Elias Yaacoub

List of Publications by Year in Descending Order

148 papers	1,728 citations	19 h-index	36 g-index
171 ext. papers	2,220 ext. citations	5.2 avg, IF	5.57 L-index

#	Paper	IF	Citations
148	A Secure Energy Efficient Scheme for Cooperative IoT Networks.. *IEEE Transactions on Communications*, **2022**, 1-1	6.9	1
147	Preliminary design and evaluation of a remote tele-mentoring system for minimally invasive surgery.. *Surgical Endoscopy and Other Interventional Techniques*, **2022**, 36, 3663	5.2	1
146	Evaluation of User-Interfaces for Controlling Movements of Virtual Minimally Invasive Surgical Instruments.. *International Journal of Medical Robotics and Computer Assisted Surgery*, **2022**, e2414	2.9	0
145	Asynchronous Federated Learning-based ECG Analysis for Arrhythmia Detection **2021**,		3
144	Energy-Aware Distributed Edge ML for mHealth Applications With Strict Latency Requirements. *IEEE Wireless Communications Letters*, **2021**, 1-1	5.9	0
143	Machine Learning Techniques for Detecting Attackers During Quantum Key Distribution in IoT Networks With Application to Railway Scenarios. *IEEE Access*, **2021**, 9, 136994-137004	3.5	4
142	Efficient Fronthaul and Backhaul Connectivity for IoT Traffic in Rural Areas. *IEEE Internet of Things Magazine*, **2021**, 4, 60-66	3.5	3
141	On The Use of Quantum Communications for Securing IoT Devices in the 6G Era **2021**,		3
140	Towards development of a tele-mentoring framework for minimally invasive surgeries. *International Journal of Medical Robotics and Computer Assisted Surgery*, **2021**, 17, e2305	2.9	3
139	. *IEEE Internet of Things Journal*, **2021**, 8, 6454-6468	10.7	3
138	Physical Layer Security in Military Communications **2021**, 384-398		
137	Game Theory for Anti-Jamming Strategy in Multi-Channel Slow fading IoT Networks. *IEEE Internet of Things Journal*, **2021**, 1-1	10.7	8
136	A Novel Pandemic Tracking Map: From Theory to Implementation. *IEEE Access*, **2021**, 9, 51106-51120	3.5	0
135	Travel Hopping Enabled Resource Allocation (THEResA) and delay tolerant networking through the use of UAVs in railroad networks. *Ad Hoc Networks*, **2021**, 122, 102628	4.8	0
134	Q-Learning Based Joint Energy-Spectral Efficiency Optimization in Multi-Hop Device-to-Device Communication. *Sensors*, **2020**, 20,	3.8	2
133	. *Proceedings of the IEEE*, **2020**, 108, 533-582	14.3	100
132	Secure Transmission of IoT mHealth Patient Monitoring Data from Remote Areas Using DTN. *IEEE Network*, **2020**, 34, 226-231	11.4	15

131	Securing internet of medical things systems: Limitations, issues and recommendations. *Future Generation Computer Systems*, **2020**, 105, 581-606	7.5	55
130	Joint Security and Energy Efficiency in IoT Networks Through Clustering and Bit Flipping **2019**,		3
129	Performance Analysis of Circular Color Shift Keying in VLC Systems With Camera-Based Receivers. *IEEE Transactions on Communications*, **2019**, 67, 4252-4266	6.9	6
128	3D Beamforming With Massive Cylindrical Arrays for Physical Layer Secure Data Transmission. *IEEE Communications Letters*, **2019**, 23, 830-833	3.8	3
127	Secure mHealth IoT Data Transfer from the Patient to the Hospital: A Three-Tier Approach. *IEEE Wireless Communications*, **2019**, 26, 70-76	13.4	5
126	Physical Layer Security in Military Communications. *International Journal of Mobile Computing and Multimedia Communications*, **2019**, 10, 26-40	0.7	
125	Secure DoF for the MIMO MAC: The Case of Knowing Eavesdropper's Channel Statistics Only **2019**,		1
124	A Real-Time ECG Feature Extraction Algorithm for Detecting Meditation Levels within a General Measurement Setup. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference*, **2019**, 2019, 99-103	0.9	1
123	A Survey on Mobile Crowd-Sensing and Its Applications in the IoT Era. *IEEE Access*, **2019**, 7, 3855-3881	3.5	30
122	Cooperative reinforcement learning for adaptive power allocation in device-to-device communication **2018**,		7
121	Safe driving: A mobile application for detecting traffic accidents **2018**,		3
120	Intelligent eye: A mobile application for assisting blind people **2018**,		11
119	A secure client-side framework for protecting the privacy of health data stored on the cloud **2018**,		2
118	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	0.4	
117	Cooperative energy efficient D2D clustering in LTE-A with enhanced QoS. *Telecommunication Systems*, **2018**, 67, 401-414	2.3	5
116	Classification for Imperfect EEG Epileptic Seizure in IoT applications: A Comparative Study **2018**,		6
115	A Simple Approach for Securing IoT Data Transmitted over Multi-RATs **2018**,		3
114	RESCUE: Renewable Energy Small Cells for Utility Enhancement in Green LTE HetNets. *IEEE Systems Journal*, **2017**, 11, 2356-2365	4.3	5

