Falko Dressler

List of Publications by Year in Descending Order

196 papers	4,538 citations	32 h-index	62 g-index
215 ext. papers	5,709 ext. citations	5.2 avg, IF	6.22 L-index

#	Paper	IF	Citations
196	Performance Analysis of UAV Assisted Mobile Communications in THz Channel. *IEEE Access*, **2021**, 9, 160104-160115	3.9	0
195	Li-Wi: An upper layer hybrid VLC-WiFi network handover solution. *Ad Hoc Networks*, **2021**, 102705	4.8	3
194	Precise: Predictive Content Dissemination Scheme exploiting realistic mobility patterns. *Computer Networks*, **2021**, 201, 108556	5.4	0
193	Age of information in molecular communication channels **2021**, 103108		
192	Towards an IEEE 802.11 Compliant System for Outdoor Vehicular Visible Light Communications. *IEEE Transactions on Vehicular Technology*, **2021**, 70, 5749-5761	6.8	2
191	Using Vector Fields for Efficient Simulation of Macroscopic Molecular Communication. *IEEE Transactions on Molecular, Biological, and Multi-Scale Communications*, **2021**, 7, 73-77	2.3	
190	Implementing The Abstract MAC Layer in Dynamic Networks. *IEEE Transactions on Mobile Computing*, **2021**, 20, 1832-1845	4.6	35
189	Vehicular Visible Light Communications: A Survey. *IEEE Communications Surveys and Tutorials*, **2021**, 23, 161-181	37.1	49
188	Toward Smart Vehicle-to-Everything-Connected Powertrains: Driving Real Component Test Benches in a Fully Interactive Virtual Smart City. *IEEE Vehicular Technology Magazine*, **2021**, 16, 75-82	9.9	6
187	Wideband OFDM-Based Communications in Bus Topology as a Key Enabler for Industry 4.0 Networks. *IEEE Access*, **2021**, 9, 114167-114178	3.5	1
186	LSTM-characterized Deep Reinforcement Learning for Continuous Flight Control and Resource Allocation in UAV-assisted Sensor Network. *IEEE Internet of Things Journal*, **2021**, 1-1	10.7	5
185	. *IEEE Access*, **2021**, 9, 93967-93975	3.5	
184	Distributed Byzantine-Resilient Multiple-Message Dissemination in Wireless Networks. *IEEE/ACM Transactions on Networking*, **2021**, 29, 1662-1675	3.8	5
183	Duality Between Coronavirus Transmission and Air-Based Macroscopic Molecular Communication. *IEEE Transactions on Molecular, Biological, and Multi-Scale Communications*, **2021**, 7, 200-208	2.3	5
182	FDLA: A Novel Frequency Diversity and Link Aggregation Solution for Handover in an Indoor Vehicular VLC Network. *IEEE Transactions on Network and Service Management*, **2021**, 18, 3556-3566	4.8	3
181	Dwell time estimation at intersections for improved vehicular micro cloud operations. *Ad Hoc Networks*, **2021**, 122, 102606	4.8	1
180	Distributed Broadcasting in Dynamic Networks. *IEEE/ACM Transactions on Networking*, **2021**, 1-14	3.8	1

