Karim G Seddik

List of Publications by Year
in descending order

144	1,783	567281 15	361022 35
papers	citations	h-index	g-index

146	146	146	1483
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	AoD-Adaptive Channel Feedback for FDD Massive MIMO Systems With Multiple-Antenna Users. IEEE Access, 2022, 10, 4431-4447.	4.2	3
2	On the Degrees of Freedom of IRS-Assisted Non-Coherent MIMO Communications. IEEE Communications Letters, 2022, 26, 1175-1179.	4.1	4
3	IRS-Assisted Physical Layer Network Coding Over Two-Way Relay Fading Channels. IEEE Transactions on Vehicular Technology, 2022, 71, 8424-8440.	6.3	6
4	Maximizing dirty-paper coding rate of RIS-assisted multi-user MIMO broadcast channels. Intelligent and Converged Networks, 2022, 3, 64-73.	4.8	3
5	On Spatial Multiplexing Using Reconfigurable Intelligent Surfaces. IEEE Wireless Communications Letters, 2021, 10, 226-230.	5.0	15
6	A Reinforcement Learning Approach to ARQ Feedback-based Multiple Access for Cognitive Radio Networks. , 2021, , .		2
7	Sample, Quantize, and Encode: Timely Estimation Over Noisy Channels. IEEE Transactions on Communications, 2021, 69, 6485-6499.	7.8	15
8	Feedback-Based Access Schemes in CR Networks: A Reinforcement Learning Approach. , 2021, , .		0
9	Mobility Load Management in Cellular Networks: A Deep Reinforcement Learning Approach. IEEE Transactions on Mobile Computing, 2021, , 1-1.	5.8	7
10	Deep Reinforcement Learning-based CIO and Energy Control for LTE Mobility Load Balancing. , 2021, , .		10
11	Optimized Power and Cell Individual Offset for Cellular Load Balancing via Reinforcement Learning. , 2021, , .		6
12	RIS Optimization on the Complex Circle Manifold for Interference Mitigation in Interference Channels. IEEE Transactions on Vehicular Technology, 2021, 70, 6184-6189.	6.3	22
13	Joint Transmitter-Receiver Optimization and Self-Interference Suppression in Full-Duplex MIMO Systems. IEEE Transactions on Vehicular Technology, 2021, 70, 6913-6929.	6.3	5
14	Effective capacity optimization for cognitive radio networks under primary QoS provisioning. Wireless Networks, 2020, 26, 2171-2190.	3.0	4
15	Hybrid ARQ-CQI Feedback-Based Access Scheme in Cognitive Radio Networks. IEEE Transactions on Cognitive Communications and Networking, 2020, 6, 728-739.	7.9	4
16	Differential Unitary Space-Time Constellations From Spherical Codes. IEEE Wireless Communications Letters, 2020, 9, 1909-1913.	5.0	4
17	Realistic Wireless Smart-Meter Network Optimization Using Composite RPL Metric. , 2020, , .		2
18	Timely Estimation Using Coded Quantized Samples. , 2020, , .		11

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19	A Machine-Learning-Based Technique for False Data Injection Attacks Detection in Industrial IoT. IEEE Internet of Things Journal, 2020, 7, 8462-8471.	8.7	91
20	Joint Resource Management With Distributed Uplink Power Control in Full-Duplex OFDMA Networks. IEEE Transactions on Vehicular Technology, 2020, 69, 2850-2863.	6.3	13
21	Cooperative Delay-Constrained Cognitive Radio Networks: Delay-Throughput Trade-Off With Relaying Full-Duplex Capability. IEEE Access, 2020, 8, 9157-9171.	4.2	4
22	Machine Learning-Based MIMO Enabling Techniques for Energy Optimization in Cellular Networks. , 2020, , .		3
23	A Machine Learning-Based Technique for the Classification of Indoor/Outdoor Cellular Network Clients. , 2020, , .		4
24	Load Balancing in Cellular Networks: A Reinforcement Learning Approach. , 2020, , .		12
25	Reconfigurable Intelligent Surfaces for Wireless Communications: Principles, Challenges, and Opportunities. IEEE Transactions on Cognitive Communications and Networking, 2020, 6, 990-1002.	7.9	389
26	Low-Complexity Semi-Blind Channel Estimation Algorithms for Vehicular Communications Using the IEEE 802.11p Standard. IEEE Transactions on Intelligent Transportation Systems, 2019, 20, 1739-1748.	8.0	14
27	Cooperative Delay-Constrained Cognitive Radio Networks: Throughput Maximization with Full-Duplex Capability Impact. Lecture Notes of the Institute for Computer Sciences, Social-Informatics and Telecommunications Engineering, 2019, , 180-194.	0.3	4
28	Prolonging smart grid network lifetime through optimising number of sensor nodes and packet length. IET Communications, 2019, 13, 2478-2484.	2.2	30
29	Noncoherent Frequency Shift Keying for Ambient Backscatter Over OFDM Signals. , 2019, , .		5
30	Multi-Resolution Multicasting Using Grassmannian Codes and Space Shift Keying. IEEE Transactions on Vehicular Technology, 2019, 68, 988-992.	6.3	3
31	Noncoherent Backscatter Communications Over Ambient OFDM Signals. IEEE Transactions on Communications, 2019, 67, 3597-3611.	7.8	55
32	On Timely Channel Coding with Hybrid ARQ. , 2019, , .		33
33	Noncoherent MIMO Codes Construction Using Autoencoders. , 2019, , .		2
34	Towards optimal resource allocation in wireless powered communication networks with non-orthogonal multiple access. Ad Hoc Networks, 2019, 85, 1-10.	5.5	18
35	Optimization of energy-constrained wireless powered communication networks with heterogeneous nodes. Wireless Networks, 2019, 25, 713-730.	3.0	15
36	Primary User-Aware Optimal Discovery Routing for Cognitive Radio Networks. IEEE Transactions on Mobile Computing, 2019, 18, 193-206.	5.8	13

