

Jie Xu

List of Publications by Year in descending order

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143
papers

10,130
citations

57758

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g-index

148
all docs

148
docs citations

148
times ranked

6344
citing authors

#	ARTICLE	IF	CITATIONS
1	Energy Minimization for Wireless Communication With Rotary-Wing UAV. IEEE Transactions on Wireless Communications, 2019, 18, 2329-2345.	9.2	991
2	Joint Offloading and Computing Optimization in Wireless Powered Mobile-Edge Computing Systems. IEEE Transactions on Wireless Communications, 2018, 17, 1784-1797.	9.2	715
3	Integrated Sensing and Communications: Toward Dual-Functional Wireless Networks for 6G and Beyond. IEEE Journal on Selected Areas in Communications, 2022, 40, 1728-1767.	14.0	514
4	UAV-Enabled Wireless Power Transfer: Trajectory Design and Energy Optimization. IEEE Transactions on Wireless Communications, 2018, 17, 5092-5106.	9.2	435
5	Multiuser MISO Beamforming for Simultaneous Wireless Information and Power Transfer. IEEE Transactions on Signal Processing, 2014, 62, 4798-4810.	5.3	430
6	Real-Time Energy Storage Management for Renewable Integration in Microgrid: An Off-Line Optimization Approach. IEEE Transactions on Smart Grid, 2015, 6, 124-134.	9.0	372
7	Online Learning for Offloading and Autoscaling in Energy Harvesting Mobile Edge Computing. IEEE Transactions on Cognitive Communications and Networking, 2017, 3, 361-373.	7.9	289
8	Throughput Maximization for UAV-Enabled Wireless Powered Communication Networks. IEEE Internet of Things Journal, 2019, 6, 1690-1703.	8.7	269
9	Healthchain: A Blockchain-Based Privacy Preserving Scheme for Large-Scale Health Data. IEEE Internet of Things Journal, 2019, 6, 8770-8781.	8.7	250
10	Throughput Optimal Policies for Energy Harvesting Wireless Transmitters with Non-Ideal Circuit Power. IEEE Journal on Selected Areas in Communications, 2014, 32, 322-332.	14.0	233
11	Joint Computation and Communication Cooperation for Energy-Efficient Mobile Edge Computing. IEEE Internet of Things Journal, 2019, 6, 4188-4200.	8.7	222
12	Energy Efficiency Optimization for MIMO Broadcast Channels. IEEE Transactions on Wireless Communications, 2013, 12, 690-701.	9.2	208
13	Joint Power and Time Allocation for NOMA-MEC Offloading. IEEE Transactions on Vehicular Technology, 2019, 68, 6207-6211.	6.3	206
14	A Comprehensive Overview on 5G-and-Beyond Networks With UAVs: From Communications to Sensing and Intelligence. IEEE Journal on Selected Areas in Communications, 2021, 39, 2912-2945.	14.0	202
15	Energy Beamforming With One-Bit Feedback. IEEE Transactions on Signal Processing, 2014, 62, 5370-5381.	5.3	172
16	Multi-Antenna NOMA for Computation Offloading in Multiuser Mobile Edge Computing Systems. IEEE Transactions on Communications, 2019, 67, 2450-2463.	7.8	172
17	Capacity Characterization of UAV-Enabled Two-User Broadcast Channel. IEEE Journal on Selected Areas in Communications, 2018, 36, 1955-1971.	14.0	166
18	Joint Task Assignment and Resource Allocation for D2D-Enabled Mobile-Edge Computing. IEEE Transactions on Communications, 2019, 67, 4193-4207.	7.8	152

