David Grace

List of Publications by Year
in descending order

120	1,625	516710 16	395702 33
papers	citations	h-index	g-index

137	137	137	1221
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Multiple Description Coding for Enhancing Outage and Video Performance Over Relay-Assisted Cognitive Radio Networks. IEEE Access, 2022, 10, 11750-11762.	4.2	8
2	Delivering Extended Cellular Coverage and Capacity Using High-Altitude Platforms. Electronics (Switzerland), 2022, 11, 1508.	3.1	2
3	Reinforcement Learning Based MAC Protocol (UW-ALOHA-QM) for Mobile Underwater Acoustic Sensor Networks. IEEE Access, 2021, 9, 5906-5919.	4.2	14
4	Multi-User Wireless Information and Power Transfer in FBMC-Based IoT Networks. IEEE Open Journal of the Communications Society, 2021, 2, 545-563.	6.9	3
5	Multi-User Interference Cancellation for Uplink FBMC-Based Multiple Access Channel. IEEE Communications Letters, 2021, 25, 2733-2737.	4.1	2
6	Deep Learning Assisted Fixed Wireless Access Network Coverage Planning. IEEE Access, 2021, 9, 124530-124540.	4.2	1
7	Blockchain-Based Secure Spectrum Trading for Unmanned-Aerial-Vehicle-Assisted Cellular Networks: An Operatorâ€™s Perspective. IEEE Internet of Things Journal, 2020, 7, 451-466.	8.7	127
8	Design and Convergence Analysis of an IIC-based BICM-ID Receiver for FBMC-QAM Systems. IEEE Open Journal of the Communications Society, 2020, , 1-1.	6.9	2
9	Prioritised Dynamic RACH (PD-RACH) Scheme for Delay-Critical MTC Communication. , 2020, , .		3
10	Capacity and Coverage Analysis of High Altitude Platform (HAP) Antenna Arrays for Rural Vehicular Broadband Services. , 2020, , .		8
11	Energy Management of Solar-Powered Aircraft-Based High Altitude Platform for Wireless Communications. Electronics (Switzerland), 2020, 9, 179.	3.1	24
12	A review of wireless communication using high-altitude platforms for extended coverage and capacity. Computer Communications, 2020, 157, 232-256.	5.1	65
13	A Non-orthogonal Waveform Design with Iterative Detection and Decoding for Narrowband IoT Applications. , 2019, , .		5
14	Implementation of uplink networkâ€coded modulation for twoâ€hop networks. Transactions on Emerging Telecommunications Technologies, 2019, 30, e3594.	3.9	0
15	Exploiting User-Centric Joint Transmission â€“ Coordinated Multipoint With a High Altitude Platform System Architecture. IEEE Access, 2019, 7, 38957-38972.	4.2	16
16	Iterative Interference Cancellation in FBMC-QAM Systems. , 2019, , .		9
17	Reinforcement Learning Based MAC Protocol (UW-ALOHA-Q) for Underwater Acoustic Sensor Networks. IEEE Access, 2019, 7, 165531-165542.	4.2	39
18	Energy-Aware Resource Management in Heterogeneous Cellular Networks With Hybrid Energy Sources. IEEE Transactions on Network and Service Management, 2019, 16, 279-293.	4.9	36