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37	AoD-Adaptive Channel Feedback in FDD Massive MIMO Systems with Multiple-Antenna Users. , 2018, , .		2
38	Backscatter Communications Over Ambient OFDM Signals Using Null Subcarriers. , 2018, , .		15
39	Soft-Sensing CQI Feedback-Based Access Scheme in Cognitive Radio Networks. IEEE Transactions on Cognitive Communications and Networking, 2018, 4, 486-499.	7.9	4
40	Stable Throughput of Cooperative Cognitive Networks With Energy Harvesting: Finite Relay Buffer and Finite Battery Capacity. IEEE Transactions on Cognitive Communications and Networking, 2018, 4, 704-718.	7.9	4
41	Degrees of Freedom of the Full-Duplex Asymmetric MIMO 3-Way Channel with Unicast and Broadcast Messages. IEEE Transactions on Communications, 2017, , 1-1.	7.8	3
42	A Cooperative Scheme for the Coexistence of the LTE and WiFi Systems. , 2017, , .		4
43	Multi-Resolution Multicasting Over the Grassmann and Stiefel Manifolds. IEEE Transactions on Wireless Communications, 2017, 16, 5296-5310.	9.2	7
44	On the role of finite queues in cooperative cognitive radio networks with energy harvesting. , 2017, , .		1
45	Non-Orthogonal Multiple Access schemes in Wireless Powered Communication Networks. , 2017, , .		20
46	Cooperative D2D communication in downlink cellular networks with energy harvesting capability. , 2017, , .		7
47	An effective Stackelberg game for high-assurance of data trustworthiness in WSNs. , 2017, , .		25
48	Using Stackelberg game to enhance cognitive radio sensor networks security. IET Communications, 2017, 11, 1503-1511.	2.2	38
49	Optimizing Cooperative Cognitive Radio Networks Performance With Primary QoS Provisioning. IEEE Transactions on Communications, 2017, 65, 1451-1463.	7.8	15
50	Cooperation in multi-user wireless powered communication networks. , 2017, , .		3
51	Asymptotic Behavior Analysis and Performance Optimization in Full Duplex Massive MIMO. , 2017, , .		3
52	Crystallized Rate Regions for Full Duplex Enabled Small Cell Networks. , 2017, , .		1
53	Fault-tolerant PMU placement using algebraic connectivity of graphs. , 2017, , .		1
54	Using repeated game for maximizing high priority data trustworthiness in Wireless Sensor Networks. , 2017, , .		24

