Wei Xu

List of Publications by Citations

130 papers	3,753 citations	30 h-index	57 g-index
140 ext. papers	4,816 ext. citations	5.5 avg, IF	6.42 L-index

#	Paper	IF	Citations
130	Low-Complexity Hybrid Precoding in Massive Multiuser MIMO Systems. *IEEE Wireless Communications Letters*, **2014**, 3, 653-656	5.9	455
129	Multicell MIMO Communications Relying on Intelligent Reflecting Surfaces. *IEEE Transactions on Wireless Communications*, **2020**, 19, 5218-5233	9.6	328
128	Secrecy Rate Maximization for Intelligent Reflecting Surface Assisted Multi-Antenna Communications. *IEEE Communications Letters*, **2019**, 23, 1488-1492	3.8	210
127	Resource Allocation for D2D-Enabled Vehicular Communications. *IEEE Transactions on Communications*, **2017**, 65, 3186-3197	6.9	194
126	Energy Efficient Resource Allocation in Machine-to-Machine Communications With Multiple Access and Energy Harvesting for IoT. *IEEE Internet of Things Journal*, **2018**, 5, 229-245	10.7	124
125	5G Cellular User Equipment: From Theory to Practical Hardware Design. *IEEE Access*, **2017**, 5, 13992-14010	3.5	107
124	On the Optimality of Power Allocation for NOMA Downlinks With Individual QoS Constraints. *IEEE Communications Letters*, **2017**, 21, 1649-1652	3.8	103
123	Energy Efficient UAV Communication With Energy Harvesting. *IEEE Transactions on Vehicular Technology*, **2020**, 69, 1913-1927	6.8	80
122	Joint Altitude, Beamwidth, Location, and Bandwidth Optimization for UAV-Enabled Communications. *IEEE Communications Letters*, **2018**, 22, 1716-1719	3.8	76
121	Fair Non-Orthogonal Multiple Access for Visible Light Communication Downlinks. *IEEE Wireless Communications Letters*, **2016**, 1-1	5.9	68
120	Multi-Agent Deep Reinforcement Learning-Based Trajectory Planning for Multi-UAV Assisted Mobile Edge Computing. *IEEE Transactions on Cognitive Communications and Networking*, **2021**, 7, 73-84	6.6	64
119	Deep-Learning-Based Joint Resource Scheduling Algorithms for Hybrid MEC Networks. *IEEE Internet of Things Journal*, **2020**, 7, 6252-6265	10.7	62
118	. *IEEE Internet of Things Journal*, **2019**, 6, 7103-7115	10.7	61
117	MIMO Channel Information Feedback Using Deep Recurrent Network. *IEEE Communications Letters*, **2019**, 23, 188-191	3.8	60
116	Spectral and Energy Efficiency of IRS-Assisted MISO Communication With Hardware Impairments. *IEEE Wireless Communications Letters*, **2020**, 9, 1366-1369	5.9	59
115	Multichannel direct transmissions of near-field information. *Light: Science and Applications*, **2019**, 8, 60	16.7	57
114	. *IEEE Transactions on Communications*, **2019**, 67, 7672-7685	6.9	56

