Elias Yaacoub

List of Publications by Year
in descending order

169 papers	2,674 citations	394421 19 h-index	276875 41 g-index
171 all docs	171 docs citations	171 times ranked	2548 citing authors

#	ARTICLE	IF	CITATIONS
1	On Physical Layer Security of Double Shadowed Rician Fading Channels. Wireless Personal Communications, 2022, 124, 2299-2312.	2.7	2
2	A Secure Energy Efficient Scheme for Cooperative IoT Networks. IEEE Transactions on Communications, 2022, 70, 3962-3976.	7.8	5
3	Preliminary design and evaluation of a remote tele-mentoring system for minimally invasive surgery. Surgical Endoscopy and Other Interventional Techniques, 2022, 36, 3663-3674.	2.4	14
4	Evaluation of user‑interfaces for controlling movements of virtual minimally invasive surgical instruments. International Journal of Medical Robotics and Computer Assisted Surgery, 2022, 18, e2414.	2.3	8
5	Accelerated IoT Anti-Jamming: A Game Theoretic Power Allocation Strategy. IEEE Transactions on Wireless Communications, 2022, 21, 10607-10620.	9.2	1
6	I-SEE: Intelligent, Secure, and Energy-Efficient Techniques for Medical Data Transmission Using Deep Reinforcement Learning. IEEE Internet of Things Journal, 2021, 8, 6454-6468.	8.7	7
7	Physical Layer Security in Military Communications. , 2021, , 384-398.		0
8	Game Theory for Anti-Jamming Strategy in Multichannel Slow Fading IoT Networks. IEEE Internet of Things Journal, 2021, 8, 16880-16893.	8.7	22
9	A Novel Pandemic Tracking Map: From Theory to Implementation. IEEE Access, 2021, 9, 51106-51120.	4.2	4
10	Seven Challenges for Communication in Modern Railway Systems. Frontiers in Communications and Networks, 2021, 1, .	3.0	2
11	Efficient Fronthaul and Backhaul Connectivity for IoT Traffic in Rural Areas. IEEE Internet of Things Magazine, 2021, 4, 60-66.	2.6	12
12	Towards Information Theoretic Interpretation of Practical Ciphers. , 2021, , .		0
13	6G Connectivity in Dense Indoor Environments using Beamforming and Frequency Allocation over IEEE 802.11ad. , 2021, , .		2
14	On The Use of Quantum Communications for Securing IoT Devices in the 6G Era. , 2021, , .		14
15	Towards development of a tele‑mentoring framework for minimally invasive surgeries. International Journal of Medical Robotics and Computer Assisted Surgery, 2021, 17, e2305.	2.3	17
16	Travel Hopping Enabled Resource Allocation (THEResA) and delay tolerant networking through the use of UAVs in railroad networks. Ad Hoc Networks, 2021, 122, 102628.	5.5	6
17	Energy-Aware Distributed Edge ML for mHealth Applications with Strict Latency Requirements. IEEE Wireless Communications Letters, 2021, , 1-1.	5.0	5
18	Machine Learning Techniques for Detecting Attackers During Quantum Key Distribution in IoT Networks With Application to Railway Scenarios. IEEE Access, 2021, 9, 136994-137004.	4.2	11