#	ARTICLE	IF	CITATIONS
19	Proactive Eavesdropping Via Jamming for Rate Maximization Over Rayleigh Fading Channels. IEEE Wireless Communications Letters, 2016, 5, 80-83.	5.0	151
20	Secure UAV Communication With Cooperative Jamming and Trajectory Control. IEEE Communications Letters, 2019, 23, 286-289.	4.1	138
21	Optimal Energy Allocation and Task Offloading Policy for Wireless Powered Mobile Edge Computing Systems. IEEE Transactions on Wireless Communications, 2020, 19, 2443-2459.	9.2	138
22	Proactive Eavesdropping via Cognitive Jamming in Fading Channels. IEEE Transactions on Wireless Communications, 2017, 16, 2790-2806.	9.2	123
23	CoMP Meets Smart Grid: A New Communication and Energy Cooperation Paradigm. IEEE Transactions on Vehicular Technology, 2015, 64, 2476-2488.	6.3	117
24	Surveillance and Intervention of Infrastructure-Free Mobile Communications: A New Wireless Security Paradigm. IEEE Wireless Communications, 2017, 24, 152-159.	9.0	117
25	Mobile Edge Computing for Cellular-Connected UAV: Computation Offloading and Trajectory Optimization. , 2018, , .		108
26	Optimized Power Control for Over-the-Air Computation in Fading Channels. IEEE Transactions on Wireless Communications, 2020, 19, 7498-7513.	9.2	101
27	Max-Min Fairness in IRS-Aided Multi-Cell MISO Systems With Joint Transmit and Reflective Beamforming. IEEE Transactions on Wireless Communications, 2021, 20, 1379-1393.	9.2	99
28	Optimal 1D Trajectory Design for UAV-Enabled Multiuser Wireless Power Transfer. IEEE Transactions on Communications, 2019, 67, 5674-5688.	7.8	92
29	Cost-aware green cellular networks with energy and communication cooperation. , 2015, 53, 257-263.		86
30	Wireless Powered Cooperative Jamming for Secure OFDM System. IEEE Transactions on Vehicular Technology, 2018, 67, 1331-1346.	6.3	86
31	A General Design Framework for MIMO Wireless Energy Transfer With Limited Feedback. IEEE Transactions on Signal Processing, 2016, 64, 2475-2488.	5.3	84
32	Over-the-Air Computing for Wireless Data Aggregation in Massive IoT. IEEE Wireless Communications, 2021, 28, 57-65.	9.0	78
33	Joint Energy and Spectrum Cooperation for Cellular Communication Systems. IEEE Transactions on Communications, 2014, 62, 3678-3691.	7.8	73
34	An Identity Management and Authentication Scheme Based on Redactable Blockchain for Mobile Networks. IEEE Transactions on Vehicular Technology, 2020, 69, 6688-6698.	6.3	73
35	Optimized Multiuser Computation Offloading with Multi-Antenna NOMA. , 2017, , .		70
36	Cooperative Energy Trading in CoMP Systems Powered by Smart Grids. IEEE Transactions on Vehicular Technology, 2016, 65, 2142-2153.	6.3	67

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37	Exploiting Physical-Layer Security for Multiuser Multicarrier Computation Offloading. IEEE Wireless Communications Letters, 2019, 8, 9-12.	5.0	67
38	Cognitive UAV Communication via Joint Maneuver and Power Control. IEEE Transactions on Communications, 2019, 67, 7872-7888.	7.8	65
39	Common Throughput Maximization for UAV-Enabled Interference Channel With Wireless Powered Communications. IEEE Transactions on Communications, 2020, 68, 3197-3212.	7.8	63
40	UAV-Enabled Wireless Power Transfer: Trajectory Design and Energy Region Characterization. , 2017, , .		62
41	Trajectory Design for UAV-Enabled Multiuser Wireless Power Transfer With Nonlinear Energy Harvesting. IEEE Transactions on Wireless Communications, 2021, 20, 1105-1121.	9.2	58
42	Joint computation and communication cooperation for mobile edge computing. , 2018, , .		57
43	A general utility optimization framework for energy-harvesting-based wireless communications. , 2015, 53, 79-85.		56
44	AnFRA: Anonymous and Fast Roaming Authentication for Space Information Network. IEEE Transactions on Information Forensics and Security, 2019, 14, 486-497.	6.9	55
45	Fundamental Rate Limits of UAV-Enabled Multiple Access Channel With Trajectory Optimization. IEEE Transactions on Wireless Communications, 2020, 19, 458-474.	9.2	55
46	Joint Transmit and Reflective Beamforming Design for IRS-Assisted Multiuser MISO SWIPT Systems. , 2020, , .		54
47	Design and Analysis of Relay-Selection Strategies for Two-Way Relay Network-Coded DCSK Systems. IEEE Transactions on Vehicular Technology, 2018, 67, 1258-1271.	6.3	53
48	Joint offloading and computing optimization in wireless powered mobile-edge computing systems. , 2017, , .		51
49	Optimized Power Control Design for Over-the-Air Federated Edge Learning. IEEE Journal on Selected Areas in Communications, 2022, 40, 342-358.	14.0	51
50	Throughput Maximization for Laser-Powered UAV Wireless Communication Systems. , 2018, , .		48
51	Multiuser MISO beamforming for simultaneous wireless information and power transfer. , 2013, , .		47
52	Placement Optimization for UAV-Enabled Wireless Networks with Multi-Hop Backhubs. Journal of Communications and Information Networks, 2018, 3, 64-73.	5.2	47
53	Multiuser MIMO Wireless Energy Transfer With Coexisting Opportunistic Communication. IEEE Wireless Communications Letters, 2015, 4, 273-276.	5.0	46
54	Energy Group Buying With Loading Sharing for Green Cellular Networks. IEEE Journal on Selected Areas in Communications, 2016, 34, 786-799.	14.0	45