179	Continuous Maneuver Control and Data Capture Scheduling of Autonomous Drone in Wireless Sensor Networks. *IEEE Transactions on Mobile Computing*, **2021**, 1-1	4.6	4
178	A smartphone perspective on computation offloading A survey. *Computer Communications*, **2020**, 159, 133-154	5.1	10
177	On High-Speed Flow-based Intrusion Detection using Snort-compatible Signatures. *IEEE Transactions on Dependable and Secure Computing*, **2020**, 1-1	3.9	7
176	Software-Based Real-Time Full-Duplex Relaying: An Experimental Study. *IEEE Transactions on Green Communications and Networking*, **2020**, 4, 647-656	4	2
175	Thinking small: Next-generation sensor networks close the size gap in vertebrate biologging. *PLoS Biology*, **2020**, 18, e3000655	9.7	28
174	Car-to-Pedestrian communication with MEC-support for adaptive safety of Vulnerable Road Users. *Computer Communications*, **2020**, 150, 83-93	5.1	16
173	Low-power and Low-delay WLAN using Wake-up Receivers. *IEEE Transactions on Mobile Computing*, **2020**, 1-1	4.6	1
172	Ultra Low-Power Sensor Networks for Next Generation Wildlife Monitoring **2019**,		1
171	**2019**,		4
170	Efficient data handling in vehicular micro clouds. *Ad Hoc Networks*, **2019**, 91, 101871	4.8	13
169	Virtual Edge Computing Using Vehicular Micro Clouds **2019**,		12
168	Optimized Assignment of Computational Tasks in Vehicular Micro Clouds **2019**,		3
167	Bloom Hopping: Bloom Filter Based 2-Hop Neighbor Management in VANETs. *IEEE Transactions on Mobile Computing*, **2019**, 18, 534-545	4.6	7
166	Keeping Data Alive: Communication Across Vehicular Micro Clouds **2019**,		4
165	**2019**,		7
164	Turning Sensor Networks into Distributed Antenna Arrays for Improved Communication Performance. *IEEE Communications Magazine*, **2019**, 57, 100-105	9.1	1
163	Poster Abstract: Jamming WLAN Data Frames and Acknowledgments using Commodity Hardware **2019**,		1
162	Towards Mastering Complex Particle Movement and Tracking in Molecular Communication Simulation **2019**,		3

161	Efficient Data Gathering for Decentralized Diversity Combining in Heterogeneous Sensor Networks **2019**,		1
160	Cooperative Driving and the Tactile Internet. *Proceedings of the IEEE*, **2019**, 107, 436-446	14.3	23
159	Not All VANET Broadcasts Are the Same: Context-Aware Class Based Broadcast. *IEEE/ACM Transactions on Networking*, **2018**, 26, 17-30	3.8	23
158	Efficient Receive Diversity in Distributed Sensor Networks Using Selective Sample Forwarding. *IEEE Transactions on Green Communications and Networking*, **2018**, 2, 336-345	4	9
157	. *IEEE Transactions on Mobile Computing*, **2018**, 17, 2321-2333	4.6	3
156	Duplicate suppression for efficient floating car data collection in heterogeneous LTE-DSRC vehicular networks. *Computer Communications*, **2018**, 123, 54-64	5.1	11
155	A simulative analysis of the performance of IEEE 802.11p and ARIB STD-T109. *Computer Communications*, **2018**, 122, 84-92	5.1	8
154	Bridging worlds: Integrating hardware-in-the-loop testing with large-scale VANET simulation **2018**,		16
153	On the need for coordinated access control for vehicular visible light communication **2018**,		6
152	Performance Assessment of IEEE 802.11p with an Open Source SDR-Based Prototype. *IEEE Transactions on Mobile Computing*, **2018**, 17, 1162-1175	4.6	42
151	How to Keep a Vehicular Micro Cloud Intact **2018**,		10
150	FIXIDS: A high-speed signature-based flow intrusion detection system **2018**,		5
149	Impact of Vehicle Type and Headlight Characteristics on Vehicular VLC Performance **2018**,		12
148	Platoon Formation: Optimized Car to Platoon Assignment Strategies and Protocols **2018**,		13
147	Content Replication in Vehicular Micro Cloud-based Data Storage: A Mobility-Aware Approach **2018** ,		5
146	Poster: First Performance Insights on Our Novel OFDM-based Vehicular VLC Prototype **2018**,		2
145	Preamble-Less Diversity Combining: Improved Energy-Efficiency in Sensor Networks **2018**,		1
144	BATS: Adaptive Ultra Low Power Sensor Network for Animal Tracking. *Sensors*, **2018**, 18,	3.8	19

