Mohammed El-Hajjar

List of Publications by Year
in descending order

128 papers	3,316 citations	257450 24 h-index	175258 52 g-index
129 all docs	129 docs citations	129 times ranked	3051 citing authors

#	Article	IF	Citations
1	Intelligent Caching in UAV-Aided Networks. IEEE Transactions on Vehicular Technology, 2022, 71, 739-752.	6.3	9
2	Reconfigurable Intelligent Surfaces Relying on Non-Diagonal Phase Shift Matrices. IEEE Transactions on Vehicular Technology, 2022, 71, 6367-6383.	6.3	19
3	Analog Radio Over Fiber-Aided Multi-Service Communications for High-Speed Trains. IEEE Open Journal of the Communications Society, 2022, 3, 424-434.	6.9	0
4	Deep Learning Assisted Adaptive Index Modulation for mmWave Communications With Channel Estimation. IEEE Transactions on Vehicular Technology, 2022, 71, 9186-9201.	6.3	3
5	Analog Radio-over-Fiber-Aided Optical-Domain MIMO Signal Processing for High-Performance Low-Cost Radio Access Networks. IEEE Communications Magazine, 2021, 59, 126-132.	6.1	6
6	Millimeter-Wave Based Localization Using a Two-Stage Channel Estimation Relying on Few-Bit ADCs. IEEE Open Journal of the Communications Society, 2021, 2, 1736-1752.	6.9	6
7	Millimeter-wave enabled PAM-4 data transmission over hybrid FSO-MMPOF link for access networks. Optical Review, 2021, 28, 278-288.	2.0	6
8	Analog Radio Over Fiber Aided C-RAN: Optical Aided Beamforming for Multi-User Adaptive MIMO Design. Frontiers in Communications and Networks, 2021, 2, .	3.0	1
9	Near-Instantaneously Adaptive Multi-Set Space-Time Shift Keying for UAV-Aided Video Surveillance. IEEE Transactions on Vehicular Technology, 2020, 69, 12843-12856.	6.3	11
10	Scalable Panoramic Wireless Video Streaming Relying on Optimal-Rate FEC-Coded Adaptive QAM. IEEE Transactions on Vehicular Technology, 2020, 69, 11206-11219.	6.3	5
11	Machine Learning Assisted Adaptive Index Modulation for mmWave Communications. IEEE Open Journal of the Communications Society, 2020, 1, 1425-1441.	6.9	15
12	Deep Learning Assisted Detection for Index Modulation Aided mmWave Systems. IEEE Access, 2020, 8, 202738-202754.	4.2	10
13	Soft-Decoding for Multi-Set Space-Time Shift-Keying mmWave Systems: A Deep Learning Approach. IEEE Access, 2020, 8, 49584-49595.	4.2	8
14	A full‐duplex radio over fiber architecture employing 12‰Gbps 16 × 16 optical multiple input multiple output for next‐generation communication networks. Transactions on Emerging Telecommunications Technologies, 2020, 31, e3910.	3.9	6
15	Linearly polarised modes enabled PAM‐4 data transmission over few‐mode fibre for data centre interconnect. Electronics Letters, 2020, 56, 1125-1127.	1.0	4
16	Optimal-Power Superposition Modulation for Scalable Video Broadcasting. IEEE Transactions on Vehicular Technology, 2020, 69, 16230-16234.	6.3	0
17	Two-Dimensional Index Modulation for the Large-Scale Multi-User MIMO Uplink. IEEE Transactions on Vehicular Technology, 2019, 68, 7904-7918.	6.3	10
18	Design and evaluation of plagiarism prevention and detection techniques in engineering education. Higher Education Pedagogies, 2019, 4, 197-208.	3.5	4

