Gongpu Wang

List of Publications by Year
in descending order

99 papers	2,780 citations	279798 23 h-index	254184 43 g-index
99 all docs	99 docs citations	99 times ranked	2005 citing authors

#	Article	IF	Citations
1	Ambient Backscatter Communication Systems: Detection and Performance Analysis. IEEE Transactions on Communications, 2016, 64, 4836-4846.	7.8	315
2	Noncoherent Detections for Ambient Backscatter System. IEEE Transactions on Wireless Communications, 2017, 16, 1412-1422.	9.2	215
3	Propagation Channels of 5G Millimeter-Wave Vehicle-to-Vehicle Communications: Recent Advances and Future Challenges. IEEE Vehicular Technology Magazine, 2020, 15, 16-26.	3.4	174
4	Reconfigurable Intelligent Surface Assisted Twoâ€"Way Communications: Performance Analysis and Optimization. IEEE Transactions on Communications, 2020, 68, 6552-6567.	7.8	169
5	Geometrical-Based Modeling for Millimeter-Wave MIMO Mobile-to-Mobile Channels. IEEE Transactions on Vehicular Technology, 2018, 67, 2848-2863.	6.3	166
6	Measurements and Analysis of Propagation Channels in High-Speed Railway Viaducts. IEEE Transactions on Wireless Communications, 2013, 12, 794-805.	9.2	164
7	Semi-Coherent Detection and Performance Analysis for Ambient Backscatter System. IEEE Transactions on Communications, 2017, 65, 5266-5279.	7.8	99
8	Angle Domain Signal Processing-Aided Channel Estimation for Indoor 60-GHz TDD/FDD Massive MIMO Systems. IEEE Journal on Selected Areas in Communications, 2017, 35, 1948-1961.	14.0	93
9	Intercept Behavior Analysis of Industrial Wireless Sensor Networks in the Presence of Eavesdropping Attack. IEEE Transactions on Industrial Informatics, 2016, 12, 780-787.	11.3	91
10	Angle Domain Channel Estimation in Hybrid Millimeter Wave Massive MIMO Systems. IEEE Transactions on Wireless Communications, 2018, 17, 8165-8179.	9.2	89
11	Is Backscatter Link Stronger than Direct Link in Reconfigurable Intelligent Surface-Assisted System?. IEEE Communications Letters, 2020, 24, 1342-1346.	4.1	84
12	Blind Channel Estimation for Ambient Backscatter Communication Systems. IEEE Communications Letters, 2018, 22, 1296-1299.	4.1	83
13	A Wideband Non-Stationary Air-to-Air Channel Model for UAV Communications. IEEE Transactions on Vehicular Technology, 2020, 69, 1214-1226.	6.3	78
14	Impact of UAV Rotation on MIMO Channel Characterization for Air-to-Ground Communication Systems. IEEE Transactions on Vehicular Technology, 2020, 69, 12418-12431.	6.3	72
15	Performance Analysis of Large Intelligent Surface Aided Backscatter Communication Systems. IEEE Wireless Communications Letters, 2020, , 1-1.	5.0	51
16	Outage Analysis of Ambient Backscatter Communication Systems. IEEE Communications Letters, 2018, 22, 1736-1739.	4.1	42
17	Channel Estimation for Ambient Backscatter Communication Systems With Massive-Antenna Reader. IEEE Transactions on Vehicular Technology, 2019, 68, 8254-8258.	6.3	42
18	Ambient Backscatter Communication Systems: Capacity and Outage Performance Analysis. IEEE Access, 2018, 6, 22695-22704.	4.2	40

