Zdenek Becvar

List of Publications by Year
in descending order

99 papers	3,653 citations	516710 16 h-index	265206 42 g-index
100 all docs	100 docs citations	100 times ranked	3943 citing authors

#	Article	IF	Citations
1	Mobile Edge Computing: A Survey on Architecture and Computation Offloading. IEEE Communications Surveys and Tutorials, 2017, 19, 1628-1656.	39.4	2,296
2	In-Band Device-to-Device Communication in OFDMA Cellular Networks: A Survey and Challenges. IEEE Communications Surveys and Tutorials, 2015, 17, 1885-1922.	39.4	274
3	Dynamic resource allocation exploiting mobility prediction in mobile edge computing. , 2016, , .		87
4	Adaptive Hysteresis Margin Based on Fuzzy Logic for Handover in Mobile Networks With Dense Small Cells. IEEE Access, 2018, 6, 17178-17189.	4.2	59
5	Joint Positioning of Flying Base Stations and Association of Users: Evolutionary-Based Approach. IEEE Access, 2019, 7, 11454-11463.	4.2	59
6	Adaptive Hysteresis Margin for Handover in Femtocell Networks. , 2010, , .		46
7	An architecture for mobile computation offloading on cloud-enabled LTE small cells. , 2014, , .		39
8	Improvement of handover prediction in mobile WiMAX by using two thresholds. Computer Networks, 2011, 55, 3759-3773.	5.1	37
9	Path selection enabling user mobility and efficient distribution of data for computation at the edge of mobile network. Computer Networks, 2016, 108, 357-370.	5.1	36
10	Resource Allocation for D2D Communication With Multiple D2D Pairs Reusing Multiple Channels. IEEE Wireless Communications Letters, 2019, 8, 1008-1011.	5.0	31
11	Cloudâ€aware power control for realâ€time application offloading in mobile edge computing. Transactions on Emerging Telecommunications Technologies, 2016, 27, 648-661.	3.9	30
12	Path selection using handover in mobile networks with cloud-enabled small cells. , 2014, , .		23
13	Performance evaluation of computation offloading from mobile device to the edge of mobile network. , 2016, , .		23
14	6G in the sky: Onâ€demand intelligence at the edge of 3D networks (Invited paper). ETRI Journal, 2020, 42, 643-657.	2.0	23
15	Offloading Multiple Mobile Data Contents Through Opportunistic Device-to-Device Communications. Wireless Personal Communications, 2015, 84, 1963-1979.	2.7	22
16	Dynamic Allocation of Computing and Communication Resources in Multi-Access Edge Computing for Mobile Users. IEEE Transactions on Network and Service Management, 2021, 18, 2089-2106.	4.9	22
17	Energy-aware Dynamic Selection of Overlay and Underlay Spectrum Sharing for Cognitive Small cells. IEEE Transactions on Vehicular Technology, 2016, , 1-1.	6.3	20
18	Device-to-Device Relaying: Optimization, Performance Perspectives, and Open Challenges Towards 6G Networks. IEEE Communications Surveys and Tutorials, 2022, 24, 1336-1393.	39.4	19

#	Article	IF	Citations
19	Dynamic Power Control Mechanism for Femtocells Based on the Frame Utilization. , 2010, , .		18
20	Distance-Based Neighborhood Scanning for Handover Purposes in Network with Small Cells. IEEE Transactions on Vehicular Technology, 2016, 65, 883-895.	6.3	17
21	Optimal Positioning of Flying Base Stations and Transmission Power Allocation in NOMA Networks. IEEE Transactions on Wireless Communications, 2022, 21, 1319-1334.	9.2	17
22	Efficiency of Handover Prediction Based on Handover History. Journal of Convergence Information Technology, 2009, 4, 41-47.	0.1	17
23	Modeling of Distributed Queueing-Based Random Access for Machine Type Communications in Mobile Networks. IEEE Communications Letters, 2018, 22, 129-132.	4.1	16
24	Deep Learning for Selection Between RF and VLC Bands in Device-to-Device Communication. IEEE Wireless Communications Letters, 2020, 9, 1763-1767.	5.0	16
25	QoS-Guaranteed Power Control Mechanism Based on the Frame Utilization for Femtocells. Eurasip Journal on Wireless Communications and Networking, 2011, 2011, .	2.4	15
26	Dynamic Optimization of Neighbor Cell List for Femtocells. , 2013, , .		15
27	Predicting Device-to-Device Channels From Cellular Channel Measurements: A Learning Approach. IEEE Transactions on Wireless Communications, 2020, 19, 7124-7138.	9.2	15
28	QoS-ensuring distribution of computation load among cloud-enabled small cells. , 2014, , .		14
29	A Seamless Integration of Computationally-Enhanced Base Stations into Mobile Networks towards 5G. , 2015, , .		14
30	Combination of visible light and radio frequency bands for device-to-device communication. , 2017, , .		14
31	Self-tuning handover algorithm based on fuzzy logic in mobile networks with dense small cells. , 2018, , .		14
32	Positioning of Flying Base Stations to Optimize Throughput and Energy Consumption of Mobile Devices. , 2019, , .		13
33	Cloud-aware power control for cloud-enabled small cells. , 2014, , .		12
34	Selection between Radio Frequency and Visible Light Communication Bands for D2D. , 2018, , .		12
35	Two-Phase Random Access Procedure for LTE-A Networks. IEEE Transactions on Wireless Communications, 2019, 18, 2374-2387.	9.2	12
36	Vehicular Network-Aware Route Selection Considering Communication Requirements of Users for ITS. IEEE Systems Journal, 2018, 12, 1239-1250.	4.6	11

