAP. , 2012, , .		1
106	Sensor selection using heuristic-based sequential hypothesis testing. , 2012, , .		1
107	Semantics-empowered middleware implementation for home ecosystem gateway. , 2014, , .		1
108	Challenges in supporting diverse applications in a shared WSN: The Motley middleware. , 2016, , .		1

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109	RLL - reliable low latency broadcast data dissemination in dense wireless lighting control networks. , 2016, , .		1
110	Exploring the economical benefits of virtualized wireless sensor networks. , 2017, , .		1
111	White Space Prediction for Low-Power Wireless Networks: A Data-Driven Approach. , 2018, , .		1
112	Deadline-Aware TDMA Scheduling for Multihop Networks Using Reinforcement Learning. , 2021, , .		1
113	A Middleware Architecture Supporting Native Mobile Agents for Wireless Sensor Networks. Lecture Notes of the Institute for Computer Sciences, Social-Informatics and Telecommunications Engineering, 2009, , 65-74.	0.3	1
114	Wireless Sensor Networks for Building Monitoring Deployment Challenges, Tools and Experience. Lecture Notes in Electrical Engineering, 2014, , 245-252.	0.4	1
115	Embedded Automated Mobile Tracking &#x00026; Security System. , 2009, , .		0
116	A methodology for sensor modeling and placement optimization to support temperature monitoring. , 2012, , .		0
117	Service and communication management in cooperative vehicular networks. , 2012, , .		0
118	A simplified node selection algorithm for multicast resource reservation in TDMA-based narrowband mobile ad-hoc networks. , 2013, , .		0
119	Feedback delay and its impact on adaptive modulation and coding in VHF narrowband mobile ad-hoc networks. , 2013, , .		0
120	Efficient feedback mechanisms in mobile narrowband multicast scenarios. , 2013, , .		0
121	Recent Advances on Future Networks and Their Management. Mobile Networks and Applications, 2014, 19, 718-719.	3.3	0
122	Enhanced SRTST - Optimized Intra-Car Real-Time Wireless Sensor Communication. , 2015, , .		0
123	Ensuring "Always Satisfactorily Connected" in Cooperative Vehicular Networks. , 2015, , .		0
124	Towards Detecting WiFi Aggregated Interference for Wireless Sensors Based on Traffic Modelling. , 2016, , .		0
125	Probabilistic Occupancy Level Estimation Based on Opportunistic Passive Wi-Fi Localisation. Lecture Notes in Networks and Systems, 2018, , 932-952.	0.7	0
126	Quantifying the Negative Impact of Mobility and Location Service Inaccuracy on Geo-Routing in Urban Vehicular Environments. Lecture Notes of the Institute for Computer Sciences, Social-Informatics and Telecommunications Engineering, 2010, , 297-313.	0.3	0

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127	Sensor Network Protocols for Greener Smart Environments. , 2013, , 205-228.		0
128	Service and Communication Management in Cooperative Vehicular Networks. Lecture Notes of the Institute for Computer Sciences, Social-Informatics and Telecommunications Engineering, 2013, , 159-171.	0.3	0
129	Hybrid Location Management in Vehicular City Environments. Lecture Notes in Computer Science, 2014, , 109-135.	1.3	0
130	HWN* Framework Towards 4G Mobile Communication Networks. Advances in Wireless Technologies and Telecommunication Book Series, 0, , 100-124.	0.4	0