

A Survey on MAC Strategies for Cognitive Radio Networks

IEEE Communications Surveys and Tutorials

14, 21-44

DOI: [10.1109/surv.2011.111510.00108](https://doi.org/10.1109/surv.2011.111510.00108)

Citation Report

#	ARTICLE	IF	CITATIONS
1	Novel overlay data transmission technique in Cognitive Radio Networks. , 2011, , .		0
2	Ghost femtocells: A novel radio resource management scheme for OFDMA based networks. , 2011, , .		7
3	Target sensing for cognitive radios. , 2011, , .		0
4	Common control channel model on MAC protocols in cognitive radio networks. , 2011, , .		4
5	An Enhanced Synchronized MAC Protocol for Cognitive Radio Networks. , 2011, , .		3
6	Interference management in self-organized femtocell networks: The BeFEMTO approach. , 2011, , .		18
7	Building cognitive radios in MATLAB Simulink — A step towards future wireless technology. , 2011, , .		10
8	Dynamic Spectrum Sharing Among Repeatedly Interacting Selfish Users With Imperfect Monitoring. IEEE Journal on Selected Areas in Communications, 2012, 30, 1890-1899.	9.7	19
9	Weighted Flow and Spectral Resource to Enhance QoS for Multi-hop Cognitive Radio Networks. , 2012, , .		1
10	Maximizing Secondary-User Satisfaction in Large-Scale DSA Systems Through Distributed Team Cooperation. IEEE Transactions on Wireless Communications, 2012, 11, 3588-3597.	6.1	7
11	An Opportunistic MAC Protocol Based on Statistical Spectrum Analysis. , 2012, , .		1
12	Dynamic spectrum access to improve fairness in Tactical Networks with mobile base stations. , 2012, , .		1
13	Energy-aware routing protocol for cognitive radio ad hoc networks. IET Communications, 2012, 6, 2159.	1.5	31
14	Goodput maximization in opportunistic spectrum access radio links with imperfect spectrum sensing and fec-based packet protection. , 2012, , .		0
15	Spectrum-driven sleep scheduling algorithm based on reliable theory in cognitive radio sensor networks. Journal of China Universities of Posts and Telecommunications, 2012, 19, 47-72.	0.8	4
16	Security Aspects in Software Defined Radio and Cognitive Radio Networks: A Survey and A Way Ahead. IEEE Communications Surveys and Tutorials, 2012, 14, 355-379.	24.8	154
17	An analysis of channel access delay in synchronized MAC protocol for cognitive radio networks. Transactions on Emerging Telecommunications Technologies, 2012, 25, n/a-n/a.	2.6	4
18	An evaluation of MAC Protocols Running on a MANET Network. Procedia Computer Science, 2012, 10, 86-93.	1.2	0

#	ARTICLE	IF	CITATIONS
19	A dynamic spectrum access MAC protocol based on spectrum analysis and spectrum sharing. , 2012, , .		0
20	BAR: Bandwidth-aware opportunistic localized-routing for cognitive radio networks. , 2012, , .		3
21	Repeated resource sharing among selfish players with imperfect binary feedback. , 2012, , .		2
22	QoS based spectrum decision framework for cognitive radio networks. , 2012, , .		18
23	MAC protocols analysis for Cognitive Radio in a network MANET. , 2012, , .		1
24	FCSS: CSMA/CA based Fast Cooperative Spectrum Sensing over multiband cognitive networks. , 2012, , .		3
25	CRUAM-MAC: A novel cognitive radio MAC protocol for dynamic spectrum access. , 2012, , .		5
26	Design of QSPM-MAC: Quasi-synchronous priority multi-channel MAC access protocol. , 2012, , .		1
27	A proposed network management protocol for Cognitive Radio Sensor Networks. , 2012, , .		2
28	Context-aware adaptive active queue management mechanism for improving video transmission over IEEE 802.11E WLAN. Journal of China Universities of Posts and Telecommunications, 2012, 19, 65-72.	0.8	3
29	Coordinating Secondary-User Behaviors for Inelastic Traffic Reward Maximization in Large-Scale osa Networks. IEEE Transactions on Network and Service Management, 2012, 9, 501-513.	3.2	6
30	Impact of Cognitive Radio: Recognition and Informed Exploitation of Grey Spectrum Opportunities. IEEE Vehicular Technology Magazine, 2012, 7, 85-90.	2.8	11
31	Joint Sensing and Transmission for AF Relay Assisted PU Transmission in Cognitive Radio Networks. IEEE Journal on Selected Areas in Communications, 2013, 31, 2249-2261.	9.7	13
32	An Auction-Based Mechanism for Cooperative Sensing in Cognitive Networks. IEEE Transactions on Wireless Communications, 2013, 12, 3649-3661.	6.1	5
33	An intelligent cognitive MAC-based sensing protocol with pseudo-deterministic convergence bounds. , 2013, , .		0
34	A decentralized MAC protocol for opportunistic spectrum access in cognitive wireless networks. Computer Communications, 2013, 36, 1399-1410.	3.1	20
35	Channel assignment with closeness multipath routing in cognitive networks. AEJ - Alexandria Engineering Journal, 2013, 52, 665-670.	3.4	4
36	Green framework for future heterogeneous wireless networks. Computer Networks, 2013, 57, 1518-1528.	3.2	20