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19	Hotspot-Oriented Green Frameworks for Ultrasmall Cell Cloud Radio Access Networks. IEEE Transactions on Vehicular Technology, 2018, 67, 703-717.	6.3	1
20	Performance of the ALOHA-Q MAC Protocol for Underwater Acoustic Networks. , 2018, , .		9
21	User-centric JT-CoMP clustering in a 5G cell-less architecture. , 2018, , .		18
22	Radio Resource Management for User-Centric JT-CoMP. , 2018, , .		6
23	Load Balancing and Control Using Particle Swarm Optimisation in 5G Heterogeneous Networks. , 2018, , .		6
24	Intelligent RACH Access Techniques to Support M2M Traffic in Cellular Networks. IEEE Transactions on Vehicular Technology, 2018, 67, 8905-8918.	6.3	8
25	User-centric JT-CoMP for High Altitude Platforms. , 2018, , .		4
26	A base station selection scheme for handover in a mobility-aware ultra-dense small cell urban vehicular environment. , 2017, , .		6
27	Antenna array beamforming strategies for high altitude platform and terrestrial coexistence using K-means clustering. , 2017, , .		11
28	A multiâ€criteria BS switchingâ€off algorithm for 5G heterogeneous cellular networks with hybrid energy sources. Transactions on Emerging Telecommunications Technologies, 2016, 27, 923-938.	3.9	10
29	Singleâ€state Qâ€learning for selfâ€organised radio resource management in dualâ€hop 5G high capacity density networks. Transactions on Emerging Telecommunications Technologies, 2016, 27, 1628-1640.	3.9	9
30	Reinforcement learningâ€based clustering protocols for a selfâ€organising cognitive radio network. Transactions on Emerging Telecommunications Technologies, 2016, 27, 544-556.	3.9	4
31	Cognitive spectrum management in dynamic cellular environments: A case-based Q-learning approach. Engineering Applications of Artificial Intelligence, 2016, 55, 239-249.	8.1	12
32	Use of Q-learning approaches for practical medium access control in wireless sensor networks. Engineering Applications of Artificial Intelligence, 2016, 55, 146-154.	8.1	31
33	Millimetre wave backhaul/fronthaul deployments for ultra-dense outdoor small cells. , 2016, , .		1
34	Service-oriented resource virtualization for evolving TDD networks towards 5G. , 2016, , .		8
35	Millimetre wave backhaul/fronthaul deployments for ultra-dense outdoor small cells. , 2016, , .		2
36	Practical Implementation and Stability Analysis of ALOHA-Q for Wireless Sensor Networks. ETRI Journal, 2016, 38, 911-921.	2.0	6

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37	Intelligent Secondary LTE Spectrum Sharing in High Capacity Cognitive Cellular Systems. , 2015, , .		1
38	Using k-means clustering with transfer and Q learning for spectrum, load and energy optimization in opportunistic mobile broadband networks. , 2015, , .		7
39	Using Bayesian networks for convergence analysis of intelligent dynamic spectrum access algorithms. , 2015, , .		0
40	Intelligent Dynamic Spectrum Access in Cellular Systems with Asymmetric Topologies and Non-Uniform Traffic Loads. , 2015, , .		3
41	Transfer learning and cooperation management: balancing the quality of service and information exchange overhead in cognitive radio networks. Transactions on Emerging Telecommunications Technologies, 2015, 26, 290-301.	3.9	11
42	Software defined network for multi-tenancy resource sharing in backhaul networks. , 2015, , .		2
43	A quantum inspired reinforcement learning technique for beyond next generation wireless networks. , 2015, , .		5
44	Application of reinforcement learning to medium access control for wireless sensor networks. Engineering Applications of Artificial Intelligence, 2015, 46, 23-32.	8.1	51
45	An SDN-based virtual cell framework for enhancing the QoE in TD-LTE pico cells. , 2015, , .		7
46	Virtual Cells: Enhancing the Resource Allocation Efficiency for TD-LTE. , 2014, , .		8
47	Dynamic topology management in flexible aerial-terrestrial networks for public safety. , 2014, , .		1
48	An SDN-based framework for elastic resource sharing in integrated FDD/TDD LTE-A HetNets. , 2014, , .		12
49	Traffic perception based topology management for 5G green ultra-small cell networks. , 2014, , .		7
50	Distributed Q-learning based dynamic spectrum management in cognitive cellular systems: Choosing the right learning rate. , 2014, , .		15
51	Cell division, migration and death for energy efficient 5G ultra-small cell networks. , 2014, , .		2
52	Distributed Q-learning based dynamic spectrum access in high capacity density cognitive cellular systems using secondary LTE spectrum sharing. , 2014, , .		15
53	Performance Evaluation of Interference Bound Backhaul Links in High Capacity Wireless Networks. Wireless Personal Communications, 2014, 74, 1129-1145.	2.7	1
54	Cognitive green backhaul deployments for future 5G networks. , 2014, , .		12

