Wei Xu

List of Publications by Year
in descending order

140 papers	6,239 citations	94433 37 h-index	74163 75 g-index
140 all docs	140 docs citations	140 times ranked	4763 citing authors

#	Article	IF	Citations
1	Energy-Efficient Wireless Communications With Distributed Reconfigurable Intelligent Surfaces. IEEE Transactions on Wireless Communications, 2022, 21, 665-679.	9.2	107
2	Joint Modulations of Electromagnetic Waves and Digital Signals on a Single Metasurface Platform to Reach Programmable Wireless Communications. Engineering, 2022, 8, 86-95.	6.7	11
3	On Maximizing the Sum Secret Key Rate for Reconfigurable Intelligent Surface-Assisted Multiuser Systems. IEEE Transactions on Information Forensics and Security, 2022, 17, 211-225.	6.9	28
4	Low-Cost Passive Beamforming for RIS-Aided Wideband OFDM Systems. IEEE Wireless Communications Letters, 2022, 11, 318-322.	5.0	15
5	Cell-Free IoT Networks With SWIPT: Performance Analysis and Power Control. IEEE Internet of Things Journal, 2022, 9, 13780-13793.	8.7	12
6	An Artificial Radio Frequency Fingerprint Embedding Scheme for Device Identification. IEEE Communications Letters, 2022, 26, 974-978.	4.1	7
7	Data Augmentation Empowered Neural Precoding for Multiuser MIMO With MMSE Model. IEEE Communications Letters, 2022, 26, 1037-1041.	4.1	7
8	Learning to Optimize Resource Assignment for Task Offloading in Mobile Edge Computing. IEEE Communications Letters, 2022, 26, 1303-1307.	4.1	9
9	Distributed Neural Precoding for Hybrid mmWave MIMO Communications With Limited Feedback. IEEE Communications Letters, 2022, 26, 1568-1572.	4.1	6
10	Energy Efficient Beamforming Optimization for Integrated Sensing and Communication. IEEE Wireless Communications Letters, 2022, 11, 1374-1378.	5.0	10
11	UAV-Enabled Data Collection Over Clustered Machine-Type Communication Networks: AEM Modeling and Trajectory Planning. IEEE Transactions on Vehicular Technology, 2022, 71, 10016-10032.	6.3	3
12	Dilated Convolution Based CSI Feedback Compression for Massive MIMO Systems. IEEE Transactions on Vehicular Technology, 2022, 71, 11216-11221.	6.3	38
13	Semi-Blind Channel Estimation for RIS-Assisted MISO Systems Using Expectation Maximization. IEEE Transactions on Vehicular Technology, 2022, 71, 10173-10178.	6.3	4
14	Worst-Case Design for RIS-Aided Over-the-Air Computation With Imperfect CSI. IEEE Communications Letters, 2022, 26, 2136-2140.	4.1	6
15	Sliding Differential Evolution Scheduling for Federated Learning in Bandwidth-Limited Networks. IEEE Communications Letters, 2021, 25, 503-507.	4.1	8
16	Cascaded Channel Estimation for IRS-Assisted mmWave Multi-Antenna With Quantized Beamforming. IEEE Communications Letters, 2021, 25, 593-597.	4.1	32
17	Packet Error Probability and Effective Throughput for Ultra-Reliable and Low-Latency UAV Communications. IEEE Transactions on Communications, 2021, 69, 73-84.	7.8	48
18	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.	7.9	196

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19	Distributed IRS With Statistical Passive Beamforming for MISO Communications. IEEE Wireless Communications Letters, 2021, 10, 221-225.	5.0	34
20	Beamforming Design for Multiuser Transmission Through Reconfigurable Intelligent Surface. IEEE Transactions on Communications, 2021, 69, 589-601.	7.8	65
