

Erik G Larsson

List of Publications by Year in descending order

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318
papers

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319
times ranked

10634
citing authors

#	ARTICLE	IF	CITATIONS
1	Universal Adversarial Attacks on Neural Networks for Power Allocation in a Massive MIMO System. IEEE Wireless Communications Letters, 2022, 11, 67-71.	5.0	6
2	Protecting GNSS Open Service Navigation Message Authentication Against Distance-Decreasing Attacks. IEEE Transactions on Aerospace and Electronic Systems, 2022, 58, 1224-1240.	4.7	5
3	Model-Based and Data-Driven Approaches for Downlink Massive MIMO Channel Estimation. IEEE Transactions on Communications, 2022, 70, 2085-2101.	7.8	6
4	Downlink Power Allocation in Massive MIMO via Deep Learning: Adversarial Attacks and Training. IEEE Transactions on Cognitive Communications and Networking, 2022, 8, 707-719.	7.9	6
5	Data Size-Aware Downlink Massive MIMO: A Session-Based Approach. IEEE Wireless Communications Letters, 2022, 11, 1468-1472.	5.0	0
6	Analog MIMO Communication for One-Shot Distributed Principal Component Analysis. IEEE Transactions on Signal Processing, 2022, 70, 3328-3342.	5.3	1
7	Combining Reciprocity and CSI Feedback in MIMO Systems. IEEE Transactions on Wireless Communications, 2022, 21, 10065-10080.	9.2	2
8	Location-based Initial Access for Wireless Power Transfer with Physically Large Arrays. , 2022, , .		3
9	Towards 6G wireless communication networks: vision, enabling technologies, and new paradigm shifts. Science China Information Sciences, 2021, 64, 1.	4.3	858
10	Is Massive MIMO Robust Against Distributed Jammers?. IEEE Transactions on Communications, 2021, 69, 457-469.	7.8	7
11	Uplink Spectral and Energy Efficiency of Cell-Free Massive MIMO With Optimal Uniform Quantization. IEEE Transactions on Communications, 2021, 69, 223-245.	7.8	36
12	Massive Machine-Type Communication Pilot-Hopping Sequence Detection Architectures Based on Non-Negative Least Squares for Grant-Free Random Access. IEEE Open Journal of Circuits and Systems, 2021, 2, 253-264.	1.9	2
13	Clustering-Based Activity Detection Algorithms for Grant-Free Random Access in Cell-Free Massive MIMO. IEEE Transactions on Communications, 2021, 69, 7520-7530.	7.8	26
14	MMSE-Optimal Sequential Processing for Cell-Free Massive MIMO With Radio Stripes. IEEE Transactions on Communications, 2021, 69, 7775-7789.	7.8	38
15	Sensing and Classification Using Massive MIMO: A Tensor Decomposition-Based Approach. IEEE Wireless Communications Letters, 2021, 10, 2649-2653.	5.0	2
16	Is NOMA Efficient in Multi-Antenna Networks? A Critical Look at Next Generation Multiple Access Techniques. IEEE Open Journal of the Communications Society, 2021, 2, 1310-1343.	6.9	102
17	Max-Min Power Control in Downlink Massive MIMO With Distributed Antenna Arrays. IEEE Transactions on Communications, 2021, 69, 740-751.	7.8	9
18	Massive Access for 5G and Beyond. IEEE Journal on Selected Areas in Communications, 2021, 39, 615-637.	14.0	347

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19	Guest Editorial Massive Access for 5G and Beyond Part I. IEEE Journal on Selected Areas in Communications, 2021, 39, 611-614.	14.0	2
20	Guest Editorial Massive Access for 5G and Beyond Part II. IEEE Journal on Selected Areas in Communications, 2021, 39, 899-902.	14.0	1
21	Enhanced Normalized Conjugate Beamforming for Cell-Free Massive MIMO. IEEE Transactions on Communications, 2021, 69, 2863-2877.	7.8	24
22	Adversarial Attacks on Deep Learning Based Power Allocation in a Massive MIMO Network. , 2021, , .		19
23	Moving Object Classification with a Sub-6 GHz Massive MIMO Array Using Real Data. , 2021, , .		1
24	Improving Cell-Free Massive MIMO by Local Per-Bit Soft Detection. IEEE Communications Letters, 2021, 25, 2400-2404.	4.1	7
25	Active Reconfigurable Intelligent Surface-Aided Wireless Communications. IEEE Transactions on Wireless Communications, 2021, 20, 4962-4975.	9.2	202
26	Intelligent Reflecting Surface-Assisted Cognitive Radio System. IEEE Transactions on Communications, 2021, 69, 675-687.	7.8	146
27	Consensus-Based Distributed Computation of Link-Based Network Metrics. IEEE Signal Processing Letters, 2021, 28, 249-253.	3.6	4
28	Optimizing Information Freshness in a Multiple Access Channel With Heterogeneous Devices. IEEE Open Journal of the Communications Society, 2021, 2, 456-470.	6.9	25
29	Learning to Perform Downlink Channel Estimation in Massive MIMO Systems. , 2021, , .		1
30	Multiple Spoofing Detection for Mobile GNSS Receivers Using Statistical Tests. IEEE Access, 2021, 9, 166382-166394.	4.2	1
31	Multi-agent Policy Optimization for Pilot Selection in Delay-constrained Grant-free Multiple Access. , 2021, , .		0
32	Energy-Efficient Massive MIMO for Serving Multiple Federated Learning Groups. , 2021, , .		3
33	Intelligent Reflecting Surface Versus Decode-and-Forward: How Large Surfaces are Needed to Beat Relaying?. IEEE Wireless Communications Letters, 2020, 9, 244-248.	5.0	560
34	Performance Analysis of Quantized Uplink Massive MIMO-OFDM With Oversampling Under Adjacent Channel Interference. IEEE Transactions on Communications, 2020, 68, 871-886.	7.8	9
35	Dynamic Resource Allocation in Co-Located and Cell-Free Massive MIMO. IEEE Transactions on Green Communications and Networking, 2020, 4, 209-220.	5.5	20
36	Intelligent Reflecting Surfaces: Physics, Propagation, and Pathloss Modeling. IEEE Wireless Communications Letters, 2020, 9, 581-585.	5.0	415

