

Merouane Debbah

List of Publications by Year in descending order

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275
papers

33,978
citations

14655

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8167

148
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277
docs citations

277
times ranked

13802
citing authors

#	ARTICLE	IF	CITATIONS
1	Communication Efficient Decentralized Learning Over Bipartite Graphs. IEEE Transactions on Wireless Communications, 2022, 21, 4150-4167.	9.2	6
2	Seven Defining Features of Terahertz (THz) Wireless Systems: A Fellowship of Communication and Sensing. IEEE Communications Surveys and Tutorials, 2022, 24, 967-993.	39.4	139
3	A Survey on 5G Radio Access Network Energy Efficiency: Massive MIMO, Lean Carrier Design, Sleep Modes, and Machine Learning. IEEE Communications Surveys and Tutorials, 2022, 24, 653-697.	39.4	61
4	Intelligent Omni-Surfaces for Full-Dimensional Wireless Communications: Principles, Technology, and Implementation. IEEE Communications Magazine, 2022, 60, 39-45.	6.1	67
5	Variational Autoencoders for Reliability Optimization in Multi-Access Edge Computing Networks. , 2022, , .		1
6	Joint Channel Estimation and Signal Recovery for RIS-Empowered Multiuser Communications. IEEE Transactions on Communications, 2022, 70, 4640-4655.	7.8	49
7	Aerial Intelligent Reflecting Surfaces in MIMO-NOMA Networks: Fundamentals, Potential Achievements, and Challenges. IEEE Open Journal of the Communications Society, 2022, 3, 1007-1024.	6.9	7
8	Multi-User Wireless Communications with Holographic MIMO Surfaces: A Convenient Channel Model and Spectral Efficiency Analysis. , 2022, , .		2
9	Predictive Deployment of UAV Base Stations in Wireless Networks: Machine Learning Meets Contract Theory. IEEE Transactions on Wireless Communications, 2021, 20, 637-652.	9.2	54
10	Opportunistic Beamforming Using an Intelligent Reflecting Surface Without Instantaneous CSI. IEEE Wireless Communications Letters, 2021, 10, 146-150.	5.0	29
11	Joint Multi-User Communication and Sensing Exploiting Both Signal and Environment Sparsity. IEEE Journal on Selected Topics in Signal Processing, 2021, 15, 1409-1422.	10.8	42
12	Overhead-Aware Design of Reconfigurable Intelligent Surfaces in Smart Radio Environments. IEEE Transactions on Wireless Communications, 2021, 20, 126-141.	9.2	103
13	Resource Allocation and Beamforming Design in the Short Blocklength Regime for URLLC. IEEE Transactions on Wireless Communications, 2021, 20, 1321-1335.	9.2	57
14	Federated Channel-Beam Mapping: from sub-6GHz to mmWave. , 2021, , .		3
15	Communication-Efficient and Distributed Learning Over Wireless Networks: Principles and Applications. Proceedings of the IEEE, 2021, 109, 796-819.	21.3	100
16	Multi-Hop RIS-Empowered Terahertz Communications: A DRL-Based Hybrid Beamforming Design. IEEE Journal on Selected Areas in Communications, 2021, 39, 1663-1677.	14.0	202
17	Channel Estimation for RIS-Empowered Multi-User MISO Wireless Communications. IEEE Transactions on Communications, 2021, 69, 4144-4157.	7.8	336
18	Massive MIMO under Double Scattering Channels: Power Minimization and Congestion Controls. , 2021, , .		3