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19	Deep Learning Aided Fingerprint-Based Beam Alignment for mmWave Vehicular Communication. IEEE Transactions on Vehicular Technology, 2019, 68, 10858-10871.	6.3	46
20	Multi-User Full Duplex Transceiver Design for mmWave Systems Using Learning-Aided Channel Prediction. IEEE Access, 2019, 7, 66068-66083.	4.2	15
21	Differential-Detection Aided Large-Scale Generalized Spatial Modulation is Capable of Operating in High-Mobility Millimeter-Wave Channels. IEEE Journal on Selected Topics in Signal Processing, 2019, 13, 1360-1374.	10.8	26
22	Multi-Set Space-Time Shift Keying Assisted Adaptive Inter-Layer FEC for Wireless Video Streaming. IEEE Access, 2019, 7, 3592-3609.	4.2	7
23	VLSI Implementation of a Fully-Pipelined K-Best MIMO Detector with Successive Interference Cancellation. Circuits, Systems, and Signal Processing, 2019, 38, 4739-4761.	2.0	11
24	Compressed Sensing-Aided Multi-Dimensional Index Modulation. IEEE Transactions on Communications, 2019, 67, 4074-4087.	7.8	16
25	Multi-User Hybrid Beamforming Relying on Learning-Aided Link-Adaptation for mmWave Systems. IEEE Access, 2019, 7, 23197-23209.	4.2	18
26	Analogue Radio Over Fiber Aided MIMO Design for the Learning Assisted Adaptive C-RAN Downlink. IEEE Access, 2019, 7, 21359-21371.	4.2	13
27	Small-Spot Direct UV Written Fiber Bragg Gratings in Multicore Fiber. , 2019, , .		1
28	Analogue Wireless Beamforming Exploiting the Fiber-Nonlinearity of Radio Over Fiber-Based C-<roman>RANs</roman>. IEEE Transactions on Vehicular Technology, 2019, 68, 2802-2813.	6.3	14
29	Hybrid Beamforming Design for Full-Duplex Millimeter Wave Communication. IEEE Transactions on Vehicular Technology, 2019, 68, 1394-1404.	6.3	97
30	A Noncoherent Multiuser Large-Scale SIMO System Relying on M-Ary DPSK and BICM-ID. IEEE Transactions on Vehicular Technology, 2018, 67, 1809-1814.	6.3	30
31	Joint-Alphabet Space Time Shift Keying in mm-Wave Non-Orthogonal Multiple Access. IEEE Access, 2018, 6, 22602-22621.	4.2	11
32	Adaptive Transceiver Design for C-RAN in mmWave Communications. IEEE Access, 2018, 6, 16770-16782.	4.2	9
33	Millimeter-Wave Communications: Physical Channel Models, Design Considerations, Antenna Constructions, and Link-Budget. IEEE Communications Surveys and Tutorials, 2018, 20, 870-913.	39.4	456
34	Hierarchical Multi-Functional Layered Spatial Modulation. IEEE Access, 2018, 6, 9492-9533.	4.2	15
35	Radio Over Fiber Downlink Design for Spatial Modulation and Multi-Set Space-Time Shift-Keying. IEEE Access, 2018, 6, 21812-21827.	4.2	7
36	Compressed-Sensing-Aided Space-Time Frequency Index Modulation. IEEE Transactions on Vehicular Technology, 2018, 67, 6259-6271.	6.3	42

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37	Dual-Function Hybrid Beamforming and Transmit Diversity Aided Millimeter Wave Architecture. IEEE Transactions on Vehicular Technology, 2018, 67, 2798-2803.	6.3	28
38	Joint Space-Time Block-Coding and Beamforming for the Multiuser Radio Over Plastic Fiber Downlink. IEEE Transactions on Vehicular Technology, 2018, 67, 2781-2786.	6.3	8
39	Effects of Mutual Coupling on Lattice Reduction-Aided Millimeter Wave Hybrid Beamforming. , 2018, , .		2
40	An Adaptive Multi-User MIMO Scheme for the Millimeter-Wave Downlink. , 2018, , .		1
41	Compressed Sensing-Aided Index Modulation Improves Space-Time Shift Keying Assisted Millimeter-Wave Communications. IEEE Access, 2018, 6, 64742-64756.	4.2	8
42	MBER Transmit Precoding for the Rank-Deficient MIMO-Aided Internet of Things. , 2018, , .		0
43	Hybrid beamforming design for dualâ€polarised millimetre wave MIMO systems. Electronics Letters, 2018, 54, 1257-1258.	1.0	7
44	Multiâ€dimensional encryption scheme based on physical layer for fading channel. IET Communications, 2018, 12, 2470-2477.	2.2	4
45	Experimental characterization of the radio over fiber aided twin-antenna spatial modulation downlink. Optics Express, 2018, 26, 12432.	3.4	8
46	Hardware Efficient Architecture for Element-Based Lattice Reduction Aided K-Best Detector for MIMO Systems. Journal of Sensor and Actuator Networks, 2018, 7, 22.	3.9	7
47	Multi-Set Space-Time Shift Keying and Space- Frequency Space-Time Shift Keying for Millimeter-Wave Communications. IEEE Access, 2017, 5, 8324-8342.	4.2	24
48	A Survey of Network Lifetime Maximization Techniques in Wireless Sensor Networks. IEEE Communications Surveys and Tutorials, 2017, 19, 828-854.	39.4	482
49	Reduced-RF-Chain Aided Soft-Decision Multi-Set Steered Space-Time Shift-Keying for Millimeter-Wave Communications. IEEE Access, 2017, 5, 7223-7243.	4.2	12
50	Millimeter-Wave Transmission for Small-Cell Backhaul in Dense Urban Environment: a Solution Based on MIMO-OFDM and Space-Time Shift Keying (STSK). IEEE Access, 2017, 5, 4000-4017.	4.2	27
51	Multiuser Steered Multiset Space-Time Shift Keying for Millimeter-Wave Communications. IEEE Transactions on Vehicular Technology, 2017, 66, 5491-5495.	6.3	15
52	Mm-Wave STSK-aided Single Carrier block transmission for broadband networking. , 2017, , .		7
53	Performance of a Non-Coherent Massive SIMO M-DPSK System. , 2017, , .		10
54	Millimeter Wave Hybrid Beamforming with DFT-MUB Aided Precoder Codebook Design. , 2017, , .		15