143	Efficient Uplink from Vehicular Micro Cloud Solutions to Data Centers **2018**,		1
142	The Impact of Head of Line Blocking in Highly Dynamic WLANs. *IEEE Transactions on Vehicular Technology*, **2018**, 67, 7664-7676	6.8	4
141	Vehicular micro cloud in action: On gateway selection and gateway handovers. *Ad Hoc Networks*, **2018**, 78, 73-83	4.8	9
140	Cyber Physical Social Systems: Towards Deeply Integrated Hybridized Systems **2018**,		15
139	Connected and Autonomous Vehicles. *IEEE Internet Computing*, **2018**, 22, 4-5	2.4	2
138	Guest Editorial Special Section on Internet-of-Things for Smart Cities and Urban Informatics. *IEEE Transactions on Industrial Informatics*, **2017**, 13, 748-750	11.9	5
137	Function Centric Nano-Networking: Addressing nano machines in a medical application scenario. *Nano Communication Networks*, **2017**, 14, 29-39	2.9	12
136	Vehicular Micro Clouds as Virtual Edge Servers for Efficient Data Collection **2017**,		18
135	Parked Cars as Virtual Network Infrastructure **2017**,		8
134	**2017**,		3
133	Simulating a city-scale community network: From models to first improvements for Freifunk **2017**,		2
132	Let's talk in groups: A distributed bursting scheme for cluster-based vehicular applications. *Vehicular Communications*, **2017**, 8, 2-12	5.7	3
131	Impact of Realistic Light Radiation Pattern on Vehicular Visible Light Communication **2017**,		29
130	Selective signal sample forwarding for receive diversity in energy-constrained sensor networks **2017**,		3
129	Demo abstract: Sender-triggered selective wake-up receiver for low-power sensor networks **2017**,		3
128	QQDCA: Adapting IEEE 802.11 EDCA for unicast transmissions at high topology dynamics **2017**,		1
127	On the feasibility of vehicular micro clouds **2017**,		15
126	High Performance Intrusion Detection Using HTTP-Based Payload Aggregation **2017**,		3

125	An architecture for sender-based addressing for selective sensor network wake-up receivers **2016**,		6
124	Interconnecting smart cities by vehicles: How feasible is it? **2016**,		7
123	Cars as the base for service discovery and provision in highly dynamic networks **2016**,		2
122	On using BOC modulation in ultra-low power sensor networks for wildlife tracking **2016**,		4
121	Analysis of Cell Sojourn Time in Heterogeneous Networks With Small Cells. *IEEE Communications Letters*, **2016**, 20, 788-791	3.8	12
120	Monitoring Bats in the Wild. *ACM Transactions on Sensor Networks*, **2016**, 12, 1-29	2.9	81
119	Motion-MiX DHT for Wireless Mobile Networks. *IEEE Transactions on Mobile Computing*, **2016**, 15, 3100-3113	4.6	12
118	Enabling Situation Awareness at Intersections for IVC Congestion Control Mechanisms. *IEEE Transactions on Mobile Computing*, **2016**, 15, 1674-1685	4.6	21
117	From radio telemetry to ultra-low-power sensor networks: tracking bats in the wild **2016**, 54, 129-135		38
116	MCB A multi-channel beaconing protocol. *Ad Hoc Networks*, **2016**, 36, 258-269	4.8	7
115	Special issue on advances in vehicular networks. *Ad Hoc Networks*, **2016**, 37, 1-2	4.8	2
114	The accuracy of Android energy measurements for offloading computational expensive tasks **2016**,		1
113	**2016**,		6
112	Improving Network Monitoring through Aggregation of HTTP/1.1 Dialogs in IPFIX **2016**,		4
111	On the impact of adjacent channel interference in multi-channel VANETs **2016**,		9
110	Pick the right guy: CQI-based LTE forwarder selection in VANETs **2016**,		7
109	Cleaning up Web 2.0 Security Mess-at Least Partly. *IEEE Security and Privacy*, **2016**, 14, 48-57	2	5
108	How Shadowing Hurts Vehicular Communications and How Dynamic Beaconing Can Help. *IEEE Transactions on Mobile Computing*, **2015**, 14, 1411-1421	4.6	78

