

Holger Claussen

List of Publications by Year in descending order

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165
papers

5,529
citations

331670

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174
all docs

174
docs citations

174
times ranked

3961
citing authors

#	ARTICLE	IF	CITATIONS
1	3D UAV Trajectory and Data Collection Optimisation Via Deep Reinforcement Learning. IEEE Transactions on Communications, 2022, 70, 2358-2371.	7.8	51
2	Unitary checkerboard precoded OFDM for low-PAPR optical wireless communications. Journal of Optical Communications and Networking, 2022, 14, 153.	4.8	3
3	Future indoor network with a sixth sense: Requirements, challenges and enabling technologies. Pervasive and Mobile Computing, 2022, 83, 101571.	3.3	3
4	On the MIMO Capacity With Joint Sum and Per-Antenna Power Constraints: A New Efficient Numerical Method. IEEE Transactions on Vehicular Technology, 2022, 71, 10179-10184.	6.3	0
5	The HOP Protocol: Reliable Latency-Bounded End-to-End Multipath Communication. IEEE/ACM Transactions on Networking, 2021, 29, 2281-2295.	3.8	8
6	Joint Optimisation of Real-Time Deployment and Resource Allocation for UAV-Aided Disaster Emergency Communications. IEEE Journal on Selected Areas in Communications, 2021, 39, 3411-3424.	14.0	71
7	On Characterizing the Capacity Region of Massive MIMO Systems with Joint Power Constraints. , 2021, , .		0
8	On the Design of Optical Energy Harvesting and Storage Systems for Outdoor Small Cells. , 2021, , .		1
9	BOOST: Transport-Layer Multi-Connectivity Solution for Multi-Wan Routers. , 2021, , .		0
10	Understanding MPTCP in Multi-WAN Routers: Measurements and System Design. , 2021, , .		1
11	BBR-S: A Low-Latency BBR Modification for Fast-Varying Connections. IEEE Access, 2021, 9, 76364-76378.	4.2	10
12	Demo: Seamless Mobile Video Streaming in Multicast Multi-RAT Communications. , 2020, , .		2
13	SOS: Stochastic Object-aware Scheduler for low delay communication over multiple wireless paths. , 2020, , .		0
14	Hierarchical Grammar-Guided Genetic Programming Techniques for Scheduling in Heterogeneous Networks. , 2020, , .		5
15	Multicast Optimization for Video Delivery in Multi-RAT Networks. IEEE Transactions on Communications, 2020, 68, 4973-4985.	7.8	5
16	Indoor Millimeter-Wave Systems: Design and Performance Evaluation. Proceedings of the IEEE, 2020, 108, 923-944.	21.3	18
17	Multi-RAT Multicast 360° Video Delivery. , 2020, , .		0
18	Energy-Aware Multi-RAT Multicast Video Delivery. , 2020, , .		0

#	ARTICLE	IF	CITATIONS
19	Evolutionary learning of link allocation algorithms for 5G heterogeneous wireless communications networks. , 2019, , .		11
20	Automated Self-Optimization in Heterogeneous Wireless Communications Networks. IEEE/ACM Transactions on Networking, 2019, 27, 419-432.	3.8	14
21	Analysis and Design of a Latency Control Protocol for Multi-Path Data Delivery With Pre-Defined QoS Guarantees. IEEE/ACM Transactions on Networking, 2019, 27, 1165-1178.	3.8	27
22	Cell ID Management in Multi-Vendor and Multi-RAT Heterogeneous Networks. IEEE Transactions on Network and Service Management, 2019, 16, 417-429.	4.9	3
23	A multi-level grammar approach to grammar-guided genetic programming: the case of scheduling in heterogeneous networks. Genetic Programming and Evolvable Machines, 2019, 20, 245-283.	2.2	10
24	Enhanced Multiuser Superposition Transmission Through Structured Modulation. IEEE Transactions on Wireless Communications, 2019, 18, 2765-2776.	9.2	5
25	Latency As a Service: Enabling Reliable Data Delivery over Multiple Unreliable Wireless Links. , 2019, , .		7
26	Towards Automation and Augmentation of the Design of Schedulers for Cellular Communications Networks. Evolutionary Computation, 2019, 27, 345-375.	3.0	2
27	Smartphone positioning with radio measurements from a single wifi access point. , 2019, , .		12
28	Anticipatory Association for Indoor Visible Light Communications: Light, Follow Me!. IEEE Transactions on Wireless Communications, 2018, 17, 2499-2510.	9.2	36
29	Managing Quality of Service Through Intelligent Scheduling in Heterogeneous Wireless Communications Networks. , 2018, , .		1
30	MPTCP Meets FEC: Supporting Latency-Sensitive Applications Over Heterogeneous Networks. IEEE/ACM Transactions on Networking, 2018, 26, 2005-2018.	3.8	52
31	Weighted Sum Rate Maximization for Zero-Forcing Methods with General Linear Covariance Constraints. , 2018, , .		2
32	On the MIMO Capacity with Multiple Linear Transmit Covariance Constraints. , 2018, , .		4
33	LEAP: A latency control protocol for multi-path data delivery with pre-defined QoS guarantees. , 2018, , .		8
34	Towards automation & augmentation of the design of schedulers for cellular communications networks. , 2018, , .		1
35	Indoor massive MIMO deployments for uniformly high wireless capacity. , 2018, , .		4
36	On the Fundamental Characteristics of Ultra-Dense Small Cell Networks. IEEE Network, 2018, 32, 92-100.	6.9	67