#	ARTICLE	IF	CITATIONS
37	Cognitive Radio Wireless Sensor Networks: Applications, Challenges and Research Trends. Sensors, 2013, 13, 11196-11228.	2.1	219
38	Optimal cooperative detection of primary user emulation attacks in distributed cognitive radio network. , 2013, , .		1
39	On the Performance of Interference-Aware Cognitive Ad-Hoc Networks. IEEE Communications Letters, 2013, 17, 1952-1955.	2.5	12
40	Distributed iterative time slot allocation for spectrum sensing information sharing in cognitive radio ad hoc networks. , 2013, , .		1
41	The impact of reporting MAC on cooperative spectrum sensing in multiband cognitive networks. , 2013, , .		5
42	Detection of primary user emulation attacks based on compressive sensing in cognitive radio networks. , 2013, , .		3
43	On the Performance of the IEEE 802.11 in a Multi-Channel Environment. , 2013, , .		1
44	Deterministic approach to rendezvous channel setup in cognitive radio networks. , 2013, , .		0
45	MAC protocols for Cognitive Radio Networks with passive and Active primary users. , 2013, , .		6
46	A Survey on Machine-Learning Techniques in Cognitive Radios. IEEE Communications Surveys and Tutorials, 2013, 15, 1136-1159.	24.8	431
47	Decision-Theoretic Distributed Channel Selection for Opportunistic Spectrum Access: Strategies, Challenges and Solutions. IEEE Communications Surveys and Tutorials, 2013, 15, 1689-1713.	24.8	196
48	A survey of cognitive radio technologies and their optimization approaches. , 2013, , .		6
49	Cognitive radio spectrum assignment and handoff decision. , 2013, , .		4
50	Hopping-Based Channel Access in Cognitive Radio Systems. , 2013, , .		1
51	Exploring parallelization for medium access schemes on many-core software defined radio architecture. , 2013, , .		2
52	Performance Analysis and Optimization of an Adaptive Admission Control Scheme in Cognitive Radio Networks. Mathematical Problems in Engineering, 2013, 2013, 1-10.	0.6	5
53	Broadcasting in multichannel cognitive radio ad hoc networks. , 2013, , .		6
54	On estimating the end-to-end bandwidth in multi-transceiver multi-hop cognitive radio networks. , 2013, , .		1

#	ARTICLE	IF	CITATIONS
55	QoS-aware cross-layer scheduling for cognitive radio networks with heterogeneous data traffic. , 2013, , .		3
56	A Cognitive Radio MAC protocol for exploiting bandwidth utilization in wireless networks. , 2013, , .		2
57	A QoS-aware cross-layer scheduling scheme for multiuser mixed-traffic cognitive radio networks. , 2013, , .		4
58	Cross-Layer Performance Analysis of the Unreliable Data Transmission for Decentralized Cognitive MAC Protocol under Multiple Secondary Users Scenario. Journal of Systems Science and Information, 2013, 1, 74-85.	0.2	0
59	The Performance Evaluation of AODV-based and DSR-based Multi-radio Routing Protocols in Cognitive Radio Ad Hoc Network. Research Journal of Applied Sciences, Engineering and Technology, 2013, 6, 1276-1282.	0.1	1
60	DYN-MAC: A MAC Protocol for Cognitive Radio Networks with Dynamic Control Channel Assignment. IEICE Transactions on Communications, 2014, E97.B, 1577-1585.	0.4	1
61	Shared-Key Based Secure MAC Protocol for CRNs. , 2014, , .		1
62	TMAC — Token based MAC protocol for cognitive radio wireless mesh network. , 2014, , .		4
63	A Resource Reservation Scheme in Cognitive Radio Ad Hoc Networks for C4I Systems. , 2014, , .		0
64	Joint channel assignment and power allocation in cognitive radio networks. , 2014, , .		6
66	MAC protocol for energy-harvesting users in cognitive radio networks. , 2014, , .		10
67	Building programmable wireless networks: an architectural survey. Eurasip Journal on Wireless Communications and Networking, 2014, 2014, .	1.5	26
68	Design and Analysis of Distributed Hopping-Based Channel Access in Multi-Channel Cognitive Radio Systems with Delay Constraints. IEEE Journal on Selected Areas in Communications, 2014, 32, 2026-2038.	9.7	25
69	PHY/MAC signalling protocols for resilient cognitive radio networks. , 2014, , .		6
70	Issues in Realization of Cognitive Radio Sensor Networks. International Journal of Control and Automation, 2014, 7, 141-152.	0.3	12
71	Asynchronous MAC Protocol for Spectrum Agility in Wireless Body Area Sensor Networks. , 2014, , .		9
72	Performance analysis of general order selection in decentralized cognitive radio networks. , 2014, , .		0
73	Advances in Cognitive Radio Sensor Networks. International Journal of Distributed Sensor Networks, 2014, 10, 631624.	1.3	2

#	ARTICLE	IF	CITATIONS
74	A new transmission model in cognitive radio based on cyclic generalized polynomial codes for bandwidth reduction. Discrete Mathematics, Algorithms and Applications, 2014, 06, 1450059.	0.4	2
75	Channel-Slot Aggregation Diversity Based Slot Reservation Scheme for Cognitive Radio Ad Hoc Networks. International Journal of Distributed Sensor Networks, 2014, 10, 382414.	1.3	1
76	Joint channel and power allocation for underwater cognitive acoustic networks. , 2014, , .		6
77	RISM: An efficient spectrum management system for underwater cognitive acoustic networks. , 2014, , .		9
78	Two-regimes interference classifier: An interference-aware resource allocation algorithm. , 2014, , .		4
79	Contention Based Multichannel MAC Protocol for Distributed Cognitive Radio Networks. IEEE Transactions on Mobile Computing, 2014, 13, 2749-2762.	3.9	42
80	An empirical assessment of Quasi-permanently vacant channels in mobile communication bands for cognitive radio. , 2014, , .		4
81	IEEE 802.11 DCF MAC protocol for cognitive radio networks: Cooperative basic access Vs RTS/CTS. , 2014, , .		4
82	Request-based data dissemination protocol for wireless sensor networks. , 2014, , .		1
83	Opportunistic Networking. Springer Briefs in Electrical and Computer Engineering, 2014, , 33-43.	0.3	0
84	A slot-asynchronous MAC protocol design for blind rendezvous in cognitive radio networks. , 2014, , .		12
85	Spectrum and energy aware multipath routing for cognitive radio ad hoc networks. , 2014, , .		0
86	CAD-MAC: A Channel-Aggregation Diversity Based MAC Protocol for Spectrum and Energy Efficient Cognitive Ad Hoc Networks. IEEE Journal on Selected Areas in Communications, 2014, 32, 237-250.	9.7	64
87	Decentralized Predictive MAC Protocol for Ad Hoc Cognitive Radio Networks. Wireless Personal Communications, 2014, 74, 803-821.	1.8	20
88	A MAC protocol by applying staggered channel model for cognitive radio networks. Wireless Networks, 2014, 20, 1873-1888.	2.0	1
89	A reconfigurable upper audio band modem for data communication between mobile devices. Analog Integrated Circuits and Signal Processing, 2014, 78, 669-682.	0.9	0
90	An efficient throughput improvement through bandwidth awareness in cognitive radio networks. Journal of Communications and Networks, 2014, 16, 146-154.	1.8	6
91	Two-dimensional POMDP-based opportunistic spectrum access in time-varying environment with fading channels. Journal of Communications and Networks, 2014, 16, 217-226.	1.8	13