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19	Asynchronous Federated Learning-based ECG Analysis for Arrhythmia Detection. , 2021, , .		13
20	Detecting Attackers during Quantum Key Distribution in IoT Networks using Neural Networks. , 2021, , .		6
21	A Lightweight Central Learning Approach for Arrhythmia Detection from ECG Signals. , 2021, , .		1
22	Securing internet of medical things systems: Limitations, issues and recommendations. Future Generation Computer Systems, 2020, 105, 581-606.	7.5	144
23	A Practical TDMA Modification of IEEE 802.11 for Ultra-Dense IoT-Health with Fairness Considerations. , 2020, , .		2
24	Optimizing Energy-Distortion Trade-off for Vital Signs Delivery in Mobile Health Applications. , 2020, , .		1
25	Q-Learning Based Joint Energy-Spectral Efficiency Optimization in Multi-Hop Device-to-Device Communication. Sensors, 2020, 20, 6692.	3.8	5
26	On Accommodating VR Traffic for mHealth Applications in Rural Areas with Limited Impact on IoT Traffic. , 2020, , .		1
27	A Key 6G Challenge and Opportunity—Connecting the Base of the Pyramid: A Survey on Rural Connectivity. Proceedings of the IEEE, 2020, 108, 533-582.	21.3	203
28	Secure Transmission of IoT mHealth Patient Monitoring Data from Remote Areas Using DTN. IEEE Network, 2020, 34, 226-231.	6.9	30
29	Secure mHealth IoT Data Transfer from the Patient to the Hospital: A Three-Tier Approach. IEEE Wireless Communications, 2019, 26, 70-76.	9.0	13
30	Massive Planar Antenna Arrays for Physical Layer Security. , 2019, , .		1
31	Joint Security and Energy Efficiency in IoT Networks Through Clustering and Bit Flipping. , 2019, , .		6
32	Performance Analysis of Circular Color Shift Keying in VLC Systems With Camera-Based Receivers. IEEE Transactions on Communications, 2019, 67, 4252-4266.	7.8	17
33	3D Beamforming With Massive Cylindrical Arrays for Physical Layer Secure Data Transmission. IEEE Communications Letters, 2019, 23, 830-833.	4.1	6
34	Secure DoF for the MIMO MAC: The Case of Knowing Eavesdropper's Channel Statistics Only. , 2019, , .		1
35	On the Delay of Finite Buffered Multi-Hop Relay Wireless Internet of Things. , 2019, , .		1
36	Novel Extended Circular Color Shift Keying Constellation in VLC Systems with Camera-based Receivers. , 2019, , .		0

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37	A Real-Time ECG Feature Extraction Algorithm for Detecting Meditation Levels within a General Measurement Setup. , 2019, 2019, 99-103.		2
38	A Survey on Mobile Crowd-Sensing and Its Applications in the IoT Era. IEEE Access, 2019, 7, 3855-3881.	4.2	53
39	Physical Layer Security in Military Communications. International Journal of Mobile Computing and Multimedia Communications, 2019, 10, 26-40.	0.5	1
40	Cooperative energy efficient D2D clustering in LTE-A with enhanced QoS. Telecommunication Systems, 2018, 67, 401-414.	2.5	6
41	Classification for Imperfect EEG Epileptic Seizure in IoT applications: A Comparative Study. , 2018, , .		9
42	A Simple Approach for Securing IoT Data Transmitted over Multi-RATs. , 2018, , .		4
43	Cooperative reinforcement learning for adaptive power allocation in device-to-device communication. , 2018, , .		11
44	Safe driving: A mobile application for detecting traffic accidents. , 2018, , .		5
45	Intelligent eye: A mobile application for assisting blind people. , 2018, , .		34
46	A secure client-side framework for protecting the privacy of health data stored on the cloud. , 2018, , .		2
47	An Efficient Channel-Aware Aloha-Like OFDMA-Based Wireless Communication Protocol for IoT Communications in Wireless Sensor Networks. Advances in Systems Analysis, Software Engineering, and High Performance Computing Book Series, 2018, , 85-110.	0.5	0
48	RESCUE: Renewable Energy Small Cells for Utility Enhancement in Green LTE HetNets. IEEE Systems Journal, 2017, 11, 2356-2365.	4.6	6
49	Femtocells in centralized systems: green operation and radio resource management techniques. Annales Des Telecommunications/Annals of Telecommunications, 2017, 72, 679-691.	2.5	2
50	Achieving physical layer security with massive MIMO beamforming. , 2017, , .		16
51	Green Virtualization for Multiple Collaborative Cellular Operators. IEEE Transactions on Cognitive Communications and Networking, 2017, 3, 420-434.	7.9	10
52	Green Networking in Cellular HetNets: A Unified Radio Resource Management Framework With Base Station ON/OFF Switching. IEEE Transactions on Vehicular Technology, 2017, 66, 5879-5893.	6.3	40
53	Toward Massive Machine Type Cellular Communications. IEEE Wireless Communications, 2017, 24, 120-128.	9.0	346
54	Rectangular and circular arrays with independently controlled beamwidth and sidelobe level. , 2017, , .		4