107	Connecting in-body nano communication with body area networks: Challenges and opportunities of the Internet of Nano Things. *Nano Communication Networks*, **2015**, 6, 29-38	2.9	61
106	**2015**,		29
105	Combined localization and data transmission in energy-constrained wireless sensor networks **2015**,		6
104	Power matters: Automatic Gain Control for a Software Defined Radio IEEE 802.11a/g/p receiver **2015**,		5
103	On the synchronization of co-located IEEE 802.15.4 networks for IoT applications **2015**,		4
102	Jerk Beaconing: A dynamic approach to platooning **2015**,		21
101	Protocol design for ultra-low power wake-up systems for tracking bats in the wild **2015**,		13
100	. *IEEE Transactions on Vehicular Technology*, **2015**, 64, 5411-5423	6.8	57
99	Cluster-based transmit power control in heterogeneous vehicular networks **2015**,		5
98	**2015**,		15
97	Vehicular Networking **2015**,		59
96	A networking perspective on self-organizing intersection management **2014**,		6
95	. *IEEE Transactions on Vehicular Technology*, **2014**, 63, 1802-1812	6.8	49
94	**2014**,		32
93	Using Erasure Codes to overcome reliability issues in energy-constrained sensor networks **2014**,		13
92	The Role of Parked Cars in Content Downloading for Vehicular Networks. *IEEE Transactions on Vehicular Technology*, **2014**, 63, 4606-4617	6.8	47
91	On the impact of street width on 5.9 GHz radio signal propagation in vehicular networks **2014**,		2
90	. *IEEE Transactions on Mobile Computing*, **2014**, 13, 1733-1745	4.6	53

89	On the applicability of fair and adaptive data dissemination in traffic information systems. *Ad Hoc Networks*, **2014**, 13, 428-443	4.8	20
88	**2014**, 52, 170-177		102
87	Towards energy efficient smart phone applications: Energy models for offloading tasks into the cloud **2014**,		11
86	Fairness kills safety: A comparative study for intersection assistance applications **2014**,		5
85	Towards inter-vehicle communication strategies for platooning support **2014**,		21
84	Reliable communication using Erasure Codes for monitoring bats in the wild **2014**,		2
83	On Swarm Intelligence Inspired Self-Organized Networking: Its Bionic Mechanisms, Designing Principles and Optimization Approaches. *IEEE Communications Surveys and Tutorials*, **2014**, 16, 513-537	37.1	138
82	A framework for inter-domain routing in virtual coordinate based mobile networks. *Wireless Networks*, **2013**, 19, 1611-1626	2.5	5
81	SmartRevoc: An efficient and privacy preserving revocation system using parked vehicles **2013**,		6
80	Towards an Open Source IEEE 802.11p stack: A full SDR-based transceiver in GNU Radio **2013**,		21
79	Use both lanes: Multi-channel beaconing for message dissemination in vehicular networks **2013**,		4
78	**2013**,		4
77	Energy-efficient monitoring of distributed system resources for self-organizing sensor networks **2013**,		1
76	Fair and adaptive data dissemination for Traffic Information Systems **2012**,		14
75	Effects and Implications of Beacon Collisions in Co-Located IEEE 802.15.4 Networks **2012**,		10
74	On the Necessity of Accurate IEEE 802.11P Models for IVC Protocol Simulation **2012**,		34
73	Toward reproducibility and comparability of IVC simulation studies: a literature survey **2012**, 50, 82-88		26
72	Performance evaluation of network mobility handover over future aeronautical data link. *Computer Communications*, **2012**, 35, 334-343	5.1	2