113	Femtocells in centralized systems: green operation and radio resource management techniques. *Annales Des Telecommunications/Annals of Telecommunications*, **2017**, 72, 679-691	2	1
112	Achieving physical layer security with massive MIMO beamforming **2017**,		10
111	Green Virtualization for Multiple Collaborative Cellular Operators. *IEEE Transactions on Cognitive Communications and Networking*, **2017**, 3, 420-434	6.6	8
110	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	6.8	30
109	Toward Massive Machine Type Cellular Communications. *IEEE Wireless Communications*, **2017**, 24, 120-128	13.4	243
108	Rectangular and circular arrays with independently controlled beamwidth and sidelobe level **2017**,		2
107	Throughput-Aware Cooperative Reinforcement Learning for Adaptive Resource Allocation in Device-to-Device Communication. *Future Internet*, **2017**, 9, 72	3.3	20
106	A Game Theoretic Framework for Green HetNets Using D2D Traffic Offload and Renewable Energy Powered Base Stations **2017**, 679-711		
105	. *IEEE Transactions on Vehicular Technology*, **2016**, 65, 1575-1589	6.8	55
104	. *IEEE Access*, **2016**, 4, 5010-5029	3.5	20
103	Tutorial on LTE/LTE-A Cellular Network Dimensioning Using Iterative Statistical Analysis. *IEEE Communications Surveys and Tutorials*, **2016**, 18, 1355-1383	37.1	28
102	Multi-operator Collaboration for Green Cellular Networks. *Studies in Systems, Decision and Control*, **2016**, 97-122	0.8	2
101	On the use of massive cylindrical antenna arrays for physical layer security **2016**,		3
100	On secret key generation with massive MIMO antennas using time-frequency-space dimensions **2016**,		2
99	An overview of research topics and challenges for 5G massive MIMO antennas **2016**,		14
98	Green 5G Femtocells for Supporting Indoor Generated IoT Traffic. *Modeling and Optimization in Science and Technologies*, **2016**, 129-152	0.6	5
97	. *IEEE Transactions on Vehicular Technology*, **2016**, 1-1	6.8	16
96	Interference mitigation in femtocell networks with joint channel sensing and resource allocation **2015**,		2

95	On the Dual-Decomposition-Based Resource and Power Allocation with Sleeping Strategy for Heterogeneous Networks **2015**,		5
94	LTE radio resource management for real-time smart meter reading in the smart grid **2015**,		8
93	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	6.6	10
92	Confluence of pattern recognition and signal processing: application of Al-Alaoui pattern recognition algorithm to digital filters design. *IET Signal Processing*, **2015**, 9, 498-505	1.7	0
91	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	7.5	50
90	On the impact of D2D traffic offloading on energy efficiency in green LTE-A HetNets. *Wireless Communications and Mobile Computing*, **2015**, 15, 1089-1105	1.9	9
89	A game theoretical approach for cooperative green mobile operators under roaming price consideration **2015**,		1
88	Delay-sensitive content distribution via peer-to-peer collaboration in public safety vehicular ad-hoc networks. *Ad Hoc Networks*, **2014**, 16, 182-196	4.8	9
87	Optimized Smart Grid Energy Procurement for LTE Networks Using Evolutionary Algorithms. *IEEE Transactions on Vehicular Technology*, **2014**, 63, 4508-4519	6.8	51
86	Energy-efficient two-hop LTE resource allocation in high speed trains with moving relays **2014**,		7
85	On the use of device-to-device communications for QoS and data rate enhancement in LTE public safety networks **2014**,		12
84	A generic simulation-based dimensioning approach for planning heterogeneous LTE cellular networks **2014**,		3
83	Cluster based V2V communications for enhanced QoS of SVC video streaming over vehicular networks **2014**,		1
82	LTE radio network planning with HetNets: BS placement optimization using simulated annealing **2014**,		16
81	Mobile relays for enhanced broadband connectivity in high speed train systems. *Physical Communication*, **2014**, 12, 105-115	2.2	10
80	Bandwidth and power allocation for two-way relaying in overlay cognitive radio systems **2014**,		6
79	On the extension of traditional resource allocation algorithms in LTE-A to joint UL-DL scheduling with FDD carrier aggregation **2014**,		1
78	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	1.1	6

