Chao Xu

List of Publications by Citations

51 papers	718 citations	16 h-index	24 g-index
51 ext. papers	867 ext. citations	7.6 avg, IF	4.2 L-index

#	Paper	IF	Citations
51	Reduced-Complexity Coherent Versus Non-Coherent QAM-Aided Space-Time Shift Keying. *IEEE Transactions on Communications*, **2011**, 59, 3090-3101	6.9	78
50	Transmit-Diversity-Assisted Space-Shift Keying for Colocated and Distributed/Cooperative MIMO Elements. *IEEE Transactions on Vehicular Technology*, **2011**, 60, 2864-2869	6.8	62
49	Spatial Modulation and Space-Time Shift Keying: Optimal Performance at a Reduced Detection Complexity. *IEEE Transactions on Communications*, **2013**, 61, 206-216	6.9	52
48	Two Decades of MIMO Design Tradeoffs and Reduced-Complexity MIMO Detection in Near-Capacity Systems. *IEEE Access*, **2017**, 5, 18564-18632	3.5	47
47	Sixty Years of Coherent Versus Non-Coherent Tradeoffs and the Road From 5G to Wireless Futures. *IEEE Access*, **2019**, 7, 178246-178299	3.5	29
46	Reduced-Complexity Noncoherently Detected Differential Space-Time Shift Keying. *IEEE Signal Processing Letters*, **2011**, 18, 153-156	3.2	28
45	Compressed-Sensing Assisted Spatial Multiplexing Aided Spatial Modulation. *IEEE Transactions on Wireless Communications*, **2018**, 17, 794-807	9.6	25
44	Reduced-Complexity Iterative-Detection-Aided Generalized Space-Time Shift Keying. *IEEE Transactions on Vehicular Technology*, **2012**, 61, 3656-3664	6.8	25
43	Adaptive Coherent/Non-Coherent Spatial Modulation Aided Unmanned Aircraft Systems. *IEEE Wireless Communications*, **2019**, 26, 170-177	13.4	24
42	. *IEEE Transactions on Communications*, **2017**, 1-1	6.9	21
41	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	7.5	20
40	. *IEEE Transactions on Signal Processing*, **2018**, 66, 773-788	4.8	20
39	. *IEEE Transactions on Communications*, **2019**, 67, 1099-1116	6.9	19
38	Reduced-complexity noncoherently detected Differential Space-Time Shift Keying **2011**,		18
37	Finite-Cardinality Single-RF Differential Space-Time Modulation for Improving the Diversity-Throughput Tradeoff. *IEEE Transactions on Communications*, **2019**, 67, 318-335	6.9	18
36	Near-Capacity Wireless System Design Principles. *IEEE Communications Surveys and Tutorials*, **2015**, 17, 1806-1833	37.1	17
35	Reduced-Complexity Approx-Log-MAP and Max-Log-MAP Soft PSK/QAM Detection Algorithms. *IEEE Transactions on Communications*, **2013**, 61, 1415-1425	6.9	16

34	Reduced-Complexity Soft-Decision Aided Space-Time Shift Keying. *IEEE Signal Processing Letters*, **2011**, 18, 547-550	3.2	16
33	Multiple-Symbol Differential Sphere Detection Aided Differential Space-Time Block Codes Using QAM Constellations. *IEEE Signal Processing Letters*, **2011**, 18, 497-500	3.2	15
32	Differential Space-Time Coding Dispensing With Channel Estimation Approaches the Performance of Its Coherent Counterpart in the Open-Loop Massive MIMO-OFDM Downlink. *IEEE Transactions on Communications*, **2018**, 66, 6190-6204	6.9	15
31	Multiple-Symbol Joint Signal Processing for Differentially Encoded Single- and Multi-Carrier Communications: Principles, Designs and Applications. *IEEE Communications Surveys and Tutorials*, **2014**, 16, 689-712	37.1	14
30	. *IEEE Transactions on Vehicular Technology*, **2013**, 62, 2633-2643	6.8	13
29	Near-Perfect Finite-Cardinality Generalized Space-Time Shift Keying. *IEEE Journal on Selected Areas in Communications*, **2019**, 37, 2146-2164	14.2	10
28	Constant-Envelope Space-Time Shift Keying. *IEEE Journal on Selected Topics in Signal Processing*, **2019**, 13, 1387-1402	7.5	9
27	. *IEEE Transactions on Vehicular Technology*, **2016**, 65, 8345-8360	6.8	9
26	Reduced-Complexity Soft-Decision Multiple-Symbol Differential Sphere Detection. *IEEE Transactions on Communications*, **2015**, 63, 3275-3289	6.9	8
25	Optimal Pilot Power Based Channel Estimation Improves the Throughput of Intelligent Reflective Surface Assisted Systems. *IEEE Transactions on Vehicular Technology*, **2020**, 69, 16202-16206	6.8	8
24	Low-Complexity Channel Estimation and Passive Beamforming for RIS-Assisted MIMO Systems Relying on Discrete Phase Shifts. *IEEE Transactions on Communications*, **2021**, 1-1	6.9	8
23	Fifty Years of Noise Modeling and Mitigation in Power-Line Communications. *IEEE Communications Surveys and Tutorials*, **2021**, 23, 41-69	37.1	8
22	Impulsive Noise Mitigation in Digital Subscriber Lines: The State-of-the-Art and Research Opportunities. *IEEE Communications Magazine*, **2019**, 57, 145-151	9.1	7
21	Near-Capacity Irregular Convolutional Coded Cooperative Differential Linear Dispersion Codes Using Multiple-Symbol Differential Detection. *IEEE Signal Processing Letters*, **2011**, 18, 173-176	3.2	7
20	Soft-Decision Multiple-Symbol Differential Sphere Detection and Decision-Feedback Differential Detection for Differential QAM Dispensing with Channel Estimation in the Face of Rapidly Fading Channels. *IEEE Transactions on Wireless Communications*, **2016**, 15, 4408-4425	9.6	7
19	Performance of HARQ-Assisted OFDM Systems Contaminated by Impulsive Noise: Finite-Length LDPC Code Analysis. *IEEE Access*, **2019**, 7, 14112-14123	3.5	6
18	Multicarrier Division Duplex Aided Millimeter Wave Communications. *IEEE Access*, **2019**, 7, 100719-100732	3.5	6
17	Iterative Receiver Design for Polar-Coded SCMA Systems. *IEEE Transactions on Communications*, **2021**, 69, 4235-4246	6.9	6