#	Article	IF	Citations
19	Signal detection and BER analysis for RF-powered devices utilizing ambient backscatter. , 2015, , .		36
20	An Approximate BER Analysis for Ambient Backscatter Communication Systems With Tag Selection. IEEE Access, 2017, 5, 22552-22558.	4.2	36
21	Uplink Detection and BER Analysis for Ambient Backscatter Communication Systems. , 2015, , .		35
22	Measurements and Cluster-Based Modeling of Vehicle-to-Vehicle Channels With Large Vehicle Obstructions. IEEE Transactions on Wireless Communications, 2020, 19, 5860-5874.	9.2	35
23	Signal detection of ambient backscatter system with differential modulation. , 2016, , .		28
24	Reconfigurable Intelligent Surface Empowered Device-to-Device Communication Underlaying Cellular Networks. IEEE Transactions on Communications, 2021, 69, 7790-7805.	7.8	27
25	Joint Beamforming and User Selection in Multicast Downlink Channel under Secrecy-Outage Constraint. IEEE Communications Letters, 2014, 18, 82-85.	4.1	25
26	Signal Detection and Optimal Antenna Selection for Ambient Backscatter Communications With Multi-Antenna Tags. IEEE Transactions on Communications, 2020, 68, 466-479.	7.8	24
27	Transceiver Design and Signal Detection in Backscatter Communication Systems With Multiple-Antenna Tags. IEEE Transactions on Wireless Communications, 2020, 19, 3273-3288.	9.2	23
28	Signal detection for ambient backscatter system with multiple receiving antennas. , 2015, , .		22
29	Security and Reliability Performance Analysis for Cloud Radio Access Networks With Channel Estimation Errors. IEEE Access, 2014, 2, 1348-1358.	4.2	19
30	Statistical Covariance Based Signal Detection for Ambient Backscatter Communication Systems. , 2016, , .		18
31	Rate-Energy Tradeoff in Simultaneous Wireless Information and Power Transfer Over Fading Channels With Uncertain Distribution. IEEE Transactions on Vehicular Technology, 2018, 67, 3663-3668.	6.3	16
32	Machine Learning Aided Channel Estimation for Ambient Backscatter Communication Systems. , 2018, , .		16
33	Channel Estimation and Self-Positioning for UAV Swarm. IEEE Transactions on Communications, 2019, 67, 7994-8007.	7.8	16
34	Optimal Offloading with Non-Orthogonal Multiple Access in Mobile Edge Computing. , 2018, , .		15
35	Channel Estimation and Transmission Strategy for Hybrid mmWave NOMA Systems. IEEE Journal on Selected Topics in Signal Processing, 2019, 13, 584-596.	10.8	15
36	A UAV-Assisted Search and Localization Strategy in Non-Line-of-Sight Scenarios. IEEE Internet of Things Journal, 2022, 9, 23841-23851.	8.7	15

#	Article	IF	Citations
37	Cognitive transmission and performance analysis for Amplify-and-Forward two-way relay networks. , 2014, , .		14
38	Doubly selective channel estimation for amplify-and-forward relay networks. , 2012, , .		13
39	Blind Channel Estimation in Ambient Backscatter Communication Systems with Multiple-Antenna Reader. , 2018, , .		13
40	Mobile Edge Computing via Wireless Power Transfer Over Multiple Fading Blocks: An Optimal Stopping Approach. IEEE Transactions on Vehicular Technology, 2020, 69, 10348-10361.	6.3	13
41	Optimal Resource Allocation for Wireless Powered Sensors: A Perspective From Age of Information. IEEE Communications Letters, 2020, 24, 2559-2563.	4.1	12
42	Robust Power and Bandwidth Allocation in Cognitive Radio System With Uncertain Distributional Interference Channels. IEEE Transactions on Wireless Communications, 2016, 15, 7160-7173.	9.2	11
43	Capacity Analysis for Wireless Symbiotic Communication Systems With BPSK Tags Under Sensitivity Constraint. IEEE Communications Letters, 2022, 26, 44-48.	4.1	10
44	Golay complementary sequences and Reed-Muller codes based PAPR reduction for relay networks with superimposed training. , 2012, , .		9
45	Doppler shift estimation for high-speed railway wireless communication systems with large-scale linear antennas. , 2015, , .		9
46	Symbol detection and performance analysis of the ambient backscatter system. , 2016, , .		9
47	Impact of hardware impairment on spectrum underlay cognitive multiple relays network. , 2016, , .		9
48	Channel capacity and lower bound for ambient backscatter communication systems. , 2017, , .		9
49	Channel Estimation for Ambient Backscatter Communications with Large Intelligent Surface. , 2019, , .		9
50	Spectrum Sensing and Throughput Analysis for Cognitive Two-Way Relay Networks With Multiple Transmit Powers. IEEE Journal on Selected Areas in Communications, 2016, 34, 3038-3047.	14.0	8
51	Detection of Ambient Backscatter Signals from Multiple-Antenna Tags. , 2018, , .		8
52	Backscatter Aided Wireless Communications on High-Speed Rails: Capacity Analysis and Transceiver Design. IEEE Journal on Selected Areas in Communications, 2020, 38, 2864-2874.	14.0	8
53	A cluster based geometrical model for millimeter wave mobile-to-mobile channels. , 2017, , .		7
54	Twoâ€"Way Communications via Reconfigurable Intelligent Surface. , 2020, , .		7