#	ARTICLE	IF	CITATIONS
37	Joint Power Allocation and Load Balancing Optimization for Energy-Efficient Cell-Free Massive MIMO Networks. IEEE Transactions on Wireless Communications, 2020, 19, 6798-6812.	9.2	84
38	Self-Learning Detector for the Cell-Free Massive MIMO Uplink: The Line-of-Sight Case. , 2020, , .		2
39	An Algorithm for Grant-Free Random Access in Cell-Free Massive MIMO. , 2020, , .		13
40	Passive Intelligent Surface Assisted MIMO Powered Sustainable IoT. , 2020, , .		10
41	Performance Analysis of Massive MIMO With Distributed Jammers. , 2020, , .		3
42	Efficient Techniques for In-Band System Information Broadcast in Multi-Cell Massive MIMO. IEEE Transactions on Communications, 2020, 68, 6157-6173.	7.8	2
43	Joint Antenna Detection and Bayesian Channel Estimation for Non-Coherent User Terminals. IEEE Transactions on Wireless Communications, 2020, 19, 7081-7096.	9.2	0
44	Massively Distributed Antenna Systems With Nonideal Optical Fiber Fronthauls: A Promising Technology for 6G Wireless Communication Systems. IEEE Vehicular Technology Magazine, 2020, 15, 43-51.	3.4	31
45	Active-Load Assisted Symbiotic Radio System in Cognitive Radio Network. , 2020, , .		5
46	Symbiotic Radio: Cognitive Backscattering Communications for Future Wireless Networks. IEEE Transactions on Cognitive Communications and Networking, 2020, 6, 1242-1255.	7.9	136
47	Cell-Free Massive MIMO with Radio Stripes and Sequential Uplink Processing. , 2020, , .		46
48	Pilot-Hopping Sequence Detection Architecture for Grant-Free Random Access using Massive MIMO. , 2020, , .		2
49	Power Control in Cellular Massive MIMO With Varying User Activity: A Deep Learning Solution. IEEE Transactions on Wireless Communications, 2020, 19, 5732-5748.	9.2	90
50	Max-Min Optimal Beamforming for Cell-Free Massive MIMO. IEEE Communications Letters, 2020, 24, 2344-2348.	4.1	19
51	Optimal Open-Loop MIMO Precoder Design. IEEE Communications Letters, 2020, 24, 2075-2079.	4.1	0
52	Correction to "Cell-Free Massive MIMO Versus Small Cells" [Mar 17 1834-1850]. IEEE Transactions on Wireless Communications, 2020, 19, 3623-3624.	9.2	3
53	Weighted Sum-Rate Maximization for Reconfigurable Intelligent Surface Aided Wireless Networks. IEEE Transactions on Wireless Communications, 2020, 19, 3064-3076.	9.2	498
54	Enhanced Fairness and Scalability of Power Control Schemes in Multi-Cell Massive MIMO. IEEE Transactions on Communications, 2020, 68, 2878-2890.	7.8	8

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55	Blind Channel Estimation for Downlink Massive MIMO Systems With Imperfect Channel Reciprocity. IEEE Transactions on Signal Processing, 2020, 68, 3132-3145.	5.3	19
56	Using Intelligent Reflecting Surfaces for Rank Improvement in MIMO Communications. , 2020, , .		48
57	Optimal Design of Energy-Efficient Cell-Free Massive MIMO: Joint Power Allocation and Load Balancing. , 2020, , .		8
58	Local Partial Zero-Forcing Precoding for Cell-Free Massive MIMO. IEEE Transactions on Wireless Communications, 2020, 19, 4758-4774.	9.2	111
59	Reconfigurable Intelligent Surfaces: Three Myths and Two Critical Questions. IEEE Communications Magazine, 2020, 58, 90-96.	6.1	194
60	Statistical test for GNSS spoofing attack detection by using multiple receivers on a rigid body. Eurasip Journal on Advances in Signal Processing, 2020, 2020, .	1.7	12
61	Massive MIMO. , 2020, , 771-775.		0
62	An Architecture for Grant-Free Random Access Massive Machine Type Communication Using Coordinate Descent. , 2020, , .		2
63	A Fair and Scalable Power Control Scheme in Multi-cell Massive MIMO. , 2019, , .		4
64	Sum Throughput Maximization for Multi-tag MISO Backscattering. , 2019, , .		1
65	Ubiquitous cell-free Massive MIMO communications. Eurasip Journal on Wireless Communications and Networking, 2019, 2019, .	2.4	317
66	Downlink Training in Cell-Free Massive MIMO: A Blessing in Disguise. IEEE Transactions on Wireless Communications, 2019, 18, 5153-5169.	9.2	63
67	Scalability Aspects of Cell-Free Massive MIMO. , 2019, , .		111
68	Energy Efficiency of the Cell-Free Massive MIMO Uplink With Optimal Uniform Quantization. IEEE Transactions on Green Communications and Networking, 2019, 3, 971-987.	5.5	69
69	Massive MIMO for Connectivity With Drones: Case Studies and Future Directions. IEEE Access, 2019, 7, 94676-94691.	4.2	27
70	Sum Spectral Efficiency Maximization in Massive MIMO Systems: Benefits from Deep Learning. , 2019, , .		24
71	Massive MIMO for Internet of Things (IoT) connectivity. Physical Communication, 2019, 37, 100859.	2.1	77
72	Introduction to the Special Issue on Array Signal Processing for Angular Models in Massive MIMO Communications. IEEE Journal on Selected Topics in Signal Processing, 2019, 13, 882-885.	10.8	9

