Jie Xu

List of Publications by Year in Descending Order

135 papers	6,130 citations	40 h-index	76 g-index
148 ext. papers	7,893 ext. citations	6.8 avg, IF	7.1 L-index

#	Paper	IF	Citations
135	Optimized Power Control Design for Over-the-Air Federated Edge Learning. *IEEE Journal on Selected Areas in Communications*, **2022**, 40, 342-358	14.2	7
134	Transmission Power Control for Over-the-Air Federated Averaging at Network Edge. *IEEE Journal on Selected Areas in Communications*, **2022**, 1-1	14.2	4
133	Cellular-Connected UAV with Adaptive Air-to-Ground Interference Cancellation and Trajectory Optimization. *IEEE Communications Letters*, **2022**, 1-1	3.8	0
132	Integrated Sensing and Communications: Towards Dual-functional Wireless Networks for 6G and Beyond. *IEEE Journal on Selected Areas in Communications*, **2022**, 1-1	14.2	49
131	Guest Editorial Special Issue on Integrated Sensing and Communication—Part I. *IEEE Journal on Selected Areas in Communications*, **2022**, 40, 1723-1727	14.2	
130	User Association and Resource Allocation for MEC-Enabled IoT Networks. *IEEE Transactions on Wireless Communications*, **2022**, 1-1	9.6	
129	Cooperative Interference Management for Over-the-Air Computation Networks. *IEEE Transactions on Wireless Communications*, **2021**, 20, 2634-2651	9.6	9
128	Hybrid Beamforming for Massive MIMO Over-the-Air Computation. *IEEE Transactions on Communications*, **2021**, 69, 2737-2751	6.9	8
127	Resource Rationing for Wireless Federated Learning: Concept, Benefits, and Challenges. *IEEE Communications Magazine*, **2021**, 59, 82-87	9.1	7
126	Unconditionally positivity preserving and energy dissipative schemes for Poisson–Nernst–Planck equations. *Numerische Mathematik*, **2021**, 148, 671-697	2.2	3
125	Optimized Power Control for Over-the-Air Federated Edge Learning **2021**,		1
124	Trajectory Design for UAV-Enabled Multiuser Wireless Power Transfer With Nonlinear Energy Harvesting. *IEEE Transactions on Wireless Communications*, **2021**, 20, 1105-1121	9.6	24
123	Time-Division Energy Beamforming for Multiuser Wireless Power Transfer With Non-Linear Energy Harvesting. *IEEE Wireless Communications Letters*, **2021**, 10, 53-57	5.9	6
122	UAV-Enabled Data Collection for Wireless Sensor Networks with Distributed Beamforming. *IEEE Transactions on Wireless Communications*, **2021**, 1-1	9.6	7
121	User Grouping and Reflective Beamforming for IRS-Aided URLLC. *IEEE Wireless Communications Letters*, **2021**, 1-1	5.9	4
120	A survey of prototype and experiment for UAV communications. *Science China Information Sciences*, **2021**, 64, 1	3.4	12
119	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	9.6	42