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55	Throughput-Aware Cooperative Reinforcement Learning for Adaptive Resource Allocation in Device-to-Device Communication. Future Internet, 2017, 9, 72.	3.8	24
56	A Game Theoretic Framework for Green HetNets Using D2D Traffic Offload and Renewable Energy Powered Base Stations. , 2017, , 679-711.		0
57	On the use of massive cylindrical antenna arrays for physical layer security. , 2016, , .		4
58	On secret key generation with massive MIMO antennas using time-frequency-space dimensions. , 2016, , .		2
59	An overview of research topics and challenges for 5G massive MIMO antennas. , 2016, , .		30
60	Green 5G Femtocells for Supporting Indoor Generated IoT Traffic. Modeling and Optimization in Science and Technologies, 2016, , 129-152.	0.7	7
61	Transmit Power Minimization and Base Station Planning for High-Speed Trains with Multiple Moving Relays in OFDMA Systems. IEEE Transactions on Vehicular Technology, 2016, , 1-1.	6.3	32
62	Next-Generation Environment-Aware Cellular Networks: Modern Green Techniques and Implementation Challenges. IEEE Access, 2016, 4, 5010-5029.	4.2	26
63	Tutorial on LTE/LTE-A Cellular Network Dimensioning Using Iterative Statistical Analysis. IEEE Communications Surveys and Tutorials, 2016, 18, 1355-1383.	39.4	33
64	Multi-operator Collaboration for Green Cellular Networks. Studies in Systems, Decision and Control, 2016, , 97-122.	1.0	2
65	Optimized LTE Cell Planning With Varying Spatial and Temporal User Densities. IEEE Transactions on Vehicular Technology, 2016, 65, 1575-1589.	6.3	76
66	A game theoretical approach for cooperative green mobile operators under roaming price consideration. , 2015, , .		2
67	Interference mitigation in femtocell networks with joint channel sensing and resource allocation. , 2015, , .		4
68	On the Dual-Decomposition-Based Resource and Power Allocation with Sleeping Strategy for Heterogeneous Networks. , 2015, , .		7
69	LTE radio resource management for real-time smart meter reading in the smart grid. , 2015, , .		9
70	Green operation of LTE-A femtocell networks benefiting from centralized control. , 2015, , .		0
71	Joint Bandwidth and Power Allocation for MIMO Two-Way Relays-Assisted Overlay Cognitive Radio Systems. IEEE Transactions on Cognitive Communications and Networking, 2015, 1, 383-393.	7.9	13
72	Confluence of pattern recognition and signal processing: application of Alâ€Alaoui pattern recognition algorithm to digital filters design. IET Signal Processing, 2015, 9, 498-505.	1.5	2

