Jiayi Zhang

List of Publications by Year
in descending order

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108 papers	5,354 citations	81900 39 h-index	98798 67 g-index
108 all docs	108 docs citations	108 times ranked	3690 citing authors

#	Article	IF	Citations
1	Green radio: radio techniques to enable energy-efficient wireless networks. , 2011, 49, 46-54.		613
2	Prospective Multiple Antenna Technologies for Beyond 5G. IEEE Journal on Selected Areas in Communications, 2020, 38, 1637-1660.	14.0	460
3	Cell-Free Massive MIMO: A New Next-Generation Paradigm. IEEE Access, 2019, 7, 99878-99888.	4.2	285
4	Performance Analysis of Mixed-ADC Massive MIMO Systems Over Rician Fading Channels. IEEE Journal on Selected Areas in Communications, 2017, 35, 1327-1338.	14.0	220
5	On Low-Resolution ADCs in Practical 5G Millimeter-Wave Massive MIMO Systems. IEEE Communications Magazine, 2018, 56, 205-211.	6.1	218
6	On the Spectral Efficiency of Massive MIMO Systems With Low-Resolution ADCs. IEEE Communications Letters, 2016, 20, 842-845.	4.1	207
7	On the Performance of RIS-Assisted Dual-Hop UAV Communication Systems. IEEE Transactions on Vehicular Technology, 2020, 69, 10385-10390.	6.3	180
8	On the Performance of NOMA-Based Cooperative Relaying Systems Over Rician Fading Channels. IEEE Transactions on Vehicular Technology, 2017, 66, 11409-11413.	6.3	137
9	Performance of Cell-Free Massive MIMO With Rician Fading and Phase Shifts. IEEE Transactions on Wireless Communications, 2019, 18, 5299-5315.	9.2	129
10	Mixed-ADC/DAC Multipair Massive MIMO Relaying Systems: Performance Analysis and Power Optimization. IEEE Transactions on Communications, 2019, 67, 140-153.	7.8	125
11	Channel Estimation for Cell-Free mmWave Massive MIMO Through Deep Learning. IEEE Transactions on Vehicular Technology, 2019, 68, 10325-10329.	6.3	124
12	Performance Analysis and Power Control of Cell-Free Massive MIMO Systems With Hardware Impairments. IEEE Access, 2018, 6, 55302-55314.	4.2	118
13	Unified Performance Analysis of Mixed Radio Frequency/Free-Space Optical Dual-Hop Transmission Systems. Journal of Lightwave Technology, 2015, 33, 2286-2293.	4.6	112
14	Non-Orthogonal Random Access for 5G Networks. IEEE Transactions on Wireless Communications, 2017, 16, 4817-4831.	9.2	107
15	Structured Massive Access for Scalable Cell-Free Massive MIMO Systems. IEEE Journal on Selected Areas in Communications, 2021, 39, 1086-1100.	14.0	102
16	Achievable Rate of Rician Large-Scale MIMO Channels With Transceiver Hardware Impairments. IEEE Transactions on Vehicular Technology, 2016, 65, 8800-8806.	6.3	80
17	New Results on the Fluctuating Two-Ray Model With Arbitrary Fading Parameters and Its Applications. IEEE Transactions on Vehicular Technology, 2018, 67, 2766-2770.	6.3	80
18	Tabu-Search-Based Pilot Assignment for Cell-Free Massive MIMO Systems. IEEE Transactions on Vehicular Technology, 2020, 69, 2286-2290.	6.3	75