#	ARTICLE	IF	CITATIONS
92	Enhanced binary exponential backoff algorithm for fair channel access in the <scp>ieee</scp> 802.11 medium access control protocol. International Journal of Communication Systems, 2014, 27, 4166-4184.	1.6	19
93	Maximal throughput routing with stability constraint in cognitive radio ad hoc networks. , 2014, , .		1
94	Dynamic Spectrum Access: Current state of the art and future challenges. , 2014, , .		2
95	Opportunistic access in frequency hopping cognitive radio networks. , 2014, , .		2
97	Adaptive spectrum searching in cognitive radio networks. , 2014, , .		0
98	Optimal Performance of Cognitive Random Access Networks With Multi-Packet Reception. IEEE Communications Letters, 2014, 18, 1807-1810.	2.5	1
99	A transparent spectrum co-access protocol for cognitive radio networks. , 2014, , .		1
100	A MAC protocol for implementing differential services over Cognitive Radio Networks. , 2014, , .		2
101	Bandwidth Reservation as a Coexistence Strategy in Opportunistic Spectrum Access Environments. IEEE Journal on Selected Areas in Communications, 2014, 32, 478-488.	9.7	7
102	Medium Access Control Protocols in Cognitive Radio Networks: Overview and General Classification. IEEE Communications Surveys and Tutorials, 2014, 16, 2092-2124.	24.8	67
103	Throughput performance of MIMO cognitive networks. , 2014, , .		2
104	Energy efficiency in cooperative cognitive wireless networks. , 2014, , .		4
105	Military training network with admission control using real-time analysis. , 2014, , .		1
107	A MAC protocol for link maintenance in multichannel cognitive radio ad hoc networks. Journal of Communications and Networks, 2015, 17, 172-183.	1.8	6
108	Experimenting With Commodity 802.11 Hardware: Overview and Future Directions. IEEE Communications Surveys and Tutorials, 2015, 17, 671-699.	24.8	22
109	Systematic construction of common channel hopping rendezvous strategies in cognitive radio networks. Eurasip Journal on Wireless Communications and Networking, 2015, 2015, .	1.5	13
110	Cognitive radio networks with asynchronous spectrum sensing and access. IEEE Network, 2015, 29, 88-95.	4.9	27
111	Distributed MAC for connectivity maximization of interference limited un-coordinated DSA networks. , 2015, , .		0

#	ARTICLE	IF	CITATIONS
112	Joint spectrum access and power allocation in full-duplex cognitive cellular networks. , 2015, , .		17
113	Scheduling in dynamic spectrum access networks using graph coloring. , 2015, , .		0
114	A double-stage reservation-based MAC scheme for distributed cognitive radio networks. , 2015, , .		0
115	Load estimation and balancing in heterogeneous wireless networks with cognitive small cells. , 2015, , .		1
116	Geolocation database-assisted QoS-aware cognitive network architecture. , 2015, , .		4
117	An optimal scheduling framework for concurrent transmissions in wireless cognitive radio networks. Telecommunication Systems, 2015, 60, 169-177.	1.6	8
118	LASAR: Spectrum aware routing protocol for cognitive radio wireless networks. , 2015, , .		2
119	A novel protocol for transparent and simultaneous spectrum access between the secondary user and the primary user in cognitive radio networks. Computer Communications, 2015, 69, 98-106.	3.1	28
120	Cognitive Radio Techniques Under Practical Imperfections: A Survey. IEEE Communications Surveys and Tutorials, 2015, 17, 1858-1884.	24.8	179
121	Energy efficient cognitive radio MAC protocol for battlefield communications. , 2015, , .		1
122	Group-based cognitive radio network formation without common channels. IET Networks, 2015, 4, 235-246.	1.1	2
123	Lightweight distributed geographical: a lightweight distributed protocol for virtual clustering in geographical forwarding cognitive radio sensor networks. International Journal of Communication Systems, 2015, 28, 1-18.	1.6	9
124	CORHYS: Hybrid signaling for opportunistic distributed cognitive radio. Computer Networks, 2015, 81, 19-42.	3.2	2
125	Proactive channel access in cognitive radio networks using statistical radio environment maps. Eurasip Journal on Wireless Communications and Networking, 2015, 2015, .	1.5	1
126	A Survey of MAC Protocols for Cognitive Radio Body Area Networks. Sensors, 2015, 15, 9189-9209.	2.1	24
127	Towards energy-efficient cooperative spectrum sensing for cognitive radio networks: an overview. Telecommunication Systems, 2015, 59, 77-91.	1.6	218
128	A non-preemptive mac protocol for multi-channel cognitive radio networks. , 2015, , .		1
129	Distributed channel access schemes for multi-channel ALOHA cognitive radio networks. , 2015, , .		0