21	Beamforming Optimization for IRS-Aided Communications With Transceiver Hardware Impairments. IEEE Transactions on Communications, 2021, 69, 1214-1227.	7.8	65
22	UAV-Relayed Covert Communication Towards a Flying Warden. IEEE Transactions on Communications, 2021, 69, 7659-7672.	7.8	33
23	Cooperative Multi-RIS Communications for Wideband mmWave MISO-OFDM Systems. IEEE Wireless Communications Letters, 2021, 10, 2360-2364.	5.0	16
24	A Generalizable Model-and-Data Driven Approach for Open-Set RFF Authentication. IEEE Transactions on Information Forensics and Security, 2021, 16, 4435-4450.	6.9	42
25	Secure Communication for Spatially Correlated Massive MIMO with Low-Resolution DACs. IEEE Wireless Communications Letters, 2021, , 1-1.	5.0	3
26	AI Driven Heterogeneous MEC System with UAV Assistance for Dynamic Environment: Challenges and Solutions. IEEE Network, 2021, 35, 400-408.	6.9	57
27	Cooperative Reflection Design With Timing Offsets in Distributed Multi-RIS Communications. IEEE Wireless Communications Letters, 2021, 10, 2379-2383.	5.0	9
28	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.	6.3	3
29	Analysis and Optimization for RIS-Aided Multi-Pair Communications Relying on Statistical CSI. IEEE Transactions on Vehicular Technology, 2021, 70, 3897-3901.	6.3	58
30	User Tracking and Wireless Digital Transmission through a Programmable Metasurface. Advanced Materials Technologies, 2021, 6, 2001254.	5.8	12
31	Layered Optical OFDM With Adaptive Bias for Dimming Compatible Visible Light Communications. Journal of Lightwave Technology, 2021, 39, 3434-3444.	4.6	13
32	RIS-Assisted Broad Coverage for mmWave Massive MIMO System. , 2021, , .		6
33	Optimal Control for Full-Duplex Communications with Reconfigurable Intelligent Surface. , 2021, , .		9
34	Is Multipath Channel Beneficial for Wideband Massive MIMO With Low-Resolution ADCs?. IEEE Transactions on Communications, 2021, 69, 4083-4097.	7.8	2
35	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.	7.8	11
36	A Lightweight Deep Network for Efficient CSI Feedback in Massive MIMO Systems. IEEE Wireless Communications Letters, 2021, 10, 1840-1844.	5.0	22

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37	Reconfigurable Intelligent Surface-Aided Indoor Communication With Neural Beam Alignment. , 2021, , .		2
38	Joint Transceiver and Passive Beamforming Optimization for RIS-Assisted MIMO Systems. , 2021, , .		0
39	Robust Key Generation With Hardware Mismatch for Secure MIMO Communications. IEEE Transactions on Information Forensics and Security, 2021, 16, 5264-5278.	6.9	7
40	Energy Efficient UAV Communication With Energy Harvesting. IEEE Transactions on Vehicular Technology, 2020, 69, 1913-1927.	6.3	143
41	Weighted Sum Secrecy Rate Maximization for D2D Underlaid Cellular Networks. IEEE Transactions on Communications, 2020, 68, 349-362.	7.8	11
42	Deep-Learning-Based Joint Resource Scheduling Algorithms for Hybrid MEC Networks. IEEE Internet of Things Journal, 2020, 7, 6252-6265.	8.7	116
43	Secure Communication for Spatially Sparse Millimeter-Wave Massive MIMO Channels via Hybrid Precoding. IEEE Transactions on Communications, 2020, 68, 887-901.	7.8	29
44	Energy Efficient Rate Splitting Multiple Access (RSMA) with Reconfigurable Intelligent Surface. , 2020, , .		63
45	Beamformig Design With Fast Convergence for IRS-Aided Full-Duplex Communication. IEEE Communications Letters, 2020, 24, 2849-2853.	4.1	38