113	Power Control for Multi-Cell Networks With Non-Orthogonal Multiple Access. *IEEE Transactions on Wireless Communications*, **2018**, 17, 927-942	9.6	53
112	Joint Precoding Optimization for Multiuser Multi-Antenna Relaying Downlinks Using Quadratic Programming. *IEEE Transactions on Communications*, **2011**, 59, 1228-1235	6.9	51
111	Enabling Multi-Functional 5G and Beyond User Equipment: A Survey and Tutorial. *IEEE Access*, **2019**, 7, 116975-117008	3.5	50
110	Spectral and Energy Efficiency of Multi-Pair Massive MIMO Relay Network With Hybrid Processing. *IEEE Transactions on Communications*, **2017**, 65, 3794-3809	6.9	48
109	Robust Beamforming With Partial Channel State Information for Energy Efficient Networks. *IEEE Journal on Selected Areas in Communications*, **2015**, 33, 2920-2935	14.2	48
108	MIMO Relaying Broadcast Channels With Linear Precoding and Quantized Channel State Information Feedback. *IEEE Transactions on Signal Processing*, **2010**, 58, 5233-5245	4.8	48
107	. *IEEE Transactions on Wireless Communications*, **2018**, 17, 5465-5479	9.6	47
106	Rate-Maximized Zero-Forcing Beamforming for VLC Multiuser MISO Downlinks. *IEEE Photonics Journal*, **2016**, 8, 1-13	1.8	41
105	Energy Efficient Non-Orthogonal Multiple Access for Machine-to-Machine Communications. *IEEE Communications Letters*, **2017**, 21, 817-820	3.8	33
104	Energy-Efficient Wireless Communications with Distributed Reconfigurable Intelligent Surfaces. *IEEE Transactions on Wireless Communications*, **2021**, 1-1	9.6	32
103	Joint Transmit Power and Placement Optimization for URLLC-Enabled UAV Relay Systems. *IEEE Transactions on Vehicular Technology*, **2020**, 69, 8003-8007	6.8	31
102	Efficient Low-Resolution ADC Relaying for Multiuser Massive MIMO System. *IEEE Transactions on Vehicular Technology*, **2017**, 66, 11039-11056	6.8	31
101	Beamforming Optimization for IRS-Aided Communications With Transceiver Hardware Impairments. *IEEE Transactions on Communications*, **2021**, 69, 1214-1227	6.9	31
100	Multiuser Massive MIMO Relaying With Mixed-ADC Receiver. *IEEE Signal Processing Letters*, **2017**, 24, 76-80	3.2	30
99	Rate Maximization for Downlink Multiuser Visible Light Communications. *IEEE Access*, **2016**, 4, 6567-6573	3.5	29
98	A Framework on Hybrid MIMO Transceiver Design Based on Matrix-Monotonic Optimization. *IEEE Transactions on Signal Processing*, **2019**, 67, 3531-3546	4.8	28
97	A Semi-Closed Form Solution to MIMO Relaying Optimization With Source-Destination Link. *IEEE Signal Processing Letters*, **2016**, 23, 247-251	3.2	28
96	Beamforming Design for Multiuser Transmission Through Reconfigurable Intelligent Surface. *IEEE Transactions on Communications*, **2021**, 69, 589-601	6.9	28

95	Weighted Sum Energy Efficiency Maximization in Ad Hoc Networks. *IEEE Wireless Communications Letters*, **2015**, 4, 233-236	5.9	27
94	Bit-Level Optimized Neural Network for Multi-Antenna Channel Quantization. *IEEE Wireless Communications Letters*, **2020**, 9, 87-90	5.9	26
93	Beam-Blocked Channel Estimation for FDD Massive MIMO With Compressed Feedback. *IEEE Access*, **2017**, 5, 11791-11804	3.5	26
92	Pilot Reuse Among D2D Users in D2D Underlaid Massive MIMO Systems. *IEEE Transactions on Vehicular Technology*, **2018**, 67, 467-482	6.8	25
91	Analysis and Optimization for RIS-Aided Multi-Pair Communications Relying on Statistical CSI. *IEEE Transactions on Vehicular Technology*, **2021**, 70, 3897-3901	6.8	25
90	User-Centric Networking for Dense C-RANs: High-SNR Capacity Analysis and Antenna Selection. *IEEE Transactions on Communications*, **2017**, 65, 5067-5080	6.9	24
89	A MIMO Detector With Deep Learning in the Presence of Correlated Interference. *IEEE Transactions on Vehicular Technology*, **2020**, 69, 4492-4497	6.8	23
88	Performance Analysis of Multiuser Massive MIMO With Spatially Correlated Channels Using Low-Precision ADC. *IEEE Communications Letters*, **2018**, 22, 205-208	3.8	23
87	Cache Placement in Two-Tier HetNets With Limited Storage Capacity: Cache or Buffer?. *IEEE Transactions on Communications*, **2018**, 66, 5415-5429	6.9	22
86	Energy Efficient Rate Splitting Multiple Access (RSMA) with Reconfigurable Intelligent Surface **2020**,		22
85	Beamformig Design With Fast Convergence for IRS-Aided Full-Duplex Communication. *IEEE Communications Letters*, **2020**, 24, 2849-2853	3.8	22
84	AI Driven Heterogeneous MEC System with UAV Assistance for Dynamic Environment: Challenges and Solutions. *IEEE Network*, **2021**, 35, 400-408	11.4	22
83	Secure Massive MIMO Communication With Low-Resolution DACs. *IEEE Transactions on Communications*, **2019**, 67, 3265-3278	6.9	21
82	Utility-Energy Efficiency Oriented User Association With Power Control in Heterogeneous Networks. *IEEE Wireless Communications Letters*, **2018**, 7, 526-529	5.9	21
81	On Performance of Quantized Transceiver in Multiuser Massive MIMO Downlinks. *IEEE Wireless Communications Letters*, **2017**, 6, 562-565	5.9	20
80	Optimal power allocation for downlink two-user non-orthogonal multiple access in visible light communication. *Journal of Communications and Information Networks*, **2017**, 2, 57-64		20
79	Packet Error Probability and Effective Throughput for Ultra-Reliable and Low-Latency UAV Communications. *IEEE Transactions on Communications*, **2021**, 69, 73-84	6.9	20
78	Distributed IRS With Statistical Passive Beamforming for MISO Communications. *IEEE Wireless Communications Letters*, **2021**, 10, 221-225	5.9	20