#	ARTICLE	IF	CITATIONS
130	On the performance of decentralized CR MAC protocols under heterogeneous channel sensing conditions. , 2015, , .		1
131	Using Cognitive Radio for Interference-Resistant Industrial Wireless Sensor Networks: An Overview. IEEE Transactions on Industrial Informatics, 2015, 11, 1466-1481.	7.2	127
132	Distributed Algorithms for Sharing Spectrum Sensing Information in Cognitive Radio Networks. IEEE Transactions on Wireless Communications, 2015, 14, 4667-4678.	6.1	16
133	Proactive spectrum handoff protocol for cognitive radio ad hoc network and analytical evaluation. IET Communications, 2015, 9, 1877-1884.	1.5	21
134	A MAC level strategy for dynamic resource allocation in Cognitive Radio tactical networks. , 2015, , .		0
135	Channel-Aware Medium Access Control in Multichannel Cognitive Radio Networks. IEEE Communications Letters, 2015, 19, 1710-1713.	2.5	8
136	A cooperative attack detection scheme for common control channel security in cognitive radio networks. , 2015, , .		0
137	Distributed multiple access in multichannel cognitive radio networks via potential games. , 2015, , .		0
138	Integration of Cognitive Radio Technology with unmanned aerial vehicles: Issues, opportunities, and future research challenges. Journal of Network and Computer Applications, 2015, 50, 15-31.	5.8	174
139	Modeling and Analysis Framework for Multi-Interface Multi-Channel Cognitive Radio Networks. IEEE Transactions on Wireless Communications, 2015, 14, 935-947.	6.1	20
140	Access Delay of Cognitive Radio Networks Based on Asynchronous Channel-Hopping Rendezvous and CSMA/CA MAC. IEEE Transactions on Vehicular Technology, 2015, 64, 1105-1119.	3.9	25
141	Joint Relay Scheduling, Channel Access, and Power Allocation for Green Cognitive Radio Communications. IEEE Journal on Selected Areas in Communications, 2015, 33, 922-932.	9.7	37
142	Medium Access Control Protocols in Cognitive Radio Networks. Signals and Communication Technology, 2015, , 109-149.	0.4	1
143	Throughput-Optimal Cross-Layer Design for Cognitive Radio Ad Hoc Networks. IEEE Transactions on Parallel and Distributed Systems, 2015, 26, 2599-2609.	4.0	23
144	Automated spectrum trading mechanisms: understanding the big picture. Wireless Networks, 2015, 21, 685-708.	2.0	15
145	Scheduling and routing methods for cognitive radio sensor networks in regular topology. Wireless Communications and Mobile Computing, 2016, 16, 47-58.	0.8	5
146	Radio Resource Allocation Techniques for Efficient Spectrum Access in Cognitive Radio Networks. IEEE Communications Surveys and Tutorials, 2016, 18, 824-847.	24.8	173
147	Cognitive radio networks and spectrum sharing. , 2016, , 467-522.		4

#	ARTICLE	IF	CITATIONS
148	CH-CSMA-CA: a MAC protocol for asynchronous channel hopping rendezvous in 802.11 DCF-based cognitive radio networks. International Journal of Autonomous and Adaptive Communications Systems, 2016, 9, 71.	0.2	2
149	Performance of Cognitive Stop-and-Wait Hybrid Automatic Repeat Request in the Face of Imperfect Sensing. IEEE Access, 2016, 4, 5489-5508.	2.6	25
150	OMNET++ based cognitive radio simulation network. , 2016, , .		2
151	Capacity analysis of CSMA/CA based wireless networks under coexisting heterogeneous devices. , 2016, , .		0
152	Performance of Cognitive Selective-Repeat Hybrid Automatic Repeat Request. IEEE Access, 2016, 4, 9828-9846.	2.6	9
153	Modelling and performance analysis of RF energy harvesting cognitive radio networks. , 2016, , .		1
154	Cognitive Radio Algorithms Coexisting in a Network: Performance and Parameter Sensitivity. IEEE Transactions on Cognitive Communications and Networking, 2016, 2, 381-396.	4.9	6
155	Reliability-based cooperative spectrum sensing algorithm in cognitive radio networks. , 2016, , .		4
156	Scheduling in Dynamic Spectrum Access Networks: Throughput and Fairness Tradeoffs. , 2016, , .		0
157	Throughput and Delay Analysis of Cognitive Go-Back-N Hybrid Automatic Repeat reQuest Using Discrete-Time Markov Modelling. IEEE Access, 2016, 4, 9659-9680.	2.6	8
158	Performance analysis of a novel decentralised MAC protocol for cognitive radio networks. , 2016, , .		4
159	Analysis of asynchronous cognitive radio system with imperfect sensing and bursty primary user traffic. Signal, Image and Video Processing, 2016, 10, 593-600.	1.7	4
160	Exploiting group structure in MAC protocol design for multichannel ad hoc Cognitive Radio Networks. , 2016, , .		1
161	A load-balancing semi-matching approach for resource allocation in cognitive radio networks. , 2016, , .		5
162	A Novel Reservation-based MAC Scheme for Distributed Cognitive Radio Networks. IEEE Transactions on Vehicular Technology, 2016, , 1-1.	3.9	5
163	Stackelberg game-based precoding and power allocation for spectrum auction in fractional frequency reuse cognitive cellular systems. Eurasip Journal on Wireless Communications and Networking, 2016, 2016, , .	1.5	1
164	Spectrum sharing methods for the coexistence of multiple RF systems: A survey. Ad Hoc Networks, 2016, 53, 53-78.	3.4	32
165	An Optimized Hybrid Approach for Spectrum Handoff in Cognitive Radio Networks With Non-Identical Channels. IEEE Transactions on Communications, 2016, 64, 4487-4496.	4.9	29