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37	A Hierarchical Approach to Grammar-Guided Genetic Programming: The Case of Scheduling in Heterogeneous Networks. Lecture Notes in Computer Science, 2018, , 225-237.	1.3	8
38	Multi-level Grammar Genetic Programming for Scheduling in Heterogeneous Networks. Lecture Notes in Computer Science, 2018, , 118-134.	1.3	9
39	Multilayer Optimization of Heterogeneous Networks Using Grammatical Genetic Programming. IEEE Transactions on Cybernetics, 2017, 47, 2938-2950.	9.5	15
40	Operating Massive MIMO in Unlicensed Bands for Enhanced Coexistence and Spatial Reuse. IEEE Journal on Selected Areas in Communications, 2017, 35, 1282-1293.	14.0	31
41	Enhancing coexistence in the unlicensed band with massive MIMO. , 2017, , .		5
42	100Å— Capacity Scaling of Cellular Networks. , 2017, , 23-54.		0
43	Automation of Cellular Networks. , 2017, , 55-90.		0
44	Frequency Assignment and Access Methods. , 2017, , 91-116.		0
45	Coverage and Capacity Optimization for Outdoor Cells. , 2017, , 149-185.		0
46	Frequency-Domain Inter-cell Interference Coordination. , 2017, , 187-222.		0
47	The Sector Offset Configuration. , 2017, , 259-294.		0
48	Deep learning through evolution: A hybrid approach to scheduling in a dynamic environment. , 2017, , .		6
49	Coordination of SON Functions in Multi-Vendor Femtocell Networks. , 2017, 55, 165-171.		6
50	Wireless RSSI fingerprinting localization. Signal Processing, 2017, 131, 235-244.	3.7	158
51	Simulating Hetnets. , 2017, , 505-547.		0
52	Control Channel Inter-cell Interference Coordination. , 2017, , 295-321.		0
53	Mobility Management. , 2017, , 363-391.		0
54	HetNet Applications. , 2017, , 493-504.		0