#	ARTICLE	IF	CITATIONS
19	On the Optimality of Reconfigurable Intelligent Surfaces (RISs): Passive Beamforming, Modulation, and Resource Allocation. IEEE Transactions on Wireless Communications, 2021, 20, 4347-4363.	9.2	61
20	Regularized Zero Forcing Beamforming for Serving More Users in Energy-Harvesting Enabled Networks. , 2021, , .		0
21	Bidirectional Approximate Message Passing for RIS-Assisted Multi-User MISO Communications. , 2021, , .		1
22	Fundamental Limits of Wave Control in Smart Environment. , 2021, , .		0
23	Capacity Optimization using Reconfigurable Intelligent Surfaces: A Large System Approach. , 2021, , .		9
24	Spectrum-Learning-Aided Reconfigurable Intelligent Surfaces for "Green" 6G Networks. IEEE Network, 2021, 35, 20-26.	6.9	12
25	Distributed Federated Learning for Ultra-Reliable Low-Latency Vehicular Communications. IEEE Transactions on Communications, 2020, 68, 1146-1159.	7.8	240
26	Guest Editorial Special Issue on "Wireless Networks Empowered by Reconfigurable Intelligent Surfaces" IEEE Journal on Selected Areas in Communications, 2020, 38, 2445-2449.	14.0	2
27	Smart Radio Environments Empowered by Reconfigurable Intelligent Surfaces: How It Works, State of Research, and The Road Ahead. IEEE Journal on Selected Areas in Communications, 2020, 38, 2450-2525.	14.0	1,365
28	Exploiting Deep Learning in Limited-Fronthaul Cell-Free Massive MIMO Uplink. IEEE Journal on Selected Areas in Communications, 2020, 38, 1678-1697.	14.0	52
29	Holographic MIMO Surfaces for 6G Wireless Networks: Opportunities, Challenges, and Trends. IEEE Wireless Communications, 2020, 27, 118-125.	9.0	699
30	Complexity-Aware ANN-Based Energy Efficiency Maximization. , 2020, , .		3
31	Asymptotic Optimality of Reconfigurable Intelligent Surfaces: Passive Beamforming and Achievable Rate. , 2020, , .		16
32	Reconfigurable Surface Assisted Multi-User Opportunistic Beamforming. , 2020, , .		3
33	Deep Learning-Aided Finite-Capacity Fronthaul Cell-Free Massive MIMO with Zero Forcing. , 2020, , .		10
34	One-Bit Feedback Exponential Learning for Beam Alignment in Mobile mmWave. IEEE Access, 2020, 8, 194575-194589.	4.2	6
35	Asymptotic Max-Min SINR Analysis of Reconfigurable Intelligent Surface Assisted MISO Systems. IEEE Transactions on Wireless Communications, 2020, 19, 7748-7764.	9.2	283
36	Stochastic Design and Analysis of User-Centric Wireless Cloud Caching Networks. IEEE Transactions on Wireless Communications, 2020, 19, 4978-4993.	9.2	7