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73	QoE Enhancement of SVC Video Streaming Over Vehicular Networks Using Cooperative LTE/802.11p Communications. IEEE Journal on Selected Topics in Signal Processing, 2015, 9, 37-49.	10.8	69
74	On the impact of D2D traffic offloading on energy efficiency in green LTEâ€A HetNets. Wireless Communications and Mobile Computing, 2015, 15, 1089-1105.	1.2	10
75	Bandwidth and power allocation for two-way relaying in overlay cognitive radio systems. , 2014, , .		9
76	On the extension of traditional resource allocation algorithms in LTE-A to joint UL-DL scheduling with FDD carrier aggregation. , 2014, , .		2
77	Fair Optimization of Video Streaming Quality of Experience in LTE Networks Using Distributed Antenna Systems and Radio Resource Management. Journal of Applied Mathematics, 2014, 2014, 1-12.	0.9	10
78	Achieving green LTE-A HetNets with D2D traffic offload and renewable energy powered small cell BSs. , 2014, , .		0
79	Multi-Operator Collaboration for Green Cellular Networks under Roaming Price Consideration. , 2014, , .		7
80	A game theoretical approach for cooperative environmentally friendly cellular networks powered by the smart grid. , 2014, , .		9
81	On using relays with carrier aggregation for planning 5G networks supporting M2M traffic. , 2014, , .		9
82	QoS-aware joint uplink-downlink scheduling in FDD LTE-Advanced with carrier aggregation. , 2014, , .		5
83	On real-time smart meter reading using OFDMA-based random access. , 2014, , .		5
84	Empirical evaluation of acoustical signals for leakage detection in underground plastic pipes. , 2014, , .		3
85	Network QoE metrics for assessing system-level performance of radio resource management algorithms in LTE networks. , 2014, , .		3
86	Optimized LTE Cell Planning for Multiple User Density Subareas Using Meta-Heuristic Algorithms. , 2014, , .		12
87	A practical approach for base station on/off switching in green LTE-A HetNets. , 2014, , .		8
88	Automatic meter reading in the smart grid using contention based random access over the free cellular spectrum. Computer Networks, 2014, 59, 171-183.	5.1	45
89	Delay-sensitive content distribution via peer-to-peer collaboration in public safety vehicular ad-hoc networks. Ad Hoc Networks, 2014, 16, 182-196.	5.5	11
90	Optimized Smart Grid Energy Procurement for LTE Networks Using Evolutionary Algorithms. IEEE Transactions on Vehicular Technology, 2014, 63, 4508-4519.	6.3	69

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91	A mathematical modeling approach and a novel solution for sector azimuth angle planning. , 2014, , .		1
92	Energy-efficient two-hop LTE resource allocation in high speed trains with moving relays. , 2014, , .		9
93	On the use of device-to-device communications for QoS and data rate enhancement in LTE public safety networks. , 2014, , .		13
94	A generic simulation-based dimensioning approach for planning heterogeneous LTE cellular networks. , 2014, , .		6
95	Cluster based V2V communications for enhanced QoS of SVC video streaming over vehicular networks. , 2014, , .		1
96	LTE radio network planning with HetNets: BS placement optimization using simulated annealing. , 2014, , .		22
97	Mobile relays for enhanced broadband connectivity in high speed train systems. Physical Communication, 2014, 12, 105-115.	2.1	15
98	Radio Resource Management in Integrated Wired/Wireless LTE Femtocell Networks. Lecture Notes in Computer Science, 2014, , 96-108.	1.3	5
99	SVC video streaming over cooperative LTE/802.11p vehicle-to-infrastructure communications. , 2013, , .		14
100	Achieving energy efficiency in LTE with joint D2D communications and green networking techniques. , 2013, , .		21
101	Air quality monitoring and analysis in Qatar using a wireless sensor network deployment. , 2013, , .		16
102	A new MAC design in LTE for MIMO multiuser schemes. , 2013, , .		0
103	A modified joint uplink-downlink opportunistic scheduling for Quality of Service guarantees. , 2013, , .		6
104	Enhanced connectivity in railroad networks using LTE relays with directive antennas. , 2013, , .		2
105	Enhanced connectivity in vehicular ad-hoc networks via V2V communications. , 2013, , .		10
106	Joint energy-distortion aware algorithms for cooperative video streaming over LTE networks. Signal Processing: Image Communication, 2013, 28, 1114-1131.	3.2	10
107	Energy-Aware Cooperative Content Distribution over Wireless Networks: Design Alternatives and Implementation Aspects. IEEE Communications Surveys and Tutorials, 2013, 15, 1736-1760.	39.4	64
108	Performance of Green LTE Networks Powered by the Smart Grid with Time Varying User Density. , 2013, , .		5

