Emad Alsusa

List of Publications by Citations

121 papers	1,451 citations	18 h-index	33 g-index
179 ext. papers	2,011 ext. citations	4.9 avg, IF	5.45 L-index

#	Paper	IF	Citations
121	Resource Allocation for Energy Efficiency Optimization in Heterogeneous Networks. *IEEE Journal on Selected Areas in Communications*, **2015**, 33, 2104-2117	14.2	137
120	Dynamic linear precoding for the exploitation of known interference in MIMO broadcast systems. *IEEE Transactions on Wireless Communications*, **2009**, 8, 1396-1404	9.6	128
119	. *IEEE Transactions on Wireless Communications*, **2014**, 13, 4656-4669	9.6	98
118	Energy Efficiency Optimization for NOMA With SWIPT. *IEEE Journal on Selected Topics in Signal Processing*, **2019**, 13, 452-466	7.5	93
117	Exact SINR Statistics in the Presence of Heterogeneous Interferers. *IEEE Transactions on Information Theory*, **2015**, 61, 6759-6773	2.8	57
116	Dynamic Peak-Based Threshold Estimation Method for Mitigating Impulsive Noise in Power-Line Communication Systems. *IEEE Transactions on Power Delivery*, **2013**, 28, 2201-2208	4.3	48
115	A Cooperative Clustering Protocol With Duty Cycling for Energy Harvesting Enabled Wireless Sensor Networks. *IEEE Transactions on Wireless Communications*, **2018**, 17, 101-111	9.6	44
114	Decision Fusion for IoT-Based Wireless Sensor Networks. *IEEE Internet of Things Journal*, **2020**, 7, 1313-1326	10.7	41
113	On the Performance of Energy Detection Using Bartlett's Estimate for Spectrum Sensing in Cognitive Radio Systems. *IEEE Transactions on Signal Processing*, **2012**, 60, 3394-3404	4.8	31
112	Performance Analysis of the Periodogram-Based Energy Detector in Fading Channels. *IEEE Transactions on Signal Processing*, **2011**, 59, 3712-3721	4.8	31
111	Preprocessing-Based Impulsive Noise Reduction for Power-Line Communications. *IEEE Transactions on Power Delivery*, **2014**, 29, 1648-1658	4.3	28
110	A Unified Model for the Design and Analysis of Spatially-Correlated Load-Aware HetNets. *IEEE Transactions on Communications*, **2014**, 62, 1-16	6.9	26
109	Two-stage transmitter precoding based on data-driven code-hopping and partial zero forcing beamforming for MC-CDMA communications. *IEEE Transactions on Wireless Communications*, **2009**, 8, 3634-3645	9.6	25
108	Adaptive code allocation for interference management on the downlink of DS-CDMA systems. *IEEE Transactions on Wireless Communications*, **2008**, 7, 2420-2424	9.6	25
107	Energy-Efficient Heterogeneous Cellular Networks With Spectrum Underlay and Overlay Access. *IEEE Transactions on Vehicular Technology*, **2018**, 67, 2439-2453	6.8	24
106	Energy Efficiency Optimization With Interference Alignment in Multi-Cell MIMO Interfering Broadcast Channels. *IEEE Transactions on Communications*, **2015**, 63, 2486-2499	6.9	19
105	Energy-harvesting in cooperative AF relaying networks over log-normal fading channels **2016**,		19