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37	A Globally Optimal Energy-Efficient Power Control Framework and Its Efficient Implementation in Wireless Interference Networks. IEEE Transactions on Signal Processing, 2020, 68, 3887-3902.	5.3	43
38	Millimeter-Wave Networking in the Sky: A Machine Learning and Mean Field Game Approach for Joint Beamforming and Beam-Steering. IEEE Transactions on Wireless Communications, 2020, 19, 6393-6408.	9.2	37
39	QoS- and Energy-Aware Optimal Resource Allocations in DF Relay-Assisted FSO Networks. IEEE Transactions on Green Communications and Networking, 2020, 4, 914-926.	5.5	4
40	Intelligent Reflecting Surface-Assisted Multi-User MISO Communication: Channel Estimation and Beamforming Design. IEEE Open Journal of the Communications Society, 2020, 1, 661-680.	6.9	252
41	Phase Configuration Learning in Wireless Networks with Multiple Reconfigurable Intelligent Surfaces. , 2020, , .		27
42	Full-Duplex Non-Orthogonal Multiple Access Networks. , 2019, , 285-303.		1
43	Wireless Communications Through Reconfigurable Intelligent Surfaces. IEEE Access, 2019, 7, 116753-116773.	4.2	1,743
44	Human-in-the-Loop Wireless Communications: Machine Learning and Brain-Aware Resource Management. IEEE Transactions on Communications, 2019, 67, 7727-7743.	7.8	24
45	Deep Learning Based Online Power Control for Large Energy Harvesting Networks. , 2019, , .		11
46	Maxâ€“Min Rate of Cell-Free Massive MIMO Uplink With Optimal Uniform Quantization. IEEE Transactions on Communications, 2019, 67, 6796-6815.	7.8	74
47	Model-Aided Wireless Artificial Intelligence: Embedding Expert Knowledge in Deep Neural Networks for Wireless System Optimization. IEEE Vehicular Technology Magazine, 2019, 14, 60-69.	3.4	120
48	Wireless Networks Design in the Era of Deep Learning: Model-Based, AI-Based, or Both?. IEEE Transactions on Communications, 2019, 67, 7331-7376.	7.8	383
49	Artificial Neural Networks-Based Machine Learning for Wireless Networks: A Tutorial. IEEE Communications Surveys and Tutorials, 2019, 21, 3039-3071.	39.4	641
50	Reconfigurable Intelligent Surfaces for Energy Efficiency in Wireless Communication. IEEE Transactions on Wireless Communications, 2019, 18, 4157-4170.	9.2	2,003
51	QoS-aware Power Allocation and Relay Placement in Green Cooperative FSO Communications. , 2019, , .		2
52	Wireless Network Intelligence at the Edge. Proceedings of the IEEE, 2019, 107, 2204-2239.	21.3	360
53	Deep Learning for UL/DL Channel Calibration in Generic Massive MIMO Systems. , 2019, , .		41
54	Indoor Signal Focusing with Deep Learning Designed Reconfigurable Intelligent Surfaces. , 2019, , .		176

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55	Asymptotic Analysis of RZF in Large-Scale MU-MIMO Systems Over Rician Channels. IEEE Transactions on Information Theory, 2019, 65, 7268-7286.	2.4	13
56	NOMA Throughput and Energy Efficiency in Energy Harvesting Enabled Networks. IEEE Transactions on Communications, 2019, 67, 6499-6511.	7.8	38
57	Smart radio environments empowered by reconfigurable AI meta-surfaces: an idea whose time has come. Eurasip Journal on Wireless Communications and Networking, 2019, 2019, .	2.4	1,020
58	Contract-Based Incentive Mechanism for LTE Over Unlicensed Channels. IEEE Transactions on Communications, 2019, 67, 6427-6440.	7.8	7
59	Asymptotic Analysis of RZF Over Double Scattering Channels With MMSE Estimation. IEEE Transactions on Wireless Communications, 2019, 18, 2509-2526.	9.2	18
60	A Tutorial on UAVs for Wireless Networks: Applications, Challenges, and Open Problems. IEEE Communications Surveys and Tutorials, 2019, 21, 2334-2360.	39.4	1,602
61	Data Correlation-Aware Resource Management in Wireless Virtual Reality (VR): An Echo State Transfer Learning Approach. IEEE Transactions on Communications, 2019, 67, 4267-4280.	7.8	54
62	On the Uplink Max-Min SINR of Cell-Free Massive MIMO Systems. IEEE Transactions on Wireless Communications, 2019, 18, 2021-2036.	9.2	112
63	Integrated Millimeter Wave and Sub-6 GHz Wireless Networks: A Roadmap for Joint Mobile Broadband and Ultra-Reliable Low-Latency Communications. IEEE Wireless Communications, 2019, 26, 109-115.	9.0	98
64	Uplink Power Control in Cell-Free Massive MIMO via Deep Learning. , 2019, , .		40
65	Distributed Power Control for Large Energy Harvesting Networks: A Multi-Agent Deep Reinforcement Learning Approach. IEEE Transactions on Cognitive Communications and Networking, 2019, 5, 1140-1154.	7.9	38
66	A Tractable Closed-Form Expression of the Coverage Probability in Poisson Cellular Networks. IEEE Wireless Communications Letters, 2019, 8, 249-252.	5.0	19
67	Decentralizing Multicell Beamforming via Deterministic Equivalents. IEEE Transactions on Communications, 2019, 67, 1894-1909.	7.8	5
68	Spectral-Energy Efficiency Pareto Front in Cellular Networks: A Stochastic Geometry Framework. IEEE Wireless Communications Letters, 2019, 8, 424-427.	5.0	16
69	Beyond 5G With UAVs: Foundations of a 3D Wireless Cellular Network. IEEE Transactions on Wireless Communications, 2019, 18, 357-372.	9.2	307
70	Theoretical Performance Limits of Massive MIMO With Uncorrelated Rician Fading Channels. IEEE Transactions on Communications, 2019, 67, 1939-1955.	7.8	19
71	Communications and Control for Wireless Drone-Based Antenna Array. IEEE Transactions on Communications, 2019, 67, 820-834.	7.8	76
72	Queueing Stability and CSI Probing of a TDD Wireless Network With Interference Alignment. IEEE Transactions on Information Theory, 2018, 64, 547-576.	2.4	2