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55	UAV-enabled multiuser wireless power transfer: Trajectory design and energy optimization. , 2017, , .		45
56	Real-Time Resource Allocation for Wireless Powered Multiuser Mobile Edge Computing With Energy and Task Causality. IEEE Transactions on Communications, 2020, 68, 7140-7155.	7.8	42
57	A survey of prototype and experiment for UAV communications. Science China Information Sciences, 2021, 64, 1.	4.3	42
58	Improving energy efficiency through multimode transmission in the downlink MIMO systems. Eurasip Journal on Wireless Communications and Networking, 2011, 2011, .	2.4	41
59	Cognitive UAV Communication via Joint Trajectory and Power Control. , 2018, , .		39
60	A Generic Receiver Architecture for MIMO Wireless Power Transfer With Nonlinear Energy Harvesting. IEEE Signal Processing Letters, 2019, 26, 312-316.	3.6	39
61	Joint Task Assignment and Wireless Resource Allocation for Cooperative Mobile-Edge Computing. , 2018, , .		38
62	Multiantenna Wireless Powered Communication With Cochannel Energy and Information Transfer. IEEE Communications Letters, 2015, 19, 2266-2269.	4.1	36
63	Radio-Map-Based Robust Positioning Optimization for UAV-Enabled Wireless Power Transfer. IEEE Wireless Communications Letters, 2020, 9, 179-183.	5.0	35
64	Transmission Power Control for Over-the-Air Federated Averaging at Network Edge. IEEE Journal on Selected Areas in Communications, 2022, 40, 1571-1586.	14.0	35
65	UAV-Enabled Wireless Power Transfer: A Tutorial Overview. IEEE Transactions on Green Communications and Networking, 2021, 5, 2042-2064.	5.5	34
66	Wireless Powered Sensor Networks: Collaborative Energy Beamforming Considering Sensing and Circuit Power Consumption. IEEE Wireless Communications Letters, 2016, 5, 344-347.	5.0	33
67	Optimal Task Offloading Scheduling for Energy Efficient D2D Cooperative Computing. IEEE Communications Letters, 2019, 23, 1816-1820.	4.1	33
68	Joint 3D Maneuver and Power Adaptation for Secure UAV Communication With CoMP Reception. IEEE Transactions on Wireless Communications, 2020, 19, 6992-7006.	9.2	33
69	Wireless Powered User Cooperative Computation in Mobile Edge Computing Systems. , 2018, , .		32
70	Hybrid Beamforming for Massive MIMO Over-the-Air Computation. IEEE Transactions on Communications, 2021, 69, 2737-2751.	7.8	32
71	UAV-Enabled Wireless Power Transfer with Directional Antenna: A Two-User Case (Invited Paper). , 2018, , .		30
72	Capacity Region of MISO Broadcast Channel for Simultaneous Wireless Information and Power Transfer. IEEE Transactions on Communications, 2015, 63, 3856-3868.	7.8	29