46	AnciNet: An Efficient Deep Learning Approach for Feedback Compression of Estimated CSI in Massive MIMO Systems. IEEE Wireless Communications Letters, 2020, 9, 2192-2196.	5.0	26
47	Multicell MIMO Communications Relying on Intelligent Reflecting Surfaces. IEEE Transactions on Wireless Communications, 2020, 19, 5218-5233.	9.2	589
48	Joint Transmit Power and Placement Optimization for URLLC-Enabled UAV Relay Systems. IEEE Transactions on Vehicular Technology, 2020, 69, 8003-8007.	6.3	61
49	On Uplink Performance of Multiuser Massive MIMO Relay Network With Limited RF Chains. IEEE Transactions on Vehicular Technology, 2020, 69, 8670-8683.	6.3	7
50	Analog Versus Hybrid Precoding for Multiuser Massive MIMO With Quantized CSI Feedback. IEEE Communications Letters, 2020, 24, 2319-2323.	4.1	13
51	Hybrid Transceiver Optimization for Multi-Hop Communications. IEEE Journal on Selected Areas in Communications, 2020, 38, 1880-1895.	14.0	13
52	A MIMO Detector With Deep Learning in the Presence of Correlated Interference. IEEE Transactions on Vehicular Technology, 2020, 69, 4492-4497.	6.3	36
53	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.	4.2	5
54	Energy-Saving UAV-Assisted Multiuser Communications With Massive MIMO Hybrid Beamforming. IEEE Communications Letters, 2020, 24, 1100-1104.	4.1	22

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55	Efficient Sparse Code Multiple Access Decoder Based on Deterministic Message Passing Algorithm. IEEE Transactions on Vehicular Technology, 2020, 69, 3562-3574.	6.3	15
56	Bit-Level Optimized Neural Network for Multi-Antenna Channel Quantization. IEEE Wireless Communications Letters, 2020, 9, 87-90.	5.0	37
57	A Novel Cross Entropy Approach for Offloading Learning in Mobile Edge Computing. IEEE Wireless Communications Letters, 2020, 9, 402-405.	5.0	21
58	Power Consumption Optimization Using Gradient Boosting Aided Deep Q-Network in C-RANs. IEEE Access, 2020, 8, 46811-46823.	4.2	8
59	Multicell Edge Coverage Enhancement Using Mobile UAV-Relay. IEEE Internet of Things Journal, 2020, 7, 7482-7494.	8.7	23
60	Resource Allocation for Wireless Communications with Distributed Reconfigurable Intelligent Surfaces. , 2020, , .		7
61	Adaptively Biased OFDM for IM/DD-Aided Optical Wireless Communication Systems. IEEE Wireless Communications Letters, 2020, 9, 698-701.	5.0	7
62	Spectral and Energy Efficiency of IRS-Assisted MISO Communication With Hardware Impairments. IEEE Wireless Communications Letters, 2020, 9, 1366-1369.	5.0	119
63	Training Optimization for Hybrid MIMO Communication Systems. IEEE Transactions on Wireless Communications, 2020, 19, 5473-5487.	9.2	7
64	Spectrum-efficient hybrid PAM-DMT for intensity-modulated optical wireless communication. Optics Express, 2020, 28, 12621.	3.4	6
65	Millimeter Wave Massive MIMO. , 2020, , 830-833.		0
66	Achievable Rate Analysis of Hybrid Massive MIMO Uplink with Imperfect Phase Shifters. , 2020, , .		1
67	Secure Cache-Aided Multi-Relay Networks in the Presence of Multiple Eavesdroppers. IEEE Transactions on Communications, 2019, 67, 7672-7685.	7.8	75
68	Subarray-Cooperation-Based Multi-Resolution Codebook and Beam Alignment Design for mmWave Backhaul Links. IEEE Access, 2019, 7, 18319-18331.	4.2	10
69	Secrecy Rate Maximization for Intelligent Reflecting Surface Assisted Multi-Antenna Communications. IEEE Communications Letters, 2019, 23, 1488-1492.	4.1	353