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73	Statistical Method for Spoofing Detection at Mobile GNSS Receivers. , 2019, , .		2
74	On the Energy Efficiency of Limited-Backhaul Cell-Free Massive MIMO. , 2019, , .		17
75	Dynamic Scheduling and Power Control in Uplink Massive MIMO with Random Data Arrivals. , 2019, , .		1
76	NOMA Versus Massive MIMO in Rayleigh Fading. , 2019, , .		2
77	Multi-Tag Backscattering to MIMO Reader: Channel Estimation and Throughput Fairness. IEEE Transactions on Wireless Communications, 2019, 18, 5584-5599.	9.2	33
78	Joint Antenna Detection and Channel Estimation for Non-Coherent User Terminals. , 2019, , .		1
79	Novel Multiantenna Reader Design for Multi-Tag Backscattered Throughput Fairness Maximization. , 2019, , .		3
80	Massive MIMO With Spatially Correlated Rician Fading Channels. IEEE Transactions on Communications, 2019, 67, 3234-3250.	7.8	136
81	Optimal Channel Estimation for Reciprocity-Based Backscattering With a Full-Duplex MIMO Reader. IEEE Transactions on Signal Processing, 2019, 67, 1662-1677.	5.3	66
82	Inverse Extrapolation for Efficient Precoding in Time-Varying Massive MIMO OFDM Systems. IEEE Access, 2019, 7, 91105-91119.	4.2	6
83	Detection of Pilot-hopping Sequences for Grant-free Random Access in Massive MIMO Systems. , 2019, , .		6
84	Sum Throughput Maximization in Multi-Tag Backscattering to Multiantenna Reader. IEEE Transactions on Communications, 2019, 67, 5689-5705.	7.8	38
85	Joint Transmit and Circuit Power Minimization in Massive MIMO With Downlink SINR Constraints: When to Turn on Massive MIMO?. IEEE Transactions on Wireless Communications, 2019, 18, 1834-1846.	9.2	22
86	What Role can NOMA Play in Massive MIMO?. IEEE Journal on Selected Topics in Signal Processing, 2019, 13, 597-611.	10.8	70
87	Physical Adversarial Attacks Against End-to-End Autoencoder Communication Systems. IEEE Communications Letters, 2019, 23, 847-850.	4.1	89
88	Performance of One-Bit Massive MIMO with Oversampling under Adjacent Channel Interference. , 2019, , .		1
89	Weighted Sum-Rate Maximization for Intelligent Reflecting Surface Enhanced Wireless Networks. , 2019, , .		126
90	Age of Information in a Multiple Access Channel with Heterogeneous Traffic and an Energy Harvesting Node. , 2019, , .		41

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91	An Architecture for Grant-Free Massive MIMO MTC Based on Compressive Sensing. , 2019, , .		4
92	Monostatic Backscattering Detection by Multiantenna Reader. , 2019, , .		6
93	RadioWeaves for efficient connectivity: analysis and impact of constraints in actual deployments. , 2019, , .		23
94	Opinion Dynamics with Random Actions and a Stubborn Agent. , 2019, , .		8
95	Techniques for System Information Broadcast in Cell-Free Massive MIMO. IEEE Transactions on Communications, 2019, 67, 244-257.	7.8	19
96	Adversarial Attacks on Deep-Learning Based Radio Signal Classification. IEEE Wireless Communications Letters, 2019, 8, 213-216.	5.0	170
97	Optimal MIMO Precoding Under a Constraint on the Amplifier Power Consumption. IEEE Transactions on Communications, 2019, 67, 218-229.	7.8	6
98	Optimized Power Control for Massive MIMO With Underlaid D2D Communications. IEEE Transactions on Communications, 2019, 67, 2763-2778.	7.8	28
99	Analysis of Nonorthogonal Training in Massive MIMO Under Channel Aging With SIC Receivers. IEEE Signal Processing Letters, 2019, 26, 282-286.	3.6	15
100	Multi-Cell Massive MIMO Uplink With Underlay Spectrum Sharing. IEEE Transactions on Cognitive Communications and Networking, 2019, 5, 119-137.	7.9	17
101	Out-of-Band Radiation from Large Antenna Arrays. IEEE Communications Magazine, 2018, 56, 196-203.	6.1	42
102	Maxâ€“Min Fair Transmit Precoding for Multi-Group Multicasting in Massive MIMO. IEEE Transactions on Wireless Communications, 2018, 17, 1358-1373.	9.2	53
103	Massive MIMO Performanceâ€“TDD Versus FDD: What Do Measurements Say?. IEEE Transactions on Wireless Communications, 2018, 17, 2247-2261.	9.2	61
104	Performance Analysis of NOMA in Training-Based Multiuser MIMO Systems. IEEE Transactions on Wireless Communications, 2018, 17, 372-385.	9.2	65
105	Performance Analysis of FDD Massive MIMO Systems Under Channel Aging. IEEE Transactions on Wireless Communications, 2018, 17, 1094-1108.	9.2	53
106	Performance of In-Band Transmission of System Information in Massive MIMO Systems. IEEE Transactions on Wireless Communications, 2018, 17, 1700-1712.	9.2	11
107	Joint Pilot Design and Uplink Power Allocation in Multi-Cell Massive MIMO Systems. IEEE Transactions on Wireless Communications, 2018, 17, 2000-2015.	9.2	107
108	Out-of-Band Radiation From Antenna Arrays Clarified. IEEE Wireless Communications Letters, 2018, 7, 610-613.	5.0	40