104	Physical Layer Security Over Correlated Log-Normal Cooperative Power Line Communication Channels. *IEEE Access*, **2017**, 5, 13909-13921	3.5	18
103	Joint Cycle Frequencies and Lags Utilization in Cyclostationary Feature Spectrum Sensing. *IEEE Transactions on Signal Processing*, **2013**, 61, 5337-5346	4.8	17
102	Secret Key Exchange Using Private Random Precoding in MIMO FDD and TDD Systems. *IEEE Transactions on Vehicular Technology*, **2017**, 66, 4823-4833	6.8	17
101	Quantized Peak-Based Impulsive Noise Blanking in Power-Line Communications. *IEEE Transactions on Power Delivery*, **2014**, 29, 1630-1638	4.3	17
100	Capacity Analysis of IRS-Based UAV Communications With Imperfect Phase Compensation. *IEEE Wireless Communications Letters*, **2021**, 10, 1479-1483	5.9	17
99	Physical layer security of cooperative relaying power-line communication systems **2016**,		15
98	Effective Noise Cancellation Using Single-Carrier FDMA Transmission in Power-Line Channels. *IEEE Transactions on Power Delivery*, **2014**, 29, 2110-2117	4.3	15
97	A Low-Complexity Time-Domain Linear Symbol Combining Technique for PAPR Reduction in OFDM Systems. *IEEE Transactions on Signal Processing*, **2008**, 56, 4844-4855	4.8	15
96	Secret Key Exchange and Authentication via Randomized Spatial Modulation and Phase Shifting. *IEEE Transactions on Vehicular Technology*, **2018**, 67, 2165-2177	6.8	15
95	Joint D2D Group Association and Channel Assignment in Uplink Multi-Cell NOMA Networks: A Matching-Theoretic Approach. *IEEE Transactions on Communications*, **2019**, 67, 8771-8785	6.9	14
94	Enhanced Multiplexing Gain Using Interference Alignment Cancellation in Multi-Cell MIMO Networks. *IEEE Transactions on Information Theory*, **2016**, 62, 357-369	2.8	13
93	Sequential Cooperative Spectrum Sensing Technique in Time Varying Channel. *IEEE Transactions on Wireless Communications*, **2014**, 13, 3394-3405	9.6	13
92	A Novel Transmitter-Based Selective-Precoding Technique for DS/CDMA Systems. *IEEE Signal Processing Letters*, **2007**, 14, 637-640	3.2	13
91	Spectrum-Occupancy Aware Cooperative Spectrum Sensing Using Adaptive Detection. *IEEE Systems Journal*, **2020**, 14, 2225-2236	4.3	13
90	Exact BER Analysis of NOMA With Arbitrary Number of Users and Modulation Orders. *IEEE Transactions on Communications*, **2021**, 69, 6330-6344	6.9	13
89	On the Performance of IRS-Assisted Multi-Layer UAV Communications with Imperfect Phase Compensation. *IEEE Transactions on Communications*, **2021**, 1-1	6.9	13
88	Stochastic Geometric Analysis of Energy-Efficient Dense Cellular Networks. *IEEE Access*, **2017**, 5, 455-469	3.5	12
87	An Efficient Multiple Lags Selection Method for Cyclostationary Feature Based Spectrum-Sensing. *IEEE Signal Processing Letters*, **2013**, 20, 133-136	3.2	11

86	. *IEEE Access*, **2019**, 7, 163556-163577	3.5	11
85	On the Impact of Antenna Array Geometry on Indoor Wideband Massive MIMO Networks. *IEEE Transactions on Antennas and Propagation*, **2021**, 69, 406-416	4.9	11
84	Adaptive Pilot Allocation Algorithm for Pilot Contamination Mitigation in TDD Massive MIMO Systems **2017**,		10
83	Interference Alignment Cancellation in Compounded MIMO Broadcast Channels With General Message Sets. *IEEE Transactions on Communications*, **2015**, 63, 3702-3712	6.9	10
82	A Dual-Functional Massive MIMO OFDM Communication and Radar Transmitter Architecture. *IEEE Transactions on Vehicular Technology*, **2020**, 69, 14974-14988	6.8	10
81	Information unequal error protection using polar codes. *IET Communications*, **2018**, 12, 956-961	1.3	9
80	Uplink Performance Enhancement Through Adaptive Multi-Association and Decoupling in UHF-mmWave Hybrid Networks. *IEEE Transactions on Vehicular Technology*, **2019**, 68, 9735-9746	6.8	9
79	. *IEEE Transactions on Wireless Communications*, **2021**, 20, 3597-3610	9.6	9
78	Optimized Precoders for Massive MIMO OFDM Dual Radar-Communication Systems. *IEEE Transactions on Communications*, **2021**, 69, 4781-4794	6.9	9
77	Polar codes based OFDM-PLC systems in the presence of middleton class-A noise **2016**,		9
76	RFID Reader Localization Using Hard Decisions With Error Concealment. *IEEE Sensors Journal*, **2019**, 19, 7534-7542	4	8
75	Relay selection for energy harvesting relay networks using a repeated game **2016**,		8
74	Adaptive user grouping algorithm for the downlink massive MIMO systems **2016**,		7
73	DC-LEACH: A duty-cycle based clustering protocol for energy harvesting WSNs **2017**,		6
72	Energy Efficient Deployment of Dense Heterogeneous Cellular Networks **2015**,		6
71	Impact of imperfect channel estimation and antenna correlation on quantised massive multiple-input multiple-output systems. *IET Communications*, **2019**, 13, 1262-1270	1.3	6
70	An Alignment Based Interference Cancellation Scheme for Multi-Cell MIMO Networks **2015**,		5
69	A Load-Aware Base Station Switch-Off Technique for Enhanced Energy Efficiency and Relatively Identical Outage Probability **2015**,		5

