Lin Bai

List of Publications by Year
in descending order

118 papers	1,441 citations	394286 19 h-index	414303 32 g-index
118 all docs	118 docs citations	118 times ranked	1449 citing authors

#	Article	IF	Citations
1	Unmanned Aerial Vehicle Base Station (UAV-BS) Deployment With Millimeter-Wave Beamforming. IEEE Internet of Things Journal, 2020, 7, 1336-1349.	5.5	115
2	Low Complexity MIMO Detection. , 2012, , .		112
3	Multi-Satellite Relay Transmission in 5G: Concepts, Techniques, and Challenges. IEEE Network, 2018, 32, 38-44.	4.9	88
4	Two-Stage Offloading Optimization for Energy–Latency Tradeoff With Mobile Edge Computing in Maritime Internet of Things. IEEE Internet of Things Journal, 2020, 7, 5954-5963.	5.5	76
5	Enhanced Channel Estimation and Codebook Design for Millimeter-Wave Communication. IEEE Transactions on Vehicular Technology, 2018, 67, 9393-9405.	3.9	59
6	Low-Complexity Multiuser Detection in Millimeter-Wave Systems Based on Opportunistic Hybrid Beamforming. IEEE Transactions on Vehicular Technology, 2018, 67, 10129-10133.	3.9	45
7	Subcarrier and power allocation scheme for downlink OFDM–NOMA systems. IET Signal Processing, 2017, 11, 51-58.	0.9	43
8	Architecture and critical technologies of space information networks. Journal of Communications and Information Networks, 2016, 1, 1-9.	3.5	39
9	Age of Information and Performance Analysis for UAV-Aided IoT Systems. IEEE Internet of Things Journal, 2021, 8, 14447-14457.	5.5	38
10	Beamforming Based Full-Duplex for Millimeter-Wave Communication. Sensors, 2016, 16, 1130.	2.1	36
11	Iterative Joint Beamforming Training with Constant-Amplitude Phased Arrays in Millimeter-Wave Communications. IEEE Communications Letters, 2014, 18, 829-832.	2.5	32
12	Large-Scale MIMO Detection Using MCMC Approach With Blockwise Sampling. IEEE Transactions on Communications, 2016, 64, 3697-3707.	4.9	31
13	Air-to-Ground Wireless Links for High-Speed UAVs. IEEE Journal on Selected Areas in Communications, 2020, 38, 2918-2930.	9.7	29
14	Cooperative Multiuser Beamforming in mmWave Distributed Antenna Systems. IEEE Transactions on Vehicular Technology, 2018, 67, 12394-12397.	3.9	28
15	Rate Splitting on Mobile Edge Computing for UAV-Aided IoT Systems. IEEE Transactions on Cognitive Communications and Networking, 2020, 6, 1193-1203.	4.9	26
16	Lattice Reduction-Based MIMO Iterative Receiver Using Randomized Sampling. IEEE Transactions on Wireless Communications, 2013, 12, 2160-2170.	6.1	22
17	User Selection and Power Allocation Schemes for Downlink NOMA Systems with Imperfect CSI. , 2016, , .		22
18	Data Aggregation in UAV-Aided Random Access for Internet of Vehicles. IEEE Internet of Things Journal, 2022, 9, 5755-5764.	5.5	22