70	Weighted Spectral Efficiency Optimization for Hybrid Beamforming in Multiuser Massive MIMO-OFDM Systems. IEEE Transactions on Vehicular Technology, 2019, 68, 9698-9712.	6.3	21
71	Multichannel direct transmissions of near-field information. Light: Science and Applications, 2019, 8, 60.	16.6	83
72	Energy Efficient Joint Power Optimization for Full-Duplex Relaying. IEEE Access, 2019, 7, 137040-137047.	4.2	5

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73	Ergodic Rate Analysis of Cooperative Ambient Backscatter Communication. IEEE Wireless Communications Letters, 2019, 8, 1679-1682.	5.0	30
74	Enabling Multi-Functional 5G and Beyond User Equipment: A Survey and Tutorial. IEEE Access, 2019, 7, 116975-117008.	4.2	82
75	Spectral-Efficient Reconstructed LACO-OFDM Transmission for Dimming Compatible Visible Light Communications. IEEE Photonics Journal, 2019, 11, 1-14.	2.0	13
76	Is Full-Duplex Relaying More Energy Efficient Than Half-Duplex Relaying?. IEEE Wireless Communications Letters, 2019, 8, 841-844.	5.0	11
77	Secure Massive MIMO Communication With Low-Resolution DACs. IEEE Transactions on Communications, 2019, 67, 3265-3278.	7.8	29
78	Rethinking Uplink Hybrid Processing: When Is Pure Analog Processing Suggested?. IEEE Transactions on Vehicular Technology, 2019, 68, 5139-5144.	6.3	2
79	Distributed and Multilayer UAV Networks for Next-Generation Wireless Communication and Power Transfer: A Feasibility Study. IEEE Internet of Things Journal, 2019, 6, 7103-7115.	8.7	78
80	A Framework on Hybrid MIMO Transceiver Design Based on Matrix-Monotonic Optimization. IEEE Transactions on Signal Processing, 2019, 67, 3531-3546.	5.3	37
81	Coexistence of Direct and Relayed Transmission Users in Multi-Cell Massive MIMO Systems. IEEE Transactions on Vehicular Technology, 2019, 68, 3728-3746.	6.3	2
82	Subarray-Based Simultaneous Beam Training for Multiuser mmWave Massive MIMO Systems. IEEE Wireless Communications Letters, 2019, 8, 976-979.	5.0	12
83	Interference-Free Hybrid Optical OFDM With Low-Complexity Receiver for Wireless Optical Communications. IEEE Communications Letters, 2019, 23, 818-821.	4.1	9
84	Non-Alternating Globally Optimal MMSE Precoding for Multiuser VLC Downlinks. IEEE Communications Letters, 2019, 23, 608-611.	4.1	10
85	Incorporating Importance Sampling in EM Learning for Sequence Detection in SPAD Underwater OWC. IEEE Access, 2019, 7, 4529-4537.	4.2	4
86	Statistically Robust Beamforming Optimization for Multi-Antenna Full-Duplex DF Relaying. IEEE Access, 2019, 7, 175564-175575.	4.2	2
87	Sum-Rate Maximization of Uplink Rate Splitting Multiple Access (RSMA) Communication. , 2019, , .		19
88	Discrete Phase Shift Design for Practical Large Intelligent Surface Communication. , 2019, , .		17
89	Wideband mmWave Channel Estimation for Hybrid Massive MIMO With Low-Precision ADCs. IEEE Wireless Communications Letters, 2019, 8, 285-288.	5.0	25
90	MIMO Channel Information Feedback Using Deep Recurrent Network. IEEE Communications Letters, 2019, 23, 188-191.	4.1	92

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91	Performance Analysis of Multi-Cell Millimeter-Wave Massive MIMO Networks With Low-Precision ADCs. IEEE Transactions on Communications, 2019, 67, 302-317.	7.8	25
