Navid Nikaein

List of Publications by Year
in descending order

101 papers	2,966 citations	623734 14 h-index	552781 26 g-index
110 all docs	110 docs citations	110 times ranked	2700 citing authors

#	Article	IF	Citations
1	OpenAirInterface. Computer Communication Review, 2014, 44, 33-38.	1.8	324
2	Network Slices toward 5G Communications: Slicing the LTE Network. IEEE Communications Magazine, 2017, 55, 146-154.	6.1	217
3	FlexRAN. , 2016, , .		197
4	Toward Enforcing Network Slicing on RAN: Flexibility and Resources Abstraction. , 2017, 55, 102-108.		166
5	An IoT gateway centric architecture to provide novel M2M services. , 2014, , .		163
6	Network Store. , 2015, , .		102
7	Processing Radio Access Network Functions in the Cloud. , 2015, , .		97
8	Survey, comparison and evaluation of cross platform mobile application development tools. , 2013, , .		80
9	LTE/LTE-A Discontinuous Reception Modeling for Machine Type Communications. IEEE Wireless Communications Letters, 2013, 2, 102-105.	5.0	72
10	Resource Allocation and Interference Management for Opportunistic Relaying in Integrated mmWave/sub-6 GHz 5G Networks. , 2017, 55, 94-101.		68
11	Enable Advanced QoS-Aware Network Slicing in 5G Networks for Slice-Based Media Use Cases. IEEE Transactions on Broadcasting, 2019, 65, 444-453.	3.2	65
12	Demo: OpenAirInterface. , 2014, , .		59
13	FlexCRAN: A flexible functional split framework over ethernet fronthaul in Cloud-RAN. , 2017, , .		58
14	Slice Orchestration for Multi-Service Disaggregated Ultra-Dense RANs. IEEE Communications Magazine, 2018, 56, 70-77.	6.1	54
15	Impact of packetization and functional split on C-RAN fronthaul performance. , 2016, , .		49
16	Cooperative Scheduling for Coexisting Body Area Networks. IEEE Transactions on Wireless Communications, 2013, 12, 123-133.	9.2	47
17	Android power management: Current and future trends. , 2012, , .		46
18	RAN Runtime Slicing System for Flexible and Dynamic Service Execution Environment. IEEE Access, 2018, 6, 34018-34042.	4.2	46

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19	Low latency MEC framework for SDN-based LTE/LTE-A networks. , 2017, , .		45
20	Providing Low Latency Guarantees for Slicing-Ready 5G Systems via Two-Level MAC Scheduling. IEEE Network, 2018, 32, 116-123.	6.9	44
21	Toward moving public safety networks. , 2016, 54, 14-20.		41
22	Critical issues of centralized and cloudified LTE-FDD Radio Access Networks. , 2015, , .		37
23	Impact of Packetization and Scheduling on C-RAN Fronthaul Performance. , 2016, , .		37
24	Mosaic5G. Computer Communication Review, 2018, 48, 29-34.	1.8	35
25	Contention Based Access for Machine-Type Communications over LTE. , 2012, , .		34
26	MEC architectural implications for LTE/LTE-A networks. , 2016, , .		29
27	Topology Management for Improving Routing and Network Performances in Mobile Ad Hoc Networks. Mobile Networks and Applications, 2004, 9, 583-594.	3.3	28
28	Optimal downlink and uplink user association in backhaul-limited HetNets. , 2016, , .		28
29	Multi-Domain Orchestration for NFV: Challenges and Research Directions. , 2016, , .		26
30	5G Architectural Design Patterns. , 2016, , .		25
31	Analyzing X2 handover in LTE/LTE-A. , 2016, , .		24
32	Machineâ€toâ€machine: an emerging communicationâ€‰paradigm. Transactions on Emerging Telecommunications Technologies, 2013, 24, 353-354.	3.9	23
33	FlexRIC. , 2021, , .		23
34	Experimental evaluation of functional splits for 5G cloud-RANs. , 2017, , .		22
35	Packet aggregation for machine type communications in LTE with random access channel. , 2013, , .		21
36	LL-MEC: Enabling Low Latency Edge Applications. , 2018, , .		21

