Christian Bettstetter

List of Publications by Citations

65 papers	3,699 citations	22 h-index	60 g-index
68 ext. papers	4,589 ext. citations	4 avg, IF	5.9 L-index

#	Paper	IF	Citations
65	The node distribution of the random waypoint mobility model for wireless ad hoc networks. *IEEE Transactions on Mobile Computing*, **2003**, 2, 257-269	4.6	660
64	Stochastic Properties of the Random Waypoint Mobility Model. *Wireless Networks*, **2004**, 10, 555-567	2.5	454
63	On the minimum node degree and connectivity of a wireless multihop network **2002**,		450
62	Mobility modeling in wireless networks. *Mobile Computing and Communications Review*, **2001**, 5, 55-66		280
61	Connectivity of Wireless Multihop Networks in a Shadow Fading Environment. *Wireless Networks*, **2005**, 11, 571-579	2.5	196
60	On the Connectivity of Ad Hoc Networks. *Computer Journal*, **2004**, 47, 432-447	1.3	183
59	Drone networks: Communications, coordination, and sensing. *Ad Hoc Networks*, **2018**, 68, 1-15	4.8	167
58	Interference Management for Cellular-Connected UAVs: A Deep Reinforcement Learning Approach. *IEEE Transactions on Wireless Communications*, **2019**, 18, 2125-2140	9.6	160
57	Application-driven design of aerial communication networks **2014**, 52, 129-137		110
56	Achieving air-ground communications in 802.11 networks with three-dimensional aerial mobility **2013**,		94
55	An Autonomous Multi-UAV System for Search and Rescue **2015**,		84
54	Temporal Correlation of Interference in Wireless Networks with Rayleigh Block Fading. *IEEE Transactions on Mobile Computing*, **2012**, 11, 2109-2120	4.6	64
53	. *IEEE Transactions on Vehicular Technology*, **2015**, 64, 4655-4669	6.8	62
52	Emergent Slot Synchronization in Wireless Networks. *IEEE Transactions on Mobile Computing*, **2010**, 9, 719-732	4.6	55
51	A Distributed End-to-End Reservation Protocol for IEEE 802.11-Based Wireless Mesh Networks. *IEEE Journal on Selected Areas in Communications*, **2006**, 24, 2018-2027	14.2	54
50	. *IEEE Transactions on Industrial Informatics*, **2014**, 10, 1806-1816	11.9	52
49	Topology properties of Ad hoc networks with random waypoint mobility. *Mobile Computing and Communications Review*, **2003**, 7, 50-52		49

48	Code construction and decoding of parallel concatenated tail-biting codes. *IEEE Transactions on Information Theory*, **2001**, 47, 366-386	2.8	40
47	Interference Functionals in Poisson Networks. *IEEE Transactions on Information Theory*, **2016**, 62, 370-383	1.8	35
46	Guaranteeing global synchronization in networks with stochastic interactions. *New Journal of Physics*, **2012**, 14, 073031	2.9	34
45	Experimental analysis of multipoint-to-point UAV communications with IEEE 802.11n and 802.11ac **2015**,		28
44	Self-organizing synchronization with inhibitory-coupled oscillators. *ACM Transactions on Autonomous and Adaptive Systems*, **2012**, 7, 1-23	1.2	25
43	Drone delivery systems: job assignment and dimensioning. *Autonomous Robots*, **2019**, 43, 261-274	3	22
42	. *IEEE Transactions on Vehicular Technology*, **2014**, 63, 178-190	6.8	22
41	Handover Challenges for Cellular-Connected Drones **2019**,		21
40	Collaborative microdrones: applications and research challenges **2008**,		19
39	Communication and Coordination for Drone Networks. *Lecture Notes of the Institute for Computer Sciences, Social-Informatics and Telecommunications Engineering*, **2017**, 79-91	0.2	19
38	Collaboration in Multi-Robot Exploration: To Meet or not to Meet?. *Journal of Intelligent and Robotic Systems: Theory and Applications*, **2016**, 82, 325-337	2.9	17
37	Connectivity of wireless multihop networks in a shadow fading environment **2003**,		16
36	Multi-objective drone path planning for search and rescue with quality-of-service requirements. *Autonomous Robots*, **2020**, 44, 1183-1198	3	15
35	An Experimental Evaluation of LTE-A Throughput for Drones **2019**,		15
34	Convergence of Self-Organizing Pulse-Coupled Oscillator Synchronization in Dynamic Networks. *IEEE Transactions on Automatic Control*, **2017**, 62, 1606-1619	5.9	15
33	. *IEEE Transactions on Mobile Computing*, **2014**, 13, 2042-2057	4.6	13
32	How does interference dynamics influence packet delivery in cooperative relaying? **2013**,		13
31	Firefly synchronization with phase rate equalization and its experimental analysis in wireless systems. *Computer Networks*, **2016**, 97, 74-87	5.4	13

