

Merouane Debbah

List of Publications by Year in descending order

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275
papers

33,978
citations

14655

66
h-index

8167

148
g-index

277
all docs

277
docs citations

277
times ranked

13802
citing authors

#	ARTICLE	IF	CITATIONS
1	Reconfigurable Intelligent Surfaces for Energy Efficiency in Wireless Communication. IEEE Transactions on Wireless Communications, 2019, 18, 4157-4170.	9.2	2,003
2	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
3	Wireless Communications Through Reconfigurable Intelligent Surfaces. IEEE Access, 2019, 7, 116753-116773.	4.2	1,743
4	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
5	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
6	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
7	Living on the edge: The role of proactive caching in 5G wireless networks. , 2014, 52, 82-89.		960
8	Unmanned Aerial Vehicle With Underlaid Device-to-Device Communications: Performance and Tradeoffs. IEEE Transactions on Wireless Communications, 2016, 15, 3949-3963.	9.2	958
9	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
10	Coalitional game theory for communication networks. IEEE Signal Processing Magazine, 2009, 26, 77-97.	5.6	805
11	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
12	Efficient Deployment of Multiple Unmanned Aerial Vehicles for Optimal Wireless Coverage. IEEE Communications Letters, 2016, 20, 1647-1650.	4.1	798
13	Mobile Unmanned Aerial Vehicles (UAVs) for Energy-Efficient Internet of Things Communications. IEEE Transactions on Wireless Communications, 2017, 16, 7574-7589.	9.2	765
14	Holographic MIMO Surfaces for 6G Wireless Networks: Opportunities, Challenges, and Trends. IEEE Wireless Communications, 2020, 27, 118-125.	9.0	699
15	Artificial Neural Networks-Based Machine Learning for Wireless Networks: A Tutorial. IEEE Communications Surveys and Tutorials, 2019, 21, 3039-3071.	39.4	641
16	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
17	Ultrareliable and Low-Latency Wireless Communication: Tail, Risk, and Scale. Proceedings of the IEEE, 2018, 106, 1834-1853.	21.3	590
18	Large System Analysis of Linear Precoding in Correlated MISO Broadcast Channels Under Limited Feedback. IEEE Transactions on Information Theory, 2012, 58, 4509-4537.	2.4	553

#	ARTICLE	IF	CITATIONS
19	Drone Small Cells in the Clouds: Design, Deployment and Performance Analysis. , 2015, , .		440
20	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
21	Toward Interconnected Virtual Reality: Opportunities, Challenges, and Enablers. , 2017, 55, 110-117.		399
22	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
23	Green Small-Cell Networks. IEEE Vehicular Technology Magazine, 2011, 6, 37-43.	3.4	362
24	Wireless Network Intelligence at the Edge. Proceedings of the IEEE, 2019, 107, 2204-2239.	21.3	360
25	Channel Estimation for RIS-Empowered Multi-User MISO Wireless Communications. IEEE Transactions on Communications, 2021, 69, 4144-4157.	7.8	336
26	A New Look at Dual-Hop Relaying: Performance Limits with Hardware Impairments. IEEE Transactions on Communications, 2013, 61, 4512-4525.	7.8	316
27	Beyond 5G With UAVs: Foundations of a 3D Wireless Cellular Network. IEEE Transactions on Wireless Communications, 2019, 18, 357-372.	9.2	307
28	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
29	Asymptotic Max-Min SINR Analysis of Reconfigurable Intelligent Surface Assisted MISO Systems. IEEE Transactions on Wireless Communications, 2020, 19, 7748-7764.	9.2	283
30	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
31	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
32	Distributed Federated Learning for Ultra-Reliable Low-Latency Vehicular Communications. IEEE Transactions on Communications, 2020, 68, 1146-1159.	7.8	240
33	Making smart use of excess antennas: Massive MIMO, small cells, and TDD. Bell Labs Technical Journal, 2013, 18, 5-21.	0.7	236
34	Energy-Efficient Power Control: A Look at 5G Wireless Technologies. IEEE Transactions on Signal Processing, 2016, 64, 1668-1683.	5.3	223
35	Energy Efficient Multi-User MISO Communication Using Low Resolution Large Intelligent Surfaces. , 2018, , .		221
36	A distributed coalition formation framework for fair user cooperation in wireless networks. IEEE Transactions on Wireless Communications, 2009, 8, 4580-4593.	9.2	214