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73	Cooperative Interference Management for Over-the-Air Computation Networks. IEEE Transactions on Wireless Communications, 2021, 20, 2634-2651.	9.2	29
74	Max-Min Fairness in IRS-Aided Multi-Cell MISO Systems via Joint Transmit and Reflective Beamforming. , 2020, , .		24
75	Positioning Optimization for Sum-Rate Maximization in UAV-Enabled Interference Channel. IEEE Signal Processing Letters, 2019, 26, 1466-1470.	3.6	22
76	Energy-efficient scheduling with individual packet delay constraints and non-ideal circuit power. Journal of Communications and Networks, 2014, 16, 36-44.	2.6	21
77	Capacity of UAV-Enabled Multicast Channel: Joint Trajectory Design and Power Allocation. , 2018, , .		21
78	UAV-Enabled Data Collection for Wireless Sensor Networks With Distributed Beamforming. IEEE Transactions on Wireless Communications, 2022, 21, 1347-1361.	9.2	21
79	User Grouping and Reflective Beamforming for IRS-Aided URLLC. IEEE Wireless Communications Letters, 2021, 10, 2533-2537.	5.0	21
80	Resource Rationing for Wireless Federated Learning: Concept, Benefits, and Challenges. IEEE Communications Magazine, 2021, 59, 82-87.	6.1	21
81	Secrecy Transmission in Large-Scale UAV-Enabled Wireless Networks. IEEE Transactions on Communications, 2019, 67, 7656-7671.	7.8	20
82	Optimal Resource Allocation for Wireless Powered Mobile Edge Computing with Dynamic Task Arrivals. , 2019, , .		20
83	Transmit Optimization for Symbol-Level Spoofing. IEEE Transactions on Wireless Communications, 2018, 17, 41-55.	9.2	19
84	Fundamental Rate Limits of Physical Layer Spoofing. IEEE Wireless Communications Letters, 2017, 6, 154-157.	5.0	18
85	Proactive Eavesdropping via Jamming over HARQ-Based Communications. , 2017, , .		18
86	PSAP: Pseudonym-Based Secure Authentication Protocol for NFC Applications. IEEE Transactions on Consumer Electronics, 2018, 64, 83-91.	3.6	18
87	Cooperative energy trading in CoMP systems powered by smart grids. , 2014, , .		17
88	Unconditionally positivity preserving and energy dissipative schemes for Poissonâ€Nernstâ€Planck equations. Numerische Mathematik, 2021, 148, 671-697.	1.9	17
89	Area Power Consumption in a Single Cell Assisted by Relays. , 2010, , .		16
90	Energy beamforming with one-bit feedback. , 2014, , .		15

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91	Exploiting Interference for Secrecy Wireless Information and Power Transfer. IEEE Wireless Communications, 2018, 25, 133-139.	9.0	15
92	Rotary-Wing UAV Enabled Wireless Network: Trajectory Design and Resource Allocation. , 2018, , .		15
93	Proactive eavesdropping via cognitive jamming in fading channels. , 2016, , .		14
94	UAV-Enabled Cellular Networks with Multi-Hop Backhubs: Placement optimization and Wireless Resource Allocation. , 2018, , .		14
95	Time-Division Energy Beamforming for Multiuser Wireless Power Transfer With Non-Linear Energy Harvesting. IEEE Wireless Communications Letters, 2021, 10, 53-57.	5.0	14
96	Transmit Beamforming Optimization for Integrated Sensing and Communication. , 2021, , .		14
97	Energy efficient iterative waterfilling for the MIMO broadcasting channels. , 2012, , .		13
98	Throughput Maximization for UAV-Enabled Wireless Powered Communication Networks - Invited Paper. , 2018, , .		13
99	3D Trajectory Optimization for Secure UAV Communication with CoMP Reception. , 2019, , .		13
100	Vertical Federated Edge Learning With Distributed Integrated Sensing and Communication. IEEE Communications Letters, 2022, 26, 2091-2095.	4.1	13
101	Improving network energy efficiency through cooperative idling in the multi-cell systems. Eurasip Journal on Wireless Communications and Networking, 2011, 2011, .	2.4	11
102	Optimal Power Control for Over-the-Air Computation. , 2019, , .		11
103	Online Maneuver Design for UAV-Enabled NOMA Systems via Reinforcement Learning. , 2020, , .		11
104	Amplify-and-Forward Relaying for Hierarchical Over-the-Air Computation. IEEE Transactions on Wireless Communications, 2022, 21, 10529-10543.	9.2	10
105	Cooperative Trajectory Design and Resource Allocation for a Two-UAV Two-User Wireless Powered Communication System. , 2018, , .		9
106	Optimized Amplify-and-Forward Relaying for Hierarchical Over-the-Air Computation. , 2020, , .		9
107	Comment on "Optimal Precoding for a QoS Optimization Problem in Two-User MISO-NOMA Downlink" IEEE Communications Letters, 2017, 21, 2109-2111.	4.1	8
108	UAV-Enabled Broadcast Channel: Trajectory Design and Capacity Characterization. , 2018, , .		8