118	Over-the-Air Computing for Wireless Data Aggregation in Massive IoT. *IEEE Wireless Communications*, **2021**, 28, 57-65	13.4	19
117	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	14.2	51
116	UAV-Enabled Wireless Power Transfer: A Tutorial Overview. *IEEE Transactions on Green Communications and Networking*, **2021**, 1-1	4	8
115	General liquid-crystal theory for anisotropically shaped molecules: Symmetry, orientational order parameters, and system free energy. *Physical Review E*, **2020**, 102, 062701	2.4	1
114	Common Throughput Maximization for UAV-Enabled Interference Channel With Wireless Powered Communications. *IEEE Transactions on Communications*, **2020**, 68, 3197-3212	6.9	36
113	Optimal Energy Allocation and Task Offloading Policy for Wireless Powered Mobile Edge Computing Systems. *IEEE Transactions on Wireless Communications*, **2020**, 19, 2443-2459	9.6	74
112	An Identity Management and Authentication Scheme Based on Redactable Blockchain for Mobile Networks. *IEEE Transactions on Vehicular Technology*, **2020**, 69, 6688-6698	6.8	39
111	Optimized Amplify-and-Forward Relaying for Hierarchical Over-the-Air Computation **2020**,		4
110	Radio-Map-Based Robust Positioning Optimization for UAV-Enabled Wireless Power Transfer. *IEEE Wireless Communications Letters*, **2020**, 9, 179-183	5.9	14
109	Fundamental Rate Limits of UAV-Enabled Multiple Access Channel With Trajectory Optimization. *IEEE Transactions on Wireless Communications*, **2020**, 19, 458-474	9.6	31
108	**2020**,		14
107	. *IEEE Transactions on Wireless Communications*, **2020**, 19, 7498-7513	9.6	44
106	Online Maneuver Design for UAV-Enabled NOMA Systems via Reinforcement Learning **2020**,		9
105	Joint 3D Maneuver and Power Adaptation for Secure UAV Communication With CoMP Reception. *IEEE Transactions on Wireless Communications*, **2020**, 19, 6992-7006	9.6	13
104	Real-Time Resource Allocation for Wireless Powered Multiuser Mobile Edge Computing With Energy and Task Causality. *IEEE Transactions on Communications*, **2020**, 68, 7140-7155	6.9	19
103	Joint Transmit and Reflective Beamforming Design for IRS-Assisted Multiuser MISO SWIPT Systems **2020**,		29
102	UAV-Enabled Wireless Power Transfer **2020**, 399-416		0
101	Cognitive UAV Communication via Joint Maneuver and Power Control. *IEEE Transactions on Communications*, **2019**, 67, 7872-7888	6.9	49

100	Optimal Resource Allocation for Wireless Powered Mobile Edge Computing with Dynamic Task Arrivals **2019**,		15
99	Optimal Task Offloading Scheduling for Energy Efficient D2D Cooperative Computing. *IEEE Communications Letters*, **2019**, 23, 1816-1820	3.8	14
98	Positioning Optimization for Sum-Rate Maximization in UAV-Enabled Interference Channel. *IEEE Signal Processing Letters*, **2019**, 26, 1466-1470	3.2	11
97	Joint Power and Time Allocation for NOMA-MEC Offloading. *IEEE Transactions on Vehicular Technology*, **2019**, 68, 6207-6211	6.8	128
96	Energy Minimization for Wireless Communication With Rotary-Wing UAV. *IEEE Transactions on Wireless Communications*, **2019**, 18, 2329-2345	9.6	507
95	Joint Task Assignment and Resource Allocation for D2D-Enabled Mobile-Edge Computing. *IEEE Transactions on Communications*, **2019**, 67, 4193-4207	6.9	91
94	Exploiting Physical-Layer Security for Multiuser Multicarrier Computation Offloading. *IEEE Wireless Communications Letters*, **2019**, 8, 9-12	5.9	43
93	AnFRA: Anonymous and Fast Roaming Authentication for Space Information Network. *IEEE Transactions on Information Forensics and Security*, **2019**, 14, 486-497	8	32
92	Secrecy Transmission in Large-Scale UAV-Enabled Wireless Networks. *IEEE Transactions on Communications*, **2019**, 67, 7656-7671	6.9	17
91	Optimal 1D Trajectory Design for UAV-Enabled Multiuser Wireless Power Transfer. *IEEE Transactions on Communications*, **2019**, 67, 5674-5688	6.9	55
90	Secrecy Transmission Capacity of Large-Scale UAV-Enabled Wireless Networks **2019**,		4
89	Healthchain: A Blockchain-Based Privacy Preserving Scheme for Large-Scale Health Data. *IEEE Internet of Things Journal*, **2019**, 6, 8770-8781	10.7	133
88	Optimal Power Control for Over-the-Air Computation **2019**,		6
87	3D Trajectory Optimization for Secure UAV Communication with CoMP Reception **2019**,		6
86	**2019**,		1
85	Secure UAV Communication With Cooperative Jamming and Trajectory Control. *IEEE Communications Letters*, **2019**, 23, 286-289	3.8	78
84	Multi-Antenna NOMA for Computation Offloading in Multiuser Mobile Edge Computing Systems. *IEEE Transactions on Communications*, **2019**, 67, 2450-2463	6.9	122
83	A Generic Receiver Architecture for MIMO Wireless Power Transfer With Nonlinear Energy Harvesting. *IEEE Signal Processing Letters*, **2019**, 26, 312-316	3.2	28