#	Article	IF	Citations
37	Wireless mesh backhauling for LTE/LTE-A networks. , 2015, , .		18
38	Toward a Fully Cloudified Mobile Network Infrastructure. IEEE Transactions on Network and Service Management, 2016, 13, 547-563.	4.9	17
39	FlexVRAN: A Flexible Controller for Virtualized RAN Over Heterogeneous Deployments. , 2019, , .		17
40	CCT: Connect and Control Things: A novel mobile application to manage M2M devices and endpoints. , 2014, , .		16
41	Demo: Closer to Cloud-RAN. , 2015, , .		16
42	Slice Scheduling with QoS-Guarantee Towards 5G. , 2019, , .		16
43	Traffic generation application for simulating online games and M2M applications via wireless networks. , 2012, , .		15
44	Minimizing energy expenditure in smart devices. , 2013, , .		15
45	Self-adaptive battery and context aware mobile application development. , 2014, , .		15
46	Improving the efficiency and reliability of wearable based mobile eHealth applications. Pervasive and Mobile Computing, 2017, 40, 674-691.	3.3	15
47	JOX: An event-driven orchestrator for 5G network slicing. , 2018, , .		15
48	Time-Sensitive Networking for 5G Fronthaul Networks. , 2020, , .		15
49	Network Slicing for TSN-Based Transport Networks. IEEE Access, 2021, 9, 62788-62809.	4.2	15
50	Architectures for cognitive radio testbeds and demonstrators - An overview. , 2010, , .		13
51	Dynamic resource allocation for machine-type communications in LTE/LTE-A with contention-based access. , 2013, , .		13
52	Reducing the energy consumption of small cell networks subject to QoE constraints. , 2014, , .		13
53	Scenarios for 5G networks: The COHERENT approach. , 2016, , .		13
54	An Analytical Framework for Optimal Downlink-Uplink User Association in HetNets with Traffic Differentiation. , 2015, , .		12

#	ARTICLE	IF	CITATIONS
55	User Association in HetNets: Impact of Traffic Differentiation and Backhaul Limitations. IEEE/ACM Transactions on Networking, 2017, 25, 3396-3410.	3.8	12
56	Towards a Cloud-Native Radio Access Network. Studies in Big Data, 2017, , 171-202.	1.1	12
57	Implementation and validation of Multimedia Broadcast Multicast Service for LTE/LTE-advanced in OpenAirInterface platform. , 2013, , .		11
58	An Analytical Framework for Multilayer Partial Frequency Reuse Scheme Design in Mobile Communication Systems. IEEE Transactions on Vehicular Technology, 2016, 65, 7593-7605.	6.3	11
59	Modelling and implementation of virtual radio resources management for 5G Cloud RAN. Eurasip Journal on Wireless Communications and Networking, 2017, 2017, .	2.4	11
60	FLEXCRAN: Cloud radio access network prototype using OpenAirInterface. , 2017, , .		11
61	Power monitor v2: Novel power saving Android application. , 2013, , .		9
62	Closing in on 5G Control Apps: Enabling Multiservice Programmability in a Disaggregated Radio Access Network. IEEE Vehicular Technology Magazine, 2018, 13, 80-93.	3.4	9
63	RAN Engine: Service-Oriented RAN Through Containerized Micro-Services. IEEE Transactions on Network and Service Management, 2021, 18, 469-481.	4.9	9
64	Load-aware handover decision algorithm in next-generation HetNets. , 2016, , .		8
65	Trajectory knowledge for improving topology control in mobile ad-hoc networks. , 2005, , .		7
66	Impact of Online Games and M2M Applications Traffic on Performance of HSPA Radio Access Networks. , 2012, , .		7
67	Application distribution model and related security attacks in VANET. , 2013, , .		7
68	Evolved user equipment for collaborative wireless backhauling in next generation cellular networks. , 2015, , .		7
69	Dynamic Buffer Sizing and Pacing as Enablers of 5G Low-Latency Services. IEEE Transactions on Mobile Computing, 2022, 21, 926-939.	5.8	7
70	Preventing RLC Buffer Sojourn Delays in 5G. IEEE Access, 2021, 9, 39466-39488.	4.2	7
71	Multicast and Virtual Road Side Units for Multi Technology Alert Messages Dissemination. , 2011, , .		6
72	OpenAirInterface Traffic Generator (OTG): A Realistic Traffic Generation Tool for Emerging Application Scenarios. , 2012, , .		6