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55	Combined green resource and topology management for beyond next generation mobile broadband systems. , 2013, , .		9
56	Reciprocal learning for cognitive medium access. , 2013, , .		2
57	Energy efficient soft real-time spectrum auction for dynamic spectrum access. , 2013, , .		3
58	Transfer Learning: A Paradigm for Dynamic Spectrum and Topology Management in Flexible Architectures. , 2013, , .		9
59	Interference aware, energy efficient resource allocation for beyond next generation mobile networks. , 2013, , .		0
60	Reinforcement learning based ALOHA for multi-hop wireless sensor networks with informed receiving. , 2012, , .		5
61	Energy efficient topology management for beyond next generation mobile broadband systems. , 2012, , .		11
62	Application of cognition based resource allocation strategies on a multi-hop backhaul network. , 2012, , .		3
63	ALOHA and Q-Learning based medium access control for Wireless Sensor Networks. , 2012, , .		47
64	Utility based cooperative spectrum leasing in cognitive radio networks. , 2012, , .		23
65	Impulse Radio UWB Pulse Shaping for Cognitive Radio Applications. Wireless Personal Communications, 2012, 63, 675-688.	2.7	1
66	Multiple access with multi-dimensional learning for cognitive radio in open spectrum. , 2011, , .		0
67	Multichannel non-persistent CSMA MAC schemes with reinforcement learning for cognitive radio networks. , 2011, , .		5
68	DRMA-AR: Distributed reservation multiple access with adaptive requests for wireless networks. , 2011, , .		1
69	Cognitive UWB spectrum sharing and power allocation in a multipath fading channel. , 2011, , .		0
70	Overlap Area Assisted Call Admission Control Scheme for Communications System. IEEE Transactions on Aerospace and Electronic Systems, 2011, 47, 2911-2920.	4.7	9
71	Cognitive Radio with Reinforcement Learning Applied to Multicast Downlink Transmission with Power Adjustment. Wireless Personal Communications, 2011, 57, 73-87.	2.7	11
72	Inter-HAP handoff analysis for multi-cell short-endurance HAP communications systems. International Journal of Satellite Communications and Networking, 2011, 29, 367-381.	1.8	2

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73	Performance of a Multiple HAP System Employing Multiple Polarization. Wireless Personal Communications, 2010, 52, 105-117.	2.7	10
74	Effect of Antenna Power Roll-Off on the Performance of 3G Cellular Systems from High Altitude Platforms. IEEE Transactions on Aerospace and Electronic Systems, 2010, 46, 1468-1477.	4.7	15
75	Cognitive radio multiple access control for unlicensed and open spectrum with reduced spectrum sensing requirements. , 2010, , .		6
76	A Novel Guaranteed Handover Scheme for HAP Communications Systems with Adaptive Modulation and Coding. , 2010, , .		2
77	Cognitive Radio for UWB spectrum sharing and power allocation. , 2010, , .		2
78	RF signal Strength based clustering protocols for a self-organizing cognitive radio network. , 2010, , .		8
79	Receiver based interference protection for MAC protocol in WSNs. , 2010, , .		0
80	Propagation Impairment Countermeasures in Mobile Stratospheric Operating Environment. , 2009, , .		1
81	Exploiting platform diversity for GoS improvement for users with different High Altitude Platform availability. IEEE Transactions on Wireless Communications, 2009, 8, 196-203.	9.2	23
82	Using Cognitive Interference Routing to Avoid Congested Areas in Wireless Ad Hoc Networks. , 2009, , .		2
83	Cognitive radio with reinforcement learning applied to heterogeneous multicast terrestrial communication systems. , 2009, , .		13
84	Cognitive Radio with Reinforcement Learning Applied to Multicast Downlink Transmission and Distributed Occupancy Detection. , 2009, , .		3
85	Using cognitive radio to deliver ‘Green’ communications. , 2009, , .		33
86	Distributed beamforming for cognitive radio networks. , 2008, , .		5
87	Improving Capacity for Wireless Ad Hoc Communications Using Cognitive Routing. , 2008, , .		16
88	Comparison of CINR-based cognitive radio schemes for multiple high altitude platforms. , 2008, , .		2
89	Interaction and coexistence of multicast terrestrial communication systems with area optimized channel assignments. , 2008, , .		2
90	Performance of cognitive radio reinforcement spectrum sharing using different weighting factors. , 2008, , .		12