#	ARTICLE	IF	CITATIONS
166	Dynamic control channel MAC for underwater cognitive acoustic networks. , 2016, , .		11
167	Clustering based cognitive MAC protocol for channel allocation to prioritize safety message dissemination in vehicular ad-hoc network. Vehicular Communications, 2016, 5, 44-54.	2.7	29
168	Cognitive radio for M2M and Internet of Things: A survey. Computer Communications, 2016, 94, 1-29.	3.1	194
169	Differentiated Access Mechanism in Cognitive Radio Networks with Energy-Harvesting Nodes. Wireless Personal Communications, 2016, 90, 2051-2071.	1.8	0
170	Cross talk MAC: A directional MAC scheme for enhancing frame aggregation in mm-Wave wireless personal area networks. , 2016, , .		2
171	Throughput Analysis for the Cognitive Uplink Under Limited Primary Cooperation. IEEE Transactions on Communications, 2016, 64, 2780-2796.	4.9	3
172	Attack Detection Scheme Against Cooperative Spectrum Sensing Data Falsification on Common Control Channel in Cognitive Radio Networks. Wireless Personal Communications, 2016, 88, 871-896.	1.8	1
173	Energy-Efficient Cooperative Spectrum Sensing: A Survey. IEEE Communications Surveys and Tutorials, 2016, 18, 1861-1886.	24.8	136
174	Quality-of-service-aware weighted-fair medium access control protocol for coexisting cognitive radio networks. Eurasip Journal on Wireless Communications and Networking, 2016, 2016, .	1.5	4
175	An Optimal Cross-Layer Framework for Cognitive Radio Network Under Interference Temperature Model. IEEE Systems Journal, 2016, 10, 293-301.	2.9	30
176	DCCC-MAC: A Dynamic Common-Control-Channel-Based MAC Protocol for Cellular Cognitive Radio Networks. IEEE Transactions on Vehicular Technology, 2016, 65, 3597-3613.	3.9	44
177	Performance study of a CSMA based multiuser MAC protocol for cognitive radio networks: analysis of channel utilization and opportunity perspective. Wireless Networks, 2016, 22, 33-47.	2.0	2
178	Energy Efficiency Versus Performance in Cognitive Wireless Networks. IEEE Journal on Selected Areas in Communications, 2016, 34, 1336-1347.	9.7	19
179	Application of Compressive Sensing in Cognitive Radio Communications: A Survey. IEEE Communications Surveys and Tutorials, 2016, 18, 1838-1860.	24.8	183
180	eDSA: Energy-Efficient Dynamic Spectrum Access Protocols for Cognitive Radio Networks. IEEE Transactions on Mobile Computing, 2016, 15, 3057-3071.	3.9	32
181	A Survey of Channel Bonding for Wireless Networks and Guidelines of Channel Bonding for Futuristic Cognitive Radio Sensor Networks. IEEE Communications Surveys and Tutorials, 2016, 18, 924-948.	24.8	119
182	On the feasibility of synchronous, retransmission-based cognitive networks. Ad Hoc Networks, 2016, 36, 398-406.	3.4	1
183	Goodput maximization in opportunistic spectrum access networks under constraints on the inter-packet transmission waiting time. Ad Hoc Networks, 2016, 38, 19-37.	3.4	1

#	ARTICLE	IF	CITATIONS
184	Cognitive Radio for Smart Grids: Survey of Architectures, Spectrum Sensing Mechanisms, and Networking Protocols. IEEE Communications Surveys and Tutorials, 2016, 18, 860-898.	24.8	285
185	CogMAC+: A decentralized MAC protocol for opportunistic spectrum access in cognitive wireless networks. Computer Communications, 2016, 79, 22-36.	3.1	7
187	Group buying spectrum auction algorithm for fractional frequency reuse cognitive cellular systems. Ad Hoc Networks, 2017, 58, 239-246.	3.4	52
188	Receiver-Initiated Spectrum Management for Underwater Cognitive Acoustic Network. IEEE Transactions on Mobile Computing, 2017, 16, 198-212.	3.9	34
189	An overview of medium access control strategies for opportunistic spectrum access in cognitive radio networks. Peer-to-Peer Networking and Applications, 2017, 10, 1113-1141.	2.6	32
190	Network Coding in Cognitive Radio Networks: A Comprehensive Survey. IEEE Communications Surveys and Tutorials, 2017, 19, 1945-1973.	24.8	69
191	Delay and Throughput Analysis of Cognitive Go-Back-N HARQ in the Face of Imperfect Sensing. IEEE Access, 2017, 5, 7454-7473.	2.6	12
192	Location Privacy in Cognitive Radio Networks: A Survey. IEEE Communications Surveys and Tutorials, 2017, 19, 1726-1760.	24.8	46
193	Cognitive channel selection and scheduling for multi-channel dynamic spectrum access networks considering QoS levels. Ad Hoc Networks, 2017, 62, 22-34.	3.4	10
194	Spectrum Section Preallocation for Cooperative Sensing and Transmission in Cognitive Radio Ad Hoc Networks. IEEE Transactions on Vehicular Technology, 2017, 66, 8910-8925.	3.9	7
195	Energy-efficient target channel sequence design for spectrum handoffs in Cognitive radio networks. China Communications, 2017, 14, 207-217.	2.0	2
196	Full-Duplex Communication in Cognitive Radio Networks: A Survey. IEEE Communications Surveys and Tutorials, 2017, 19, 2158-2191.	24.8	159
197	From Sensing to Predictions and Database Technique: A Review of TV White Space Information Acquisition in Cognitive Radio Networks. Wireless Personal Communications, 2017, 96, 6473-6502.	1.8	4
198	Cluster-Based Control Information Exchange in Multi-Channel Ad Hoc Networks With Spectrum Heterogeneity. IEEE Access, 2017, 5, 2720-2735.	2.6	3
199	Throughput improvement by disruption-suppressed channel switching in multi-channel ad-hoc networks. , 2017, , .		1
200	Performance study of dedicated in-band Control Channels for Cognitive Radio Networks. , 2017, , .		1
202	Queue-aware opportunistic scheduling in multi-channel dynamic spectrum access networks. , 2017, , .		1
203	A Novel Statistical Multi-Channel Busy Recognition Mechanism in the MAC Layer for Airborne Tactical Networks. IEEE Access, 2017, 5, 19662-19667.	2.6	10