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19	Low Complexity MIMO Receivers. , 2014, , .		21
20	UAV-Aided Backscatter Communications: Performance Analysis and Trajectory Optimization. IEEE Journal on Selected Areas in Communications, 2021, 39, 3129-3143.	9.7	21
21	Coordinated Beamforming for UAV-Aided Millimeter-Wave Communications Using GPML-Based Channel Estimation. IEEE Transactions on Cognitive Communications and Networking, 2021, 7, 100-109.	4.9	20
22	Secrecy Capacity of Artificial Noise Aided Secure Communication in MIMO Rician Channels. IEEE Access, 2018, 6, 7921-7929.	2.6	19
23	Direction Finding of Linear Frequency Modulation Signal With Time-Modulated Array. IEEE Transactions on Antennas and Propagation, 2019, 67, 2841-2846.	3.1	19
24	Lattice Reduction Aided Detection for Underdetermined MIMO Systems: A Pre-Voting Cancellation Approach. , 2010, , .		18
25	Direction Finding of Linear Frequency Modulation Signal in Time Modulated Array With Pulse Compression. IEEE Transactions on Antennas and Propagation, 2020, 68, 509-520.	3.1	18
26	Cooperative transmission over Rician fading channels for geostationary orbiting satellite collocation system. IET Communications, 2017, 11, 538-547.	1.5	16
27	Age of Information Aware UAV Deployment for Intelligent Transportation Systems. IEEE Transactions on Intelligent Transportation Systems, 2022, 23, 2705-2715.	4.7	16
28	Relay-Aided Random Access in Space-Air-Ground Integrated Networks. IEEE Wireless Communications, 2020, 27, 37-43.	6.6	16
29	An Efficient Hybrid Transmission Method: Using Nonorthogonal Multiple Access and Multiuser Diversity. IEEE Transactions on Vehicular Technology, 2018, 67, 2276-2288.	3.9	15
30	A Collision Resolution Protocol for Random Access in Massive MIMO. IEEE Journal on Selected Areas in Communications, 2021, 39, 686-699.	9.7	15
31	Downlink Throughput Maximization for OFDMA Systems With Feedback Channel Capacity Constraints. IEEE Transactions on Signal Processing, 2011, 59, 441-446.	3.2	14
32	Performance Analysis and System Design for Hierarchical Modulated BICM-ID. IEEE Transactions on Wireless Communications, 2014, 13, 3056-3069.	6.1	14
33	A NOMA-PSO based cooperative transmission method in satellite communication systems. , 2017, , .		14
34	Transmit Power Minimization for Vector-Perturbation Based NOMA Systems: A Sub-Optimal Beamforming Approach. IEEE Transactions on Wireless Communications, 2019, 18, 2679-2692.	6.1	14
35	Multiple Delay Estimation for Collision Resolution in Non-Orthogonal Random Access. IEEE Transactions on Vehicular Technology, 2020, 69, 497-508.	3.9	14
36	Adaptive congestion control of DSRC vehicle networks for collaborative road safety applications. , 2011, , .		13