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55	Energy-Efficient Hardware Implementation of an LR-Aided K-Best MIMO Decoder for 5G Networks. Journal of Low Power Electronics and Applications, 2016, 6, 12.	2.0	0
56	Buffer-aided relaying for the multi-user uplink: outage analysis and power allocation. IET Communications, 2016, 10, 936-944.	2.2	4
57	Multi-Set Space-Time Shift-Keying With Reduced Detection Complexity. IEEE Access, 2016, 4, 4234-4246.	4.2	28
58	Element-based Lattice Reduction aided K-Best detector for large-scale MIMO systems. , 2016, , .		4
59	Optical single sideband signal generation relying on a single-drive Mach–Zehnder modulator for radio over fibre communications. IET Communications, 2016, 10, 534-539.	2.2	6
60	Plagiarism detection and prevention techniques in engineering education. , 2016, , .		20
61	Layered Multi-Group Steered Space-Time Shift-Keying for Millimeter-Wave Communications. IEEE Access, 2016, 4, 3708-3718.	4.2	26
62	Millimeter-Wave Radio Over Fiber Optical Upconversion Techniques Relying on Link Nonlinearity. IEEE Communications Surveys and Tutorials, 2016, 18, 29-53.	39.4	71
63	Error Vector Magnitude Analysis of Fading SIMO Channels Relying on MRC Reception. IEEE Transactions on Communications, 2016, 64, 1786-1797.	7.8	16
64	A Survey of VLSI Implementations of Tree Search Algorithms for MIMO Detection. Circuits, Systems, and Signal Processing, 2016, 35, 3644-3674.	2.0	7
65	Adaptive-Truncated-HARQ-Aided Layered Video Streaming Relying on Interlayer FEC Coding. IEEE Transactions on Vehicular Technology, 2016, 65, 1506-1521.	6.3	16
66	Outage Analysis and Optimization in Single- and Multiuser Wireless Energy Harvesting Networks. IEEE Transactions on Vehicular Technology, 2016, 65, 1464-1476.	6.3	17
67	VLSI implementation of a scalable K-best MIMO detector. , 2015, , .		6
68	Experimental demonstration of plastic optical fibre-based digitised radio over fibre downlink. Electronics Letters, 2015, 51, 1679-1681.	1.0	1
69	Power Allocation-Aided Spatial Modulation for Limited-Feedback MIMO Systems. IEEE Transactions on Vehicular Technology, 2015, 64, 2198-2204.	6.3	112
70	Energy-efficient adaptive MIMO decoders. , 2015, , .		0
71	Network-Lifetime Maximization of Wireless Sensor Networks. IEEE Access, 2015, 3, 2191-2226.	4.2	49
72	Outage Analysis of Superposition-Modulation-Aided Network-Coded Cooperation in the Presence of Network Coding Noise. IEEE Transactions on Vehicular Technology, 2015, 64, 493-501.	6.3	13