#	ARTICLE	IF	CITATIONS
55	A New Method of MIMO-Based Non-Orthogonal Multiuser Downlink Transmission. , 2017, , .		6
56	Massive MIMO Unlicensed for High-Performance Indoor Networks. , 2017, , .		3
57	Multilayer optimization of heterogeneous networks using grammatical genetic programming. , 2017, , .		1
58	Small Cell Networks: Deployment, Management, and Optimization. , 2017, , .		20
59	Configuring Dynamic Heterogeneous Wireless Communications Networks Using a Customised Genetic Algorithm. Lecture Notes in Computer Science, 2017, , 205-220.	1.3	0
60	A centralized method for PCI assignment with common reference signal frequency shift control. , 2016, , .		5
61	Extracting Location Information from RF Fingerprints. , 2016, , .		2
62	Lattice Partition Multiple Access: A New Method of Downlink Non-Orthogonal Multiuser Transmissions. , 2016, , .		50
63	Self-optimization of coverage and sleep modes of multi-vendor enterprise femtocells. , 2016, , .		2
64	Using LTE in Unlicensed Bands: Potential Benefits and Coexistence Issues. , 2016, 54, 116-123.		37
65	A metric to describe access point significance in location estimation. , 2016, , .		3
66	Energy Efficient Visible Light Communications Relying on Amorphous Cells. IEEE Journal on Selected Areas in Communications, 2016, 34, 894-906.	14.0	52
67	Evolving Coverage Optimisation Functions for Heterogeneous Networks Using Grammatical Genetic Programming. Lecture Notes in Computer Science, 2016, , 219-234.	1.3	4
68	Downward Facing Directional Antennas for Ultra-High Density Indoor Small Cells. Journal of Signal Processing Systems, 2016, 83, 255-263.	2.1	4
69	Scheduling in Heterogeneous Networks Using Grammar-Based Genetic Programming. Lecture Notes in Computer Science, 2016, , 83-98.	1.3	9
70	Indoor Optical Wireless Power Transfer to Small Cells at Nighttime. Journal of Lightwave Technology, 2016, 34, 3236-3258.	4.6	60
71	Analytical Evaluation of Higher Order Sectorization, Frequency Reuse, and User Classification Methods in OFDMA Networks. IEEE Transactions on Wireless Communications, 2016, 15, 8209-8222.	9.2	15
72	Locating user equipments and access points using RSSI fingerprints: A Gaussian process approach. , 2016, , .		13

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73	Evolutionary Learning of Scheduling Heuristics for Heterogeneous Wireless Communications Networks. , 2016, , .		3
74	Energy and Spectral Efficiency Gains from Multi-User MIMO-Based Small Cell Reassignments. , 2015, , .		1
75	Optimization of Demand Hotspot Capacities Using Switched Multi-Element Antenna Equipped Small Cells. , 2015, , .		0
76	RSSI Localization with Gaussian Processes and Tracking. , 2015, , .		16
77	Uplink-Oriented Deployment Guidelines and Auto-Configuration Algorithms for Co-Channel W-CDMA Heterogeneous Networks. IEEE Transactions on Wireless Communications, 2015, 14, 3752-3763.	9.2	1
78	Towards 1 Gbps/UE in Cellular Systems: Understanding Ultra-Dense Small Cell Deployments. IEEE Communications Surveys and Tutorials, 2015, 17, 2078-2101.	39.4	393
79	The sector offset configuration concept and its applicability to heterogeneous cellular networks. , 2015, 53, 190-198.		4
80	Dynamic idle mode control in Small Cell networks. , 2015, , .		0
81	Load balancing in heterogeneous networks using an evolutionary algorithm. , 2015, , .		10
82	On the design of a free space optical link for small cell backhaul communication and power supply. , 2015, , .		10
83	Small cell backhaul: challenges and prospective solutions. Eurasip Journal on Wireless Communications and Networking, 2015, 2015, .	2.4	50
84	Correlated shadow fading for cellular network system-level simulations with wrap-around. , 2015, , .		10
85	Detecting co-located mobile users. , 2015, , .		12
86	Impact of Co-Channel Small Cell Deployments on Uplink Capacity of W-CDMA Cellular Networks. , 2014, , .		2
87	Digital Fountain Codes with Reduced Latency, Complexity and Buffer Requirements for Wireless Communications. , 2014, , .		1
88	Improving Small Cell Performance through Switched Multi-element Antenna Systems in Heterogeneous Networks. IEEE Transactions on Vehicular Technology, 2014, , 1-1.	6.3	6
89	Coverage Optimization Trade-Offs in Heterogeneous W-CDMA Networks with Co-Channel Small Cells. , 2014, , .		0
90	On the design of an optical wireless link for small cell backhaul communication and energy harvesting. , 2014, , .		9