77	Multi-Operator Collaboration for Green Cellular Networks under Roaming Price Consideration **2014**,		5
76	A game theoretical approach for cooperative environmentally friendly cellular networks powered by the smart grid **2014**,		7
75	On using relays with carrier aggregation for planning 5G networks supporting M2M traffic **2014**,		7
74	**2014**,		4
73	On real-time smart meter reading using OFDMA-based random access **2014**,		3
72	Empirical evaluation of acoustical signals for leakage detection in underground plastic pipes **2014**,		3
71	Network QoE metrics for assessing system-level performance of radio resource management algorithms in LTE networks **2014**,		2
70	Optimized LTE Cell Planning for Multiple User Density Subareas Using Meta-Heuristic Algorithms **2014**,		8
69	A practical approach for base station on/off switching in green LTE-A HetNets **2014**,		6
68	Automatic meter reading in the smart grid using contention based random access over the free cellular spectrum. *Computer Networks*, **2014**, 59, 171-183	5.4	30
67	Radio Resource Management in Integrated Wired/Wireless LTE Femtocell Networks. *Lecture Notes in Computer Science*, **2014**, 96-108	0.9	4
66	SVC video streaming over cooperative LTE/802.11p vehicle-to-infrastructure communications **2013**,		10
65	Achieving energy efficiency in LTE with joint D2D communications and green networking techniques **2013**,		17
64	Air quality monitoring and analysis in Qatar using a wireless sensor network deployment **2013**,		10
63	A modified joint uplink-downlink opportunistic scheduling for Quality of Service guarantees **2013**,		6
62	Enhanced connectivity in railroad networks using LTE relays with directive antennas **2013**,		1
61	Enhanced connectivity in vehicular ad-hoc networks via V2V communications **2013**,		8
60	Joint energy-distortion aware algorithms for cooperative video streaming over LTE networks. *Signal Processing: Image Communication*, **2013**, 28, 1114-1131	2.8	7

59	Energy-Aware Cooperative Content Distribution over Wireless Networks: Design Alternatives and Implementation Aspects. *IEEE Communications Surveys and Tutorials*, **2013**, 15, 1736-1760	37.1	52
58	Performance of Green LTE Networks Powered by the Smart Grid with Time Varying User Density **2013**,		5
57	Wireless sensor network for real-time air pollution monitoring **2013**,		54
56	Energy optimization in unsynchronized TDD systems for joint uplink downlink scheduling **2013**,		2
55	A game theoretic framework for energy efficient deployment and operation of heterogeneous LTE networks **2013**,		4
54	Exploiting multiple wireless interfaces in smartphones for traffic offloading **2013**,		11
53	Enhancing the quality of experience of video streaming in LTE networks using distributed antenna systems **2013**,		2
52	On the capacity and spatial fairness trade-off in planning sectorization and frequency reuse **2013**,		1
51	A Survey on Uplink Resource Allocation in OFDMA Wireless Networks. *IEEE Communications Surveys and Tutorials*, **2012**, 14, 322-337	37.1	98
50	Cooperative ad hoc networks for energy and delay efficient content distribution with fast channel variations. *Wireless Communications and Mobile Computing*, **2012**, 12, 1635-1651	1.9	
49	Cooperative relay-based multicasting for energy and delay minimization **2012**,		1
48	On the performance of distributed base stations in LTE public safety networks **2012**,		5
47	Green communications in LTE networks with environmentally friendly small cell base stations **2012**,		13
46	Energy-efficient Device-to-Device communications in LTE public safety networks **2012**,		33
45	Performance study of the implementation of green communications in LTE networks **2012**,		11
44	Optimized green operation of LTE networks in the presence of multiple electricity providers **2012**,		9
43	Heterogeneous LTE/802.11a mobile relays for data rate enhancement and energy-efficiency in high speed trains **2012**,		5
42	Multihop Routing for Energy Efficiency in Wireless Sensor Networks **2012**,		12