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73	Ultra-Reliable Communication in 5G mmWave Networks: A Risk-Sensitive Approach. IEEE Communications Letters, 2018, 22, 708-711.	4.1	27
74	System-Level Modeling and Optimization of the Energy Efficiency in Cellular Networks—A Stochastic Geometry Framework. IEEE Transactions on Wireless Communications, 2018, 17, 2539-2556.	9.2	71
75	Design of 5G Full Dimension Massive MIMO Systems. IEEE Transactions on Communications, 2018, 66, 726-740.	7.8	115
76	Energy Efficient Multi-User MISO Communication Using Low Resolution Large Intelligent Surfaces. , 2018, , .		221
77	Deep Learning Power Allocation in Massive MIMO. , 2018, , .		89
78	Federated Learning for Ultra-Reliable Low-Latency V2V Communications. , 2018, , .		144
79	Achievable Rate Maximization by Passive Intelligent Mirrors. , 2018, , .		204
80	3D Cellular Network Architecture with Drones for beyond 5G. , 2018, , .		9
81	Machine Learning for Predictive On-Demand Deployment of Uavs for Wireless Communications. , 2018, , .		69
82	Wireless Communications and Control for Swarms of Cellular-Connected UAVs. , 2018, , .		27
83	User Association and Load Balancing for Massive MIMO through Deep Learning. , 2018, , .		38
84	IDFT-VFDM for Downlink and Uplink Decoupling. , 2018, , .		3
85	Asymptotic Analysis of Regularized Zero-Forcing in Double Scattering Channels. , 2018, , .		4
86	Stochastic Geometry Modeling of Cellular Networks: A New Definition of Coverage and its Application to Energy Efficiency Optimization. , 2018, , .		1
87	Ultrareliable and Low-Latency Wireless Communication: Tail, Risk, and Scale. Proceedings of the IEEE, 2018, 106, 1834-1853.	21.3	590
88	Drone-Based Antenna Array for Service Time Minimization in Wireless Networks. , 2018, , .		15
89	Enhanced Max-Min SINR for Uplink Cell-Free Massive MIMO Systems. , 2018, , .		30
90	Cell-Free Massive MIMO with Limited Backhaul. , 2018, , .		84