#	Article	IF	Citations
19	Performance Analysis of Digital Communication Systems Over Composite $eta{-}mu$/Gamma Fading Channels. IEEE Transactions on Vehicular Technology, 2012, 61, 3114-3124.	6.3	74
20	Spectral Efficiency of Multipair Massive MIMO Two-Way Relaying With Hardware Impairments. IEEE Wireless Communications Letters, 2018, 7, 14-17.	5.0	74
21	Resource Allocation for Intelligent Reflecting Surface Aided Vehicular Communications. IEEE Transactions on Vehicular Technology, 2020, 69, 12321-12326.	6.3	69
22	Graph Coloring Based Pilot Assignment for Cell-Free Massive MIMO Systems. IEEE Transactions on Vehicular Technology, 2020, 69, 9180-9184.	6.3	67
23	Effective capacity of communication systems over Î² â€“ Î¼ shadowed fading channels. Electronics Letters, 2015, 51, 1540-1542.	1.0	60
24	The Effective Throughput of MISO Systems Over $kappa$ â€“mu Fading Channels. IEEE Transactions on Vehicular Technology, 2014, 63, 943-947.	6.3	57
25	On High-Order Capacity Statistics of Spectrum Aggregation Systems Over $kappa $ - $mu $ and $kappa $ - $mu $ Shadowed Fading Channels. IEEE Transactions on Communications, 2017, 65, 935-944.	7.8	57
26	Physical Layer Security Over Fluctuating Two-Ray Fading Channels. IEEE Transactions on Vehicular Technology, 2018, 67, 8949-8953.	6.3	57
27	On the Ergodic Capacity of MIMO Free-Space Optical Systems Over Turbulence Channels. IEEE Journal on Selected Areas in Communications, 2015, 33, 1925-1934.	14.0	55
28	Effective Rate of MISO Systems Over $kappa $ - $mu $ Shadowed Fading Channels. IEEE Access, 2017, 5, 10605-10611.	4.2	54
29	Efficient Receiver Design for Uplink Cell-Free Massive MIMO With Hardware Impairments. IEEE Transactions on Vehicular Technology, 2020, 69, 4537-4541.	6.3	53
30	Performance Analysis of 5G Mobile Relay Systems for High-Speed Trains. IEEE Journal on Selected Areas in Communications, 2020, 38, 2760-2772.	14.0	52
31	Advances in Cooperative Single-Carrier FDMA Communications: Beyond LTE-Advanced. IEEE Communications Surveys and Tutorials, 2015, 17, 730-756.	39.4	51
32	Network Slicing Enabled Resource Management for Service-Oriented Ultra-Reliable and Low-Latency Vehicular Networks. IEEE Transactions on Vehicular Technology, 2020, 69, 7847-7862.	6.3	50
33	Channel Estimation for mmWave Massive MIMO With Convolutional Blind Denoising Network. IEEE Communications Letters, 2020, 24, 95-98.	4.1	49
34	Performance Analysis of RIS-Aided Systems With Practical Phase Shift and Amplitude Response. IEEE Transactions on Vehicular Technology, 2021, 70, 4501-4511.	6.3	48
35	Effective Rate Analysis in Weibull Fading Channels. IEEE Wireless Communications Letters, 2016, 5, 340-343.	5.0	46
36	Uplink Performance of Cell-Free Massive MIMO Over Spatially Correlated Rician Fading Channels. IEEE Communications Letters, 2021, 25, 1348-1352.	4.1	43

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37	OFDMA/SC-FDMA Aided Spaceâ€“Time Shift Keying for Dispersive Multiuser Scenarios. IEEE Transactions on Vehicular Technology, 2013, 62, 408-414.	6.3	42
38	On the Multivariate Gammaâ€“Gamma Distribution With Arbitrary Correlation and Applications in Wireless Communications. IEEE Transactions on Vehicular Technology, 2016, 65, 3834-3840.	6.3	42
39	DFT-Based Hybrid Beamforming Multiuser Systems: Rate Analysis and Beam Selection. IEEE Journal on Selected Topics in Signal Processing, 2018, 12, 514-528.	10.8	41
40	Generalized physical layer channel model for relay- based super dense networks. China Communications, 2015, 12, 123-131.	3.2	40
41	Effective Rate of MISO Systems Over Fisherâ€“Snedecor <inline-formula> <tex-math notation="LaTeX">$mathcal{F}$ </tex-math> </inline-formula> Fading Channels. IEEE Communications Letters, 2018, 22, 2619-2622.	4.1	39
42	Spectral and energy efficiency of cell-free massive MIMO systems with hardware impairments. , 2017, , .		38
43	Performance Analysis of Mixed RF-UWOC Dual-Hop Transmission Systems. IEEE Transactions on Vehicular Technology, 2020, 69, 14043-14048.	6.3	37
44	Unified Framework for the Effective Rate Analysis of Wireless Communication Systems Over MISO Fading Channels. IEEE Transactions on Communications, 2017, 65, 1775-1785.	7.8	35
45	Cooperative Store-Carry-Forward Scheme for Intermittently Connected Vehicular Networks. IEEE Transactions on Vehicular Technology, 2016, , 1-1.	6.3	34
46	Capacity Analysis of $alpha $ - $eta $ - $kappa $ - $mu $ Fading Channels. IEEE Communications Letters, 2017, 21, 1449-1452.	4.1	34
47	SNR Coverage Probability Analysis of RIS-Aided Communication Systems. IEEE Transactions on Vehicular Technology, 2021, 70, 3914-3919.	6.3	31
48	Two-Way Hybrid Terrestrial-Satellite Relaying Systems: Performance Analysis and Relay Selection. IEEE Transactions on Vehicular Technology, 2019, 68, 7011-7023.	6.3	30
49	Performance Analysis of Cell-Free Massive MIMO Over Spatially Correlated Fading Channels. , 2019, , .		29
50	Wireless powered IoE for 6G: Massive access meets scalable cell-free massive MIMO. China Communications, 2020, 17, 92-109.	3.2	29
51	Wireless powered UAV relay communications over fluctuating two-ray fading channels. Physical Communication, 2019, 35, 100724.	2.1	26
52	Dual-Hop Relaying Communications Over Fisher-Snedecor F-Fading Channels. IEEE Transactions on Communications, 2020, 68, 2695-2710.	7.8	26
53	Energy-Efficient Channel-Dependent Cooperative Relaying for the Multiuser SC-FDMA Uplink. IEEE Transactions on Vehicular Technology, 2011, 60, 992-1004.	6.3	24
54	Secrecy Performance Analysis of SIMO Systems Over Correlated $kappa$ â€“mu Shadowed Fading Channels. IEEE Access, 2019, 7, 86090-86101.	4.2	24