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73	Performance Improvement and Cost Reduction Techniques for Radio Over Fiber Communications. IEEE Communications Surveys and Tutorials, 2015, 17, 627-670.	39.4	121
74	Phase rotation€based precoding for spatial modulation systems. IET Communications, 2015, 9, 1315-1323.	2.2	23
75	Simultaneous Optical Phase and Intensity Modulation Transmits Independent Signals in Radio Over Fiber Communication. IEEE Communications Letters, 2015, 19, 557-560.	4.1	8
76	Cross-Layer Network Lifetime Maximization in Interference-Limited WSNs. IEEE Transactions on Vehicular Technology, 2015, 64, 3795-3803.	6.3	75
77	Single ODSB Radio-Over-Fiber Signal Supports STBC at Each RAP. IEEE Communications Letters, 2015, 19, 1331-1334.	4.1	4
78	The "Rap" on ROF: Radio over Fiber Using Radio Access Point for High Data Rate Wireless Personal Area Networks. IEEE Microwave Magazine, 2015, 16, 64-78.	0.8	15
79	Cross€layer network lifetime optimisation considering transmit and signal processing power in wireless sensor networks. IET Wireless Sensor Systems, 2014, 4, 176-182.	1.7	21
80	Adaptive Soft-Decision Aided Differential Modulation for Cooperative Uplink Transmission Relying on Radio-Over-Fiber Backhaul. , 2014, , .		0
81	Wireless Video: An Interlayer Error-Protection-Aided Multilayer Approach. IEEE Vehicular Technology Magazine, 2014, 9, 104-112.	3.4	9
82	Pilot Contamination Elimination for Large-Scale Multiple-Antenna Aided OFDM Systems. IEEE Journal on Selected Topics in Signal Processing, 2014, 8, 759-772.	10.8	122
83	Layered Wireless Video Relying on Minimum-Distortion Inter-Layer FEC Coding. IEEE Transactions on Multimedia, 2014, 16, 697-710.	7.2	24
84	Demonstrating the practical challenges of wireless communications using USRP. , 2014, 52, 194-201.		27
85	Opportunistic Relay Selection for Cooperative Relaying in Cochannel Interference Contaminated Networks. IEEE Transactions on Vehicular Technology, 2014, 63, 2455-2461.	6.3	3
86	Star-QAM Signaling Constellations for Spatial Modulation. IEEE Transactions on Vehicular Technology, 2014, 63, 3741-3749.	6.3	68
87	EXIT Charts for System Design and Analysis. IEEE Communications Surveys and Tutorials, 2014, 16, 127-153.	39.4	106
88	Radio-over-Fiber Aided Base Station Coordination for OFDM. , 2014, , .		1
89	A Full-Duplex Diversity-Assisted Hybrid Analogue/Digitized Radio Over Fibre for Optical/Wireless Integration. IEEE Communications Letters, 2013, 17, 409-412.	4.1	18
90	Baseband Radio over Fiber Aided Millimeter-Wave Distributed Antenna for Optical/Wireless Integration. IEEE Communications Letters, 2013, 17, 1012-1015.	4.1	12

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91	Inter-Layer FEC Aided Unequal Error Protection for Multilayer Video Transmission in Mobile TV. IEEE Transactions on Circuits and Systems for Video Technology, 2013, 23, 1622-1634.	8.3	35
92	A Survey of Digital Television Broadcast Transmission Techniques. IEEE Communications Surveys and Tutorials, 2013, 15, 1924-1949.	39.4	82
93	Distributed Multiple-Component Turbo Codes for Cooperative Hybrid ARQ. IEEE Signal Processing Letters, 2013, 20, 599-602.	3.6	13
94	Detect-and-Forward Relaying Aided Cooperative Spatial Modulation for Wireless Networks. IEEE Transactions on Communications, 2013, 61, 4500-4511.	7.8	40
95	Inter-Layer Turbo Coded Unequal Error Protection for Multi-Layer Video Transmission. , 2013, , .		0
96	Inter-layer-decoding aided self-concatenated coded scalable video transmission. , 2013, , .		3
97	Near-Capacity Wireless Transceivers and Cooperative Communications in the MIMO Era: Evolution of Standards, Waveform Design, and Future Perspectives. Proceedings of the IEEE, 2011, 99, 1343-1385.	21.3	67
98	Self-Concatenated Coding and Multi-Functional MIMO Aided H.264 Video Telephony. , 2011, , .		0
99	Layered Steered Space–Time-Spreading-Aided Generalized MC DS-CDMA. IEEE Transactions on Vehicular Technology, 2010, 59, 999-1005.	6.3	9
100	Dispensing with Channel Estimationâ€¦. IEEE Vehicular Technology Magazine, 2010, 5, 42-48.	3.4	6
101	Performance of the Space-Time Block Coded DS-CDMA Uplink Employing Soft-Output ACO-Aided Multiuser Space-Time Detection and Iterative Decoding. , 2010, , .		2
102	Over-Complete Source-Mapping Aided AMR-WB Using Iteratively Detected Differential Space-Time Spreading. , 2010, , .		0
103	Iterative H.264 Source and Channel Decoding Using Sphere Packing Modulation Aided Layered Steered Space-Time Codes. , 2010, , .		0
104	On Multidimensional BICM-ID Constellation Labelling. , 2010, , .		4
105	Multifunctional MIMO systems: A combined diversity and multiplexing design perspective. IEEE Wireless Communications, 2010, 17, 73-79.	9.0	37
106	Iteratively Detected Three-Stage Multi-Dimensional Sphere Packing Modulation Aided Multi-Functional MIMO. , 2009, , .		1
107	Three-Stage Iterative Detection of a MIMO-Aided Precoded AMR-WB Speech Transceiver. , 2009, , .		0
108	Robust Transmission of H.264 Coded Video Using Three-Stage Iterative Joint Source and Channel Decoding. , 2009, , .		0