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109	Wireless sensor network for real-time air pollution monitoring. , 2013, , .		78
110	Opportunistic bi-directional scheduling under quality of experience demands. , 2013, , .		0
111	Energy optimization in unsynchronized TDD systems for joint uplink downlink scheduling. , 2013, , .		2
112	A game theoretic framework for energy efficient deployment and operation of heterogeneous LTE networks. , 2013, , .		5
113	Exploiting multiple wireless interfaces in smartphones for traffic offloading. , 2013, , .		14
114	Green operation techniques for large scale deployments of small cell LTE networks. , 2013, , .		1
115	Enhancing the quality of experience of video streaming in LTE networks using distributed antenna systems. , 2013, , .		2
116	On the capacity and spatial fairness trade-off in planning sectorization and frequency reuse. , 2013, , .		1
117	Enhancing the QoS of real-time video streaming over LTE MBMS using D2D communications. , 2012, , .		2
118	An energy-efficient M2M communication method for leakage detection in underground water pipes. , 2012, , .		4
119	Cooperative wireless sensor networks for green internet of things. , 2012, , .		21
120	Distributed Load Balancing through Self Organisation of cell size in cellular systems. , 2012, , .		5
121	On real-time video streaming over LTE networks with mobile-to-mobile cooperation. , 2012, , .		14
122	A Survey on Uplink Resource Allocation in OFDMA Wireless Networks. IEEE Communications Surveys and Tutorials, 2012, 14, 322-337.	39.4	134
123	Cooperative ad hoc networks for energy and delay‰efficient content distribution with fast channel‰variations. Wireless Communications and Mobile Computing, 2012, 12, 1635-1651.	1.2	0
124	Cooperative relay-based multicasting for energy and delay minimization. , 2012, , .		1
125	On the performance of distributed base stations in LTE public safety networks. , 2012, , .		6
126	Green communications in LTE networks with environmentally friendly small cell base stations. , 2012, , .		14

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127	Energy-efficient Device-to-Device communications in LTE public safety networks. , 2012, , .		43
128	Performance study of the implementation of green communications in LTE networks. , 2012, , .		17
129	Optimized green operation of LTE networks in the presence of multiple electricity providers. , 2012, , .		12
130	Heterogeneous LTE/802.11a mobile relays for data rate enhancement and energy-efficiency in high speed trains. , 2012, , .		7
131	Multihop Routing for Energy Efficiency in Wireless Sensor Networks. , 2012, , .		15
132	Uplink OFDMA resource allocation with discrete rates: optimal solution and suboptimal implementation. Transactions on Emerging Telecommunications Technologies, 2012, 23, 148-162.	3.9	8
133	A utility minimization approach for energy-aware cooperative content distribution with fairness constraints. Transactions on Emerging Telecommunications Technologies, 2012, 23, 378-392.	3.9	26
134	Delay efficient cooperation in public safety vehicular networks using LTE and IEEE 802.11p. , 2012, , .		19
135	A Genetic Algorithm Solution for the Operation of Green LTE Networks with Energy and Environment Considerations. Lecture Notes in Computer Science, 2012, , 512-519.	1.3	2
136	A Nash bargaining solution for energy-efficient content distribution over wireless networks with mobile-to-mobile cooperation. , 2011, , .		8
137	Novel time-frequency reservation Aloha scheme for OFDMA systems. , 2011, , .		2
138	Joint Uplink Scheduling and Interference Mitigation in Multicell LTE Networks. , 2011, , .		21
139	A novel distributed scheduling scheme for OFDMA uplink using channel information and probabilistic transmission. Computer Communications, 2011, 34, 2104-2113.	5.1	2
140	Interference mitigation and avoidance in uplink OFDMA with collaborative distributed intracell scheduling. AEU - International Journal of Electronics and Communications, 2011, 65, 937-941.	2.9	4
141	Scheduling in OFDMA Uplink With Imperfect CSI. International Journal of Wireless Information Networks, 2011, 18, 73-79.	2.7	0
142	A multiorganism based method for Bayesian gene network estimation. BioSystems, 2011, 103, 425-434.	2.0	1
143	Achieving the Nash bargaining solution in OFDMA uplink using distributed scheduling with limited feedback. AEU - International Journal of Electronics and Communications, 2011, 65, 320-330.	2.9	19
144	An OFDMA communication protocol for wireless sensor networks used for leakage detection in underground water infrastructures. , 2011, , .		4