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55	Hierarchical coherent and non-coherent communication. , 2017, , .		1
56	Hybrid Feedback-Based Access Scheme for Cognitive Radio Systems. , 2017, , .		2
57	Non-coherent multi-layer constellations for unequal error protection. , 2017, , .		2
58	Topology realization using gain control for wireless testbeds. , 2016, , .		1
59	Game Theory Meets Wireless Sensor Networks Security Requirements and Threats Mitigation: A Survey. Sensors, 2016, 16, 1003.	3.8	86
60	Full Duplex in Massive MIMO Systems: Analysis and Feasibility. , 2016, , .		4
61	Asymmetric degrees of freedom of the full-duplex MIMO 3-way channel. , 2016, , .		5
62	Sparse spectrum sensing in infrastructure-less cognitive radio networks via binary consensus algorithms. , 2016, , .		2
63	Full-Duplex Meets Multiuser MIMO: Comparisons and Analysis. IEEE Transactions on Vehicular Technology, 2016, , 1-1.	6.3	12
64	Using Stackelberg game to enhance node protection in WSNs. , 2016, , .		20
65	Users association in small cell networks with massive MIMO. , 2016, , .		2
66	On optimizing cooperative cognitive user performance under primary QoS constraints. , 2016, , .		4
67	A systematic design approach for non-coherent Grassmannian constellations. , 2016, , .		7
68	On optimal policies in full-duplex wireless powered communication networks. , 2016, , .		13
69	PMUs placement with max-flow min-cut communication constraint in smart grids. , 2016, , .		1
70	Unequal error protection for impulsive noise channels in power line communications. , 2016, , .		0
71	Effective Capacity of Delay-Constrained Cognitive Radio Links Exploiting Primary Feedback. IEEE Transactions on Vehicular Technology, 2016, 65, 7334-7348.	6.3	18
72	Design of a Novel Wireless Communication Scheme that Jointly Supports Both Coherent and Non-Coherent Receivers. , 2016, , .		0

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73	Optimization of Wireless Powered Communication Networks with Heterogeneous Nodes. , 2015, , .		14
74	Cooperative MAC for Cognitive Radio Network with Energy Harvesting and Randomized Service Policy. , 2015, , .		5
75	Primary User Aware k-Hop Routing for Cognitive Radio Networks. , 2015, , .		2
76	Space-Time Block Codes over the Stiefel Manifold. , 2015, , .		0
77	Channel Estimation and Tracking Algorithms for Harsh Vehicle to Vehicle Environments. , 2015, , .		8
78	Jointly optimal power and rate allocation for layered broadcast over amplify-and-forward relay channels. , 2015, , .		1
79	Joint estimation-detection of cyber attacks in smart grids: Bayesian and non-Bayesian formulations. , 2015, , .		4
80	Mode selection, user pairing, subcarrier allocation and power control in full-duplex OFDMA HetNets. , 2015, , .		15
81	Effective Capacity and Delay Optimization in Cognitive Radio Networks. Lecture Notes of the Institute for Computer Sciences, Social-Informatics and Telecommunications Engineering, 2015, , 30-42.	0.3	1
82	A Collaborative Approach for Compressive Spectrum Sensing. Advances in Wireless Technologies and Telecommunication Book Series, 2015, , 153-178.	0.4	1
83	Adaptive low power detection of sparse events in wireless sensor networks. , 2014, , .		5
84	The design and implementation of a constrained WSN for permaculture farming in Egypt. , 2014, , .		2
85	A POMDP framework for cognitive MAC based on primary feedback exploitation. , 2014, , .		2
86	A feedback-soft sensing-based cognitive access scheme with feedback erasures. , 2014, , .		1
87	Layered coding with non-coherent and coherent layers over fading channels. , 2014, , .		0
88	A mixed-method approach to fault tolerance and management for resilient hierarchical routing. , 2014, , .		0
89	A probabilistic MAC for cognitive radio systems with energy harvesting nodes. , 2014, , .		2
90	On the stable throughput of cooperative cognitive radio networks with finite relaying buffer. , 2014, , .		11

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91	Multi-resolution broadcasting over the Grassmann and stiefel manifolds. , 2014, , .		5
92	Optimal power allocation for layered broadcast over amplify-and-forward relay channels. , 2014, , .		2
93	On the stability of random access with energy harvesting and collision resolution. , 2014, , .		6
94	On the stability of random multiple access with feedback exploitation and queue priority. , 2014, , .		5
95	Adaptive spectrum hole detection using Sequential Compressive Sensing. , 2014, , .		7
96	Power optimization for layered transmission over decode-and-forward relay channels. , 2014, , .		7
97	Pseudo-Lattice Treatment for Subspace Aligned Interference Signals. IEEE Transactions on Vehicular Technology, 2014, 63, 4729-4734.	6.3	1
98	A pricing-based cooperative spectrum sharing stackelberg game. , 2014, , .		3
99	Performance evaluation of censoring-enabled systems for sequential detection in large wireless sensor networks. , 2014, , .		1
100	Hierarchical prior zero-forcing for cognitive relaying. , 2014, , .		0
101	Optimization of Wireless Powered Communication Networks with Heterogeneous Nodes. , 2014, , .		0
102	Primary User Aware k-Hop Routing for Cognitive Radio Networks. , 2014, , .		1
103	Exploiting Temporal Correlation of Sparse Signals in Wireless Sensor Networks. , 2014, , .		2
104	Space-Time Block Codes over the Stiefel Manifold. , 2014, , .		0
105	Collaborative compressive spectrum sensing using kronecker sparsifying basis. , 2013, , .		11
106	A Feedback- Soft Sensing-Based Access Scheme for Cognitive Radio Networks. IEEE Transactions on Wireless Communications, 2013, 12, 3226-3237.	9.2	16
107	Coordinated partial co-channel deployment in two-layer networks. , 2013, , .		5
108	Generalized Instantly Decodable Network Coding for relay-assisted networks. , 2013, , .		2

