Tamer Khattab

List of Publications by Year
in descending order

171 papers	1,648 citations	516561 16 h-index	434063 31 g-index
173 all docs	173 docs citations	173 times ranked	1685 citing authors

#	ARTICLE	IF	CITATIONS
1	Design Challenges of Multi-UAV Systems in Cyber-Physical Applications: A Comprehensive Survey and Future Directions. IEEE Communications Surveys and Tutorials, 2019, 21, 3340-3385.	24.8	167
2	RF-based drone detection and identification using deep learning approaches: An initiative towards a large open source drone database. Future Generation Computer Systems, 2019, 100, 86-97.	4.9	144
3	DroneRF dataset: A dataset of drones for RF-based detection, classification and identification. Data in Brief, 2019, 26, 104313.	0.5	68
4	Smart and Secure Wireless Communications via Reflecting Intelligent Surfaces: A Short Survey. IEEE Open Journal of the Communications Society, 2020, 1, 1442-1456.	4.4	65
5	A Survey on Mobile Crowd-Sensing and Its Applications in the IoT Era. IEEE Access, 2019, 7, 3855-3881.	2.6	53
6	Deep Learning for RF-Based Drone Detection and Identification: A Multi-Channel 1-D Convolutional Neural Networks Approach. , 2020, , .		42
7	A review of mathematical model-based scenario analysis and interventions for COVID-19. Computer Methods and Programs in Biomedicine, 2021, 209, 106301.	2.6	37
8	Eigenvalue-Based Multiple Antenna Spectrum Sensing: Higher Order Moments. IEEE Transactions on Wireless Communications, 2017, 16, 1168-1184.	6.1	36
9	A Distributed Approach for Networked Flying Platform Association with Small Cells in 5G+ Networks. , 2017, , .		36
10	5G Networks Towards Smart and Sustainable Cities: A Review of Recent Developments, Applications and Future Perspectives. IEEE Access, 2022, 10, 2987-3006.	2.6	32
11	Secure Transmission of IoT mHealth Patient Monitoring Data from Remote Areas Using DTN. IEEE Network, 2020, 34, 226-231.	4.9	30
12	On spectrum sharing between energy harvesting cognitive radio users and primary users. , 2015, , .		29
13	Secure Spatial Multiple Access Using Directional Modulation. IEEE Transactions on Wireless Communications, 2018, 17, 563-573.	6.1	29
14	Unleashing the secure potential of the wireless physical layer: Secret key generation methods. Physical Communication, 2016, 19, 1-10.	1.2	25
15	Theoretical accuracy analysis of indoor visible light communication positioning system based on time-of-arrival. , 2016, , .		24
16	Design and Implementation of a RF Based Anti-Drone System. , 2020, , .		23
17	Association of networked flying platforms with small cells for network centric 5G+ C-RAN. , 2017, , .		22
18	Game Theory for Anti-Jamming Strategy in Multichannel Slow Fading IoT Networks. IEEE Internet of Things Journal, 2021, 8, 16880-16893.	5.5	22