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55	Capacity-approaching linear precoding with low-complexity for large-scale MIMO systems. , 2015, , .		23
56	Gallager's Exponent Analysis of STBC MIMO Systems over Î·-Î¼ and Î²-Î¼ Fading Channels. IEEE Transactions on Communications, 2013, 61, 1028-1039.	7.8	22
57	Secure mmWave Communications in Cognitive Radio Networks. IEEE Wireless Communications Letters, 2019, 8, 1171-1174.	5.0	21
58	On the Distribution of the Ratio of Products of Fisher-Snedecor $mathcal {F}$ Random Variables and Its Applications. IEEE Transactions on Vehicular Technology, 2020, 69, 1855-1866.	6.3	21
59	Multipair Massive MIMO Two-Way Full-Duplex Relay Systems with Hardware Impairments. , 2017, , .		19
60	Energy-Efficient Dynamic Resource Allocation for Opportunistic-Relaying-Assisted SC-FDMA Using Turbo-Equalizer-Aided Soft Decode-and-Forward. IEEE Transactions on Vehicular Technology, 2013, 62, 235-246.	6.3	17
61	Confidential Information Ensurance through Physical Layer Security in Device-to-Device Communication. , 2018, , .		17
62	Joint Full-Duplex and Roadside Unit Selection for NOMA-Enabled V2X Communications: Ergodic Rate Performance. IEEE Access, 2020, 8, 140348-140360.	4.2	16
63	Power-Efficient Opportunistic Amplify-and-Forward Single-Relay Aided Multi-User SC-FDMA Uplink. , 2010, , .		13
64	Cell-Free Massive MIMO with Rician Fading: Estimation Schemes and Spectral Efficiency. , 2018, , .		12
65	Multi-User Performance of the Amplify-and-Forward Single-Relay Assisted SC-FDMA Uplink. , 2009, , .		11
66	Performance analysis of highâ€speed railway communication systems subjected to coâ€channel interference and channel estimation errors. IET Communications, 2014, 8, 1151-1157.	2.2	9
67	UAV-Aided Wireless Information and Power Transmission for High-Speed Train Communications. , 2018, , .		9
68	NOMA-Based Cell-Free Massive MIMO Over Spatially Correlated Rician Fading Channels. , 2020, , .		9
69	Cell-Free Massive MIMO with Channel Aging and Pilot Contamination. , 2020, , .		9
70	On the spectral efficiency of space-constrained massive MIMO with linear receivers. , 2016, , .		8
71	Performance Analysis of Wireless Powered UAV Relaying Systems Over <tex>$kappa-mu$</tex> Fading Channels. , 2018, , .		8
72	Effective Capacity of Fluctuating Two-Ray Channels with Arbitrary Fading Parameters. , 2018, , .		8