#	ARTICLE	IF	CITATIONS
204	Exclusive Use Spectrum Access Trading Models in Cognitive Radio Networks: A Survey. IEEE Communications Surveys and Tutorials, 2017, 19, 2192-2231.	24.8	65
205	Resource Allocation for Underlay Cognitive Radio Networks: A Survey. IEEE Communications Surveys and Tutorials, 2017, 19, 1249-1276.	24.8	190
206	Advances on Spectrum Sensing for Cognitive Radio Networks: Theory and Applications. IEEE Communications Surveys and Tutorials, 2017, 19, 1277-1304.	24.8	439
207	Fast Node Cardinality Estimation and Cognitive MAC Protocol Design for Heterogeneous M2M Networks. , 2017, , .		5
208	A dynamic spectrum allocation for the military cognitive radio network using evolutionary algorithm. , 2017, , .		1
209	Preemptive priority mechanism with hybrid spectrum sensing for cognitive radio networks. , 2017, , .		0
210	Joint resource allocation for multi-homing and single-network users in heterogeneous cognitive radio networks. , 2017, , .		2
211	Taxonomy of security attacks and threats in cognitive radio networks. , 2017, , .		6
212	Distributed scheduling in multi-hop multi-band cognitive radio networks utilizing potential fields. , 2017, , .		0
213	Interference MAC: Impact of improper Gaussian signaling on the rate region Pareto boundary. , 2017, , .		3
214	Energy efficient routing protocols for wireless sensor networks: comparison and future directions. MATEC Web of Conferences, 2017, 140, 01005.	0.1	2
215	Performance Evaluation of NP and ML Based Spectrum Sensing in FDCRN under Small Scale Fading Scenario. , 2017, , .		3
216	Cognitive radio DAB MAC protocol performance using a CR specific simulator and Software Defined Radio. , 2017, , .		1
217	Medium Access Control Protocols for Cognitive Radio Ad Hoc Networks: A Survey. Sensors, 2017, 17, 2136.	2.1	20
218	Performance Analysis and Optimization for Cognitive Radio Networks with Classified Secondary Users and Impatient Packets. Mobile Information Systems, 2017, 2017, 1-8.	0.4	6
219	An Ultra-Wide Overlay Cognitive Radio System for Wireless Backhauling for Small Cells. , 2017, , .		2
220	State-of-the-Art Medium Access Control (MAC) Protocols for Underwater Acoustic Networks: A Survey Based on a MAC Reference Model. IEEE Communications Surveys and Tutorials, 2018, 20, 96-131.	24.8	125
221	A Fair Multi-Channel Assignment Algorithm With Practical Implementation in Distributed Cognitive Radio Networks. IEEE Access, 2018, 6, 14255-14267.	2.6	50

#	ARTICLE	IF	CITATIONS
222	Formation of Cognitive Personal Area Networks (CPANs) Using Probabilistic Rendezvous. IEEE Transactions on Vehicular Technology, 2018, 67, 1635-1648.	3.9	1
223	Bayesian-based Distributed Sequential Decision In Rail Transit Cognitive Radio. Procedia Computer Science, 2018, 129, 382-388.	1.2	2
224	Wireless Multimedia Cognitive Radio Networks: A Comprehensive Survey. IEEE Communications Surveys and Tutorials, 2018, 20, 1056-1103.	24.8	141
225	Prediction-Based Spectrum Management in Cognitive Radio Networks. IEEE Systems Journal, 2018, 12, 3303-3314.	2.9	38
226	Co-SpOT: Cooperative Spectrum Opportunity Detection Using Bayesian Clustering in Spectrum-Heterogeneous Cognitive Radio Networks. IEEE Transactions on Cognitive Communications and Networking, 2018, 4, 206-219.	4.9	18
227	A New Probabilistic Target Channel Selection Approach for Load Balancing in Cognitive Radio Networks. IEEE Transactions on Cognitive Communications and Networking, 2018, 4, 43-52.	4.9	12
228	Design and Performance Analysis of Multichannel MAC Protocol for Cognitive WLAN. IEEE Transactions on Vehicular Technology, 2018, 67, 5317-5330.	3.9	17
229	Control channel selection techniques in cognitive radio networks: A comparative performance analysis. Journal of Communications and Networks, 2018, 20, 57-68.	1.8	6
230	Predictive medium access control for industrial cognitive radio. , 2018, , .		2
231	Queue based scheduling in single and multi channel dynamic spectrum access networks. Pervasive and Mobile Computing, 2018, 46, 73-95.	2.1	5
232	Hybrid data dissemination protocol (HDDP) for wireless sensor networks. Wireless Networks, 2018, 24, 1739-1754.	2.0	8
233	A distributed spectrum handoff MSRVP protocol for the cognitive radio ad hoc networks. Wireless Networks, 2018, 24, 1831-1839.	2.0	1
234	Design and Performance Analysis of Cognitive WLAN MAC Protocol. IEEE Systems Journal, 2018, 12, 2261-2272.	2.9	3
235	Spectrum Inference in Cognitive Radio Networks: Algorithms and Applications. IEEE Communications Surveys and Tutorials, 2018, 20, 150-182.	24.8	138
236	Security threats and countermeasures of MAC layer in cognitive radio networks. Ad Hoc Networks, 2018, 70, 85-102.	3.4	30
237	Cooperative control feedback: On backoff misbehavior of CSMA/CA MAC in channel-hopping cognitive radio networks. Journal of Communications and Networks, 2018, 20, 523-535.	1.8	8
238	Broadcast Storm Mitigation of ESMs Using Spectrum Sharing in Cognitive Radio VANETs. , 2018, , .		2
239	MSHCS-MAC: A MAC protocol for Multi-hop cognitive radio networks based on Slow Hopping and Cooperative Sensing approach. , 2018, , .		2