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73	Personalized power saving profiles generation analyzing smart device usage patterns. , 2014, , .		6
74	M2M Traffic and Models. , 2014, , 57-85.		6
75	Topology management for group oriented networks. , 2010, , .		5
76	Low latency random access with TTI bundling in LTE/LTE-A. , 2015, , .		5
77	Multi-objective placement of virtual network function chains in 5G. , 2017, , .		5
78	Demo: FlexRAN. , 2017, , .		5
79	Autonomous Self-Backhauled LTE Mesh Network With QoS Guarantee. IEEE Access, 2018, 6, 4083-4117.	4.2	5
80	Design aspects for 5G architectures: The SESAME and COHERENT approach. , 2017, , .		4
81	SliceNet Control Plane for 5G Network Slicing in Evolving Future Networks. , 2019, , .		4
82	Utility-Based Opportunistic Scheduling Under Multi-Connectivity With Limited Backhaul Capacity. IEEE Networking Letters, 2019, 1, 80-83.	1.9	4
83	Hybrid scheduling for event-driven simulation over heterogeneous computers. , 2013, , .		3
84	Random access with adaptive packet aggregation in LTE/LTE-A. Eurasip Journal on Wireless Communications and Networking, 2016, 2016, 36.	2.4	3
85	Q4HEALTH: Quality of Service and prioritisation for emergency services in the LTE RAN stack. , 2016, , .		3
86	Toward multi-layer partial frequency reuse in future mobile communication systems. , 2014, , .		2
87	Pre-processor for MAC-layer scheduler to efficiently manage buffer in modern wireless networks. , 2014, , .		2
88	Public Safety Networks: Enabling Mobility for Critical Communications. , 2016, , 95-126.		2
89	Scalable two-hop relaying for mmWave networks. , 2017, , .		2
90	Self-backhauled autonomous LTE mesh networks. , 2017, , .		2

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91	Coordinator-Master-Worker Model For Efficient Large Scale Network Simulation. , 2013, , .		2
92	Service-oriented intelligent and extensible RAN. , 2020, , .		2
93	Usage patterns based security attacks for smart devices. , 2014, , .		1
94	Three-Step Iterative Scheduler for QoS Provisioning to Users Running Multiple Services in Parallel. , 2014, , .		1
95	A demonstration of evolved user equipment for collaborative wireless backhauling in next generation cellular networks. , 2015, , .		1
96	ICN/DTN for Public Safety in Mobile Networks. , 2017, , 231-247.		1
97	FlexDRAN: Flexible Centralization in Disaggregated Radio Access Networks. IEEE Access, 2022, 10, 11789-11808.	4.2	1
98	HSPA radio access performance evaluation for Online games and M2M applications traffic (TCP vs) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50		0
99	An Analytical Framework for Optimal Downlink-Uplink User Association in HetNets with Traffic Differentiation. , 2014, , .		0
100	General-purpose coordinatorâ€"masterâ€"worker model for efficient large-scale simulation over heterogeneous infrastructure. Journal of Simulation, 2017, 11, 228-241.	1.5	0
101	Plug & Play Network Application Chaining for Multi-Service Programmability in 5G RAN. , 2018, , .		0