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73	Cell-Free Massive MIMO With Low-Resolution ADCs Over Spatially Correlated Channels. , 2020, , .		8
74	Amount of Secrecy Loss: A Novel Metric for Physical Layer Security Analysis. IEEE Communications Letters, 2020, 24, 1626-1630.	4.1	8
75	Performance of relay networks in fading environments with dominant specular components. China Communications, 2016, 13, 69-78.	3.2	7
76	Guest Editorial Special Issue on Multiple Antenna Technologies for Beyond 5G-Part II. IEEE Journal on Selected Areas in Communications, 2020, 38, 1941-1944.	14.0	7
77	Physical-Layer Analysis of IEEE 802.11ay Based on a Fading Channel Model from Mobile Measurements. , 2019, , .		6
78	Expanded Compute-and-Forward for Backhaul-Limited Cell-Free Massive MIMO. , 2019, , .		5
79	Downlink Performance of Cell-Free Massive MIMO with Rician Fading and Phase Shifts. , 2019, , .		5
80	On the Cross-Application of Calibrated Pathloss Models Using Area Features: Finding a way to determine similarity between areas. IEEE Antennas and Propagation Magazine, 2020, 62, 40-50.	1.4	5
81	Efficient Receiver for Cell-Free Massive MIMO Systems with Low-Resolution ADCs. , 2020, , .		5
82	Guest Editorial Special Issue on Multiple Antenna Technologies for Beyond 5G-Partâ€"I. IEEE Journal on Selected Areas in Communications, 2020, 38, 1633-1636.	14.0	5
83	Effective rate analysis of MISO η-μ fading channels. , 2013, , .		4
84	A Novel Random Access Scheme Based on Successive Interference Cancellation for 5G Networks. , 2017, , .		4
85	Performance Analysis of Dual-Hop DF Satellite Relaying over k-Âμ Shadowed Fading Channels. , 2017, , .		4
86	On the Concatenations of Polar Codes and Non-Binary LDPC Codes. IEEE Access, 2018, 6, 65088-65097.	4.2	4
87	Performance analysis of dual-hop UAV relaying systems over mixed fluctuating two-ray and Nakagami-m fading channels. Science China Information Sciences, 2021, 64, 1.	4.3	4
88	Link-Level Abstraction of IEEE 802.11ay based on Quasi-Deterministic Channel Model from Measurements. , 2020, , .		4
89	Frequency-Domain Turbo Equalisation in Coded SC-FDMA Systems: EXIT Chart Analysis and Performance. , 2012, , .		3
90	Outage probability analysis of relay systems over Î²-Î¼ fading channels. China Communications, 2014, 11, 60-66.	3.2	3

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91	Reliable Hybrid Systematic Network Coding for Multicast Services in 5G Networks. , 2018, , .		3
92	Mapping Design for 2^{M} -Ary Bit-Interleaved Polar Coded Modulation. IEEE Access, 2019, 7, 116774-116784.	4.2	3
93	Hybrid Precoding for Millimeter Wave Multiuser Massive MIMO Systems with Low-Resolution DACs. , 2020, , .		3
94	Deep Learning Based Link-Level Abstraction for mmWave Communications. , 2021, , .		3
95	An enhanced multi-user eigen transmission scheme for cell-edge performance improvement. , 2014, , .		2
96	Impact of cooperative spaceâ€“time/frequency diversity in OFDMâ€based wireless sensor systems over mobile multipath channels. IET Wireless Sensor Systems, 2016, 6, 138-143.	1.7	2
97	Wireless Powered UAV Relay Communications over the Fisher-Snedecoer Æ' Fading Channels. , 2019, , .		2
98	First-hop-quality-aware dynamic resource allocation for amplify-and-forward opportunistic relaying assisted SC-FDMA. , 2012, , .		1
99	An Enhanced Coherent Joint Transmission Algorithm for Multi-Cell Downlink Transmission. , 2014, , .		1
100	The Application of NOMA on High-Speed Railway with Partial CSI. , 2019, , .		1
101	Performance Analysis of Dual-Hop Mixed FSO/mmWave Systems. , 2020, , .		1
102	Gallager's error exponent analysis of STBC systems over η-μ fading channels. , 2013, , .		0
103	Effective Rate Analysis of MISO Systems over Î±-Âµ Fading Channels. , 2014, , .		0
104	MIMO-OFDM transmissions invoking space-time/frequency linear dispersion codes subject to Doppler and delay spreads. , 2016, , .		0
105	Analog beam selection schemes of DFT-based hybrid beamforming multiuser systems. , 2017, , .		0
106	Outage Probability of Multihop Relaying with Cochannel Interferences over k-Âµ Fading Channels. , 2017, , .		0
107	IEEE Access Special Section Editorial: Advances in Statistical Channel Modeling for Future Wireless Communications Networks. IEEE Access, 2020, 8, 160325-160328.	4.2	0
108	Outage Probability of Two-Way Relaying Systems Over Mixed Fluctuating Two-Ray and Nakagami-m Fading Channels. , 2020, , .		0