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37	Lattice Reduction-Based Approximate MAP Detection with Bit-Wise Combining and Integer Perturbed List Generation. IEEE Transactions on Communications, 2013, 61, 3259-3269.	4.9	13
38	Optimal Beamforming for Dual-Hop MIMO AF Relay Networks With Cochannel Interferences. IEEE Transactions on Signal Processing, 2017, 65, 1825-1840.	3.2	13
39	UAV-Aided Networks for Emergency Communications in Areas with Unevenly Distributed Users. Journal of Communications and Information Networks, 2018, 3, 23-32.	3.5	12
40	Adaptive Rate Control of Dedicated Short Range Communications Based Vehicle Networks for Road Safety Applications. , 2011, , .		11
41	Random Access and Detection Performance of Internet of Things for Smart Ocean. IEEE Internet of Things Journal, 2020, 7, 9858-9869.	5.5	11
42	Greedy User Selection Using a Lattice Reduction Updating Method for Multiuser MIMO Systems. IEEE Transactions on Vehicular Technology, 2011, 60, 136-147.	3.9	10
43	Adaptive resource allocation for multicast orthogonal frequency division multiple access systems with guaranteed BER and rate. International Journal of Communication Systems, 2013, 26, 912-926.	1.6	10
44	UAV-aided Networks for Emergency Communications in Areas with Unevenly Distributed Users. , 2018, , .		10
45	Relay-Aided Multiple Access Scheme in Two-Point Joint Transmission. IEEE Transactions on Vehicular Technology, 2019, 68, 5629-5641.	3.9	9
46	Direction Finding and Performance Analysis With 1 bit Time Modulated Array. IEEE Transactions on Antennas and Propagation, 2021, 69, 6881-6893.	3.1	9
47	Performance Analysis for SDMA mmWave Systems: Using an Approximate Closed-Form Solution of Downlink Sum-Rate. IEEE Access, 2017, 5, 15641-15649.	2.6	8
48	Space Information Networks. IEEE Wireless Communications, 2019, 26, 8-9.	6.6	8
49	A Secure Structure for UAV-Aided IoT Networks: Space-Time Key. IEEE Wireless Communications, 2021, 28, 96-101.	6.6	8
50	Theoretic Analysis of IEEE 802.11 Rate Adaptation Algorithm SampleRate. IEEE Communications Letters, 2011, 15, 524-526.	2.5	7
51	Collaborative Relay Beamforming Strategies for Multiple Destinations with Guaranteed QoS in Wireless Machine-to-Machine Networks. International Journal of Distributed Sensor Networks, 2012, 8, 525640.	1.3	7
52	Successive orthogonal beamforming for cooperative multiâ€point downlinks. IET Communications, 2013, 7, 706-714.	1.5	7
53	Cooperative transmission for geostationary orbiting satellite collocation system. , 2014, , .		7
54	Beamforming for Dual-Hop MIMO AF Relay Networks With Channel Estimation Error and Feedback Delay. IEEE Access, 2017, 5, 21840-21851.	2.6	7

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55	Variational Bayesian Inference for Channel Estimation and User Activity Detection in C-RAN. IEEE Wireless Communications Letters, 2020, , 1-1.	3.2	7
56	Achieving Antenna and Multipath Diversities in GLRT-Based Burst Packet Detection. IEEE Transactions on Signal Processing, 2015, 63, 1832-1845.	3.2	6
57	Error Performance of Physical-Layer Network Coding in Multiple-Antenna Two-Way Relay Systems With Outdated CSI. IEEE Transactions on Communications, 2015, 63, 3744-3753.	4.9	6
58	An Improved EPA-Based Receiver Design for Uplink LDPC Coded SCMA System. IEEE Wireless Communications Letters, 2022, 11, 947-951.	3.2	6
59	Multilayer Orthogonal Beamforming for Priority-Guaranteed Wireless Communications. International Journal of Distributed Sensor Networks, 2012, 8, 307467.	1.3	5
60	Fairnessâ€aware power allocation in twoâ€way decodeâ€andâ€forward relay systems. Electronics Letters, 2015, 51, 52-54.	0.5	5
61	Power allocation scheme and spectral efficiency analysis for downlink nonâ€orthogonal multiple access systems. IET Signal Processing, 2017, 11, 537-543.	0.9	5
62	Collaborative Relay Beamforming Based on Minimum Power for M2M Devices in Multicell Systems. International Journal of Distributed Sensor Networks, 2013, 9, 293565.	1.3	4
63	A Game-Theoretic Analysis of Multiple Protocol Data Flows in Hierarchical M2M Communication Networks. International Journal of Distributed Sensor Networks, 2013, 9, 584707.	1.3	4
64	MMSE-based random sampling for iterative detection for large-scale MIMO systems. Journal of Communications and Information Networks, 2016, 1, 29-36.	3.5	4
65	Optimal beamforming for dualâ€hop MIMO AF relay networks with imperfect CSI. IET Communications, 2018, 12, 115-124.	1.5	4
66	Guest Editorial Special Issue on Unmanned Aerial Vehicles Over Internet of Things. IEEE Internet of Things Journal, 2019, 6, 1636-1639.	5.5	4
67	Multiple Delay Estimation Using Genetic Algorithm-Based MCMC in Non-Orthogonal Random Access. IEEE Wireless Communications Letters, 2020, 9, 398-401.	3.2	4
68	Multiuser Selection Criteria for MIMO-NOMA Systems With Different Detectors. IEEE Transactions on Vehicular Technology, 2020, 69, 1777-1791.	3.9	4
69	On the Harmonic Selection and Performance Verification in Time-Modulated Array-Based Space Division Multiple Access. IEEE Transactions on Antennas and Propagation, 2021, 69, 3244-3256.	3.1	4
70	Lowâ€complexity iterative channel estimation with lattice reductionâ€based detection for multipleâ€input multipleâ€output systems. IET Communications, 2014, 8, 905-913.	1.5	3
71	A Precoding Compensation Scheme for Heterogeneous Communication Networks With CSI Feedback Delay. IEEE Transactions on Network Science and Engineering, 2020, 7, 2506-2514.	4.1	3
72	Resolution Limits of Non-Adaptive 20 Questions Search for Multiple Targets. IEEE Transactions on Information Theory, 2022, 68, 4964-4982.	1.5	3