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145	Enhancing the performance of OFDMA underlay cognitive radio networks via secondary pattern nulling and primary beam steering. , 2011, , .		12
146	Beam and RB allocation in LTE uplink with opportunistic beamforming. , 2011, , .		3
147	A Wireless Communications Laboratory on Cellular Network Planning. IEEE Transactions on Education, 2010, 53, 653-661.	2.4	12
148	Uplink scheduling in LTE systems using distributed base stations. European Transactions on Telecommunications, 2010, 21, 532-543.	1.2	12
149	A comparison of uplink scheduling in OFDMA and SCFDMA. , 2010, , .		6
150	Ergodic sum-rate maximization in OFDMA uplink with discrete rates. , 2010, , .		3
151	Weighted ergodic sum-rate maximisation in uplink orthogonal frequency division multiple access and its achievable rate region. IET Communications, 2010, 4, 2217.	2.2	11
152	Opportunistic beamforming for uplink OFDMA scheduling in severe interference conditions. , 2010, , .		1
153	Proportional fair scheduling with probabilistic interference avoidance in the uplink of multicell OFDMA systems. , 2010, , .		15
154	A transparent pricing scheme for interference mitigation in uplink OFDMA with collaborative distributed scheduling. , 2010, , .		5
155	On uplink OFDMA resource allocation with ergodic sum-rate maximization. , 2009, , .		17
156	Distributed uplink scheduling and rate control in cdma2000 using adaptive antenna arrays. AEU - International Journal of Electronics and Communications, 2009, 63, 841-852.	2.9	4
157	A Game Theoretical Formulation for Proportional Fairness in LTE Uplink Scheduling. , 2009, , .		58
158	Low complexity scheduling algorithms for the LTE uplink. , 2009, , .		25
159	Centralized and distributed LTE uplink scheduling in a distributed base station scenario. , 2009, , .		9
160	Uplink scheduling in OFDMA systems using opportunistic beamforming. , 2009, , .		1
161	Distributed Probabilistic Scheduling in OFDMA Uplink using Subcarrier Sensing. , 2009, , .		3
162	Directivity and Interference Tradeoffs with Cylindrical Antenna Arrays. , 2008, , .		1

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163	Distributed on-off uplink scheduling in CDMA systems with adaptive antenna arrays. , 2008, , .		1
164	A new multitask learning method for multiorganism gene network estimation. , 2008, , .		30
165	Reverse Link Rate Control in 1xEV-DO with Adaptive Antenna Arrays. , 2008, , .		3
166	Intercell Interference Reduction by the Use of Chebyshev Circular Antenna Arrays with Beam Steering. , 2007, , .		3
167	Cylindrical Antenna Arrays for WCDMA Downlink Capacity Enhancement. , 2006, , .		7
168	A Game Theoretic Framework for Green HetNets Using D2D Traffic Offload and Renewable Energy Powered Base Stations. Advances in Wireless Technologies and Telecommunication Book Series, 0, , 333-367.	0.4	1
169	Distributed Antenna Systems for Enhanced Video Transmission in LTE Public Safety Networks. Advances in Wireless Technologies and Telecommunication Book Series, 0, , 40-64.	0.4	0