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91	Online Energy-Efficient Power Control in Wireless Networks by Deep Neural Networks. , 2018, , .		30
92	Random Access in Massive MIMO by Exploiting Timing Offsets and Excess Antennas. IEEE Transactions on Communications, 2018, 66, 6081-6095.	7.8	12
93	Collaborative Artificial Intelligence (AI) for User-Cell Association in Ultra-Dense Cellular Systems. , 2018, , .		19
94	Path selection and rate allocation in self-backhauled mmWave networks. , 2018, , .		26
95	Traffic-Aware Scheduling and Feedback Allocation in Multichannel Wireless Networks. IEEE Transactions on Wireless Communications, 2018, 17, 5520-5534.	9.2	5
96	Polarization Planning for Wireless Networks. Wireless Personal Communications, 2018, 98, 759-778.	2.7	0
97	Caching in the Sky: Proactive Deployment of Cache-Enabled Unmanned Aerial Vehicles for Optimized Quality-of-Experience. IEEE Journal on Selected Areas in Communications, 2017, 35, 1046-1061.	14.0	610
98	Ultra-Reliable and Low Latency Communication in mmWave-Enabled Massive MIMO Networks. IEEE Communications Letters, 2017, 21, 2041-2044.	4.1	92
99	Optimal Transport Theory for Cell Association in UAV-Enabled Cellular Networks. IEEE Communications Letters, 2017, 21, 2053-2056.	4.1	94
100	Toward Interconnected Virtual Reality: Opportunities, Challenges, and Enablers. , 2017, 55, 110-117.		399
101	Performance Analysis of Compact FD-MIMO Antenna Arrays in a Correlated Environment. IEEE Access, 2017, 5, 4163-4178.	4.2	16
102	Echo State Networks for Proactive Caching in Cloud-Based Radio Access Networks With Mobile Users. IEEE Transactions on Wireless Communications, 2017, 16, 3520-3535.	9.2	147
103	Wireless Communication Using Unmanned Aerial Vehicles (UAVs): Optimal Transport Theory for Hover Time Optimization. IEEE Transactions on Wireless Communications, 2017, 16, 8052-8066.	9.2	261
104	Mobile Unmanned Aerial Vehicles (UAVs) for Energy-Efficient Internet of Things Communications. IEEE Transactions on Wireless Communications, 2017, 16, 7574-7589.	9.2	765
105	Resource optimization and power allocation in in-band full duplex-enabled non-orthogonal multiple access networks. IEEE Journal on Selected Areas in Communications, 2017, 35, 2860-2873.	14.0	57
106	Joint Load Balancing and Interference Mitigation in 5G Heterogeneous Networks. IEEE Transactions on Wireless Communications, 2017, 16, 6032-6046.	9.2	62
107	Leveraging D2D communication to maximize the spectral efficiency of Massive MIMO systems. , 2017, , .		1
108	Asymptotic analysis of multicell massive MIMO over Rician fading channels. , 2017, , .		36

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109	Performance Optimization for UAV-Enabled Wireless Communications under Flight Time Constraints. , 2017, , .		22
110	Popular Matching Games for Correlation-Aware Resource Allocation in the Internet of Things. , 2017, , .		8
111	Downlink performance of dense antenna deployment: To distribute or concentrate?. , 2017, , .		0
112	Echo state transfer learning for data correlation aware resource allocation in wireless virtual reality. , 2017, , .		6
113	Deterministic equivalent for max-min SINR over random user locations. , 2017, , .		1
114	Echo State Networks for Proactive Caching and Content Prediction in Cloud Radio Access Networks. , 2016, , .		7
115	Massive MIMO with imperfect channel covariance information. , 2016, , .		77
116	Random Access in Uplink Massive MIMO Systems: How to Exploit Asynchronicity and Excess Antennas. , 2016, , .		15
117	Mobile Internet of Things: Can UAVs Provide an Energy-Efficient Mobile Architecture?. , 2016, , .		184
118	Spatial Correlation Characterization of a Full Dimension Massive MIMO System. , 2016, , .		7
119	Polarization Diversity in Ring Topology Networks. , 2016, , .		1
120	On the optimum number of cooperating nodes in interfered cluster-based sensor networks. , 2016, , .		0
121	A Multi-Game Framework for Harmonized LTE-U and WiFi Coexistence over Unlicensed Bands. IEEE Wireless Communications, 2016, 23, 62-69.	9.0	27
122	Large System Analysis of Base Station Cooperation for Power Minimization. IEEE Transactions on Wireless Communications, 2016, 15, 5480-5496.	9.2	24
123	Energy efficiency and sum rate tradeoffs for massive MIMO systems with underlaid device-to-device communications. Eurasip Journal on Wireless Communications and Networking, 2016, 2016, .	2.4	19
124	Spatial correlation characterization of a uniform circular array in 3D MIMO systems. , 2016, , .		8
125	Polynomial expansion of the precoder for power minimization in large-scale MIMO systems. , 2016, , .		4
126	Max-min SINR low complexity transceiver design for single cell massive MIMO. , 2016, , .		3