77	Wideband mmWave Channel Estimation for Hybrid Massive MIMO With Low-Precision ADCs. *IEEE Wireless Communications Letters*, **2019**, 8, 285-288	5.9	18
76	Optimal Fairness-Aware Time and Power Allocation in Wireless Powered Communication Networks. *IEEE Transactions on Communications*, **2018**, 66, 3122-3135	6.9	17
75	Ergodic Rate Analysis of Cooperative Ambient Backscatter Communication. *IEEE Wireless Communications Letters*, **2019**, 8, 1679-1682	5.9	16
74	A Novel Cross Entropy Approach for Offloading Learning in Mobile Edge Computing. *IEEE Wireless Communications Letters*, **2020**, 9, 402-405	5.9	16
73	Cellular and WiFi Co-design for 5G User Equipment **2018**,		16
72	AnciNet: An Efficient Deep Learning Approach for Feedback Compression of Estimated CSI in Massive MIMO Systems. *IEEE Wireless Communications Letters*, **2020**, 9, 2192-2196	5.9	15
71	Association and Load Optimization With User Priorities in Load-Coupled Heterogeneous Networks. *IEEE Transactions on Wireless Communications*, **2018**, 17, 324-338	9.6	14
70	Learning Oriented Cross-Entropy Approach to User Association in Load-Balanced HetNet. *IEEE Wireless Communications Letters*, **2018**, 7, 1014-1017	5.9	14
69	Performance Analysis of Multi-Cell Millimeter-Wave Massive MIMO Networks With Low-Precision ADCs. *IEEE Transactions on Communications*, **2019**, 67, 302-317	6.9	14
68	Transceiver Optimization for Full-Duplex Massive MIMO AF Relaying With Direct Link. *IEEE Access*, **2016**, 4, 8857-8864	3.5	13
67	Energy efficient resource allocation for machine-to-machine communications with NOMA and energy harvesting **2017**,		12
66	Cascaded Channel Estimation for IRS-Assisted mmWave Multi-Antenna With Quantized Beamforming. *IEEE Communications Letters*, **2021**, 25, 593-597	3.8	12
65	Joint Time Allocation and Power Control in Multicell Networks With Load Coupling: Energy Saving and Rate Improvement. *IEEE Transactions on Vehicular Technology*, **2017**, 66, 10470-10485	6.8	11
64	Sum-Rate Maximization of Uplink Rate Splitting Multiple Access (RSMA) Communication **2019**,		11
63	Spectral-Efficient Reconstructed LACO-OFDM Transmission for Dimming Compatible Visible Light Communications. *IEEE Photonics Journal*, **2019**, 11, 1-14	1.8	10
62	Framework of Channel Estimation for Hybrid Analog-and-Digital Processing Enabled Massive MIMO Communications. *IEEE Transactions on Communications*, **2018**, 66, 3902-3915	6.9	10
61	Secure Communication for Spatially Sparse Millimeter-Wave Massive MIMO Channels via Hybrid Precoding. *IEEE Transactions on Communications*, **2020**, 68, 887-901	6.9	10
60	UAV-Relayed Covert Communication Towards a Flying Warden. *IEEE Transactions on Communications*, **2021**, 1-1	6.9	10