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109	When is the Achievable Rate Region Convex in Two-User Massive MIMO Systems?. IEEE Wireless Communications Letters, 2018, 7, 796-799.	5.0	1
110	Massive MIMO for Communications With Drone Swarms. IEEE Transactions on Wireless Communications, 2018, 17, 1604-1629.	9.2	98
111	Jamming-Resistant Receivers for the Massive MIMO Uplink. IEEE Transactions on Information Forensics and Security, 2018, 13, 210-223.	6.9	76
112	On the Total Energy Efficiency of Cell-Free Massive MIMO. IEEE Transactions on Green Communications and Networking, 2018, 2, 25-39.	5.5	459
113	A Modular Base Station Architecture for Massive MIMO with Antenna and User Scalability per Processing Node. , 2018, , .		2
114	Downlink Spectral Efficiency of Cell-Free Massive MIMO with Full-Pilot Zero-Forcing. , 2018, , .		26
115	Massive MIMO. , 2018, , 1-4.		1
116	How Energy-Efficient Can a Wireless Communication System Become?. , 2018, , .		36
117	Downlink Power Control in Massive MIMO Networks with Distributed Antenna Arrays. , 2018, , .		13
118	On the Performance of Backhaul Constrained Cell-Free Massive MIMO with Linear Receivers. , 2018, , .		29
119	On the Performance of Cell-Free Massive MIMO in Ricean Fading. , 2018, , .		58
120	How Much Will Tiny IoT Nodes Profit from Massive Base Station Arrays?. , 2018, , .		2
121	Mrt-Based Joint Unicast and Multigroup Multicast Transmission in Massive MIMO Systems. , 2018, , .		0
122	Grant-Free Massive MTC-Enabled Massive MIMO: A Compressive Sensing Approach. IEEE Transactions on Communications, 2018, 66, 6164-6175.	7.8	186
123	Human and Machine Type Communications Can Coexist in Uplink Massive MIMO Systems. , 2018, , .		9
124	Semi-Closed Form Solution for Sum Rate Maximization in Downlink Multiuser MIMO Via Large-System Analysis. , 2018, , .		0
125	Sparse Signal Processing for Grant-Free Massive Connectivity: A Future Paradigm for Random Access Protocols in the Internet of Things. IEEE Signal Processing Magazine, 2018, 35, 88-99.	5.6	314
126	Joint Unicast and Multi-Group Multicast Transmission in Massive MIMO Systems. IEEE Transactions on Wireless Communications, 2018, 17, 6375-6388.	9.2	32

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127	Impact of Spatial Filtering on Distortion From Low-Noise Amplifiers in Massive MIMO Base Stations. IEEE Transactions on Communications, 2018, 66, 6050-6067.	7.8	17
128	Efficient DSP and Circuit Architectures for Massive MIMO: State of the Art and Future Directions. IEEE Transactions on Signal Processing, 2018, 66, 4717-4736.	5.3	45
129	Uplink Spectral Efficiency of Massive MIMO with Spatially Correlated Rician Fading. , 2018, , .		6
130	On the Zero-Forcing Receiver Performance for Massive MIMO Drone Communications. , 2018, , .		2
131	Efficient Techniques for Broadcast of System Information in mmWave Communication Systems. , 2018, , .		2
132	Optimizing Reciprocity-Based Backscattering with a Full-Duplex Antenna Array Reader. , 2018, , .		8
133	Spatial Characteristics of Distortion Radiated From Antenna Arrays With Transceiver Nonlinearities. IEEE Transactions on Wireless Communications, 2018, 17, 6663-6679.	9.2	48
134	Adapting the number of antennas and power to traffic load: When to turn on massive MIMO?. , 2018, , .		2
135	Cell-Free Massive MIMO Versus Small Cells. IEEE Transactions on Wireless Communications, 2017, 16, 1834-1850.	9.2	1,399
136	Random Access Protocols for Massive MIMO. IEEE Communications Magazine, 2017, 55, 216-222.	6.1	72
137	No Downlink Pilots Are Needed in TDD Massive MIMO. IEEE Transactions on Wireless Communications, 2017, 16, 2921-2935.	9.2	173
138	A Random Access Protocol for Pilot Allocation in Crowded Massive MIMO Systems. IEEE Transactions on Wireless Communications, 2017, 16, 2220-2234.	9.2	108
139	Optimal Pilot and Payload Power Control in Single-Cell Massive MIMO Systems. IEEE Transactions on Signal Processing, 2017, 65, 2363-2378.	5.3	77
140	On the effect of imperfect timing synchronization on pilot contamination. , 2017, , .		8
141	Achievable uplink rates for massive MIMO with coarse quantization. , 2017, , .		24
142	Jamming Massive MIMO using Massive MIMO: Asymptotic separability results. , 2017, , .		8
143	Jamming a TDD Point-to-Point Link Using Reciprocity-Based MIMO. IEEE Transactions on Information Forensics and Security, 2017, 12, 2957-2970.	6.9	15
144	Massive MIMO with multi-cell MMSE processing: exploiting all pilots for interference suppression. Eurasip Journal on Wireless Communications and Networking, 2017, 2017, .	2.4	83