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19	Reinforcement learning-based decision support system for COVID-19. Biomedical Signal Processing and Control, 2021, 68, 102676.	3.5	20
20	Secret Key Generation Based on AoA Estimation for Low SNR Conditions. , 2015, , .		19
21	On the Higher Order Statistics of the Channel Capacity in Dispersed Spectrum Cognitive Radio Systems Over Generalized Fading Channels. IEEE Transactions on Vehicular Technology, 2016, 65, 3818-3823.	3.9	19
22	Deep Reinforcement Learning Powered IRS-Assisted Downlink NOMA. IEEE Open Journal of the Communications Society, 2022, 3, 729-739.	4.4	19
23	Statistics of general order selection in correlated Nakagami fading channels. IEEE Transactions on Communications, 2008, 56, 344-346.	4.9	18
24	Non-data-aided SNR estimation for QPSK modulation in AWGN channel. , 2014, , .		18
25	On the Performance of Quickest Detection Spectrum Sensing: The Case of Cumulative Sum. IEEE Communications Letters, 2020, 24, 739-743.	2.5	17
26	Optical CDMA for All-Optical Sub-Wavelength Switching in Core GMPLS Networks. IEEE Journal on Selected Areas in Communications, 2007, 25, 905-921.	9.7	16
27	Characterization of the indoor-outdoor radio propagation channel at 2.4 GHz. , 2011, , .		16
28	Maximum throughput of a cooperative energy harvesting cognitive radio user. , 2014, , .		15
29	Energy Detection Spectrum Sensing in Full-Duplex Cognitive Radio: The Practical Case of Rician RSI. IEEE Transactions on Communications, 2019, 67, 6544-6555.	4.9	15
30	Carrier Aggregation for Cooperative Cognitive Radio Networks. IEEE Transactions on Vehicular Technology, 2017, 66, 5904-5918.	3.9	14
31	Power Budgeting of LEO Satellites: An Electrical Power System Design for 5G Missions. IEEE Access, 2021, 9, 113258-113269.	2.6	14
32	On the Performance of Hadamard Ratio Detector-Based Spectrum Sensing for Cognitive Radios. IEEE Transactions on Signal Processing, 2015, 63, 3809-3824.	3.2	13
33	Energy efficient spectrum allocation and mode selection for mission-critical D2D communications. , 2016, , .		13
34	Distributed Power Allocation for Multi-Flow Carrier Aggregation in Heterogeneous Cognitive Cellular Networks. IEEE Transactions on Wireless Communications, 2018, 17, 2486-2498.	6.1	13
35	Secure mHealth IoT Data Transfer from the Patient to the Hospital: A Three-Tier Approach. IEEE Wireless Communications, 2019, 26, 70-76.	6.6	13
36	Analysis of Wireless CSMA/CA Network Using Single Station Superposition (SSS). AEU - International Journal of Electronics and Communications, 2002, 56, 73-83.	1.7	12

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37	Estimating the number of sources: An efficient maximization approach. , 2015, , .		12
38	Optimized Error Probability for Weighted Collaborative Spectrum Sensing in Time- and Energy-Limited Cognitive Radio Networks. IEEE Transactions on Vehicular Technology, 2017, 66, 9035-9049.	3.9	12
39	Blind SNR Estimation of Gaussian-Distributed Signals in Nakagami Fading Channels. IEEE Transactions on Wireless Communications, 2015, 14, 3509-3518.	6.1	10
40	Correlated Multiple Antennas Spectrum Sensing Under Calibration Uncertainty. IEEE Transactions on Wireless Communications, 2015, 14, 6777-6791.	6.1	10
41	Secure multiple-users transmission using multi-path directional modulation. , 2016, , .		10
42	ViDMASK dataset for face mask detection with social distance measurement. Displays, 2022, 73, 102235.	2.0	10
43	Distributed spectrum sensing of correlated observations in cognitive radio networks. , 2013, , .		9
44	Adaptive hierarchical cooperative communication using energy harvesting relay. , 2013, , .		9
45	A degrees of freedom-optimal scheme for SISO X channel with synergistic alternating CSIT. , 2014, , .		9
46	On the coexistence of a primary user with an energy harvesting secondary user: a case of cognitive cooperation. Wireless Communications and Mobile Computing, 2016, 16, 166-176.	0.8	9
47	Estimating the number of sources in white Gaussian noise: simple eigenvalues based approaches. IET Signal Processing, 2017, 11, 663-673.	0.9	9
48	Classification for Imperfect EEG Epileptic Seizure in IoT applications: A Comparative Study. , 2018, , .		9
49	Drone-SCNet: Scaled Cascade Network for Crowd Counting on Drone Images. IEEE Transactions on Aerospace and Electronic Systems, 2021, 57, 3988-4001.	2.6	9
50	Multiple antenna cyclostationary-based detection of primary users with multiple cyclic frequency in Cognitive Radios. , 2014, , .		8
51	Energy-efficient cooperative relaying protocol for full-duplex cognitive radio users and delay-aware primary users. , 2015, , .		8
52	Robust secret key extraction from channel secondary random process. Wireless Communications and Mobile Computing, 2016, 16, 1389-1400.	0.8	8
53	STATISTICAL ANALYSIS OF ELECTROMAGNETIC FIELD INSIDE A JET ENGINE USING THE REVERBERATION CHAMBER APPROACH. Progress in Electromagnetics Research M, 2012, 24, 157-165.	0.5	7
54	Hybrid underlay/overlay cognitive radio system with hierarchical modulation in the presence of channel estimation error. , 2014, , .		7