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109	A spatial incremental relaying-based user transparent ARQ protocol. , 2013, , .		0
110	Opportunistic relaying with partial CSI and dynamic resource allocation. , 2013, , .		1
111	Performance and complexity comparison of near-optimal MIMO decoders. , 2013, , .		1
112	On the Tail-Biting Convolutional Code Decoder for the LTE and LTE-A standards'. , 2013, , .		1
113	Sparse reconstruction-based detection of spatial dimension holes in cognitive radio networks. , 2013, , .		3
114	Exploiting spatial spectrum holes in multiuser MIMO systems. , 2013, , .		0
115	Cognitive multiple access using soft sensing and secondary channel state information. , 2012, , .		0
116	On the ARQ protocols over the Z-interference channels: Diversity-multiplexing-delay tradeoff. , 2012, , .		2
117	Distributed Space-Frequency Coding for Cooperative Diversity Over Broadband Relay Channels With DF Relaying. IEEE Transactions on Vehicular Technology, 2012, 61, 3266-3272.	6.3	1
118	Spiky sea clutter and constant false alarm rate processing in high-resolution maritime radar systems. , 2012, , .		2
119	A modified joint processing technique for Coordinated Multi-Point Transmission in LTE-advanced. , 2012, , .		2
120	On the diversity gain region of the Z-interference channels. , 2012, , .		14
121	A feedback-based access scheme for cognitive-relaying networks. , 2012, , .		2
122	Censoring for Type-Based Multiple Access Scheme in Wireless Sensor Networks. , 2012, , .		3
123	Femtocells interference avoidance using Femtocell Identification. , 2011, , .		2
124	A feedback-based access scheme for cognitive radio systems. , 2011, , .		11
125	Censoring for improved performance of distributed detection in wireless sensor networks. , 2011, , .		3
126	Asymptotic Distortion Performance of Source-Channel Diversity over Multihop and Relay Channels. IEEE Transactions on Mobile Computing, 2010, 9, 270-287.	5.8	6

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127	Soft Sensing-Based Multiple Access for Cognitive Radio Networks. , 2010, , .		10
128	On the impact of correlation on distributed detection in wireless sensor networks with relays deployment. , 2009, , .		3
129	Connectivity-aware network maintenance and repair via relays deployment. IEEE Transactions on Wireless Communications, 2009, 8, 356-366.	9.2	25
130	Cooperative space-frequency coding for broadband relay channels. , 2009, , .		3
131	Design criteria and performance analysis for distributed space-time coding. IEEE Transactions on Vehicular Technology, 2008, 57, 2280-2292.	6.3	41
132	Distributed Space-Frequency Coding over Broadband Relay Channels. IEEE Transactions on Wireless Communications, 2008, 7, 4748-4759.	9.2	28
133	Trans-Modulation in Wireless Relay Networks. IEEE Communications Letters, 2008, 12, 170-172.	4.1	39
134	Distributed Space-Frequency Coding over Amplify-and-Forward Relay Channels. , 2008, , .		3
135	Connectivity-Aware Network Maintenance via Relays Deployment. , 2008, , .		2
136	On Relay Nodes Deployment for Distributed Detection in Wireless Sensor Networks. , 2008, , .		0
137	Asymptotic Distortion Performance of Source-Channel Diversity Schemes over Relay Channels. , 2008, , .		1
138	Synchronization-Aware Distributed Space-Time Codes in Wireless Relay Networks. , 2007, , .		0
139	Improving Connectivity via Relays Deployment in Wireless Sensor Networks. , 2007, , .		31
140	Distributed Space-Frequency Coding over Relay Channels. , 2007, , .		3
141	Distortion Exponents for Different Source-Channel Diversity Achieving Schemes over Multi-Hop Channels. , 2007, , .		6
142	Outage analysis and optimal power allocation for multinode relay networks. IEEE Signal Processing Letters, 2007, 14, 377-380.	3.6	165
143	WLC21-6: Protocol-Aware Design Criteria and Performance Analysis for Distributed Space-Time Coding. , 2006, , .		2
144	Outage analysis of multi-node amplify-and-forward relay networks. , 2006, , .		27