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145	Uplink Performance of Wideband Massive MIMO With One-Bit ADCs. IEEE Transactions on Wireless Communications, 2017, 16, 87-100.	9.2	277
146	Spatio-Temporal Waveform Design for Multiuser Massive MIMO Downlink With 1-bit Receivers. IEEE Journal on Selected Topics in Signal Processing, 2017, 11, 347-362.	10.8	49
147	Random Pilot and Data Access in Massive MIMO for Machine-Type Communications. IEEE Transactions on Wireless Communications, 2017, 16, 7703-7717.	9.2	60
148	NOMA in multiuser MIMO systems with imperfect CSI. , 2017, , .		7
149	Computation limited matrix inversion using Neumann series expansion for massive MIMO. , 2017, , .		2
150	Energy efficiency optimization for cell-free massive MIMO. , 2017, , .		33
151	Joint pilot sequence design and power control for Max-Min fairness in uplink massive MIMO. , 2017, , .		14
152	Analysis of nonlinear low-noise amplifiers in massive MIMO base stations. , 2017, , .		1
153	Optimal Base Station Design with Limited Fronthaul: Massive Bandwidth or Massive MIMO?. , 2017, , .		3
154	Device Activity and Embedded Information Bit Detection Using AMP in Massive MIMO. , 2017, , .		24
155	Multigroup Multicast Precoding in Massive MIMO. , 2017, , .		4
156	Performance analysis of (TDD) massive MIMO with Kalman channel prediction. , 2017, , .		43
157	A scalable architecture for massive MIMO base stations using distributed processing. , 2016, , .		25
158	How Much Do Downlink Pilots Improve Cell-Free Massive MIMO?. , 2016, , .		63
159	Out-of-band radiation measure for MIMO arrays with beamformed transmission. , 2016, , .		20
160	On the performance of cell-free massive MIMO with short-term power constraints. , 2016, , .		37
161	Multi-cell massive MIMO performance with double scattering channels. , 2016, , .		11
162	Waveforms for the Massive MIMO Downlink: Amplifier Efficiency, Distortion, and Performance. IEEE Transactions on Communications, 2016, 64, 5050-5063.	7.8	66

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163	Downlink power control for massive MIMO cellular systems with optimal user association. , 2016, , .		10
164	Experimental study of indoor tracking using UWB measurements and particle filtering. , 2016, , .		3
165	Waveform design for massive MISO downlink with energy-efficient receivers adopting 1-bit ADCs. , 2016, , .		7
166	Detection and mitigation of jamming attacks in massive MIMO systems using random matrix theory. , 2016, , .		32
167	Random access protocol for massive MIMO: Strongest-user collision resolution (SUCR). , 2016, , .		37
168	Random access for massive MIMO systems with intra-cell pilot contamination. , 2016, , .		20
169	On the separability of signal and interference-plus-noise subspaces in blind pilot decontamination. , 2016, , .		18
170	Joint Power Allocation and User Association Optimization for Massive MIMO Systems. IEEE Transactions on Wireless Communications, 2016, 15, 6384-6399.	9.2	139
171	Target Tracking in Confined Environments With Uncertain Sensor Positions. IEEE Transactions on Vehicular Technology, 2016, 65, 870-882.	6.3	57
172	On the Feasibility of Wireless Energy Transfer Using Massive Antenna Arrays. IEEE Transactions on Wireless Communications, 2016, 15, 3466-3480.	9.2	105
173	ML Detection in Phase Noise Impaired SIMO Channels With Uplink Training. IEEE Transactions on Communications, 2016, 64, 223-235.	7.8	17
174	Massive MIMO: ten myths and one critical question. IEEE Communications Magazine, 2016, 54, 114-123.	6.1	882
175	Kernel Methods for Accurate UWB-Based Ranging With Reduced Complexity. IEEE Transactions on Wireless Communications, 2016, 15, 1783-1793.	9.2	45
176	Wireless Information and Power Transfer in Multiway Massive MIMO Relay Networks. IEEE Transactions on Wireless Communications, 2016, 15, 3837-3855.	9.2	82
177	Joint Beamforming and Broadcasting in Massive MIMO. IEEE Transactions on Wireless Communications, 2016, 15, 3058-3070.	9.2	48
178	Massive MIMO for Maximal Spectral Efficiency: How Many Users and Pilots Should Be Allocated?. IEEE Transactions on Wireless Communications, 2016, 15, 1293-1308.	9.2	429
179	A Multi-Cell MMSE Precoder for Massive MIMO Systems and New Large System Analysis. , 2015, , .		32
180	Uplink pilot and data power control for single cell massive MIMO systems with MRC. , 2015, , .		27

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181	A Multi-Cell MMSE Detector for Massive MIMO Systems and New Large System Analysis. , 2015, , .		25
182	Broadcasting in massive MIMO using OSTBC with reduced dimension. , 2015, , .		6
183	Three Practical Aspects of Massive MIMO: Intermittent User Activity, Pilot Synchronism, and Asymmetric Deployment. , 2015, , .		11
184	Fingerprinting-Based Positioning in Distributed Massive MIMO Systems. , 2015, , .		93
185	Blind estimation of effective downlink channel gains in massive MIMO. , 2015, , .		19
186	Cell-Free Massive MIMO: Uniformly great service for everyone. , 2015, , .		237
187	Measurement Analysis and Channel Modeling for TOA-Based Ranging in Tunnels. IEEE Transactions on Wireless Communications, 2015, 14, 456-467.	9.2	47
188	Uplink Performance of Time-Reversal MRC in Massive MIMO Systems Subject to Phase Noise. IEEE Transactions on Wireless Communications, 2015, 14, 711-723.	9.2	130
189	Correction to "Massive MIMO With Optimal Power and Training Duration Allocation"[Dec 14 605-608]. IEEE Wireless Communications Letters, 2015, 4, 225-225.	5.0	0
190	GNSS spoofing detection using multiple mobile COTS receivers. , 2015, , .		13
191	Massive MIMO at night: On the operation of massive MIMO in low traffic scenarios. , 2015, , .		11
192	Massive MIMO in Real Propagation Environments: Do All Antennas Contribute Equally?. IEEE Transactions on Communications, 2015, 63, 3917-3928.	7.8	210
193	Multiuser MIMO precoding with per-antenna continuous-time constant-envelope constraints. , 2015, , .		5
194	Massive MIMO With Optimal Power and Training Duration Allocation. IEEE Wireless Communications Letters, 2014, 3, 605-608.	5.0	110
195	Massive MIMO as a cyber-weapon. , 2014, , .		10
196	MIMO capacity under power amplifiers consumed power and per-antenna radiated power constraints. , 2014, , .		3
197	On the complexity of very large multi-user MIMO detection. , 2014, , .		5
198	Constant envelope signal space diversity. , 2014, , .		5