#	ARTICLE	IF	CITATIONS
240	A Survey of Deep Learning for Tactical Wireless Networks. , 2018, , .		2
241	A Review of Medium Access Control Protocols in Cognitive Radio Networks. , 2018, , .		3
242	Recent Advances in Wireless Sensor Network Routing Protocols: An Energy Efficiency Perspective. , 2018, , .		3
243	Queueing Analysis of Performance Measures Under a New Configurable Channel Allocation in Cognitive Radio. IEEE Transactions on Vehicular Technology, 2018, 67, 9571-9582.	3.9	8
244	Efficient idle channel discovery mechanism through cooperative parallel sensing in cognitive radio network. Eurasip Journal on Wireless Communications and Networking, 2018, 2018, .	1.5	4
245	Fuzzy logic based channel ranking for CR-MANET. , 2018, , .		2
246	Adaptive Spectrum Sharing for Half-Duplex and Full-Duplex Cognitive Radios: From the Energy Efficiency Perspective. IEEE Transactions on Communications, 2018, 66, 5067-5080.	4.9	32
247	Enhancing throughput in multi-radio cognitive radio networks. Wireless Networks, 2019, 25, 4383-4402.	2.0	2
248	Bayesian Sequential Learning for Railway Cognitive Radio. Promet - Traffic - Traffico, 2019, 31, 141-149.	0.3	1
249	Multichannel MAC protocol with dynamic backoff contention for distributed cognitive radio networks. Eurasip Journal on Wireless Communications and Networking, 2019, 2019, .	1.5	4
250	Progression on spectrum sensing for cognitive radio networks: A survey, classification, challenges and future research issues. Journal of Network and Computer Applications, 2019, 143, 47-76.	5.8	101
251	Sense-and-Predict: Harnessing Spatial Interference Correlation for Cognitive Radio Networks. IEEE Transactions on Wireless Communications, 2019, 18, 2777-2793.	6.1	14
252	Q-learning Based Network Selection Mechanism for CRNs with Secrecy Provisioning. , 2019, , .		2
253	Performance analysis of Decentralized MAC protocol in Cognitive Radio networks. , 2019, , .		2
254	Energy and spectral efficient SMC-MAC protocol in distributed cognitive radio networks. IET Communications, 2019, 13, 2705-2713.	1.5	4
255	Image Transmission over Cognitive Radio Networks for Smart Grid Applications. Applied Sciences (Switzerland), 2019, 9, 5498.	1.3	10
256	Estimator-Correlator based Spectrum Sensing with PU Signal Uncertainty in Full Duplex CRNs. , 2019, , .		2
257	Exploiting Group Structure in MAC Protocol Design for Multichannel Ad Hoc Cognitive Radio Networks. IEEE Transactions on Vehicular Technology, 2019, 68, 893-907.	3.9	8

#	ARTICLE	IF	CITATIONS
258	Design of CR-OFDM in 900MHz Band. Lecture Notes on Data Engineering and Communications Technologies, 2019, , 431-442.	0.5	0
259	Machine Learning-Based Algorithm for Channel Selection Utilizing Preemptive Resume Priority in Cognitive Radio Networks Validated by NS-2. Circuits, Systems, and Signal Processing, 2020, 39, 1038-1058.	1.2	12
260	Misbehavior in Multi-Channel MAC Protocols. IEEE Transactions on Dependable and Secure Computing, 2020, 17, 760-774.	3.7	1
261	Orchestration of heterogeneous wireless networks: State of the art and remaining challenges. Computer Communications, 2020, 149, 62-77.	3.1	12
262	Cross-layer perspective for channel assignment in cognitive radio networks: A survey. International Journal of Communication Systems, 2020, 33, e4261.	1.6	8
263	Spectrum-aware cross-layered routing protocol for cognitive radio ad hoc networks. Computer Communications, 2020, 164, 249-260.	3.1	11
264	Secure Cooperative Spectrum Sensing Strategy Based on Reputation Mechanism for Cognitive Wireless Sensor Networks. IEEE Access, 2020, 8, 131361-131369.	2.6	14
265	Research on A New Media Access Control Protocol. , 2020, , .		0
266	Survey on Wireless Networks Coexistence: Resource Sharing in the 5G Era. Mobile Networks and Applications, 2020, 25, 1749-1764.	2.2	16
267	Fast node cardinality estimation and cognitive MAC protocol design for heterogeneous machine-to-machine networks. Wireless Networks, 2020, 26, 3929-3952.	2.0	3
268	A localized algorithm for clustering in cognitive radio networks. Journal of King Saud University - Computer and Information Sciences, 2021, 33, 600-607.	2.7	18
269	Stochastic approach for channel selection in cognitive radio networks using optimization techniques. Telecommunication Systems, 2021, 76, 167-186.	1.6	4
270	Energy preservation and network critic based channel scheduling (EPNCS) in cognitive radio sensor networks. International Journal of Information Technology (Singapore), 2021, 13, 69-81.	1.8	5
271	A Review on SDR, Spectrum Sensing, and CR-based IoT in Cognitive Radio Networks. International Journal of Advanced Computer Science and Applications, 2021, 12, .	0.5	5
272	Random Multiple Access With Hierarchical Users. IEEE Transactions on Wireless Communications, 2021, 20, 6622-6633.	6.1	1
273	A Review on Modern Spectrum Sensing and Assignment Techniques in CRN. International Journal of Scientific Research in Science and Technology, 2021, , 171-181.	0.1	2
275	MAC Protocol for Quality-Aware Real-Time Voice Delivery in Cognitive Radio-Enabled WSNs. International Journal of Distributed Sensor Networks, 2015, 2015, 1-10.	1.3	2
276	A MAC Protocol for CR-WSN without a Dedicated Common Control Channel. International Journal of Distributed Sensor Networks, 2015, 11, 982408.	1.3	2

#	ARTICLE	IF	CITATIONS
277	Spectrum Sharing Security and Attacks in CRNs: a Review. International Journal of Advanced Computer Science and Applications, 2014, 5, .	0.5	13
278	Performance Evaluation of the Centralized Spectrum Access Strategy with Multiple Input Streams in Cognitive Radio Networks. IEICE Transactions on Communications, 2014, E97.B, 334-342.	0.4	5
279	Medium Access Control Design for Cognitive Radio Networks: A Survey. IEICE Transactions on Communications, 2014, E97.B, 359-374.	0.4	13
280	Cooperative Message Broadcasting in Multichannel Cognitive Radio Ad Hoc Networks. IEICE Transactions on Fundamentals of Electronics, Communications and Computer Sciences, 2013, E96.A, 2099-2105.	0.2	3
282	Cognitive Radio Networks. Advances in Wireless Technologies and Telecommunication Book Series, 2019, , 491-518.	0.3	6
283	Optimal Admission Control and State Space Reduction in Two-Class Preemptive Loss Systems. ETRI Journal, 2015, 37, 917-921.	1.2	4
284	Multi-channel MAC Protocol in Cognitive Radio Networks. Journal of Networks, 2013, 8, .	0.4	5
285	The Life Cycle of the Rendezvous Problem of Cognitive Radio Ad Hoc Networks: A Survey. Journal of Computing Science and Engineering, 2013, 7, 81-88.	0.3	28
286	Freemium Spectrum Sharing and Pricing. , 2021, , .		1
287	On Using Multi Agent Systems in Cognitive Radio Networks: A Survey. International Journal of Wireless and Mobile Networks, 2012, 4, 1-16.	0.1	6
288	A Dual-Band MAC Protocol for Indoor Cognitive Radio Networks: An e-Health Case Study. , 2013, , .		2
289	A MAC Protocol for Transmission Power Control in Ad Hoc Networks. Journal of the Korea Academia-Industrial Cooperation Society, 2013, 14, 878-884.	0.0	1
290	Mobile Cyber-Physical Systems. , 2013, , 21-32.		0
292	Distortion-Aware Dynamic Channel Allocation for Multimedia Users in Cognitive Radios. IEICE Transactions on Communications, 2014, E97.B, 2790-2799.	0.4	1
293	Adaptive Sensing Period Based Distributed Medium Access Control for Cognitive Radio Networks. IEICE Transactions on Communications, 2014, E97.B, 2502-2511.	0.4	4
294	Performance Evaluation of MAC Protocols with Application to MANET Routing for Distributed Cognitive Radio Networks. KIPS Transactions on Computer and Communication Systems, 2014, 3, 97-106.	0.1	0
295	Active Mechanism Network Coding Algorithm based on Multi-channel Sensing. Journal of Networks, 2014, 9, .	0.4	0
296	Design of Probabilistic Random Access in Cognitive Radio Networks. Lecture Notes of the Institute for Computer Sciences, Social-Informatics and Telecommunications Engineering, 2015, , 696-707.	0.2	1