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55	Optimal cooperative cognitive relaying and spectrum access for an energy harvesting cognitive radio: Reinforcement learning approach. , 2015, , .		7
56	Throughput of a cooperative energy harvesting secondary user in cognitive radio networks. Transactions on Emerging Telecommunications Technologies, 2016, 27, 1365-1379.	2.6	7
57	On the performance of spectrum sensing based on GLR for full-duplex cognitive radio networks. , 2016, , .		7
58	Relay-Assisted Primary and Secondary Transmissions in Cognitive Radio Networks. IEEE Access, 2016, 4, 6386-6400.	2.6	7
59	Maximizing Dense Network Flow through Wireless Multihop Backhauling using UAVs. , 2018, , .		7
60	On Network Flow Maximization via Multihop Backhauling and UAVs: An Integer Programming Approach. , 2019, , .		7
61	Modeling of CubeSat Orientation Scenario and Solar Cells for Internet of Space Provision. , 2019, , .		7
62	Performance of THz Communications Over Cascaded RISs: A Practical Solution to the Over-Determined Formulation. IEEE Communications Letters, 2022, 26, 291-295.	2.5	7
63	Cognitive relay-sharing by using hierarchical modulation under interference constraints. , 2014, , .		6
64	Efficient Collaborative Spectrum Sensing under the Smart Primary User Emulation Attacker Network. , 2015, , .		6
65	Optimal collaborative energy harvesting spectrum sensing with limited time resource. , 2016, , .		6
66	On dual peak detection UWB receivers in noise and interference dominated environments. AEU - International Journal of Electronics and Communications, 2016, 70, 121-131.	1.7	6
67	A Simple Cross Correlation Switched Beam System (XSBS) for Angle of Arrival Estimation. IEEE Access, 2017, 5, 3340-3352.	2.6	6
68	A Simple Angle of Arrival Estimation System. , 2017, , .		6
69	Energy-efficient cooperative cognitive relaying schemes for cognitive radio networks. Physical Communication, 2018, 30, 179-192.	1.2	6
70	Novel Hybrid Physical Layer Security Technique in RFID Systems. , 2019, , .		6
71	Joint Security and Energy Efficiency in IoT Networks Through Clustering and Bit Flipping. , 2019, , .		6
72	3D Beamforming With Massive Cylindrical Arrays for Physical Layer Secure Data Transmission. IEEE Communications Letters, 2019, 23, 830-833.	2.5	6