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73	Distributed Beamforming for Relay Assisted Multiuser Machine-to-Machine Networks. International Journal of Distributed Sensor Networks, 2012, 8, 213727.	1.3	2
74	Multiuser beamforming in multicell downlinks for maximising worst signal-to-interference-plus-noise ratio. IET Communications, 2013, 7, 1596-1604.	1.5	2
75	Secure Relay Beamforming with Correlated Channel Models in Dual-Hop Wireless Communication Networks. , 2016, , .		2
76	Doubly iterative multiple-input–multiple-output-bit-interleaved coded modulation receiver with joint channel estimation and randomised sampling detection. IET Signal Processing, 2016, 10, 335-341.	0.9	2
77	Low Complexity Hybrid Beamforming for MmWave-UAV Communication Systems with a Pre-defined Codebook. , 2019, , .		2
78	Periodic Phase Modulation Method for Fast Diagnosis of Phased Array. IEEE Transactions on Antennas and Propagation, 2021, 69, 1184-1187.	3.1	2
79	Wireless Radar Sensor Networks: Epidemiological Modeling and Optimization. IEEE Journal on Selected Areas in Communications, 2022, 40, 1993-2005.	9.7	2
80	On the Achievable User Number of the Downlinks in Cellular-Based Machine-to-Machine Communications. International Journal of Distributed Sensor Networks, 2012, 8, 714971.	1.3	1
81	Service-Oriented Radio Architecture: A Novel M2M Network Architecture for Cognitive Radio Systems. International Journal of Distributed Sensor Networks, 2012, 8, 762953.	1.3	1
82	Coordinated relay beamforming based on the worst-case SINR in multicell wireless systems. , 2012, , .		1
83	An Optimal Multiuser Beamforming Scheme Based on the Worst SNR in Cellular Systems. , 2012, , .		1
84	Collaborative Relay-Based Multiuser Beamforming in Cellular Systems. , 2012, , .		1
85	A Dual-Cycle Architecture in Cognitive M2M Wireless Networks. International Journal of Distributed Sensor Networks, 2013, 9, 239170.	1.3	1
86	A primary rate guaranteed SDMA for aeronautical communications. , 2013, , .		1
87	Approximate maximum a posteriori detection for multiple-input–multiple-output systems with bit-level lattice reduction-aided detectors and successive interference cancellation. IET Communications, 2014, 8, 697-706.	1.5	1
88	Ergodic Rate Analysis of Power Allocation Schemes in Two-Way Decode-and-Forward Relay Systems. , 2015, , .		1
89	Near optimal power allocation in two-way relay systems with physical layer network coding. IET Communications, 2015, 9, 1885-1893.	1.5	1
90	Subcarrier and Power Allocation for Multiuser MIMO-OFDM Systems with Various Detectors. , 2016, , .		1