#	Title		
41	Uplink OFDMA resource allocation with discrete rates: optimal solution and suboptimal implementation. *Transactions on Emerging Telecommunications Technologies*, **2012**, 23, 148-162	1.9	7
40	A utility minimization approach for energy-aware cooperative content distribution with fairness constraints. *Transactions on Emerging Telecommunications Technologies*, **2012**, 23, 378-392	1.9	21
39	Delay efficient cooperation in public safety vehicular networks using LTE and IEEE 802.11p **2012**,		18
38	Enhancing the QoS of real-time video streaming over LTE MBMS using D2D communications **2012**,		2
37	An energy-efficient M2M communication method for leakage detection in underground water pipes **2012**,		2
36	Cooperative wireless sensor networks for green internet of things **2012**,		15
35	Distributed Load Balancing through Self Organisation of cell size in cellular systems **2012**,		4
34	On real-time video streaming over LTE networks with mobile-to-mobile cooperation **2012**,		12
33	Air Quality Monitoring and Prediction System Using Machine-to-Machine Platform. *Lecture Notes in Computer Science*, **2012**, 508-517	0.9	1
32	A Genetic Algorithm Solution for the Operation of Green LTE Networks with Energy and Environment Considerations. *Lecture Notes in Computer Science*, **2012**, 512-519	0.9	1
31	A novel distributed scheduling scheme for OFDMA uplink using channel information and probabilistic transmission. *Computer Communications*, **2011**, 34, 2104-2113	5.1	2
30	Interference mitigation and avoidance in uplink OFDMA with collaborative distributed intracell scheduling. *AEU - International Journal of Electronics and Communications*, **2011**, 65, 937-941	2.8	4
29	Scheduling in OFDMA Uplink With Imperfect CSI. *International Journal of Wireless Information Networks*, **2011**, 18, 73-79	1.9	
28	A Nash bargaining solution for energy-efficient content distribution over wireless networks with mobile-to-mobile cooperation **2011**,		6
27	Novel time-frequency reservation Aloha scheme for OFDMA systems **2011**,		2
26	Joint Uplink Scheduling and Interference Mitigation in Multicell LTE Networks **2011**,		12
25	A multiorganism based method for Bayesian gene network estimation. *BioSystems*, **2011**, 103, 425-34	1.9	1
24	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	2.8	14

23	An OFDMA communication protocol for wireless sensor networks used for leakage detection in underground water infrastructures **2011**,		4
22	Enhancing the performance of OFDMA underlay cognitive radio networks via secondary pattern nulling and primary beam steering **2011**,		9
21	Beam and RB allocation in LTE uplink with opportunistic beamforming **2011**,		2
20	A comparison of uplink scheduling in OFDMA and SCFDMA **2010**,		2
19	Ergodic sum-rate maximization in OFDMA uplink with discrete rates **2010**,		3
18	Weighted ergodic sum-rate maximisation in uplink orthogonal frequency division multiple access and its achievable rate region. *IET Communications*, **2010**, 4, 2217	1.3	9
17	Proportional fair scheduling with probabilistic interference avoidance in the uplink of multicell OFDMA systems **2010**,		11
16	A transparent pricing scheme for interference mitigation in uplink OFDMA with collaborative distributed scheduling **2010**,		5
15	A Wireless Communications Laboratory on Cellular Network Planning. *IEEE Transactions on Education*, **2010**, 53, 653-661	2.1	10
14	Uplink scheduling in LTE systems using distributed base stations. *European Transactions on Telecommunications*, **2010**, 21, 532-543		12
13	On uplink OFDMA resource allocation with ergodic sum-rate maximization **2009**,		14
12	Distributed uplink scheduling and rate control in cdma2000 using adaptive antenna arrays. *AEU - International Journal of Electronics and Communications*, **2009**, 63, 841-852	2.8	2
11	A Game Theoretical Formulation for Proportional Fairness in LTE Uplink Scheduling **2009**,		42
10	Low complexity scheduling algorithms for the LTE uplink **2009**,		19
9	Centralized and distributed LTE uplink scheduling in a distributed base station scenario **2009**,		3
8	Directivity and Interference Tradeoffs with Cylindrical Antenna Arrays **2008**,		1
7	A new multitask learning method for multiorganism gene network estimation **2008**,		24
6	Reverse Link Rate Control in 1xEV-DO with Adaptive Antenna Arrays **2008**,		1

5	Intercell Interference Reduction by the Use of Chebyshev Circular Antenna Arrays with Beam Steering **2007**,		2
4	Cylindrical Antenna Arrays for WCDMA Downlink Capacity Enhancement **2006**,		6
3	On Physical Layer Security of Double Shadowed Rician Fading Channels. *Wireless Personal Communications*,1	1.9	0
2	Distributed Antenna Systems for Enhanced Video Transmission in LTE Public Safety Networks. *Advances in Wireless Technologies and Telecommunication Book Series*,40-64	0.2	
1	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*,333-367	0.2	1