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127	Opportunistic Feedback Reporting and Scheduling Scheme for Multichannel Wireless Networks. , 2016, , .		1
128	Linear precoding based on polynomial expansion: reducing complexity in massive MIMO. Eurasip Journal on Wireless Communications and Networking, 2016, 2016, 63.	2.4	60
129	Asymptotic analysis of downlink MISO systems over Rician fading channels. , 2016, , .		15
130	Efficient Deployment of Multiple Unmanned Aerial Vehicles for Optimal Wireless Coverage. IEEE Communications Letters, 2016, 20, 1647-1650.	4.1	798
131	Energy-Efficient Power Control: A Look at 5G Wireless Technologies. IEEE Transactions on Signal Processing, 2016, 64, 1668-1683.	5.3	223
132	Ultra Dense Small Cell Networks: Turning Density Into Energy Efficiency. IEEE Journal on Selected Areas in Communications, 2016, 34, 1267-1280.	14.0	139
133	Unmanned Aerial Vehicle With Underlaid Device-to-Device Communications: Performance and Tradeoffs. IEEE Transactions on Wireless Communications, 2016, 15, 3949-3963.	9.2	958
134	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
135	Distributed energy-efficient UL power control in massive MIMO with hardware impairments and imperfect CSI. , 2015, , .		4
136	Base Station Cooperation for Power Minimization in the Downlink: Large System Analysis. , 2015, , .		5
137	Large System Analysis of the Energy Consumption Distribution in Multi-User MIMO Systems With Mobility. IEEE Transactions on Wireless Communications, 2015, 14, 1730-1745.	9.2	40
138	Optimal Design of Energy-Efficient Multi-User MIMO Systems: Is Massive MIMO the Answer?. IEEE Transactions on Wireless Communications, 2015, 14, 3059-3075.	9.2	803
139	Interference Management in 5G Reverse TDD HetNets With Wireless Backhaul: A Large System Analysis. IEEE Journal on Selected Areas in Communications, 2015, 33, 1187-1200.	14.0	102
140	Decentralized multi-cell beamforming with QoS guarantees via large system analysis. , 2015, , .		2
141	Drone Small Cells in the Clouds: Design, Deployment and Performance Analysis. , 2015, , .		440
142	Big data meets telcos: A proactive caching perspective. Journal of Communications and Networks, 2015, 17, 549-557.	2.6	137
143	A Generalized Spatial Correlation Model for 3D MIMO Channels Based on the Fourier Coefficients of Power Spectrums. IEEE Transactions on Signal Processing, 2015, 63, 3671-3686.	5.3	51
144	Interference-Aware RZF Precoding for Multicell Downlink Systems. IEEE Transactions on Signal Processing, 2015, 63, 3959-3973.	5.3	26