30	Job Selection in a Network of Autonomous UAVs for Delivery of Goods		11
29	A Survey of Models and Design Methods for Self-organizing Networked Systems. *Lecture Notes in Computer Science*, **2009**, 37-49	0.9	11
28	Live multicast video streaming from drones: an experimental study. *Autonomous Robots*, **2020**, 44, 75-913		11
27	First experiments with a 5G-Connected drone **2020**,		8
26	Sandsbots: Robots That Sync and Swarm. *IEEE Access*, **2020**, 8, 218752-218764	3.5	8
25	Autocorrelation and Coherence Time of Interference in Poisson Networks. *IEEE Transactions on Mobile Computing*, **2020**, 19, 1506-1518	4.6	8
24	Fault-tolerant averaging for self-organizing synchronization in wireless ad hoc networks **2010**,		7
23	Packet travel times in wireless relay chains under spatially and temporally dependent interference **2014**,		6
22	Contention-Based Estimation of Neighbor Cardinality. *IEEE Transactions on Mobile Computing*, **2013**, 12, 542-555	4.6	6
21	Measurement-based analysis of cooperative relaying in an industrial wireless sensor network **2012**,		6
20	Globally stable synchronization by inhibitory pulse coupling **2009**,		6
19	Quantifying inhomogeneity of spatial point patterns. *Computer Networks*, **2017**, 115, 65-81	5.4	5
18	Semi-Blind Interference Prediction in Wireless Networks **2017**,		5
17	Underlay device-to-device communications in LTE-A: Uplink or downlink? **2015**,		5
16	A review of swarmalators and their potential in bio-inspired computing **2019**,		5
15	Edge Computing in 5G for Drone Navigation: What to Offload?. *IEEE Robotics and Automation Letters*, **2021**, 6, 2571-2578	4.2	5
14	Experimental Study of Packet Loss in a UWB Sensor Network for Aircraft **2017**,		4
13	Synchronization of inhibitory pulse-coupled oscillators in delayed random and line networks **2010**,		4

List of Publications

12	Toward a mobility metric for comparable & reproducible results in ad hoc networks research. *Mobile Computing and Communications Review*, **2003**, 7, 58-60		4
11	A Performance Evaluation Tool for Drone Communications in 4G Cellular Networks **2019**,		3
10	On Access Control in Cabin-Based Transport Systems. *IEEE Transactions on Intelligent Transportation Systems*, **2019**, 20, 2149-2156	6.1	3
9	Wireless Connectivity in Airplanes: Challenges and the Case for UWB. *IEEE Access*, **2021**, 9, 52913-52925	3.5	3
8	Towards Industrial Ultra-Wideband Networks: Experiments for Machine Vibration Monitoring. *IEEE Access*, **2020**, 8, 42576-42583	3.5	2
7	Application-Layer Rate-Adaptive Multicast Video Streaming over 802.11 for Mobile Devices **2016**,		2
6	. *IEEE Transactions on Vehicular Technology*, **2021**, 70, 2783-2793	6.8	1
5	Video Quality and Latency for UAV Teleoperation over LTE: A Study with ns3 **2021**,		1
4	Multidrone Systems: More Than the Sum of the Parts. *Computer*, **2021**, 54, 34-43	1.6	1
3	On Interference Dynamics in Mat□n Networks. *IEEE Transactions on Mobile Computing*, **2020**, 19, 1677-1688	4.6	1
2	Deadlocks in the synchronization of pulse-coupled oscillators on star graphs. *Physical Review E*, **2020**, 102, 062211	2.4	0
1	Performance Impact of Mobility in an Emulated IP-based Multihop Radio Access Network. *International Federation for Information Processing*, **2005**, 395-406		0