71	Low-cost interferer detection and classification using TelosB sensor motes **2012**,		12
70	Content downloading in vehicular networks: Bringing parked cars into the picture **2012**,		22
69	On autonomous indoor flights: High-quality real-time localization using low-cost sensors **2012**,		8
68	On the applicability of Two-Ray path loss models for vehicular network simulation **2012**,		95
67	On the Feasibility of Mass-Spring-Relaxation for Simple Self-Deployment **2012**,		3
66	To crash or not to crash: Estimating its likelihood and potentials of beacon-based IVC systems **2012**,		18
65	Security in nano communication: Challenges and open research issues **2012**,		6
64	A simulation tool for automated platooning in mixed highway scenarios **2012**,		11
63	Bidirectionally Coupled Network and Road Traffic Simulation for Improved IVC Analysis. *IEEE Transactions on Mobile Computing*, **2011**, 10, 3-15	4.6	811
62	Research challenges in intervehicular communication: lessons of the 2010 Dagstuhl Seminar **2011**, 49, 158-164		56
61	Traffic information systems: efficient message dissemination via adaptive beaconing **2011**, 49, 173-179		116
60	Topics in automotive networking [Series Editorial] **2011**, 49, 102-104		
59	SlotSwap: strong and affordable location privacy in intelligent transportation systems. *IEEE Communications Magazine*, **2011**, 49, 126-133	9.1	91
58	Toward Realistic Simulation of Intervehicle Communication. *IEEE Vehicular Technology Magazine*, **2011**, 6, 43-51	9.9	18
57	. *IEEE Transactions on Instrumentation and Measurement*, **2011**, 60, 336-344	5.2	27
56	Exploiting Virtual Coordinates for Improved Routing Performance in Sensor Networks. *IEEE Transactions on Mobile Computing*, **2011**, 10, 1214-1226	4.6	32
55	ALF: An autonomous localization framework for self-localization in indoor environments **2011**,		5
54	Adaptive Load Balancing for Parallel IDS on Multi-Core Systems Using Prioritized Flows **2011**,		4

53	Distributed Mass-Spring-Relaxation for Anchor-Free Self-Localization in Sensor and Actor Networks **2011**,		4
52	Realistic simulation and experimental validation of adjacent-channel interference in planning of industrial wireless networks **2011**,		3
51	Analysis of deficit round robin scheduling for future aeronautical data link **2011**,		3
50	Cooperative Awareness at Low Vehicle Densities: How Parked Cars Can Help See through Buildings **2011**,		32
49	Considerations on Quality Metrics for Self-localization Algorithms. *Lecture Notes in Computer Science*, **2011**, 104-115	0.9	2
48	On the Impact of Human Driver Behavior on Intelligent Transportation Systems **2010**,		10
47	Emissions vs. Travel Time: Simulative Evaluation of the Environmental Impact of ITS **2010**,		19
46	Performance Evaluation of Network Mobility Handover over Future Aeronautical Data Link **2010**,		4
45	Dialog-based payload aggregation for intrusion detection **2010**,		3
44	. *IEEE Journal on Selected Areas in Communications*, **2010**, 28, 521-523	14.2	7
43	Bio-inspired networking: from theory to practice **2010**, 48, 176-183		76
42	Inter-Domain Routing and Data Replication in Virtual Coordinate Based Networks **2010**,		7
41	Simulation of Ad Hoc Routing Protocols using OMNeT++. *Mobile Networks and Applications*, **2010**, 15, 786-801	2.9	13
40	Hybrid simulation of Sensor and Actor Networks with BARAKA. *Wireless Networks*, **2010**, 16, 1525-1539	2.5	0
39	On the feasibility of UMTS-based Traffic Information Systems. *Ad Hoc Networks*, **2010**, 8, 506-517	4.8	43
38	A survey on bio-inspired networking. *Computer Networks*, **2010**, 54, 881-900	5.4	206
37	Stateful Mobile Modules for Sensor Networks. *Lecture Notes in Computer Science*, **2010**, 63-76	0.9	2
36	Self-localization capable mobile sensor nodes **2009**,		8