#	ARTICLE	IF	CITATIONS
199	Optimizing multi-cell massive MIMO for spectral efficiency: How Many users should be scheduled?. , 2014, , .		32
200	Massive MIMO for next generation wireless systems. IEEE Communications Magazine, 2014, 52, 186-195.	6.1	5,006
201	Amplifier-Aware Multiple-Input Single-Output Capacity. IEEE Transactions on Communications, 2014, 62, 913-919.	7.8	27
202	Fast Blind Recognition of Channel Codes. IEEE Transactions on Communications, 2014, 62, 1393-1405.	7.8	58
203	Optimized Encoding of Scheduling Assignments Using Finite Blocklength Coding Bounds. IEEE Wireless Communications Letters, 2014, 3, 265-268.	5.0	1
204	Kernel principal component analysis for UWB-based ranging. , 2014, , .		4
205	PAR-Aware Large-Scale Multi-User MIMO-OFDM Downlink. IEEE Journal on Selected Areas in Communications, 2013, 31, 303-313.	14.0	155
206	Multiple symbols soft-decision metrics for coded frequency-shift keying signals. Science China Information Sciences, 2013, 56, 1-8.	4.3	2
207	The Multicell Multiuser MIMO Uplink with Very Large Antenna Arrays and a Finite-Dimensional Channel. IEEE Transactions on Communications, 2013, 61, 2350-2361.	7.8	272
208	Improving 3GPP-LTE Uplink Control Signaling Performance Using Complex-Field Coding. IEEE Transactions on Vehicular Technology, 2013, 62, 161-171.	6.3	13
209	Optimal Power Allocation for Hybrid ARQ with Chase Combining in i.i.d. Rayleigh Fading Channels. IEEE Transactions on Communications, 2013, 61, 1835-1846.	7.8	64
210	Achievable Outage Rate Regions for the MISO Interference Channel. IEEE Wireless Communications Letters, 2013, 2, 439-442.	5.0	6
211	Reducing Physical Layer Control Signaling Using Mobile-Assisted Scheduling. IEEE Transactions on Wireless Communications, 2013, 12, 368-379.	9.2	2
212	Simultaneous information and power transfer over broadband channels: Fixed coding rates. , 2013, , .		1
213	Improving 3GPP-LTE uplink control signaling by repetition across frequency bands. , 2013, , .		2
214	Massive MU-MIMO downlink TDD systems with linear precoding and downlink pilots. , 2013, , .		39
215	Spectral efficiency of the multipair two-way relay channel with massive arrays. , 2013, , .		16
216	Efficient Computation of Pareto Optimal Beamforming Vectors for the MISO Interference Channel With Successive Interference Cancellation. IEEE Transactions on Signal Processing, 2013, 61, 4782-4795.	5.3	19

#	ARTICLE	IF	CITATIONS
217	Scaling Up MIMO: Opportunities and Challenges with Very Large Arrays. IEEE Signal Processing Magazine, 2013, 30, 40-60.	5.6	4,222
218	The Sign-Definiteness Lemma and Its Applications to Robust Transceiver Optimization for Multiuser MIMO Systems. IEEE Transactions on Signal Processing, 2013, 61, 238-252.	5.3	39
219	Achievable rates of ZF receivers in massive MIMO with phase noise impairments. , 2013, , .		16
220	Per-Antenna Constant Envelope Precoding for Large Multi-User MIMO Systems. IEEE Transactions on Communications, 2013, 61, 1059-1071.	7.8	269
221	Outage probability analysis for superposition coded symmetric relaying. Science China Information Sciences, 2013, 56, 1-9.	4.3	2
222	Energy and Spectral Efficiency of Very Large Multiuser MIMO Systems. IEEE Transactions on Communications, 2013, 61, 1436-1449.	7.8	2,423
223	Large-Scale Multipair Two-Way Relay Networks with Distributed AF Beamforming. IEEE Communications Letters, 2013, 17, 1-4.	4.1	46
224	Uplink Performance Analysis of Multicell MU-SIMO Systems With ZF Receivers. IEEE Transactions on Vehicular Technology, 2013, 62, 4471-4483.	6.3	128
225	Some fundamental limits on frequency synchronization in massive MIMO. , 2013, , .		27
226	On the Value of Spectrum Sharing among Operators in Multicell Networks. , 2013, , .		9
227	On Optimal Link Activation With Interference Cancellation in Wireless Networking. IEEE Transactions on Vehicular Technology, 2013, 62, 939-945.	6.3	45
228	Multi-pair amplify-and-forward relaying with very large antenna arrays. , 2013, , .		130
229	Bits-to-symbol mappings for superposition coding based HARQ systems. , 2013, , .		1
230	Guest Editorial: Large-Scale Multiple Antenna Wireless Systems. IEEE Journal on Selected Areas in Communications, 2013, 31, 113-116.	14.0	8
231	Effect of oscillator phase noise on uplink performance of large MU-MIMO systems. , 2012, , .		19
232	Complexity reduction of blind decoding schemes using CRC splitting. , 2012, , .		2
233	Piggybacking an Additional Lonely Bit on Linearly Coded Payload Data. IEEE Wireless Communications Letters, 2012, 1, 292-295.	5.0	14
234	Improved Detection of ACK/NACK Messages in the LTE Uplink Control Channel. , 2012, , .		2