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37	Machine Learning for Power Control in D2D Communication Based on Cellular Channel Gains. , 2019, , .		11
38	Joint Positioning of UAV and Power Control for Flying Base Stations in Mobile Networks. , 2019, , .		11
39	Efficient Exploitation of Radio Frequency and Visible Light Communication Bands for D2D in Mobile Networks. IEEE Access, 2019, 7, 168922-168933.	4.2	9
40	Mobility management for D2D communication combining radio frequency and visible light communications bands. Wireless Networks, 2020, 26, 5473-5484.	3.0	9
41	Impact of Handover on VoIP Speech Quality in WiMAX Networks. , 2009, , .		8
42	Mitigation of Redundant Handovers to Femtocells by Estimation of throughput Gain. Mobile Information Systems, 2013, 9, 315-330.	0.6	8
43	Combined Shared and Dedicated Resource Allocation for D2D Communication. , 2018, , .		8
44	Positioning and Association Rules for Transparent Flying Relay Stations. IEEE Wireless Communications Letters, 2021, 10, 1276-1280.	5.0	8
45	Cross-layer approach enabling communication of high number of devices in 5G mobile networks. , 2015, , .		7
46	Incentive-Based D2D Relaying in Cellular Networks. IEEE Transactions on Communications, 2021, 69, 1775-1788.	7.8	7
47	Optimization of Total Power Consumed by Flying Base Station Serving Mobile Users. IEEE Transactions on Network Science and Engineering, 2022, 9, 2815-2832.	6.4	7
48	Optimization of handover scanning procedure in WiMAX networks with relay stations. , 2008, , .		6
49	On enhancement of handover decision in femtocells. , 2011, , .		6
50	Methodology and tool for energy consumption modeling of mobile devices. , 2014, , .		6
51	Selfâ€optimizing neighbor cell list with dynamic threshold for handover purposes in networks with small cells. Wireless Communications and Mobile Computing, 2015, 15, 1729-1743.	1.2	6
52	Optimizing Transmission and Propulsion Powers for Flying Base Stations. , 2020, , .		6
53	Soft Frequency Reuse With Allocation of Resource Plans Based on Machine Learning in the Networks With Flying Base Stations. IEEE Access, 2021, 9, 104887-104903.	4.2	6
54	Optimization of Cell Individual Offset for Handover of Flying Base Station. , 2021, , .		6