#	ARTICLE	IF	CITATIONS
297	Tunable RF Front-Ends and Robust Sensing Algorithms for Cognitive Radio Receivers. <i>Advances in Wireless Technologies and Telecommunication Book Series</i> , 2015, , 68-99.	0.3	0
298	Analysis and optimization of a gated polling based spectrum allocation mechanism in cognitive radio networks. <i>Journal of Industrial and Management Optimization</i> , 2015, 12, 687-702.	0.8	1
299	Multimedia Communication in Cognitive Radio Ad Hoc and Sensor Networks. , 2015, , 53-94.		0
300	Opportunistic Communication Spectra Utilization. <i>Springer Briefs in Electrical and Computer Engineering</i> , 2016, , 9-27.	0.3	2
301	Computer Simulation of Average Channel Access Delay in Cognitive Radio Network. <i>Communications in Computer and Information Science</i> , 2016, , 325-336.	0.4	1
303	Design and Implementation of Distributed Cognitive Medium Access Control Protocol for Multi-hop Mobile Ad Hoc Network with Single Transceiver. , 2017, , .		0
304	Medium Access Control Protocol for the Distributed Cognitive Radio Network. , 2017, , 77-104.		0
305	Throughput Enhancement Using Bandwidth Wastage in MAC Protocol of the Distributed Cognitive Radio Network. , 2017, , 131-143.		0
306	A SURVEY OF CONTENTION BASED MEDIUM ACCESS CONTROL (MAC) PROTOCOLS IN WIRELESS LAN. <i>International Journal of Research in Engineering and Technology</i> , 2017, 6, 39-45.	0.1	1
308	Taxonomy for the Resource Allocation in CRNs. <i>Springer Briefs in Electrical and Computer Engineering</i> , 2019, , 41-58.	0.3	0
309	A Study on Multi-agent Systems in Cognitive Radio. <i>Advances in Intelligent Systems and Computing</i> , 2019, , 515-527.	0.5	1
310	MAC in Cognitive Radio Networks. , 2020, , 737-740.		0
311	MAC Layer Spectrum Sensing in Cognitive Radio Networks. , 0, , 210-230.		0
312	Communication-Aware Consensus-Based Decentralized Task Allocation in Communication Constrained Environments. <i>IEEE Access</i> , 2022, 10, 19753-19767.	2.6	7
313	Resource Pre-allocation for Cooperative Sensing to Achieve End-to-end Delay Fairness in CRNs. , 2020, , .		0
314	Multi-Tag Selection in Cognitive Ambient Backscatter Communications for Next-Generation IoT Networks. <i>Wireless Communications and Mobile Computing</i> , 2022, 2022, 1-12.	0.8	1
315	A Comprehensive Study of Past, Present, and Future of Spectrum Sharing and Information Embedding Techniques in Joint Wireless Communication and Radar Systems. <i>Wireless Communications and Mobile Computing</i> , 2022, 2022, 1-25.	0.8	5
316	Pricing Policy for a Dynamic Spectrum Allocation Scheme with Batch Requests and Impatient Packets in Cognitive Radio Networks. <i>Journal of Systems Science and Systems Engineering</i> , 2022, 31, 133-149.	0.8	53

#	ARTICLE	IF	CITATIONS
317	A hybrid spectrum access approach for efficient channel allocation and power control in cognitive radio networks. <i>International Journal of Communication Systems</i> , 2022, 35, .	1.6	1
319	An Analytical Framework for Cooperative Cognitive Radio Network for Spectrum Leasing/Sharing. <i>SSRN Electronic Journal</i> , 0, , .	0.4	0
320	Channel-Hopping Sequence and Rendezvous MAC for Cognitive Radio Networks. <i>Sensors</i> , 2022, 22, 5949.	2.1	2
321	Channel hopping for blind rendezvous in cognitive radio networks: A review. <i>Computer Communications</i> , 2022, 195, 82-98.	3.1	5
322	Maximizing Stable Throughput in Age of Information-Based Cognitive Radio. , 2022, , .		0
323	On the Medium Access Control Protocols Suitable for Wireless Sensor Networks – A Survey. , 2014, 6, .		3
324	A study on the channel bonding in IoT networks: Requirements, applications, and challenges. <i>International Journal of Communication Systems</i> , 2023, 36, .	1.6	1
325	A comprehensive survey on heterogeneous cognitive radio networks. , 2023, , 149-178.		2
326	A Lightweight Authentication MAC Protocol for CR-WSNs. <i>Sensors</i> , 2023, 23, 2015.	2.1	2
327	Optimized MAC Protocol Using Fuzzy-Based Framework for Cognitive Radio AdHoc Networks. <i>IEEE Access</i> , 2023, 11, 27506-27518.	2.6	0