59	Subarray-Based Simultaneous Beam Training for Multiuser mmWave Massive MIMO Systems. *IEEE Wireless Communications Letters*, **2019**, 8, 976-979	5.9	9
58	Efficient Sparse Code Multiple Access Decoder Based on Deterministic Message Passing Algorithm. *IEEE Transactions on Vehicular Technology*, **2020**, 69, 3562-3574	6.8	9
57	Weighted Sum Secrecy Rate Maximization for D2D Underlaid Cellular Networks. *IEEE Transactions on Communications*, **2020**, 68, 349-362	6.9	9
56	Discrete Phase Shift Design for Practical Large Intelligent Surface Communication **2019**,		9
55	Energy-Saving UAV-Assisted Multiuser Communications With Massive MIMO Hybrid Beamforming. *IEEE Communications Letters*, **2020**, 24, 1100-1104	3.8	8
54	Weighted Spectral Efficiency Optimization for Hybrid Beamforming in Multiuser Massive MIMO-OFDM Systems. *IEEE Transactions on Vehicular Technology*, **2019**, 68, 9698-9712	6.8	8
53	A Lightweight Deep Network for Efficient CSI Feedback in Massive MIMO Systems. *IEEE Wireless Communications Letters*, **2021**, 10, 1840-1844	5.9	8
52	Is Full-Duplex Relaying More Energy Efficient Than Half-Duplex Relaying?. *IEEE Wireless Communications Letters*, **2019**, 8, 841-844	5.9	7
51	Interference-Free Hybrid Optical OFDM With Low-Complexity Receiver for Wireless Optical Communications. *IEEE Communications Letters*, **2019**, 23, 818-821	3.8	7
50	Subarray-Cooperation-Based Multi-Resolution Codebook and Beam Alignment Design for mmWave Backhaul Links. *IEEE Access*, **2019**, 7, 18319-18331	3.5	7
49	Dual-Polarized Massive MIMO Systems Under Multi-Cell Pilot Contamination. *IEEE Access*, **2016**, 4, 5998-6013	3.5	7
48	A Generalizable Model-and-Data Driven Approach for Open-Set RFF Authentication. *IEEE Transactions on Information Forensics and Security*, **2021**, 16, 4435-4450	8	7
47	Power Consumption Optimization Using Gradient Boosting Aided Deep Q-Network in C-RANs. *IEEE Access*, **2020**, 8, 46811-46823	3.5	6
46	Compressive Sensing-Based User Clustering for Downlink NOMA Systems With Decoding Power. *IEEE Signal Processing Letters*, **2018**, 25, 660-664	3.2	6
45	Optimized Full-Duplex MIMO DF Relaying With Limited Dynamic Range. *IEEE Access*, **2017**, 5, 20726-20735	3.5	6
44	User Tracking and Wireless Digital Transmission through a Programmable Metasurface. *Advanced Materials Technologies*, **2021**, 6, 2001254	6.8	6
43	Multicell Edge Coverage Enhancement Using Mobile UAV-Relay. *IEEE Internet of Things Journal*, **2020**, 7, 7482-7494	10.7	6
42	Hybrid Beamforming Design for Multiuser Massive MIMO-OFDM Systems **2018**,		6

41	Non-Alternating Globally Optimal MMSE Precoding for Multiuser VLC Downlinks. *IEEE Communications Letters*, **2019**, 23, 608-611	3.8	5
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39	Layered Optical OFDM With Adaptive Bias for Dimming Compatible Visible Light Communications. *Journal of Lightwave Technology*, **2021**, 39, 3434-3444	4	5
38	Analysis and Optimization of Massive Access to the IoT Relying on Multi-Pair Two-Way Massive MIMO Relay Systems. *IEEE Transactions on Communications*, **2021**, 69, 4585-4598	6.9	5
37	Optimal Multiuser Loading in Quantized Massive MIMO Under Spatially Correlated Channels. *IEEE Transactions on Vehicular Technology*, **2019**, 68, 1459-1471	6.8	5
36	Outage Minimized Full-Duplex Multiantenna DF Relaying With CSI Uncertainty. *IEEE Transactions on Vehicular Technology*, **2018**, 67, 9000-9005	6.8	5
35	Hybrid Transceiver Optimization for Multi-Hop Communications. *IEEE Journal on Selected Areas in Communications*, **2020**, 38, 1880-1895	14.2	4
34	Robust Transmission Design for Multicell D2D Underlaid Cellular Networks. *IEEE Transactions on Vehicular Technology*, **2018**, 67, 5922-5936	6.8	4
33	Multiuser Massive MIMO AF Relaying: Spectral Efficiency and Power Allocation. *IEEE Access*, **2018**, 6, 18894-18906	3.5	4
32	Training Optimization for Hybrid MIMO Communication Systems. *IEEE Transactions on Wireless Communications*, **2020**, 19, 5473-5487	9.6	4
31	Spectrum-efficient hybrid PAM-DMT for intensity-modulated optical wireless communication. *Optics Express*, **2020**, 28, 12621-12637	3.3	4
30	Low-Cost Passive Beamforming for RIS-Aided Wideband OFDM Systems. *IEEE Wireless Communications Letters*, **2021**, 1-1	5.9	4
29	Optimal Control for Full-Duplex Communications with Reconfigurable Intelligent Surface **2021**,		4
28	Data Augmentation Empowered Neural Precoding for Multiuser MIMO with MMSE Model. *IEEE Communications Letters*, **2022**, 1-1	3.8	4
27	Learning to Optimize Resource Assignment for Task Offloading in Mobile Edge Computing. *IEEE Communications Letters*, **2022**, 1-1	3.8	4
26	On Uplink Performance of Multiuser Massive MIMO Relay Network With Limited RF Chains. *IEEE Transactions on Vehicular Technology*, **2020**, 69, 8670-8683	6.8	3
25	Analog Versus Hybrid Precoding for Multiuser Massive MIMO With Quantized CSI Feedback. *IEEE Communications Letters*, **2020**, 24, 2319-2323	3.8	3
24	Distributed Energy Efficiency Optimization for Multi-User Cognitive Radio Networks Over MIMO Interference Channels: A Non-Cooperative Game Approach. *IEEE Access*, **2020**, 8, 26701-26714	3.5	3