92	Optimal Multiuser Loading in Quantized Massive MIMO Under Spatially Correlated Channels. IEEE Transactions on Vehicular Technology, 2019, 68, 1459-1471.	6.3	9
93	Optimal Fairness-Aware Time and Power Allocation in Wireless Powered Communication Networks. IEEE Transactions on Communications, 2018, 66, 3122-3135.	7.8	25
94	Robust Transmission Design for Multicell D2D Underlaid Cellular Networks. IEEE Transactions on Vehicular Technology, 2018, 67, 5922-5936.	6.3	5
95	Association and Load Optimization With User Priorities in Load-Coupled Heterogeneous Networks. IEEE Transactions on Wireless Communications, 2018, 17, 324-338.	9.2	19
96	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.	8.7	157
97	Utility-Energy Efficiency Oriented User Association With Power Control in Heterogeneous Networks. IEEE Wireless Communications Letters, 2018, 7, 526-529.	5.0	26
98	Performance Analysis of Multiuser Massive MIMO With Spatially Correlated Channels Using Low-Precision ADC. IEEE Communications Letters, 2018, 22, 205-208.	4.1	30
99	Power Control for Multi-Cell Networks With Non-Orthogonal Multiple Access. IEEE Transactions on Wireless Communications, 2018, 17, 927-942.	9.2	62
100	Multiuser Massive MIMO AF Relaying: Spectral Efficiency and Power Allocation. IEEE Access, 2018, 6, 18894-18906.	4.2	7
101	Compressive Sensing-Based User Clustering for Downlink NOMA Systems With Decoding Power. IEEE Signal Processing Letters, 2018, 25, 660-664.	3.6	12
102	Pilot Reuse Among D2D Users in D2D Underlaid Massive MIMO Systems. IEEE Transactions on Vehicular Technology, 2018, 67, 467-482.	6.3	30
103	Outage Minimized Full-Duplex Multiantenna DF Relaying With CSI Uncertainty. IEEE Transactions on Vehicular Technology, 2018, 67, 9000-9005.	6.3	5
104	Cellular and WiFi Co-design for 5G User Equipment. , 2018, , .		29
105	Fast beam alignment algorithm for multiâ€user mmWave communications. Electronics Letters, 2018, 54, 1456-1458.	1.0	4
106	Hybrid Beamforming Design for Multiuser Massive MIMO-OFDM Systems. , 2018, , .		8
107	Learning Oriented Cross-Entropy Approach to User Association in Load-Balanced HetNet. IEEE Wireless Communications Letters, 2018, 7, 1014-1017.	5.0	19
108	Cache Placement in Two-Tier HetNets With Limited Storage Capacity: Cache or Buffer?. IEEE Transactions on Communications, 2018, 66, 5415-5429.	7.8	37

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109	Joint Altitude, Beamwidth, Location, and Bandwidth Optimization for UAV-Enabled Communications. IEEE Communications Letters, 2018, 22, 1716-1719.	4.1	112
110	Framework of Channel Estimation for Hybrid Analog-and-Digital Processing Enabled Massive MIMO Communications. IEEE Transactions on Communications, 2018, 66, 3902-3915.	7.8	11
111	Millimeter Wave Massive MIMO. , 2018, , 1-4.		1
112	Hybrid Precoding Architecture for Massive Multiuser MIMO With Dissipation: Sub-Connected or Fully Connected Structures?. IEEE Transactions on Wireless Communications, 2018, 17, 5465-5479.	9.2	67
113	Robust Beamforming With Pilot Reuse Scheduling in a Heterogeneous Cloud Radio Access Network. IEEE Transactions on Vehicular Technology, 2018, 67, 7242-7256.	6.3	6
114	Multiuser Massive MIMO Relaying With Mixed-ADC Receiver. IEEE Signal Processing Letters, 2017, 24, 76-80.	3.6	36
115	Resource Allocation for D2D-Enabled Vehicular Communications. IEEE Transactions on Communications, 2017, 65, 3186-3197.	7.8	278