68	On the Feasibility of Interference Alignment in Compounded MIMO Broadcast Channels With Antenna Correlation and Mixed User Classes. *IEEE Transactions on Vehicular Technology*, **2018**, 67, 2130-2140	6.8	5
67	MC-CDMA Specific PAPR Reduction Technique Utilising Spreading Code Redistribution **2006**,		5
66	Energy-Efficient Decoupled Access Scheme for Cellular-Enabled UAV Communication Systems. *IEEE Systems Journal*, **2021**, 1-12	4.3	5
65	Ultra-Light Decoder for Turbo Product Codes. *IEEE Communications Letters*, **2018**, 22, 446-449	3.8	5
64	A New Allocation Algorithm for Pilot Contamination Mitigation in TDD Massive MIMO Systems **2017**,		4
63	Energy efficiency in heterogeneous networks **2015**,		4
62	Identifying the maximum DoF region in the three-cell compounded MIMO network **2016**,		4
61	On enhancing the performance of the DPTE-based noise cancellation method utilizing the PTS PAPR reduction scheme in PLC systems **2014**,		4
60	Single-carrier FDMA with blanking/clipping for mitigating impulsive noise over PLC channels **2014**,		4
59	Interference minimization through sleep mode based resource allocation for future femtocell networks **2015**,		4
58	Confederation Based RRM with Proportional Fairness for Soft Frequency Reuse LTE Networks. *IEEE Transactions on Wireless Communications*, **2014**, 13, 1703-1715	9.6	4
57	Hybrid overlay/underlay MC-CDMA for cognitive radio networks with MMSE channel equalization **2013**,		4
56	New and accurate results on the performance of the Multitaper-based detector **2012**,		4
55	A Receiver Architecture for Dual-Functional Massive MIMO OFDM RadCom Systems **2020**,		4
54	AID-based backoff for throughput enhancement in 802.11ah networks. *International Journal of Communication Systems*, **2019**, 32, e3923	1.7	4
53	Secret key establishment technique using channel state information driven phase randomisation in multiple-input multiple-output orthogonal frequency division multiplexing. *IET Information Security*, **2017**, 11, 1-7	1.4	3
52	Joint relay selection and energy-efficient power allocation strategies in energy-harvesting cooperative NOMA networks. *Transactions on Emerging Telecommunications Technologies*, **2019**, 30, e3593	1.9	3
51	Performance analysis and SINR-based power allocation strategies for downlink NOMA networks. *IET Communications*, **2020**, 14, 723-735	1.3	3

50	Performance analysis of downlink NOMA networks over Rayleigh fading channels **2018**,		3
49	Enhancing the throughput of 802.11ah sectorized networks using AID-based backoff counters **2017** ,		3
48	On the Performance of TDD Massive MIMO Systems with Pilot Contamination **2017**,		3
47	On the Detection of Unknown Signals Using Welch Overlapped Segmented Averaging Method **2011** ,		3
46	A novel spatial modulation technique with interference free simultaneous transmission **2010**,		3
45	Cooperative Spectrum Sensing for Cognitive Radio Networks Based on Spectrum Estimates **2011**,		3
44	A Novel Transmitter-Based Selective-Precoding Technique for DS/CDMA Systems **2007**,		3
43	A Dual-Function Massive MIMO Uplink OFDM Communication and Radar Architecture. *IEEE Transactions on Cognitive Communications and Networking*, **2021**, 1-1	6.6	3
42	Load-Aware Energy Efficient Adaptive Large Scale Antenna System. *IEEE Access*, **2020**, 8, 82592-82606	3.5	3
41	Performance Analysis of Downlink NOMA System over □□Generalized Fading Channel **2020**,		3
40	Joint DL/UL Decoupled Cell-Association and Resource Allocation in D2D-Underlay HetNets. *IEEE Transactions on Vehicular Technology*, **2021**, 70, 3640-3651	6.8	3
39	A method to enhance the performance of successive cancellation decoding in polar codes **2016**,		3
38	A Decoupled Access Scheme with Reinforcement Learning Power Control for Cellular-Enabled UAVs. *IEEE Internet of Things Journal*, **2021**, 1-1	10.7	3
37	A Multi-Level Interference Mapping Technique for Resource Management in Cellular Networks **2015**,		2
36	NOMA/OMA Mode Selection and Resource Allocation for Beyond 5G Networks **2020**,		2
35	Network sum-rate maximizing and max-min rate power allocation over time-varying multi-user multi-relay amplify-and-forward networks **2016**,		2
34	Impact of pilot sequence contamination in massive MIMO systems. *IET Communications*, **2017**, 11, 2005-2011	1.5	2
33	Energy efficiency in multi-cell MIMO broadcast channels with interference alignment **2014**,		2