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73	A New Wearable ECG Monitor Evaluation and Experimental Analysis: Proof of Concept. , 2020, , .		6
74	Expatriatesâ€™ Housing Dispersal Outlook in a Rapidly Developing Metropolis Based on Urban Growth Predicted Using a Machine Learning Algorithm. Housing Policy Debate, 2023, 33, 641-661.	1.6	6
75	Secret key generation based on channel and distance measurements. , 2014, , .		5
76	Secrecy for MIMO wiretap and MIMO broadcast channels with fading eavesdroppers: CSI does not increase the secure DoF. , 2015, , .		5
77	Interference cancellation through interference alignment for downlink of cognitive cellular networks. Electronics Letters, 2015, 51, 54-56.	0.5	5
78	Comparative simulation for physical layer key generation methods. , 2015, , .		5
79	To Relay or Not to Relay in Cognitive Radio Sensor Networks. IEEE Transactions on Vehicular Technology, 2015, 64, 5221-5231.	3.9	5
80	Self-interference cancellation using time-domain phase noise estimation in OFDM full-duplex systems. , 2017, , .		5
81	On Channel Selection for Carrier Aggregation Systems. IEEE Transactions on Communications, 2018, 66, 808-818.	4.9	5
82	Patch Antenna Array Designs for Wireless Communication Applications Inside Jet Engines. IEEE Transactions on Antennas and Propagation, 2019, 67, 971-979.	3.1	5
83	Energy Efficient Spectrum Allocation and Mode Selection for D2D Communications in Heterogeneous Networks. IEEE Transactions on Signal and Information Processing Over Networks, 2020, 6, 382-393.	1.6	5
84	A Secure Energy Efficient Scheme for Cooperative IoT Networks. IEEE Transactions on Communications, 2022, 70, 3962-3976.	4.9	5
85	A hybrid spectrum sensing technique with multiple antenna based on GLRT. , 2013, , .		4
86	Underlay cognitive radio: What is the impact of carrier aggregation and relaying on throughput?. , 2016, , .		4
87	Optimized collaborative spectrum sensing in energy harvesting cognitive radio networks. , 2016, , .		4
88	Swinging with the Jet Set: Analysis of Electromagnetic Fields Inside Jet Engines--From Numerical and Experimental Analysis to Statistical Analysis. IEEE Microwave Magazine, 2016, 17, 61-72.	0.7	4
89	On the more accurate channel model and positioning based on time-of-arrival for visible light localization. Optical Engineering, 2017, 56, 016110.	0.5	4
90	On the Achievable Rates of OFDM with Common Phase Error Compensation in Phase Noise Channels. IEEE Transactions on Communications, 2017, , 1-1.	4.9	4

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91	A Simple Approach for Securing IoT Data Transmitted over Multi-RATs. , 2018, , .		4
92	Centralized and Distributed Cognitive Relay-Selection Schemes for SWIPT Cognitive Networks. IEEE Transactions on Communications, 2019, 67, 7431-7443.	4.9	4
93	A Novel Pandemic Tracking Map: From Theory to Implementation. IEEE Access, 2021, 9, 51106-51120.	2.6	4
94	Centralized, Distributed, and Module-Integrated Electric Power System Schemes in CubeSats: Performance Assessment. IEEE Access, 2022, 10, 55396-55407.	2.6	4
95	Optimal power allocation and relay selection in two-way multi-relay cooperative communication. , 2013, , .		3
96	Band allocation for cognitive radios with buffered primary and secondary users. , 2014, , .		3
97	Maximum throughput of a secondary user cooperating with an energy-aware primary user. , 2014, , .		3
98	Multiuser scheduling on downlink communications by using adaptive hierarchical modulation. , 2015, , .		3
99	Optimal spectrum access for a rechargeable cognitive radio user based on energy buffer state. , 2015, , .		3
100	Power-optimal feedback-based random spectrum access for an energy harvesting cognitive user. , 2015, , .		3
101	Secret communication on the Z-Channel with cooperative receivers. , 2016, , .		3
102	Performance of eigenvalue based spectrum sensing in full-duplex cognitive radio networks. , 2016, , .		3
103	Optimization of probability of error in collaborative spectrum sensing of time-limited cognitive radio networks. , 2016, , .		3
104	Degrees of Freedom of the Full-Duplex Asymmetric MIMO 3-Way Channel with Unicast and Broadcast Messages. IEEE Transactions on Communications, 2017, , 1-1.	4.9	3
105	Mean squared error analysis for OFDMA signals under joint Tx/Rx IQ imbalance. , 2018, , .		3
106	DFT-Based Multi-Directions Directional Modulation. IEEE Wireless Communications Letters, 2019, 8, 1232-1235.	3.2	3
107	An Efficient Algorithm for Dense Network Flow Maximization with Multihop Backhauling and NFPs. , 2019, , .		3
108	ICIC-Enabled Association and Channel Selection for UAV-BSs Based on User Locations and Demands. , 2019, , .		3