#	ARTICLE	IF	CITATIONS
235	Joint Source-Channel Coding for the MIMO Broadcast Channel. IEEE Transactions on Signal Processing, 2012, 60, 2085-2090.	5.3	13
236	Approximating the LLR Distribution for a Class of Soft-Output MIMO Detectors. IEEE Transactions on Signal Processing, 2012, 60, 6421-6434.	5.3	4
237	Joint Source-Channel Decoding Over MIMO Channels Based on Partial Marginalization. IEEE Transactions on Signal Processing, 2012, 60, 6734-6739.	5.3	0
238	Power-efficient downlink communication using large antenna arrays: The doughnut channel. , 2012, , .		1
239	Single-User Beamforming in Large-Scale MISO Systems with Per-Antenna Constant-Envelope Constraints: The Doughnut Channel. IEEE Transactions on Wireless Communications, 2012, 11, 3992-4005.	9.2	111
240	Constant envelope precoding for power-efficient downlink wireless communication in multi-user MIMO systems using large antenna arrays. , 2012, , .		5
241	Effective rate analysis of MISO Rician fading channels. , 2012, , .		6
242	Spectrum sensing of OFDM signals in the presence of CFO: New algorithms and empirical evaluation using USRP. , 2012, , .		6
243	Fast identification of control signaling aided by please-decode-blindly (PDB) messages. , 2012, , .		0
244	Does non-orthogonal spectrum sharing in the same cell improve the sum-rate of wireless operators?. , 2012, , .		12
245	Performance analysis of large scale MU-MIMO with optimal linear receivers. , 2012, , .		32
246	Spectrum Sensing for Cognitive Radio : State-of-the-Art and Recent Advances. IEEE Signal Processing Magazine, 2012, 29, 101-116.	5.6	906
247	Eigenvalue-Based Spectrum Sensing of Orthogonal Space-Time Block Coded Signals. IEEE Transactions on Signal Processing, 2012, 60, 6724-6728.	5.3	7
248	On the Optimality of Single-Carrier Transmission in Large-Scale Antenna Systems. IEEE Wireless Communications Letters, 2012, 1, 276-279.	5.0	164
249	EVD-based channel estimation in multicell multiuser MIMO systems with very large antenna arrays. , 2012, , .		314
250	Analytic Framework for the Effective Rate of MISO Fading Channels. IEEE Transactions on Communications, 2012, 60, 1741-1751.	7.8	48
251	Gaussian approximation of the LLR distribution for the ML and partial marginalization MIMO detectors. , 2011, , .		7
252	Efficient computation of the pareto boundary for the two-user MISO interference channel with multi-user decoding capable receivers. , 2011, , .		1

#	ARTICLE	IF	CITATIONS
253	Outage-Optimal Power Allocation for Hybrid ARQ with Incremental Redundancy. IEEE Transactions on Wireless Communications, 2011, 10, 2069-2074.	9.2	58
254	Uplink performance analysis of multicell MU-MIMO with zero-forcing receivers and perfect CSI. , 2011, , .		19
255	Adaptive Partial Decode-and-Forward Relaying with Quantized Feedback. , 2011, , .		2
256	Multiantenna spectrum sensing of a second-order cyclostationary signal. , 2011, , .		9
257	Robust joint optimization of MIMO two-way relay channels with imperfect CSI. , 2011, , .		9
258	Robust joint optimization of MIMO interfering relay channels with imperfect CSI. , 2011, , .		2
259	Optimal resource allocation for IR-HARQ. , 2011, , .		7
260	Comments on "Multiple Antenna Spectrum Sensing in Cognitive Radios". IEEE Transactions on Wireless Communications, 2011, 10, 1678-1680.	9.2	8
261	Partial Marginalization Soft MIMO Detection With Higher Order Constellations. IEEE Transactions on Signal Processing, 2011, 59, 453-458.	5.3	23
262	Spectrum Sensing of Signals with Structured Covariance Matrices Using Covariance Matching Estimation Techniques. , 2011, , .		1
263	Analysis of the pilot contamination effect in very large multicell multiuser MIMO systems for physical channel models. , 2011, , .		192
264	A Fast Scheme for Blind Identification of Channel Codes. , 2011, , .		44
265	Superposition Modulation-Based Symmetric Relaying With Hybrid ARQ: Analysis and Optimization. IEEE Transactions on Vehicular Technology, 2011, 60, 3667-3683.	6.3	8
266	Closed-Form Sum-MSE Minimization for the Two-User Gaussian MIMO Broadcast Channel. IEEE Communications Letters, 2011, 15, 950-952.	4.1	3
267	Optimal Symbol-by-Symbol Costa Precoding for a Relay-Aided Downlink Channel. IEEE Transactions on Communications, 2011, 59, 2274-2284.	7.8	1
268	Linear Multihop Amplify-and-Forward Relay Channels: Error Exponent and Optimal Number of Hops. IEEE Transactions on Wireless Communications, 2011, 10, 3834-3842.	9.2	21
269	Closed-form parameterization of the Pareto boundary for the two-user MISO interference channel. , 2011, , .		20
270	A Low Complexity User Grouping Based Multiuser MISO Downlink Precoder. , 2011, , .		1