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145	On the Asymptotic Sum Rate of Downlink Cellular Systems With Random User Locations. IEEE Wireless Communications Letters, 2015, 4, 333-336.	5.0	21
146	Traffic-Aware Training and Scheduling for MISO Wireless Downlink Systems. IEEE Transactions on Information Theory, 2015, 61, 2574-2599.	2.4	13
147	Cache-enabled small cell networks: modeling and tradeoffs. Eurasip Journal on Wireless Communications and Networking, 2015, 2015, 41.	2.4	145
148	Coordinated Multicell Beamforming for Massive MIMO: A Random Matrix Approach. IEEE Transactions on Information Theory, 2015, 61, 3387-3412.	2.4	56
149	Massive MIMO with Non-Ideal Arbitrary Arrays: Hardware Scaling Laws and Circuit-Aware Design. IEEE Transactions on Wireless Communications, 2015, 14, 4353-4368.	9.2	303
150	3D Massive MIMO Systems: Modeling and Performance Analysis. IEEE Transactions on Wireless Communications, 2015, 14, 6926-6939.	9.2	36
151	Spatial correlation in 3D MIMO channels using fourier coefficients of power spectrums. , 2015, , .		5
152	Optimal design of energy-efficient cooperative WSNs: How many sensors are needed?. , 2015, , .		1
153	A framework for energy-efficient design of 5G technologies. , 2015, , .		7
154	Cache-enabled small cell networks: Modeling and tradeoffs. , 2014, , .		88
155	Low-Complexity Polynomial Channel Estimation in Large-Scale MIMO With Arbitrary Statistics. IEEE Journal on Selected Topics in Signal Processing, 2014, 8, 815-830.	10.8	124
156	Power efficient low complexity precoding for massive MIMO systems. , 2014, , .		8
157	Optimal linear precoding in multi-user MIMO systems: A large system analysis. , 2014, , .		15
158	Analysis and Management of Interference in 5G Reverse TDD HetNets. , 2014, , .		2
159	Interference Analysis and Management for Spatially Reused Cooperative Multihop Wireless Networks. IEEE Transactions on Communications, 2014, 62, 3778-3790.	7.8	10
160	Optimizing multi-cell massive MIMO for spectral efficiency: How Many users should be scheduled?. , 2014, , .		32
161	Energy Efficiency of Large-Scale Multiple Antenna Systems with Transmit Antenna Selection. IEEE Transactions on Communications, 2014, 62, 638-647.	7.8	145
162	Improving Macrocell-Small Cell Coexistence Through Adaptive Interference Draining. IEEE Transactions on Wireless Communications, 2014, 13, 942-955.	9.2	9

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163	Circuit-aware design of energy-efficient massive MIMO systems. , 2014, , .		10
164	Efficient linear precoding for massive MIMO systems using truncated polynomial expansion. , 2014, , .		26
165	Multiobjective Signal Processing Optimization: The way to balance conflicting metrics in 5G systems. IEEE Signal Processing Magazine, 2014, 31, 14-23.	5.6	170
166	Massive MIMO Systems With Non-Ideal Hardware: Energy Efficiency, Estimation, and Capacity Limits. IEEE Transactions on Information Theory, 2014, 60, 7112-7139.	2.4	901
167	Energy-efficiency and future knowledge tradeoff in small cells prediction-based strategies. , 2014, , .		1
168	Preliminary Results on 3D Channel Modeling: From Theory to Standardization. IEEE Journal on Selected Areas in Communications, 2014, 32, 1219-1229.	14.0	103
169	Living on the edge: The role of proactive caching in 5G wireless networks. , 2014, 52, 82-89.		960
170	Massive MIMO systems with hardware-constrained base stations. , 2014, , .		15
171	Reconfigurable cognitive transceiver for opportunistic networks. Eurasip Journal on Advances in Signal Processing, 2014, 2014, .	1.7	2
172	On Queue-Aware Power Control in Interfering Wireless Links: Heavy Traffic Asymptotic Modelling and Application in QoS Provisioning. IEEE Transactions on Mobile Computing, 2014, 13, 2345-2356.	5.8	2
173	Linear Precoding Based on Polynomial Expansion: Large-Scale Multi-Cell MIMO Systems. IEEE Journal on Selected Topics in Signal Processing, 2014, 8, 861-875.	10.8	153
174	Base Station Cooperation for Power Minimization in the Downlink: Large System Analysis. , 2014, , .		0
175	Distributed power control over interference channels using ACK/NACK feedback. , 2014, , .		1
176	Null-Space Precoder for Dense 4G and Beyond Networks. , 2014, , 475-521.		0
177	Optimum and Equilibrium in Assignment Problems With Congestion: Mobile Terminals Association to Base Stations. IEEE Transactions on Automatic Control, 2013, 58, 2018-2031.	5.7	22
178	An Energy-Efficient Framework for the Analysis of MIMO Slow Fading Channels. IEEE Transactions on Signal Processing, 2013, 61, 2647-2659.	5.3	24
179	Relay Selection Schemes for Dual-Hop Networks under Security Constraints with Multiple Eavesdroppers. IEEE Transactions on Wireless Communications, 2013, 12, 6076-6085.	9.2	153
180	H-Infinity control based scheduler for the deployment of small cell networks. Performance Evaluation, 2013, 70, 513-527.	1.2	3