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55	Optimization of network entry procedure in relay based WiMAX networks. , 2008, , .		5
56	Overhead of ARQ mechanism in IEEE 802.16 networks. Telecommunication Systems, 2011, 46, 353-367.	2.5	5
57	Reuse of Multiple Channels by Multiple D2D Pairs in Dedicated Mode: A Game Theoretic Approach. IEEE Transactions on Wireless Communications, 2021, 20, 4313-4327.	9.2	5
58	Impact of Relay Stations Implementation on the Handover in WiMAX. , 2007, , 107-114.		5
59	Acquisition of Channel State Information for Routing Purposes in Relay-Based WiMAX Networks. , 2009, , .		4
60	Optimization of association procedure in WiMAX networks with relay stations. Telecommunication Systems, 2013, 52, 1697-1704.	2.5	4
61	Centralized dynamic resource allocation scheme for femtocells exploiting graph theory approach. , 2014, , .		4
62	Incentive Mechanism and Relay Selection for D2D Relaying in Cellular Networks. , 2019, , .		4
63	Reducing Energy Consumed by Repositioning of Flying Base Stations Serving Mobile Users. , 2020, , .		4
64	Power Allocation, Channel Reuse, and Positioning of Flying Base Stations With Realistic Backhaul. IEEE Internet of Things Journal, 2022, 9, 1790-1805.	8.7	4
65	Handover Procedure in Femtocells. Advances in Wireless Technologies and Telecommunication Book Series, 2012, , 157-179.	0.4	4
66	Vertical Handover Decision in Heterogeneous Wireless Networks with Femtocells. Elektronika Ir Elektrotechnika, 2014, 20, .	0.8	4
67	Reduction of Scanning Reporting Overhead in IEEE 802.16 Networks with Relays. , 2010, , .		3
68	Fast predicted handover in IEEE 802.16 networks. European Transactions on Telecommunications, 2011, 22, 68-80.	1.2	3
69	Handover with consideration of connection cost in femtocell networks. , 2012, , .		3
70	Fast cell selection with efficient active set management in OFDMA networks with femtocells. Eurasip Journal on Wireless Communications and Networking, 2012, 2012, .	2.4	3
71	Connection Cost Based Handover Decision for Offloading Macrocells by Femtocells. Lecture Notes in Computer Science, 2012, , 208-219.	1.3	3
72	Optimization of SINR-based Neighbor Cell List for networks with small cells. , 2013, , .		3

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73	Flexible Soft Frequency Reuse for Interference Management in the Networks with Flying Base Stations. , 2020, , .		3
74	Sequential Bargaining Game for Reuse of Radio Resources in D2D Communication in Dedicated Mode. , 2020, , .		3
75	Energy Consumption Performance of Opportunistic Device-to-Device Relaying Under Log-Normal Shadowing. IEEE Systems Journal, 2020, , 1-12.	4.6	3
76	Optimization of Transmission Power for NOMA in Networks with Flying Base Stations. , 2020, , .		3
77	Impact of Additional Noise on Subjective and Objective Quality Assessement in VoIP. , 2007, , .		2
78	Comparison of Common PLC Methods Used in VoIP Networks. , 2007, , .		2
79	Impact of saturation on speech quality in VoIP. , 2008, , .		2
80	Optimization of power control algorithm for femtocells based on frame utilization. , 2011, , .		2
81	Efficient routing of data for femtocells. , 2011, , .		2
82	Performance of fast cell selection in two-tier OFDMA networks with small cells. , 2012, , .		2
83	Self-configured Neighbor Cell List of macro cells in network with Small Cells. , 2013, , .		2
84	Prediction of Channel Quality after Handover for Mobility Management in 5G. , 2014, , .		2
85	Q-learning-based prediction of channel quality after handover in mobile networks. , 2014, , .		2
86	Joint Association, Transmission Power Allocation and Positioning of Flying Base Stations Considering Limited Backhaul. , 2020, , .		2
87	Handover of relay stations for load balancing in IEEE 802.16. Wireless Communications and Mobile Computing, 2013, 13, 170-183.	1.2	1
88	Enhancement of Hybrid Cognitive Approach for Femtocells. , 2015, , .		1
89	Nash Bargaining Solution for Cooperative Relaying Exploiting Energy Consumption. , 2019, , .		1
90	Integrating UAVs as Transparent Relays into Mobile Networks: A Deep Learning Approach. , 2020, , .		1

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91	Distributed Hybrid Spectrum Access for Cognitive Femtocells in 5G Mobile Networks. Elektronika Ir Elektrotechnika, 2016, 22, .	0.8	1
92	Energy Efficient Positioning of Flying Base Stations via Coulombâ€™s law. , 2020, , .		1
93	PADSA: Priority-Aware Block Data Storage Architecture for Edge Cloud Serving Autonomous Vehicles. , 2021, , .		1
94	Interference Empowered 5G Networks. , 2014, , .		0
95	Hybrid spectrum sharing for cognitive small cells. , 2018, , .		0
96	Radio Resource Sharing Among Users in Hybrid Access Femtocells. KSII Transactions on Internet and Information Systems, 2014, 8, .	0.3	0
97	Low-Complexity Iterative Soft-output Demodulation for Hierarchical Quadrature Amplitude Modulation. , 2020, , .		0
98	Dynamic Adjustment of Scheduling Period in Mobile Networks Based on C-RAN. , 2021, , .		0
99	Reducing Storage and Communication Latencies in Vehicular Edge Cloud. , 2022, , .		0