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109	Compressed wideband spectrum sensing with correlated subband occupancy in multi-antenna cognitive radios. , 2012, , .		2
110	Modified QR-D and MMSE PMI selection technique for MIMO closed loop spatial multiplexing in LTE/LTE-advanced. , 2013, , .		2
111	Time-frequency compressed spectrum sensing in cognitive radios. , 2013, , .		2
112	Transmit and receive cooperative cognition: Protocol design and stability analysis. , 2013, , .		2
113	Efficient FPGA-based implementation of a novel dual mode spectrum sensing technique. , 2013, , .		2
114	On Orthogonal Band Allocation for Multi-User Multi-Band Cognitive Radio Networks: Stability Analysis. IEEE Transactions on Communications, 2014, , 1-1.	4.9	2
115	Cooperative cognitive relaying under primary and secondary quality of service satisfaction. , 2014, , .		2
116	On the synergistic benefits of alternating CSIT for X channel within a four-symbol channel extension. , 2015, , .		2
117	On the Design of a Relay-Assisted Network. IEEE Communications Letters, 2015, 19, 1153-1156.	2.5	2
118	Capacious spread spectrum watermarking utilizing hadamard matrix. , 2016, , .		2
119	Dynamic interference–limited relay sharing in cognitive radio networks by using hierarchical modulation. IET Communications, 2017, 11, 1903-1912.	1.5	2
120	On the Secure Degrees of Freedom of the K User MIMO MAC with Statistical CSI. , 2017, , .		2
121	Joint coding for proactive caching with changing file popularities. , 2017, , .		2
122	Thresholds Optimization for One-Bit Feedback Multi-User Scheduling. IEEE Wireless Communications Letters, 2018, 7, 646-649.	3.2	2
123	A secure client-side framework for protecting the privacy of health data stored on the cloud. , 2018, , .		2
124	Order Statistics-Based Design of UWB Receivers. IEEE Wireless Communications Letters, 2020, 9, 1427-1431.	3.2	2
125	Coded Caching for Time-Varying Files Popularities and Asynchronous Delivery. IEEE Open Journal of the Communications Society, 2021, 2, 1458-1472.	4.4	2
126	Directional Modulation for Secure RFID in Health Systems. , 2020, , .		2

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127	Long mmWave Backhaul Connectivity Using Fixed-Wing UAVs. , 2022, , .		2
128	Throughput maximization via adjusting packet size of a buffered cognitive radio user. , 2014, , .		1
129	Probabilistic band-splitting for a buffered cooperative cognitive terminal. , 2014, , .		1
130	A novel peak search &amp; save cyclostationary feature detection algorithm. , 2014, , .		1
131	Multi-User Diversity with Optimal Power Allocation in Spectrum Sharing under Average Interference Power Constraint. , 2014, , .		1
132	Channel secondary random process for robust secret key generation. , 2015, , .		1
133	On the design of relay-assisted primary-secondary networks. , 2015, , .		1
134	Secure robust collaborative spectrum sensing in the presence of smart attackers. , 2016, , .		1
135	Optimal power allocation in dispersed cognitive radio systems with carrier aggregation. , 2016, , .		1
136	Performance of non-coherent decode-and-forward relaying over time-varying fading channels. , 2016, , .		1
137	Secure DoF for the MIMO MAC: The Case of Knowing Eavesdropper's Channel Statistics Only. , 2019, , .		1
138	On the Delay of Finite Buffered Multi-Hop Relay Wireless Internet of Things. , 2019, , .		1
139	Non-uniform Quantized Distributed Sensing in Practical Wireless Rayleigh Fading Channel. Lecture Notes of the Institute for Computer Sciences, Social-Informatics and Telecommunications Engineering, 2015, , 78-91.	0.2	1
140	Distributed Power Control for Carrier Aggregation in Cognitive Heterogeneous 5G Cellular Networks. Lecture Notes of the Institute for Computer Sciences, Social-Informatics and Telecommunications Engineering, 2015, , 681-695.	0.2	1
141	Generative Adversarial Network Approach to Future Sermonizing of Housing Dispersal in Emerging Cities. Journal of the Urban Planning and Development Division, ASCE, 2022, 148, .	0.8	1
142	Cyber-Attacks Against Voltage Profile In Smart Distribution Grids With Highly-Dispersed PV Generators: Detection and Protection. , 2020, , .		1
143	Accelerated IoT Anti-Jamming: A Game Theoretic Power Allocation Strategy. IEEE Transactions on Wireless Communications, 2022, 21, 10607-10620.	6.1	1
144	A New Simple Order-Based Multiple Access Scheme. Proceedings - International Symposium on Computers and Communications, 2007, , .	0.0	0