#	ARTICLE	IF	CITATIONS
271	Optimization of Frame Length in OFDMA Systems Taking into Account the Control Signaling Cost. , 2011, , .		2
272	A unified framework for GLRT-based spectrum sensing of signals with covariance matrices with known eigenvalue multiplicities. , 2011, , .		14
273	Mixed-integer linear programming framework for max-min power control with single-stage interference cancellation. , 2011, , .		9
274	Codebook Design and Hybrid Digital/Analog Coding for Parallel Rayleigh Fading Channels. IEEE Transactions on Signal Processing, 2011, 59, 5091-5096.	5.3	1
275	New results on adaptive computational resource allocation in soft MIMO detection. , 2011, , .		3
276	Comparison of Strategies for Signaling of Scheduling Assignments in Wireless OFDMA. IEEE Transactions on Vehicular Technology, 2010, 59, 4527-4542.	6.3	14
277	Monotonic Optimization Framework for the Two-User MISO Interference Channel. IEEE Transactions on Communications, 2010, 58, 2159-2168.	7.8	65
278	Optimal OFDMA Downlink Scheduling Under a Control Signaling Cost Constraint. IEEE Transactions on Communications, 2010, 58, 2776-2781.	7.8	13
279	Spectrum sensing of orthogonal space-time block coded signals with multiple receive antennas. , 2010, , .		9
280	On Diversity Combining with Unknown Channel State Information and Unknown Noise Variance. , 2010, , .		4
281	Differential Signaling of Scheduling Information in Wireless Multiple Access Systems. , 2010, , .		3
282	Reducing Downlink Signaling Traffic in Wireless Systems Using Mobile-Assisted Scheduling. , 2010, , .		1
283	Improved Error Protection for Uplink Control Signaling in 3GPP-LTE via Complex-Field Coding. , 2010, , .		7
284	Retransmission Strategies for Symmetric Relaying Using Superposition Modulation. , 2010, , .		2
285	The Higher-Order Singular Value Decomposition: Theory and an Application [Lecture Notes. IEEE Signal Processing Magazine, 2010, 27, 151-154.	5.6	103
286	Accuracy Comparison of LS and Squared-Range LS for Source Localization. IEEE Transactions on Signal Processing, 2010, 58, 916-923.	5.3	25
287	Globally Optimal Resource Allocation for Achieving Maximum Weighted Sum Rate. , 2010, , .		24
288	Spectrum sensing methods for detection of DVB-T signals in AWGN and fading channels. , 2010, , .		25

#	ARTICLE	IF	CITATIONS
289	Optimal and near-optimal spectrum sensing of OFDM signals in AWGN channels. , 2010, , .		6
290	Overview of spectrum sensing for cognitive radio. , 2010, , .		37
291	Overview of recent advances in numerical tensor algebra. , 2010, , .		0
292	Monotonic optimization framework for the MISO IFC. , 2009, , .		2
293	on the optimal K-term approximation of a sparse parameter vector MMSE estimate. , 2009, , .		0
294	On Coding of Scheduling Information in OFDM. , 2009, , .		3
295	Finite-SNR Analysis and Optimization of Decode-and-Forward Relaying Over Slow-Fading Channels. IEEE Transactions on Vehicular Technology, 2009, 58, 4292-4305.	6.3	8
296	Game theory and the flat-fading gaussian interference channel. IEEE Signal Processing Magazine, 2009, 26, 18-27.	5.6	120
297	Cooperative transmission based on decode-and-forward relaying with partial repetition coding. IEEE Transactions on Wireless Communications, 2009, 8, 1716-1725.	9.2	62
298	A Bayesian approach to spectrum sensing, denoising and anomaly detection. , 2009, , .		12
299	Optimal scheduling and QoS power control for cognitive underlay networks. , 2009, , .		7
300	Pareto-optimal beamforming for the MISO interference channel with partial CSI. , 2009, , .		11
301	Outage rate regions for the MISO IFC. , 2009, , .		11
302	Implementation Aspects of Fixed-Complexity Soft-Output MIMO Detection. , 2009, , .		10
303	Stopping Criterion for Complexity Reduction of Sphere Decoding. IEEE Communications Letters, 2009, 13, 402-404.	4.1	11
304	Selfishness and altruism on the MISO interference channel: the case of partial transmitter CSI. IEEE Communications Letters, 2009, 13, 667-669.	4.1	35
305	Optimal modulation for known interference. IEEE Transactions on Communications, 2008, 56, 1892-1899.	7.8	6
306	Soft-Decision Metrics for Coded Orthogonal Signaling in Symmetric Alpha-Stable Noise. IEEE Transactions on Signal Processing, 2008, 56, 266-273.	5.3	19

#	ARTICLE	IF	CITATIONS
307	Competition Versus Cooperation on the MISO Interference Channel. IEEE Journal on Selected Areas in Communications, 2008, 26, 1059-1069.	14.0	248
308	The MISO interference channel from a game-theoretic perspective: A combination of selfishness and altruism achieves pareto optimality. Proceedings of the IEEE International Conference on Acoustics, Speech, and Signal Processing, 2008, , .	1.8	62
309	Asymptotically optimal transmit strategies for the multiple antenna interference channel. , 2008, , .		14
310	Fixed-Complexity Soft MIMO Detection via Partial Marginalization. IEEE Transactions on Signal Processing, 2008, 56, 3397-3407.	5.3	101
311	Cognitive radio in a frequency-planned environment: some basic limits. IEEE Transactions on Wireless Communications, 2008, 7, 4800-4806.	9.2	70
312	Linear precoding in multiple antenna broadcast channels: Efficient computation of the achievable rate region. , 2008, , .		14
313	Parameterization of the MISO interference channel with transmit beamforming and partial channel state information. , 2008, , .		16
314	Transactions letters - Combining long-term and low-rate short-term channel state information over correlated mimo channels. IEEE Transactions on Wireless Communications, 2008, 7, 2409-2414.	9.2	10
315	Greedy user selection for zero-forcing and MMSE multiuser beamforming with channel estimation errors. Proceedings of the IEEE International Conference on Acoustics, Speech, and Signal Processing, 2008, , .	1.8	8
316	Complete Characterization of the Pareto Boundary for the MISO Interference Channel. IEEE Transactions on Signal Processing, 2008, 56, 5292-5296.	5.3	406
317	Primary System Detection for Cognitive Radio: Does Small-Scale Fading Help?. IEEE Communications Letters, 2007, 11, 799-801.	4.1	17
318	Sensor-Network-Aided Cognitive Radio: On the Optimal Receiver for Estimate-and-Forward Protocols Applied to the Relay Channel. Conference Record of the Asilomar Conference on Signals, Systems and Computers, 2007, , .	0.0	26