82	. *IEEE Internet of Things Journal*, **2019**, 6, 4188-4200	10.7	132
81	Throughput Maximization for UAV-Enabled Wireless Powered Communication Networks. *IEEE Internet of Things Journal*, **2019**, 6, 1690-1703	10.7	178
80	Exploiting Interference for Secrecy Wireless Information and Power Transfer. *IEEE Wireless Communications*, **2018**, 25, 133-139	13.4	12
79	Design and Analysis of Relay-Selection Strategies for Two-Way Relay Network-Coded DCSK Systems. *IEEE Transactions on Vehicular Technology*, **2018**, 67, 1258-1271	6.8	42
78	Joint Offloading and Computing Optimization in Wireless Powered Mobile-Edge Computing Systems. *IEEE Transactions on Wireless Communications*, **2018**, 17, 1784-1797	9.6	469
77	. *IEEE Transactions on Vehicular Technology*, **2018**, 67, 1331-1346	6.8	61
76	Transmit Optimization for Symbol-Level Spoofing. *IEEE Transactions on Wireless Communications*, **2018**, 17, 41-55	9.6	12
75	PSAP: Pseudonym-Based Secure Authentication Protocol for NFC Applications. *IEEE Transactions on Consumer Electronics*, **2018**, 64, 83-91	4.8	16
74	Throughput Maximization for UAV-Enabled Wireless Powered Communication Networks - Invited Paper **2018**,		9
73	Throughput Maximization for Laser-Powered UAV Wireless Communication Systems **2018**,		28
72	UAV-Enabled Broadcast Channel: Trajectory Design and Capacity Characterization **2018**,		5
71	. *IEEE Journal on Selected Areas in Communications*, **2018**, 36, 1955-1971	14.2	130
70	Transmit beamforming for simultaneous wireless information and power transfer **2018**, 479-506		1
69	Optimal Computation and Spectrum Resource Sharing in Cooperative Mobile Edge Computing Systems : (Invited Paper) **2018**,		3
68	Cooperative Trajectory Design and Resource Allocation for a Two-UAV Two-User Wireless Powered Communication System **2018**,		5
67	Rotary-Wing UAV Enabled Wireless Network: Trajectory Design and Resource Allocation **2018**,		6
66	Multi-antenna Energy Beamforming for SWIPT **2018**, 81-97		
65	Wireless Powered User Cooperative Computation in Mobile Edge Computing Systems **2018**,		21