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109	Energy Efficiency optimization for two-way relay channels. , 2013, , .		7
110	Progressive Linear Precoder Optimization for ARQ Packet Retransmissions in Nonregenerative MIMO Relay Systems. IEEE Transactions on Signal Processing, 2013, 61, 68-81.	5.3	7
111	Energy efficient coordinated beamforming for multi-cell MISO systems. , 2013, , .		7
112	Adaptive Mode Switching for Cognitive Wireless Powered Communication Systems. IEEE Wireless Communications Letters, 2017, 6, 386-389.	5.0	7
113	Wireless surveillance of two-hop communications : (Invited paper). , 2017, , .		7
114	Robust ARQ Precoder Optimization for AF MIMO Relay Systems with Channel Estimation Errors. IEEE Transactions on Wireless Communications, 2013, 12, 5236-5247.	9.2	6
115	Transmit Optimization for Symbol-Level Spoofing with BPSK Signaling. , 2016, , .		6
116	Transmit beamforming for simultaneous wireless information and power transfer. , 2018, , 479-506.		6
117	General liquid-crystal theory for anisotropically shaped molecules: Symmetry, orientational order parameters, and system free energy. Physical Review E, 2020, 102, 062701.	2.1	6
118	Cellular-Connected UAV With Adaptive Air-to-Ground Interference Cancellation and Trajectory Optimization. IEEE Communications Letters, 2022, 26, 1368-1372.	4.1	6
119	Energy efficient downlink MIMO transmission with linear precoding. Science China Information Sciences, 2013, 56, 1-12.	4.3	5
120	Harnessing Self-Interference in Full-Duplex Relaying: An Analog Filter-and-Forward Approach. , 2016, , .		5
121	Heterogeneous access class barring with QoS guarantee in machineâ€type communications. Transactions on Emerging Telecommunications Technologies, 2017, 28, e2959.	3.9	5
122	Secrecy Transmission Capacity of Large-Scale UAV-Enabled Wireless Networks. , 2019, , .		5
123	Optimized Power Control for Over-the-Air Federated Edge Learning. , 2021, , .		5
124	A Linear Processing Scheme in Multiuser Downlink MIMO Broadcasting Channel with Fixed Relays. IEICE Transactions on Communications, 2009, E92-B, 679-682.	0.7	4
125	Robust Multimode Selection in the Downlink Multiuser MIMO Channels with Delayed CSIT. , 2011, , .		4
126	An energy efficient semi-static power control and link adaptation scheme in UMTS HSDPA. Eurasip Journal on Wireless Communications and Networking, 2012, 2012, .	2.4	4

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127	Optimal Computation and Spectrum Resource Sharing in Cooperative Mobile Edge Computing Systems : (Invited Paper). , 2018, , .		4
128	Optimal energy and spectrum sharing for cooperative cellular systems. , 2014, , .		3
129	Capacity Characterization of UAV-Enabled Multiple Access Channel with Trajectory Optimization. , 2019, , .		3
130	User Association and Resource Allocation for MEC-Enabled IoT Networks. IEEE Transactions on Wireless Communications, 2022, 21, 8051-8062.	9.2	3
131	Energy Consumption in Downlink MIMO Relay Systems with Multiple Users. , 2010, , .		2
132	Capacity region of MISO broadcast channel with SWIPT. , 2015, , .		2
133	Outage Probability Minimization for UAV-Enabled Data Collection with Distributed Beamforming. , 2020, , .		2
134	The Effect of Channel Estimation Error in Multiuser Downlink MIMO Relay Channels. , 2010, , .		1
135	QoS aware energy efficient resource allocation in HSDPA systems. , 2014, , .		1
136	Spectrum Efficiency Prediction for Real-World 5G Networks Based on Drive Testing Data. , 2022, , .		1
137	Derivative-Free Placement Optimization for Multi-UAV Wireless Networks with Channel Knowledge Map. , 2022, , .		1
138	Cost-Aware Cellular Networks Powered by Smart Grids and Energy Harvesting. , 0, , 271-288.		0
139	Power Allocation for Point-to-Point Energy Harvesting Channels. , 2018, , 5-73.		0
140	IEEE ACCESS Special Section Editorial: Energy Efficient Wireless Communications With Energy Harvesting and Wireless Power Transfer. IEEE Access, 2018, 6, 72041-72045.	4.2	0
141	Asymmetric Interference Cancellation for 5G Non-Public Network with Uplink-Downlink Spectrum Sharing. , 2021, , .		0
142	Guest Editorial Special Issue on Integrated Sensing and Communicationâ€™Part I. IEEE Journal on Selected Areas in Communications, 2022, 40, 1723-1727.	14.0	0
143	Guest Editorial Special Issue on Integrated Sensing and Communicationâ€™Part II. IEEE Journal on Selected Areas in Communications, 2022, 40, 2007-2010.	14.0	0