35	Flow-based Front Payload Aggregation **2009**,		3
34	Network attack detection and defense Manifesto of the Dagstuhl Perspective Workshop, March 2nd8th, 2008. *Computer Science - Research and Development*, **2009**, 23, 15-25		2
33	Simulation study of IEEE 802.15.4 LR-WPAN for industrial applications. *Wireless Communications and Mobile Computing*, **2009**, 10, n/a-n/a	1.9	12
32	A rule-based system for programming self-organized sensor and actor networks. *Computer Networks*, **2009**, 53, 1737-1750	5.4	22
31	Hash tables for efficient flow monitoring: vulnerabilities and countermeasures **2009**,		3
30	Advantages of virtual addressing for efficient and failure tolerant routing in sensor networks **2009**,		7
29	On the lifetime of wireless sensor networks. *ACM Transactions on Sensor Networks*, **2009**, 5, 1-39	2.9	368
28	Performance impact of and protocol interdependencies of IEEE 802.15.4 security mechanisms **2009** ,		4
27	Real-time enabled IEEE 802.15.4 sensor networks in industrial automation **2009**,		15
26	Data-centric cooperative storage in wireless sensor network **2009**,		2
25	QoS-oriented Integrated Network Planning for Industrial Wireless Sensor Networks **2009**,		5
24	Real-time indoor localization support for four-rotor flying robots using sensor nodes **2009**,		7
23	Progressing toward realistic mobility models in VANET simulations. *IEEE Communications Magazine*, **2008**, 46, 132-137	9.1	112
22	Requirements and objectives for secure Traffic Information Systems **2008**,		3
21	Performance Evaluation of IEEE 802.15.4 LR-WPAN for Industrial Applications **2008**,		22
20	On the Need for Passive Monitoring in Sensor Networks **2008**,		9
19	Virtual Cord Protocol (VCP): A flexible DHT-like routing service for sensor networks **2008**,		32
18	A study of self-organization mechanisms in ad hoc and sensor networks. *Computer Communications*, **2008**, 31, 3018-3029	5.1	69

17	A Rule System for Network-Centric Operation in Massively Distributed Systems. *Lecture Notes in Computer Science*, **2008**, 364-375	0.9	
16	BARAKA: A Hybrid Simulator of SANETs **2007**,		2
15	Realistic Simulation of Network Protocols in VANET Scenarios **2007**,		19
14	Profile-Matching Techniques for On-Demand Software Management in Sensor Networks. *Eurasip Journal on Wireless Communications and Networking*, **2007**, 2007, 1	3.2	
13	Adaptive Data Dissemination in Sensor Networks Using WPDD **2007**,		1
12	An adaptive model for reconfigurable autonomous services using profiling. *International Journal of Pervasive Computing and Communications*, **2007**, 2, 247-260	3.3	1
11	The DYMO Routing Protocol in VANET Scenarios **2007**,		33
10	Wireless and Sensor Networks Security (WSNS) A Retrospection **2007**,		1
9	**2007**,		101
8	Sensor/Actuator Networks in Smart Homes for Supporting Elderly and Handicapped People **2007**,		28
7	Self-Organized Network Security Facilities based on Bio-inspired Promoters and Inhibitors. *Studies in Computational Intelligence*, **2007**, 81-98	0.8	4
6	Flexible Flow Aggregation for Adaptive Network Monitoring. *Local Computer Networks (LCN), Proceedings of the IEEE Conference on*, **2006**,		11
5	Practical Evaluation of the Performance Impact of Security Mechanisms in Sensor Networks. *Local Computer Networks (LCN), Proceedings of the IEEE Conference on*, **2006**,		8
4	Experimental Performance Evaluation of Cryptographic Algorithms on Sensor Nodes **2006**,		25
3	Lifetime Analysis in Heterogeneous Sensor Networks **2006**,		11
2	Network-centric Actuation Control in Sensor/Actuator Networks based on Bio-inspired Technologies **2006**,		7
1	Bio-inspired Promoters and Inhibitors for Self-Organized Network Security Facilities **2006**,		1