116	Spectral and Energy Efficiency of Multi-Pair Massive MIMO Relay Network With Hybrid Processing. IEEE Transactions on Communications, 2017, 65, 3794-3809.	7.8	63
117	On the Optimality of Power Allocation for NOMA Downlinks With Individual QoS Constraints. IEEE Communications Letters, 2017, 21, 1649-1652.	4.1	162
118	Energy Efficient Non-Orthogonal Multiple Access for Machine-to-Machine Communications. IEEE Communications Letters, 2017, 21, 817-820.	4.1	45
119	5G Cellular User Equipment: From Theory to Practical Hardware Design. IEEE Access, 2017, 5, 13992-14010.	4.2	173
120	Efficient Low-Resolution ADC Relaying for Multiuser Massive MIMO System. IEEE Transactions on Vehicular Technology, 2017, 66, 11039-11056.	6.3	35
121	User-Centric Networking for Dense C-RANs: High-SNR Capacity Analysis and Antenna Selection. IEEE Transactions on Communications, 2017, 65, 5067-5080.	7.8	27
122	On Performance of Quantized Transceiver in Multiuser Massive MIMO Downlinks. IEEE Wireless Communications Letters, 2017, 6, 562-565.	5.0	32
123	Beam-Blocked Channel Estimation for FDD Massive MIMO With Compressed Feedback. IEEE Access, 2017, 5, 11791-11804.	4.2	36
124	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.	6.3	16
125	Optimized Full-Duplex MIMO DF Relaying With Limited Dynamic Range. IEEE Access, 2017, 5, 20726-20735.	4.2	6
126	Energy efficient resource allocation for machine-to-machine communications with NOMA and energy harvesting. , 2017, , .		13

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127	Energy Minimization in Machine-to-Machine Systems with Energy Harvesting. , 2017, , .		3
128	On uplink performance of massive MIMO relaying with hybrid multiuser detection. , 2017, , .		1
129	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.	5.2	32
130	Dual-Polarized Massive MIMO Systems Under Multi-Cell Pilot Contamination. IEEE Access, 2016, 4, 5998-6013.	4.2	9
131	Transceiver Optimization for Full-Duplex Massive MIMO AF Relaying With Direct Link. IEEE Access, 2016, 4, 8857-8864.	4.2	15
132	Rate Maximization for Downlink Multiuser Visible Light Communications. IEEE Access, 2016, 4, 6567-6573.	4.2	36
133	Fair Non-Orthogonal Multiple Access for Visible Light Communication Downlinks. IEEE Wireless Communications Letters, 2016, , 1-1.	5.0	88
134	Rate-Maximized Zero-Forcing Beamforming for VLC Multiuser MISO Downlinks. IEEE Photonics Journal, 2016, 8, 1-13.	2.0	59
135	A Semi-Closed Form Solution to MIMO Relaying Optimization With Source-Destination Link. IEEE Signal Processing Letters, 2016, 23, 247-251.	3.6	54
136	Weighted Sum Energy Efficiency Maximization in Ad Hoc Networks. IEEE Wireless Communications Letters, 2015, 4, 233-236.	5.0	31
137	Robust Beamforming With Partial Channel State Information for Energy Efficient Networks. IEEE Journal on Selected Areas in Communications, 2015, 33, 2920-2935.	14.0	62
138	Low-Complexity Hybrid Precoding in Massive Multiuser MIMO Systems. IEEE Wireless Communications Letters, 2014, 3, 653-656.	5.0	633
139	Joint Precoding Optimization for Multiuser Multi-Antenna Relaying Downlinks Using Quadratic Programming. IEEE Transactions on Communications, 2011, 59, 1228-1235.	7.8	69
140	MIMO Relaying Broadcast Channels With Linear Precoding and Quantized Channel State Information Feedback. IEEE Transactions on Signal Processing, 2010, 58, 5233-5245.	5.3	59