64	UAV-Enabled Cellular Networks with Multi-Hop Backhauls: Placement optimization and Wireless Resource Allocation **2018**,		10
63	Capacity of UAV-Enabled Multicast Channel: Joint Trajectory Design and Power Allocation **2018**,		17
62	Power Allocation for Point-to-Point Energy Harvesting Channels **2018**, 5-73		
61	Cost-Aware Design for Energy Harvesting Powered Cellular Networks **2018**, 203-238		
60	Wireless-Powered Mobile Edge Computing Systems **2018**, 253-271		
59	Placement Optimization for UAV-Enabled Wireless Networks with Multi-Hop Backhauls. *Journal of Communications and Information Networks*, **2018**, 3, 64-73		28
58	IEEE ACCESS Special Section Editorial: Energy Efficient Wireless Communications With Energy Harvesting and Wireless Power Transfer. *IEEE Access*, **2018**, 6, 72041-72045	3.5	
57	Joint Task Assignment and Wireless Resource Allocation for Cooperative Mobile-Edge Computing **2018**,		27
56	UAV-Enabled Wireless Power Transfer with Directional Antenna: A Two-User Case (Invited Paper) **2018**,		25
55	Mobile Edge Computing for Cellular-Connected UAV: Computation Offloading and Trajectory Optimization **2018**,		74
54	Cognitive UAV Communication via Joint Trajectory and Power Control **2018**,		26
53	Joint computation and communication cooperation for mobile edge computing **2018**,		33
52	UAV-Enabled Wireless Power Transfer: Trajectory Design and Energy Optimization. *IEEE Transactions on Wireless Communications*, **2018**, 17, 5092-5106	9.6	295
51	Heterogeneous access class barring with QoS guarantee in machine-type communications. *Transactions on Emerging Telecommunications Technologies*, **2017**, 28, e2959	1.9	5
50	Fundamental Rate Limits of Physical Layer Spoofing. *IEEE Wireless Communications Letters*, **2017**, 6, 154-157	3.9	13
49	Adaptive Mode Switching for Cognitive Wireless Powered Communication Systems. *IEEE Wireless Communications Letters*, **2017**, 6, 386-389	5.9	6
48	Proactive Eavesdropping via Cognitive Jamming in Fading Channels. *IEEE Transactions on Wireless Communications*, **2017**, 16, 2790-2806	9.6	88
47	Comment on "Optimal Precoding for a QoS Optimization Problem in Two-User MISO-NOMA Downlink" *IEEE Communications Letters*, **2017**, 21, 2109-2111	3.8	4

46	Surveillance and Intervention of Infrastructure-Free Mobile Communications: A New Wireless Security Paradigm. *IEEE Wireless Communications*, **2017**, 24, 152-159	13.4	95
45	Joint offloading and computing optimization in wireless powered mobile-edge computing systems **2017**,		40
44	Online Learning for Offloading and Autoscaling in Energy Harvesting Mobile Edge Computing. *IEEE Transactions on Cognitive Communications and Networking*, **2017**, 3, 361-373	6.6	225
43	Optimized Multiuser Computation Offloading with Multi-Antenna NOMA **2017**,		58
42	Wireless surveillance of two-hop communications : (Invited paper) **2017**,		2
41	Proactive Eavesdropping via Jamming over HARQ-Based Communications **2017**,		14
40	**2017**,		54
39	UAV-enabled multiuser wireless power transfer: Trajectory design and energy optimization **2017**,		33
38	Cooperative Energy Trading in CoMP Systems Powered by Smart Grids. *IEEE Transactions on Vehicular Technology*, **2016**, 65, 2142-2153	6.8	56
37	Proactive Eavesdropping Via Jamming for Rate Maximization Over Rayleigh Fading Channels. *IEEE Wireless Communications Letters*, **2016**, 5, 80-83	5.9	110
36	A General Design Framework for MIMO Wireless Energy Transfer With Limited Feedback. *IEEE Transactions on Signal Processing*, **2016**, 64, 2475-2488	4.8	72
35	Energy Group Buying With Loading Sharing for Green Cellular Networks. *IEEE Journal on Selected Areas in Communications*, **2016**, 34, 786-799	14.2	38
34	Harnessing Self-Interference in Full-Duplex Relaying: An Analog Filter-and-Forward Approach **2016**,		3
33	Proactive eavesdropping via cognitive jamming in fading channels **2016**,		10
32	Wireless Powered Sensor Networks: Collaborative Energy Beamforming Considering Sensing and Circuit Power Consumption. *IEEE Wireless Communications Letters*, **2016**, 5, 344-347	5.9	25
31	Multiuser MIMO Wireless Energy Transfer With Coexisting Opportunistic Communication. *IEEE Wireless Communications Letters*, **2015**, 4, 273-276	5.9	35
30	Cost-aware green cellular networks with energy and communication cooperation **2015**, 53, 257-263		66
29	A general utility optimization framework for energy-harvesting-based wireless communications **2015**, 53, 79-85		50