16	Joint Impulsive Noise Estimation and Data Detection Conceived for LDPC-Coded DMT-Based DSL Systems. *IEEE Access*, **2017**, 5, 23133-23145	3.5	4
15	Reconfigurable Intelligent Surface Assisted Multi-Carrier Wireless Systems for Doubly Selective High-Mobility Ricean Channels. *IEEE Transactions on Vehicular Technology*, **2022**, 1-1	6.8	3
14	Low-Complexity Improved-Rate Generalised Spatial Modulation: Bit-to-Symbol Mapping, Detection and Performance Analysis. *IEEE Transactions on Vehicular Technology*, **2021**, 1-1	6.8	3
13	Scalable Panoramic Wireless Video Streaming Relying on Optimal-Rate FEC-Coded Adaptive QAM. *IEEE Transactions on Vehicular Technology*, **2020**, 69, 11206-11219	6.8	3
12	Air-to-Ground NOMA Systems for the Internet-Above-the-Clouds. *IEEE Access*, **2018**, 6, 47442-47460	3.5	3
11	Subcarrier Subset Selection-Aided Transmit Precoding Achieves Full-Diversity in Index Modulation. *IEEE Transactions on Vehicular Technology*, **2019**, 68, 11031-11041	6.8	2
10	Joint Training of the Superimposed Direct and Reflected Links in Reconfigurable Intelligent Surface Assisted Multiuser Communications. *IEEE Transactions on Green Communications and Networking*, **2022**, 1-1	4	2
9	Near-Instantaneously Adaptive Multi-Set Space-Time Shift Keying for UAV-Aided Video Surveillance. *IEEE Transactions on Vehicular Technology*, **2020**, 69, 12843-12856	6.8	2
8	Artificially Time-Varying Differential MIMO for Achieving Practical Physical Layer Security. *IEEE Open Journal of the Communications Society*, **2021**, 2, 2180-2194	6.7	2
7	Turbo Detection Aided Autoencoder for Multi-Carrier Wireless Systems: Integrating Deep Learning into Channel Coded Systems. *IEEE Transactions on Cognitive Communications and Networking*, **2022**, 1-1	6.6	2
6	. *IEEE Transactions on Wireless Communications*, **2021**, 20, 3847-3864	9.6	1
5	Deep Learning-Aided Optical IM/DD OFDM Approaches the Throughput of RF-OFDM. *IEEE Journal on Selected Areas in Communications*, **2021**, 1-1	14.2	0
4	Unity-Rate Coding Improves the Iterative Detection Convergence of Autoencoder-Aided Communication Systems. *IEEE Transactions on Vehicular Technology*, **2022**, 1-1	6.8	0
3	Energy Efficient Transmission Based on Grouped Spatial Modulation for Upstream DSL Systems. *IEEE Access*, **2019**, 7, 88312-88326	3.5	
2	Optimal-Power Superposition Modulation for Scalable Video Broadcasting. *IEEE Transactions on Vehicular Technology*, **2020**, 69, 16230-16234	6.8	
1	The Achievable Rate Analysis of Generalized Quadrature Spatial Modulation and a Pair of Low-Complexity Detectors. *IEEE Transactions on Vehicular Technology*, **2022**, 1-1	6.8	