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37	Performance of Transmit Antenna Selection Physical Layer Security Schemes. IEEE Signal Processing Letters, 2012, 19, 372-375.	3.6	206
38	Achievable Rate Maximization by Passive Intelligent Mirrors. , 2018, , .		204
39	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
40	Massive MIMO: How many antennas do we need?. , 2011, , .		192
41	Mobile Internet of Things: Can UAVs Provide an Energy-Efficient Mobile Architecture?. , 2016, , .		184
42	Indoor Signal Focusing with Deep Learning Designed Reconfigurable Intelligent Surfaces. , 2019, , .		176
43	Multiobjective Signal Processing Optimization: The way to balance conflicting metrics in 5G systems. IEEE Signal Processing Magazine, 2014, 31, 14-23.	5.6	170
44	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
45	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
46	From Spectrum Pooling to Space Pooling: Opportunistic Interference Alignment in MIMO Cognitive Networks. IEEE Transactions on Signal Processing, 2010, 58, 3728-3741.	5.3	152
47	Massive MIMO and small cells: Improving energy efficiency by optimal soft-cell coordination. , 2013, , .		151
48	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
49	Energy Efficiency of Large-Scale Multiple Antenna Systems with Transmit Antenna Selection. IEEE Transactions on Communications, 2014, 62, 638-647.	7.8	145
50	Cache-enabled small cell networks: modeling and tradeoffs. Eurasip Journal on Wireless Communications and Networking, 2015, 2015, 41.	2.4	145
51	Federated Learning for Ultra-Reliable Low-Latency V2V Communications. , 2018, , .		144
52	Ultra Dense Small Cell Networks: Turning Density Into Energy Efficiency. IEEE Journal on Selected Areas in Communications, 2016, 34, 1267-1280.	14.0	139
53	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
54	Cooperative spectrum sensing using random matrix theory. , 2008, , .		137

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55	Big data meets telcos: A proactive caching perspective. Journal of Communications and Networks, 2015, 17, 549-557.	2.6	137
56	Methodologies for analyzing equilibria in wireless games. IEEE Signal Processing Magazine, 2009, 26, 41-52.	5.6	135
57	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
58	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
59	Design of 5G Full Dimension Massive MIMO Systems. IEEE Transactions on Communications, 2018, 66, 726-740.	7.8	115
60	On the Uplink Max-Min SINR of Cell-Free Massive MIMO Systems. IEEE Transactions on Wireless Communications, 2019, 18, 2021-2036.	9.2	112
61	Joint Relay Selection and Analog Network Coding Using Differential Modulation in Two-Way Relay Channels. IEEE Transactions on Vehicular Technology, 2010, 59, 2932-2939.	6.3	111
62	A Deterministic Equivalent for the Analysis of Correlated MIMO Multiple Access Channels. IEEE Transactions on Information Theory, 2011, 57, 3493-3514.	2.4	111
63	Preliminary Results on 3D Channel Modeling: From Theory to Standardization. IEEE Journal on Selected Areas in Communications, 2014, 32, 1219-1229.	14.0	103
64	Overhead-Aware Design of Reconfigurable Intelligent Surfaces in Smart Radio Environments. IEEE Transactions on Wireless Communications, 2021, 20, 126-141.	9.2	103
65	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
66	Communication-Efficient and Distributed Learning Over Wireless Networks: Principles and Applications. Proceedings of the IEEE, 2021, 109, 796-819.	21.3	100
67	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
68	Optimal Transport Theory for Cell Association in UAV-Enabled Cellular Networks. IEEE Communications Letters, 2017, 21, 2053-2056.	4.1	94
69	Interference Alignment for Cooperative Femtocell Networks: A Game-Theoretic Approach. IEEE Transactions on Mobile Computing, 2013, 12, 2233-2246.	5.8	92
70	Ultra-Reliable and Low Latency Communication in mmWave-Enabled Massive MIMO Networks. IEEE Communications Letters, 2017, 21, 2041-2044.	4.1	92
71	Deep Learning Power Allocation in Massive MIMO. , 2018, , .		89
72	Cache-enabled small cell networks: Modeling and tradeoffs. , 2014, , .		88