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109	Iteratively Detected Generalised MC DS-CDMA Using Layered Steeered Space-Time Spreading. , 2009, , .		0
110	Layered steered space-time codes using multi-dimensional sphere packing modulation. IEEE Transactions on Wireless Communications, 2009, 8, 3335-3340.	9.2	18
111	Iterative AMR-WB Source and Channel Decoding Using Differential Space–Time Spreading-Assisted Sphere-Packing Modulation. IEEE Transactions on Vehicular Technology, 2009, 58, 484-490.	6.3	8
112	Distributed Turbo Coding in the Presence of Inter-User Channel Impairment. , 2009, , .		0
113	Over-Complete Source-Mapping Aided AMR-WB MIMO Transceiver Using Three-Stage Interative Detection. , 2008, , .		3
114	Turbo Detection of Precoded Sphere Packing Modulation Using Four Transmit Antennas for Differential Space-Time Spreading. IEEE Transactions on Wireless Communications, 2008, 7, 943-952.	9.2	23
115	Iteratively Detected Sphere Packing Modulated OFDM: An Exit Chart Perspective. , 2008, , .		0
116	A Systematic Luby Transform Coded V-BLAST System. , 2008, , .		4
117	EXIT Chart Aided Design of DS-CDMA UltraWideBand Systems Using Iterative Decoding. , 2008, , .		0
118	Over-Complete Mapping Aided, Soft-Bit Assisted Iterative Unequal Error Protection H.264 Joint Source and Channel Decoding. , 2008, , .		11
119	Downlink Steered Space-Time Spreading For Multi-Carrier Transmission Over Frequency Selective Channels. IEEE Vehicular Technology Conference, 2008, , .	0.4	0
120	Near-Instantaneously Adaptive Cooperative Uplink Schemes Based on Space-Time Block Codes and V-Blast. IEEE Vehicular Technology Conference, 2007, , .	0.4	9
121	Layered steered space-time codes and their capacity. Electronics Letters, 2007, 43, 680.	1.0	13
122	Iteratively Detected Irregular Variable Length Coding and Sphere-Packing Modulation-Aided Differential Space-Time Spreading. Vehicular Technology Conference-Fall (VTC-FALL), Proceedings, IEEE, 2007, , .	0.0	5
123	Coherent and Differential Downlink Space-Time Steering Aided Generalised Multicarrier DS-CDMA. IEEE Transactions on Wireless Communications, 2007, 6, 3857-3863.	9.2	6
124	Downlink Steered Space-Time Spreading Assisted Generalised Multicarrier DS-CDMA Using Sphere-Packing-Aided Multilevel Coding. Vehicular Technology Conference-Fall (VTC-FALL), Proceedings, IEEE, 2007, , .	0.0	2
125	Adaptive Differential Space-Time-Spreading-Assisted Turbo-Detected Sphere Packing Modulation. , 2007, , .		0
126	Layered Steered Space-Time Codes Using Iterative Detection. Signal Processing Systems Design and Implementation (siPS), IEEE Workshop on, 2007, , .	0.0	1

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127	Differential space-time spreading using iteratively detected sphere packing modulation and two transmit antennas. , 2006, , .		11
128	Differential Space-Time Spreading Using Four Transmit Antennas and Iteratively Detected Sphere Packing Modulation. , 2006, , .		2