23	Energy Minimization in Machine-to-Machine Systems with Energy Harvesting **2017**,		3
22	Resource Allocation for Wireless Communications with Distributed Reconfigurable Intelligent Surfaces **2020**,		3
21	Adaptively Biased OFDM for IM/DD-Aided Optical Wireless Communication Systems. *IEEE Wireless Communications Letters*, **2020**, 9, 698-701	5.9	3
20	RIS-Assisted Broad Coverage for mmWave Massive MIMO System **2021**,		3
19	Incorporating Importance Sampling in EM Learning for Sequence Detection in SPAD Underwater OWC. *IEEE Access*, **2019**, 7, 4529-4537	3.5	3
18	Cooperative Multi-RIS Communications for Wideband mmWave MISO-OFDM Systems. *IEEE Wireless Communications Letters*, **2021**, 1-1	5.9	3
17	Fast beam alignment algorithm for multi-user mmWave communications. *Electronics Letters*, **2018**, 54, 1456-1458	1.1	3
16	Coexistence of Direct and Relayed Transmission Users in Multi-Cell Massive MIMO Systems. *IEEE Transactions on Vehicular Technology*, **2019**, 68, 3728-3746	6.8	2
15	Energy Efficient Joint Power Optimization for Full-Duplex Relaying. *IEEE Access*, **2019**, 7, 137040-137047	3.5	2
14	Statistically Robust Beamforming Optimization for Multi-Antenna Full-Duplex DF Relaying. *IEEE Access*, **2019**, 7, 175564-175575	3.5	2
13	Sliding Differential Evolution Scheduling for Federated Learning in Bandwidth-Limited Networks. *IEEE Communications Letters*, **2021**, 25, 503-507	3.8	2
12	Cooperative Reflection Design with Timing Offsets in Distributed Multi-RIS Communications. *IEEE Wireless Communications Letters*, **2021**, 1-1	5.9	2
11	Rethinking Uplink Hybrid Processing: When Is Pure Analog Processing Suggested?. *IEEE Transactions on Vehicular Technology*, **2019**, 68, 5139-5144	6.8	1
10	On uplink performance of massive MIMO relaying with hybrid multiuser detection **2017**,		1
9	An Artificial Radio Frequency Fingerprint Embedding Scheme for Device Identification. *IEEE Communications Letters*, **2022**, 1-1	3.8	1
8	Is Multipath Channel Beneficial for Wideband Massive MIMO With Low-Resolution ADCs?. *IEEE Transactions on Communications*, **2021**, 69, 4083-4097	6.9	1
7	Secure Communication for Spatially Correlated Massive MIMO With Low-Resolution DACs. *IEEE Wireless Communications Letters*, **2021**, 1-1	5.9	1
6	Distributed Neural Precoding for Hybrid mmWave MIMO Communications with Limited Feedback. *IEEE Communications Letters*, **2022**, 1-1	3.8	1

5	Cell-Free IoT Networks with SWIPT: Performance Analysis and Power Control. *IEEE Internet of Things Journal*, **2022**, 1-1	10.7	0
4	On Maximizing the Sum Secret Key Rate for Reconfigurable Intelligent Surface-Assisted Multiuser Systems. *IEEE Transactions on Information Forensics and Security*, **2021**, 1-1	8	0
3	Robust Key Generation With Hardware Mismatch for Secure MIMO Communications. *IEEE Transactions on Information Forensics and Security*, **2021**, 16, 5264-5278	8	0
2	Performance Analysis of TDD Multicell Massive MIMO Systems With Non-Orthogonal Pilots and Hardware Imperfections in Rician Fading Channels. *IEEE Transactions on Vehicular Technology*, **2021**, 70, 1347-1364	6.8	0
1	Energy Efficient Beamforming Optimization for Integrated Sensing and Communication. *IEEE Wireless Communications Letters*, **2022**, 1-1	5.9	