32	A new PAPR reduction tecnique using time domain symbol scrambling for OFDM systems **2007**,		2
31	Resource allocation for SWIPT-enabled energy-harvesting downlink/uplink clustered NOMA networks. *Computer Networks*, **2020**, 182, 107471	5.4	2
30	Performance Analysis for Downlink NOMA Over $alpha$-mu Generalized Fading Channels. *IEEE Transactions on Vehicular Technology*, **2021**, 70, 6814-6825	6.8	2
29	Investigation of Channel Correlation in Indoor Wideband Massive MIMO Systems **2019**,		2
28	Multi-relay selection in energy-harvesting cooperative wireless networks: game-theoretic modeling and analysis. *Telecommunication Systems*, **2020**, 73, 289-311	2.3	2
27	Energy-Efficient Resource Allocation in SWIPT Enabled NOMA Systems **2018**,		2
26	A Matching-Theoretic Approach to User-Association and Channel Assignment in Downlink Multi-Cell NOMA Networks **2018**,		2
25	. *IEEE Internet of Things Journal*, **2021**, 8, 14896-14907	10.7	2
24	Performance Analysis of Multi-Antenna HetNets **2016**,		1
23	Joint cost-sharing and multi-relay selection for two-way relay networks using a pricing game **2016**,		1
22	Post-combining based cyclostationary feature detection for cognitive radio over fading channels **2013**,		1
21	PHY-SEC: Secret key exchange and authentication via Random Spatial Modulation and phase shifting **2017**,		1
20	Pilot contamination mitigation in TDD massive MIMO systems **2017**,		1
19	A new and generalized model for the multitaper detector with nonzero mean signals **2014**,		1
18	Joint dynamic energy-efficient spectrum allocation and routing in two-tiered 4G cellular systems **2013**,		1
17	Cooperative Estimation of Path Loss in Interference Channels Without Primary-User CSI Feedback. *IEEE Signal Processing Letters*, **2013**, 20, 273-276	3.2	1
16	Selective Channel Inversion Precoding for the Downlink of MIMO Wireless Systems **2009**,		1
15	Optimised spreading code redistribution PAPR reduction technique for MC-CDMA systems. *European Transactions on Telecommunications*, **2009**, 20, 522-530		1

14	Accurate evaluation of packet error probabilities considering bit-to-bit error dependence **2005**,		1
13	Joint Estimation of Location and Orientation in Wireless Sensor Networks Using Directional Antennas. *IEEE Sensors Journal*, **2020**, 20, 14347-14359	4	1
12	Joint relay selection and power allocation for NOMA-based multicast cognitive radio networks. *IET Communications*, **2020**, 14, 2027-2037	1.3	1
11	Power allocation over time-varying multiple-access interference channels. *International Journal of Communication Systems*, **2016**, 29, 2041-2058	1.7	1
10	Power allocation over time-varying multi-user multi-relay amplify-and-forward networks. *IET Communications*, **2016**, 10, 2636-2648	1.3	1
9	D2D Group Association and Channel Assignment in Uplink Multi-Cell NOMA Networks **2019**,		1
8	A survey on downlink-uplink decoupled access: Advances, challenges, and open problems. *Computer Networks*, **2022**, 109040	5.4	1
7	Joint relay selection and max-min energy-efficient power allocation in downlink multicell NOMA networks: A matching-theoretic approach. *Transactions on Emerging Telecommunications Technologies*, **2019**, 30, e3564	1.9	0
6	. *IEEE Access*, **2022**, 1-1	3.5	0
5	A Game Theoretic Framework for Quality of Experience Enhancement in Dense Stadia. *IEEE Access*, **2019**, 7, 102606-102616	3.5	
4	Inphase and Quadrature Utilization for Pairing Diversity and Interference Exploitation in Uplink OFDMA. *IEEE Transactions on Communications*, **2014**, 62, 4255-4268	6.9	
3	Network sum-rate maximization via joint power allocation and antenna selection for clustered downlink/uplink NOMA networks. *Physical Communication*, **2022**, 51, 101596	2.2	
2	Efficient NOMA Design without Channel Phase Information using Amplitude-Coherent Detection. *IEEE Transactions on Communications*, **2021**, 1-1	6.9	
1	A Power and Spectrum Efficient Uplink Transmission Scheme for QoS-Constrained IoT Networks. *IEEE Internet of Things Journal*, **2022**, 1-1	10.7	