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91	Lattice reductionâ€based iterative receivers: using partial bitâ€wise MMSE filter with randomised sampling and MAPâ€aided integer perturbation. IET Communications, 2016, 10, 1394-1400.	1.5	1
92	On the communication range of millimeter-wave small-cells for the energy efficiency of a heterogeneous network. Journal of Communications and Information Networks, 2016, 1, 111-124.	3.5	1
93	Coverage and rate analysis of user beam selection in mm-wave heterogeneous networks. Journal of Communications and Information Networks, 2017, 2, 120-130.	3.5	1
94	Secrecy capacity of artificial noise aided Rician/Rayleigh MIMO channels. , 2017, , .		1
95	Normalized amplitude of channel state information: The robust parameter for indoor localization in wireless sensor networks. International Journal of Distributed Sensor Networks, 2018, 14, 155014771875942.	1.3	1
96	Secure Beamforming via Amplify-and-Forward Relays in Machine-to-Machine Communications. International Journal of Distributed Sensor Networks, 2013, 9, 728532.	1.3	1
97	Array Signal Recovery and Direction-Finding Based on Non-Uniform Period Modulation. , 2020, , .		1
98	Variational Inference Based Sparse Signal Detection for Next Generation Multiple Access. IEEE Journal on Selected Areas in Communications, 2022, 40, 1114-1127.	9.7	1
99	Outage Throughput Maximization for OFDMA Systems with Feedback Channel Capacity Constraints. , 2010, , .		0
100	Updated Basis Lattice Reduction Based Sequential User Selection for Multiuser MIMO Systems. , 2010, , .		0
101	Two-phases control of DSRC Vehicle networks for road intersection coexisting safety applications. , 2011, , .		0
102	The throughput order of multicast traffics with physical-layer network coding in random wireless ad hoc networks. Journal of Communications and Networks, 2011, 13, 214-220.	1.8	0
103	Orthogonal beamforming for rural broadband wireless access with limited feedback. , 2012, , .		0
104	Collaborative relay beamforming based on the worst-case SINR for multiuser in cellular systems. , 2012, , .		0
105	MIMO iterative receiver using lattice reduction-aided detection and successive interference cancellation. , 2013, , .		0
106	Iterative channel estimation and detection with computational efficient lattice basis reduction for MIMO systems. , 2013, , .		0
107	Distributed real-time optimization of average consensus. , 2013, , .		0
108	SDMA-Based Aeronautical Machine-to-Machine Communications under SINR Constraints. International Journal of Distributed Sensor Networks, 2013, 9, 475761.	1.3	0

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109	Multiple Beam Selection for Combing M2M Communication Networks and Cellular Networks with Limited Feedback. International Journal of Distributed Sensor Networks, 2013, 9, 540849.	1.3	0
110	On the optimization of lattice reduction-based approximate MAP detection using randomized sampling in MIMO systems. , 2013, , .		0
111	Distributed relay beamforming based on worst signal–to–noise ratio constraints for multiple receivers. IET Signal Processing, 2013, 7, 523-532.	0.9	0
112	Wireless Machine-to-Machine Networks 2013. International Journal of Distributed Sensor Networks, 2014, 10, 857139.	1.3	0
113	Optimal designs of collaborative relay-assisted multiuser beamforming for cellular systems. Wireless Communications and Mobile Computing, 2014, 14, 1484-1499.	0.8	0
114	Optimal and near Optimal Power Allocation Schemes in Two-Way Relay Systems with Physical Layer Network Coding. , 2015, , .		0
115	Energy Efficiency Maximization for Downlink OFDMA Systems with Feedback Channel Capacity Constraints. , 2016, , .		0
116	MIMO Detection. , 2018, , 1-4.		0
117	Wireless Machine-to-Machine Networks. International Journal of Distributed Sensor Networks, 2012, 8, 535927.	1.3	0
118	MIMO Detection. , 2020, , 843-847.		0