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91	Improved frequency reuse through sector offset configuration in LTE Heterogeneous Networks. , 2014, , .		5
92	Channel Estimation for Spatial Modulation. IEEE Transactions on Communications, 2014, 62, 4362-4372.	7.8	54
93	Power Minimization Based Resource Allocation for Interference Mitigation in OFDMA Femtocell Networks. IEEE Journal on Selected Areas in Communications, 2014, 32, 333-344.	14.0	164
94	Energy and Spectral Efficiency Gains from Multi-User MIMO-Based Small Cell Reassignments. , 2014, , .		0
95	Improved fuzzy reinforcement learning for self-optimisation of heterogeneous wireless networks. , 2013, , .		3
96	Neighbour cell list management in wireless heterogeneous networks. , 2013, , .		4
97	Dual connectivity in LTE HetNets with split control- and user-plane. , 2013, , .		64
98	Duty cycles and load balancing in HetNets with eICIC almost blank subframes. , 2013, , .		25
99	Sector offset configuration with static vertical beam-forming for LTE. , 2013, , .		0
100	A comparison of grammatical genetic programming grammars for controlling femtocell network coverage. Genetic Programming and Evolvable Machines, 2013, 14, 65-93.	2.2	20
101	On Distributed and Coordinated Resource Allocation for Interference Mitigation in Self-Organizing LTE Networks. IEEE/ACM Transactions on Networking, 2013, 21, 1145-1158.	3.8	168
102	A new approach for scrambling and spreading code reuse in WCDMA networks. , 2013, , .		1
103	Uplink-oriented deployment guidelines and optimization in W-CDMA heterogeneous networks. , 2013, , .		1
104	Improved frequency reuse schemes with horizontal sector offset for LTE. , 2013, , .		10
105	Multi-carrier cell structures with vertical and horizontal sector Offset using static beamforming. , 2013, , .		3
106	Online evolution of femtocell coverage algorithms using genetic programming. , 2013, , .		4
107	Multi-carrier cell structures with offset sectorization for heterogeneous networks. , 2013, , .		5
108	Representing Communication and Learning in Femtocell Pilot Power Control Algorithms. Genetic and Evolutionary Computation, 2013, , 223-238.	1.0	0

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109	Comparing the robustness of grammatical genetic programming solutions for femtocell algorithms. , 2012, , .		0
110	Multi-carrier cell structures with angular offset. , 2012, , .		16
111	Controlling local service access in wireless cellular networks. , 2012, , .		1
112	Handover optimisation for co-channel WCDMA heterogeneous networks. , 2012, , .		1
113	Characterisation of Other-Cell Interference in Co-Channel WCDMA Small Cell Networks. , 2012, , .		4
114	Urban small cell deployments: Impact on the network energy consumption. , 2012, , .		36
115	Self-configuration of scrambling codes for WCDMA small cell networks. , 2012, , .		8
116	Femtocells: Past, Present, and Future. IEEE Journal on Selected Areas in Communications, 2012, 30, 497-508.	14.0	970
117	Evolving Femtocell Algorithms with Dynamic and Stationary Training Scenarios. Lecture Notes in Computer Science, 2012, , 518-527.	1.3	3
118	Self-configuring Switched Multi-Element Antenna system for interference mitigation in femtocell networks. , 2011, , .		8
119	A symbolic regression approach to manage femtocell coverage using grammatical genetic programming. , 2011, , .		16
120	Minimising cell transmit power. , 2011, , .		14
121	Minimising cell transmit power. Computer Communication Review, 2011, 41, 410-411.	1.8	2
122	A fuzzy reinforcement learning approach for self-optimization of coverage in LTE networks. Bell Labs Technical Journal, 2010, 15, 153-175.	0.7	61
123	Femtocell Networks. Eurasip Journal on Wireless Communications and Networking, 2010, 2010, .	2.4	4
124	Efficient self-optimization of neighbour cell lists in macrocellular networks. , 2010, , .		9
125	Distributed Radio Coverage Optimization in Enterprise Femtocell Networks. , 2010, , .		62
126	Improving Energy Efficiency of Femtocell Base Stations Via User Activity Detection. , 2010, , .		120