#	Article	IF	Citations
55	AI assisted PHY in future wireless systems: Recent developments and challenges. China Communications, 2021, 18, 285-297.	3.2	7
56	Channel Estimation with New Basis Expansion Model for Wireless Communications on High Speed Railways. , 2016, , .		6
57	Training Based DOA Estimation in Hybrid mmWave Massive MIMO Systems. , 2017, , .		6
58	Blind Detection for Ambient Backscatter Communication System with Multiple-Antenna tags. , 2018, , .		6
59	Optimal Resource Allocation in Wireless Powered Relay Networks With Nonlinear Energy Harvesters. IEEE Wireless Communications Letters, 2020, 9, 371-375.	5.0	6
60	A 2D-DFT Based Channel Estimation Scheme in Indoor 60GHz Communication Systems with Large-Scale Multiple-Antenna. , 2016, , .		5
61	Signal detection with channel estimation error for full duplex wireless system utilizing ambient backscatter. , 2017, , .		5
62	A Doppler Shift Estimator for Millimeter-Wave Communication Systems on High-Speed Railways. , 2018, , .		5
63	Energy-Efficient Mobile-Edge Computation Offloading over Multiple Fading Blocks. , 2019, , .		5
64	Impact of UAV Rotation on MIMO Channel Space-Time Correlation. , 2020, , .		5
65	Transmission schemes for high-speed railway: Direct or relay?. , 2012, , .		4
66	Efficient spectrum sensing and power allocation for cognitive twoâ€way relay network. IET Communications, 2016, 10, 616-623.	2.2	4
67	Channel Estimation for Ambient Backscatter Systems over Frequency-Selective Channels. , 2018, , .		4
68	Channel and Phase Shift Estimation for TM-aided OTFS Railway Communications. , 2021, , .		4
69	Secure performance analysis of cognitive two-way relay system with an eavesdropper. , 2014, , .		3
70	Network Utility Maximization in Wireless Networks Over Fading Channels With Uncertain Distribution. IEEE Communications Letters, 2017, 21, 1107-1110.	4.1	3
71	Semi-Blind Detection of Ambient Backscatter Signals from Multiple-Antenna Tags. , 2018, , .		3
72	A Novel Target Recognition Based Radio Channel Clustering Algorithm. , 2018, , .		3

#	Article	IF	Citations
73	Energy Efficiency Gains for Wireless Communication Systems Aided by Ambient Backscatter. , 2021, , .		3
74	Joint Channel Estimation and Data Detection for Intelligent Transparent Surface (ITS) Aided Wireless Communications on Railways. , 2021, , .		3
75	Security-reliability tradeoff for secure wireless communications with channel estimation error. , 2013, , .		2
76	A distributed mobility management scheme in networks withâ€‰theâ€‰locator/identifier separation. International Journal of Communication Systems, 2014, 27, 1874-1893.	2.5	2
77	Spectrum Sensing for Cognitive Two-Way Relay Networks with Multiple Primary Transmit Powers. , 2014, , .		2
78	Sequential detection and average sample number for cognitive radio with multiple primary transmit power levels. , 2016, , .		2
79	Throughput maximization for wireless powered communication. , 2017, , .		2
80	A practical channel estimation scheme for indoor 60GHz massive MIMO systems via array signal processing. , 2017, , .		2
81	Resource Allocation in Cognitive Underlay System With Uncertain Interference Channelâ€™s Statistics. IEEE Communications Letters, 2018, 22, 1022-1025.	4.1	2
82	Featureâ€'oriented channel estimation in reconfigurable intelligent surfaceâ€'assisted wireless communication systems. IET Communications, 2020, 14, 3458-3463.	2.2	2
83	Time-Selective and Frequency-Selective Relay-Based Channel Capacity for Wireless Communication Systems in High-Speed Railway Environment. , 2014, , .		1
84	Rate-energy tradeoff in simultaneous wireless information and power transfer over Rayleigh block fading channel. , 2017, , .		1
85	Joint Doppler and Channel Estimation for High-Speed Railway Wireless Communication with Massive ULA. , 2017, , .		1
86	Uplink channel estimation with basis expansion model and expectation maximization for wireless communication systems on high speed railways. , 2017, , .		1
87	Transmission strategies of buffer-aided ambient backscatter system. , 2017, , .		1
88	Sparse Reconstruction Based Channel Estimation for Underwater Piezo-Acoustic Backscatter Systems. , 2021, , .		1
89	Transmission Schemes for Backscatter Aided Wireless Communications on High Speed Rails. , 2020, , .		1
90	Modeling and channel estimation for piezo-acoustic backscatter assisted underwater acoustic communications. China Communications, 2022, 19, 297-307.	3.2	1

#	Article	IF	Citations
91	A gradient projection based self-optimizing algorithm for inter-cell interference coordination in downlink OFDMA networks. , 2012, , .		0
92	Doubly selective channel estimation for amplify-and-forward two-way relay networks. , 2013, , .		0
93	Security-Reliability Analysis for Cloud Radio Networks with Channel Estimation Error. , 2014, , .		0
94	Security-Reliability Tradeoff for Relay Networks in the Presence of Channel Estimation Error. , 2014, , .		0
95	Uplink Detection and BER Analysis for Ambient Backscatter Communication Systems. , 2014, , .		0
96	Channel estimation for wireless cellular systems with massive linear receiving antennas. , 2015, , .		0
97	Index Detection Based Channel Estimation for Hybrid Massive MIMO MmWave Systems. , 2019, , .		0
98	Data-Driven Power Allocation for Medium Access Control in LTE-U Coexisting with Wi-Fi. Mobile Networks and Applications, 2019, 24, 1618-1629.	3.3	0
99	Capacity Bounds for Backscatter Aided Wireless Transmission on High Speed Rails. , 2020, , .		0