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145	A New Simple Method for Calculating the Bit Error Rate of OCDMA Systems. Proceedings - International Symposium on Computers and Communications, 2007, , .	0.0	0
146	Generalized dynamic spectrum access: An order statistics design perspective. AEU - International Journal of Electronics and Communications, 2009, 63, 1054-1060.	1.7	0
147	The effect of additional statistical side information on multiple antenna spectrum sensing. , 2012, , .		0
148	Finite-sample size multiple antennas spectrum sensing. , 2012, , .		0
149	Modulation-independent non-data-aided SNR estimator for OFDM signals in Nakagami fading channels. , 2013, , .		0
150	Protocol design and stability analysis of cooperative cognitive radio users. , 2014, , .		0
151	Spectrum-Aggregating Cognitive Multi-Antenna User with Multiple Primary Users. , 2014, , .		0
152	SFET-Based Multiple Antenna Spectrum Sensing Using the Second Order Moments of Eigenvalues. , 2014, , .		0
153	Efficient Collaborative Spectrum Sensing under the Smart Primary User Emulation Attacker Network. , 2014, , .		0
154	SFET-Based Multiple Antenna Spectrum Sensing Using the Second Order Moments of Eigenvalues. , 2015, , .		0
155	On secure communication over the Z-Channel. , 2016, , .		0
156	On the degrees of freedom region of the M Ã— N Interference Channel. , 2016, , .		0
157	Error probability analysis of energy harvesting relay-aided cooperative network using hierarchical modulation. , 2016, , .		0
158	Impact of stochastic RF energy harvesting relay on wireless point-to-point network. , 2016, , .		0
159	Maximum Secondary Stable Throughput of a Cooperative Secondary Transmitterâ€"Receiver Pair: Protocol Design and Stability Analysis. IEEE Transactions on Vehicular Technology, 2016, 65, 4937-4951.	3.9	0
160	The Effect of Transmitter's Eavesdropper CSI on the Secure Degrees of Freedom of the MIMO MAC. , 2017, , .		0
161	Exploiting spectrum sensing data for key management. Computer Communications, 2017, 97, 31-39.	3.1	0
162	Blind secure communication: The Secure degrees of freedom of one hop wireless networks with No CSI. , 2018, , .		0

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163	On the Achievable Degrees of Freedom of a Relay Aided X-Channel. , 2018, , .		0
164	Proactive Power Allocation and Caching Node Selection for Regular Service Guarantees. , 2018, , .		0
165	On Correlation-Based Channel Sensing with IQ Imbalance. , 2019, , .		0
166	Towards Information Theoretic Interpretation of Practical Ciphers. , 2021, , .		0
167	A Testbed for Implementing Lightweight Physical Layer Security in an IoT-based Health Monitoring System. , 2021, , .		0
168	Fractional Low Order Cyclostationary-Based Spectrum Sensing in Cognitive Radio Networks. Lecture Notes of the Institute for Computer Sciences, Social-Informatics and Telecommunications Engineering, 2015, , 3-16.	0.2	0
169	Optimization of Collaborative Spectrum Sensing with Limited Time Resource. Lecture Notes of the Institute for Computer Sciences, Social-Informatics and Telecommunications Engineering, 2015, , 109-122.	0.2	0
170	Detection of Temporally Correlated Primary User Signal with Multiple Antennas. Lecture Notes of the Institute for Computer Sciences, Social-Informatics and Telecommunications Engineering, 2015, , 66-77.	0.2	0
171	Deep Reinforcement Learning Algorithm for Smart Data Compression under NOMA-Uplink Protocol. , 2020, , .		0