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91	Assessment of Coexistence Performance for WiMAX Broadband in HAP Cellular System and Multiple-Operator Terrestrial Deployments. , 2007, , .		5
92	Capacity Analysis of Coexisting TD-SCDMA / WCDMA Systems. , 2007, , .		5
93	A Transmit and Receive Multi-Antenna Channel Model and Simulator for Communications from High Altitude Platforms. International Journal of Wireless Information Networks, 2006, 13, 59-75.	2.7	16
94	Capacity Evaluation of a Multi-Hop Wireless Ad hoc Network Using Minimum Impact Routing. , 2006, , .		3
95	High Altitude Platform mm-Wave Aperture Antenna Steering Solutions. Wireless Personal Communications, 2005, 32, 215-236.	2.7	9
96	Performance of Multiple High Altitude Platforms using Directive HAP and User Antennas. Wireless Personal Communications, 2005, 32, 275-299.	2.7	30
97	Effect of Antenna Beam Pattern and Layout on Cellular Performance in High Altitude Platform Communications. Wireless Personal Communications, 2005, 35, 35-51.	2.7	12
98	Effect of lateral displacement of a high-altitude platform on cellular interference and handover. IEEE Transactions on Wireless Communications, 2005, 4, 1483-1490.	9.2	27
99	Improving the system capacity of broadband services using multiple high-altitude platforms. IEEE Transactions on Wireless Communications, 2005, 4, 700-709.	9.2	82
100	Burst Targeted Demand Assignment Multiple-Access for Broadband Internet Service Delivery Over Geostationary Satellite. IEEE Journal on Selected Areas in Communications, 2004, 22, 546-558.	14.0	16
101	Integration of a HAP within a Terrestrial UMTS Network: Interference Analysis and Cell Dimensioning. Wireless Personal Communications, 2003, 24, 291-325.	2.7	39
102	Optimizing an array of antennas for cellular coverage from a high altitude platform. IEEE Transactions on Wireless Communications, 2003, 2, 484-492.	9.2	128
103	Analytical model of round-robin scheduling for a geostationary satellite system. IEEE Communications Letters, 2003, 7, 546-548.	4.1	8
104	Providing multimedia communications services from high altitude platforms. International Journal of Satellite Communications and Networking, 2001, 19, 559-580.	0.6	61
105	Broadband communications from a high-altitude platform: the European HeliNet programme. Electronics and Communication Engineering Journal, 2001, 13, 138-144.	0.5	114
106	Reducing call dropping in distributed dynamic channel assignment algorithms by incorporating power control in wireless ad hoc networks. IEEE Journal on Selected Areas in Communications, 2000, 18, 2417-2428.	14.0	23
107	The effects of building geometric displacement error on urban microcellular ray based modelling. , 0, , .		0
108	The effects of interference threshold and SNR hysteresis on distributed channel assignment algorithms for UFDMA. , 0, , .		5

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109	Performance of a distributed dynamic channel assignment algorithm incorporating power control in a wireless environment. , 0, , .		3
110	Modelling the performance of an all-informed net which incorporates distributed dynamic channel assignment. , 0, , .		0
111	LMDS from high altitude aeronautical platforms. , 0, , .		20
112	Integrated air interface multiple access schemes for broadband wireless communications. , 0, , .		0
113	Capacity effects on terrestrial broadband wireless access networks, operating in the LMDS frequency band, during rainfall conditions. , 0, , .		1
114	Performance of the combined free/demand assignment multiple access protocol with combined request strategies via satellite. , 0, , .		7
115	Comparative performance of the CFDAMA protocol via satellite with various terminal request strategies. , 0, , .		9
116	An LMDS access protocol for advanced high-speed and bandwidth intensive wireless applications. , 0, , .		0
117	Burst targeted demand assignment multiple access (BTDAMA) for on-off type data traffic via satellite. , 0, , .		2
118	Optimising the downlink capacity of broadband fixed wireless access systems for packet-based communications. , 0, , .		2
119	Adaptive burst targeted demand assignment multiple access (BTDAMA) for geostationary satellite systems. , 0, , .		3
120	Joint User-Centric Clustering and Multi-cell Radio Resource Management in Coordinated Multipoint Joint Transmission. Wireless Personal Communications, 0, , 1.	2.7	3