28	Capacity Region of MISO Broadcast Channel for Simultaneous Wireless Information and Power Transfer. *IEEE Transactions on Communications*, **2015**, 63, 3856-3868	6.9	27
27	Capacity region of MISO broadcast channel with SWIPT **2015**,		2
26	Real-Time Energy Storage Management for Renewable Integration in Microgrid: An Off-Line Optimization Approach. *IEEE Transactions on Smart Grid*, **2015**, 6, 124-134	10.7	256
25	CoMP Meets Smart Grid: A New Communication and Energy Cooperation Paradigm. *IEEE Transactions on Vehicular Technology*, **2015**, 64, 2476-2488	6.8	87
24	Multiantenna Wireless Powered Communication With Cochannel Energy and Information Transfer. *IEEE Communications Letters*, **2015**, 19, 2266-2269	3.8	29
23	Throughput Optimal Policies for Energy Harvesting Wireless Transmitters with Non-Ideal Circuit Power. *IEEE Journal on Selected Areas in Communications*, **2014**, 32, 322-332	14.2	171
22	Energy-efficient scheduling with individual packet delay constraints and non-ideal circuit power. *Journal of Communications and Networks*, **2014**, 16, 36-44	4.1	14
21	Energy Beamforming With One-Bit Feedback. *IEEE Transactions on Signal Processing*, **2014**, 62, 5370-5381	4.8	138
20	Joint Energy and Spectrum Cooperation for Cellular Communication Systems. *IEEE Transactions on Communications*, **2014**, 62, 3678-3691	6.9	62
19	Energy beamforming with one-bit feedback **2014**,		11
18	. *IEEE Transactions on Signal Processing*, **2014**, 62, 4798-4810	4.8	326
17	Cooperative energy trading in CoMP systems powered by smart grids **2014**,		14
16	Optimal energy and spectrum sharing for cooperative cellular systems **2014**,		3
15	Energy Efficiency Optimization for MIMO Broadcast Channels. *IEEE Transactions on Wireless Communications*, **2013**, 12, 690-701	9.6	160
14	Energy efficient downlink MIMO transmission with linear precoding. *Science China Information Sciences*, **2013**, 56, 1-12	3.4	3
13	Robust ARQ Precoder Optimization for AF MIMO Relay Systems with Channel Estimation Errors. *IEEE Transactions on Wireless Communications*, **2013**, 12, 5236-5247	9.6	4
12	Energy Efficiency optimization for two-way relay channels **2013**,		2
11	Progressive Linear Precoder Optimization for ARQ Packet Retransmissions in Nonregenerative MIMO Relay Systems. *IEEE Transactions on Signal Processing*, **2013**, 61, 68-81	4.8	5

List of Publications

10	Energy efficient coordinated beamforming for multi-cell MISO systems **2013**,		5
9	Multiuser MISO beamforming for simultaneous wireless information and power transfer **2013**,		41
8	An energy efficient semi-static power control and link adaptation scheme in UMTS HSDPA. *Eurasip Journal on Wireless Communications and Networking*, **2012**, 2012,	3.2	2
7	Energy efficient iterative waterfilling for the MIMO broadcasting channels **2012**,		8
6	Improving network energy efficiency through cooperative idling in the multi-cell systems. *Eurasip Journal on Wireless Communications and Networking*, **2011**, 2011,	3.2	6
5	Improving energy efficiency through multimode transmission in the downlink MIMO systems. *Eurasip Journal on Wireless Communications and Networking*, **2011**, 2011,	3.2	32
4	Robust Multimode Selection in the Downlink Multiuser MIMO Channels with Delayed CSIT **2011**,		4
3	Area Power Consumption in a Single Cell Assisted by Relays **2010**,		11
2	A Linear Processing Scheme in Multiuser Downlink MIMO Broadcasting Channel with Fixed Relays. *IEICE Transactions on Communications*, **2009**, E92-B, 679-682	0.5	1
1	Cost-Aware Cellular Networks Powered by Smart Grids and Energy Harvesting271-288		