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127	On femto deployment architectures and macrocell offloading benefits in joint macro-femto deployments. , 2010, 48, 26-32.		154
128	Self-optimization of capacity and coverage in LTE networks using a fuzzy reinforcement learning approach. , 2010, , .		56
129	Evolving femtocell coverage optimization algorithms using genetic programming. , 2009, , .		38
130	Leveraging advances in mobile broadband technology to improve environmental sustainability. Telecommunications Journal of Australia, 2009, 59, 4.1-4.18.	0.2	28
131	Macrocell offloading benefits in joint macro-and femtocell deployments. , 2009, , .		18
132	Partial GSM spectrum reuse for femtocells. , 2009, , .		9
133	Femtocell Coverage Optimization Using Switched Multi-Element Antennas. , 2009, , .		64
134	Co-Channel Operation of Macro- and Femtocells in a Hierarchical Cell Structure. International Journal of Wireless Information Networks, 2008, 15, 137-147.	2.7	49
135	Self-optimization of coverage for femtocell deployments. Wireless Telecommunications Symposium, 2009 WTS 2009, 2008, , .	0.0	164
136	Effects of joint macrocell and residential picocell deployment on the network energy efficiency. , 2008, , .		87
137	Financial Analysis of a Pico-Cellular Home Network Deployment. , 2007, , .		93
138	Performance of Macro- and Co-Channel Femtocells in a Hierarchical Cell Structure. , 2007, , .		325
139	Effects of User-Deployed, Co-Channel Femtocells on the Call Drop Probability in a Residential Scenario. , 2007, , .		150
140	Distributed Algorithms for Robust Self-deployment and Load Balancing in Autonomous Wireless Access Networks. , 2006, , .		12
141	Evolution Towards Dynamic Spectrum Sharing in Mobile Communications. , 2006, , .		15
142	Autonomous Self-deployment of Wireless Access Networks in an Airport Environment. Lecture Notes in Computer Science, 2006, , 86-98.	1.3	16
143	Self-deployment, Self-configuration:Critical Future Paradigms for Wireless Access Networks. Lecture Notes in Computer Science, 2005, , 58-68.	1.3	24
144	Low complexity detection of high-order modulations in multiple antenna systems. IET Communications, 2005, 152, 789.	1.0	9

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145	Improved Max-Log-MAP Turbo Decoding by Maximization of Mutual Information Transfer. <i>Eurasip Journal on Advances in Signal Processing</i> , 2005, 2005, 1.	1.7	10
146	A Low Complexity Iterative Receiver based on Successive Cancellation for MIMO. , 2003, , 105-112.		3
147	Layered encoding for 16- and 64-QAM iterative MIMO receivers. , 2003, , .		2
148	High-performance MIMO receivers based on multi-stage partial parallel interference cancellation. , 2003, , .		5
149	Improved max-log map turbo decoding using maximum mutual information combining. , 0, , .		12
150	Impact of modeling errors on the performance of MIMO receivers with APP and PIC detection. , 0, , .		3
151	Layered encoding for low complexity detection of high-order modulations in MIMO channels. , 0, , .		0
152	Efficient modelling of channel maps with correlated shadow fading in mobile radio systems. , 0, , .		92
153	Autonomous organization of wireless network transport in a multi-provider environment. , 0, , .		7
154	l, base station: Cognisant robots and future wireless access networks. , 0, , .		11
155	An overview of the femtocell concept. <i>Bell Labs Technical Journal</i> , 0, 13, 221-245.	0.7	322
156	Deployment options for femtocells and their impact on existing macrocellular networks. <i>Bell Labs Technical Journal</i> , 0, 13, 145-160.	0.7	57
157	Autonomous self-deployment of wireless access networks. <i>Bell Labs Technical Journal</i> , 0, 14, 55-72.	0.7	10
158	Self-Optimization of femtocell coverage to minimize the increase in core network mobility signalling. <i>Bell Labs Technical Journal</i> , 0, 14, 155-183.	0.7	43
159	Dynamic idle mode procedures for femtocells. <i>Bell Labs Technical Journal</i> , 0, 15, 95-116.	0.7	76
160	Uncoordinated femtocell deployments. , 0, , 217-244.		0
161	Femtocell coverage optimization. , 0, , 161-187.		0
162	Dormant Cells and Idle Modes. , 0, , 393-418.		0

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163	Backhaul for Small Cells. , 0 , 419-441.		1
164	Optimization of Small Cell Deployment. , 0 , 443-465.		0
165	Ultra-Dense Networks. , 0 , 467-491.		0