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181	Cognitive Orthogonal Precoder for Two-Tiered Networks Deployment. IEEE Journal on Selected Areas in Communications, 2013, 31, 2338-2348.	14.0	29
182	Massive MIMO and small cells: How to densify heterogeneous networks. , 2013, , .		81
183	Massive MIMO and small cells: Improving energy efficiency by optimal soft-cell coordination. , 2013, , .		151
184	Equilibria of channel selection games in parallel multiple access channels. Eurasip Journal on Wireless Communications and Networking, 2013, 2013, .	2.4	6
185	Making smart use of excess antennas: Massive MIMO, small cells, and TDD. Bell Labs Technical Journal, 2013, 18, 5-21.	0.7	236
186	Vandermonde-Subspace Frequency Division Multiplexing for Two-Tiered Cognitive Radio Networks. IEEE Transactions on Communications, 2013, 61, 2212-2220.	7.8	26
187	Fluctuations of an Improved Population Eigenvalue Estimator in Sample Covariance Matrix Models. IEEE Transactions on Information Theory, 2013, 59, 1149-1163.	2.4	2
188	On the energy efficiency of virtual MIMO systems. , 2013, , .		2
189	A New Look at Dual-Hop Relaying: Performance Limits with Hardware Impairments. IEEE Transactions on Communications, 2013, 61, 4512-4525.	7.8	316
190	A Distributed Approach to Interference Alignment in OFDM-Based Two-Tiered Networks. IEEE Transactions on Vehicular Technology, 2013, 62, 1935-1949.	6.3	49
191	Massive MIMO in the UL/DL of Cellular Networks: How Many Antennas Do We Need?. IEEE Journal on Selected Areas in Communications, 2013, 31, 160-171.	14.0	1,878
192	Performance of Mutual Information Inference Methods Under Unknown Interference. IEEE Transactions on Information Theory, 2013, 59, 1129-1148.	2.4	2
193	Signal Processing in Large Systems: A New Paradigm. IEEE Signal Processing Magazine, 2013, 30, 24-39.	5.6	40
194	Interference Alignment for Cooperative Femtocell Networks: A Game-Theoretic Approach. IEEE Transactions on Mobile Computing, 2013, 12, 2233-2246.	5.8	92
195	Satisfying demands in a multicellular network: A universal power allocation algorithm. Computer Communications, 2013, 36, 1373-1386.	5.1	0
196	Large System Analysis of Linear Precoding in MISO Broadcast Channels with Confidential Messages. IEEE Journal on Selected Areas in Communications, 2013, 31, 1660-1671.	14.0	82
197	Analysis and management of heterogeneous user mobility in large-scale downlink systems. , 2013, , .		3
198	A Differential Feedback Scheme Exploiting the Temporal and Spectral Correlation. IEEE Transactions on Vehicular Technology, 2013, 62, 4701-4707.	6.3	7

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199	Interference analysis for spatial reused cooperative multihop wireless networks. , 2013, , .		1
200	On the impact of transceiver impairments on af relaying. , 2013, , .		41
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