#	ARTICLE	IF	CITATIONS
73	Cell-Free Massive MIMO with Limited Backhaul. , 2018, , .		84
74	Physical Layer Security Game: Interaction between Source, Eavesdropper, and Friendly Jammer. Eurasip Journal on Wireless Communications and Networking, 2010, 2009, .	2.4	82
75	Learning equilibria with partial information in decentralized wireless networks. , 2011, 49, 136-142.		82
76	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
77	Massive MIMO and small cells: How to densify heterogeneous networks. , 2013, , .		81
78	Massive MIMO with imperfect channel covariance information. , 2016, , .		77
79	Communications and Control for Wireless Drone-Based Antenna Array. IEEE Transactions on Communications, 2019, 67, 820-834.	7.8	76
80	Maxâ€“Min Rate of Cell-Free Massive MIMO Uplink With Optimal Uniform Quantization. IEEE Transactions on Communications, 2019, 67, 6796-6815.	7.8	74
81	Constrained cost-coupled stochastic games with independent state processes. Operations Research Letters, 2008, 36, 160-164.	0.7	73
82	System-Level Modeling and Optimization of the Energy Efficiency in Cellular Networksâ€”A Stochastic Geometry Framework. IEEE Transactions on Wireless Communications, 2018, 17, 2539-2556.	9.2	71
83	Machine Learning for Predictive On-Demand Deployment of Uavs for Wireless Communications. , 2018, , .		69
84	Intelligent Omni-Surfaces for Full-Dimensional Wireless Communications: Principles, Technology, and Implementation. IEEE Communications Magazine, 2022, 60, 39-45.	6.1	67
85	Joint Load Balancing and Interference Mitigation in 5G Heterogeneous Networks. IEEE Transactions on Wireless Communications, 2017, 16, 6032-6046.	9.2	62
86	Optimal Channel Training in Uplink Network MIMO Systems. IEEE Transactions on Signal Processing, 2011, 59, 2824-2833.	5.3	61
87	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
88	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
89	Linear precoding based on polynomial expansion: reducing complexity in massive MIMO. Eurasip Journal on Wireless Communications and Networking, 2016, 2016, 63.	2.4	60
90	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

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91	Resource Allocation and Beamforming Design in the Short Blocklength Regime for URLLC. IEEE Transactions on Wireless Communications, 2021, 20, 1321-1335.	9.2	57
92	Coordinated Multicell Beamforming for Massive MIMO: A Random Matrix Approach. IEEE Transactions on Information Theory, 2015, 61, 3387-3412.	2.4	56
93	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
94	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
95	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
96	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
97	Network Formation Games Among Relay Stations in Next Generation Wireless Networks. IEEE Transactions on Communications, 2011, 59, 2528-2542.	7.8	50
98	A Distributed Approach to Interference Alignment in OFDM-Based Two-Tiered Networks. IEEE Transactions on Vehicular Technology, 2013, 62, 1935-1949.	6.3	49
99	Joint Channel Estimation and Signal Recovery for RIS-Empowered Multiuser Communications. IEEE Transactions on Communications, 2022, 70, 4640-4655.	7.8	49
100	Power allocation games for mimo multiple access channels with coordination. IEEE Transactions on Wireless Communications, 2009, 8, 3182-3192.	9.2	47
101	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
102	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
103	On the impact of transceiver impairments on af relaying. , 2013, , .		41
104	Deep Learning for UL/DL Channel Calibration in Generic Massive MIMO Systems. , 2019, , .		41
105	Signal Processing in Large Systems: A New Paradigm. IEEE Signal Processing Magazine, 2013, 30, 24-39.	5.6	40
106	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
107	Uplink Power Control in Cell-Free Massive MIMO via Deep Learning. , 2019, , .		40
108	Asymptotic Behavior of Random Vandermonde Matrices With Entries on the Unit Circle. IEEE Transactions on Information Theory, 2009, 55, 3115-3147.	2.4	39

#	ARTICLE	IF	CITATIONS
109	Free Deconvolution for Signal Processing Applications. , 2007, , .		38
110	User Association and Load Balancing for Massive MIMO through Deep Learning. , 2018, , .		38
111	NOMA Throughput and Energy Efficiency in Energy Harvesting Enabled Networks. IEEE Transactions on Communications, 2019, 67, 6499-6511.	7.8	38
112	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
113	Physical layer security: Coalitional games for distributed cooperation. , 2009, , .		37
114	Eigen-Inference for Energy Estimation of Multiple Sources. IEEE Transactions on Information Theory, 2011, 57, 2420-2439.	2.4	37
115	Analysis of Outage Probability and Throughput for Half-Duplex Hybrid-ARQ Relay Channels. IEEE Transactions on Vehicular Technology, 2012, 61, 3061-3070.	6.3	37
116	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
117	Secured Communication over Frequency-Selective Fading Channels: A Practical Vandermonde Precoding. Eurasip Journal on Wireless Communications and Networking, 2009, 2009, .	2.4	36
118	3D Massive MIMO Systems: Modeling and Performance Analysis. IEEE Transactions on Wireless Communications, 2015, 14, 6926-6939.	9.2	36
119	Asymptotic analysis of multicell massive MIMO over Rician fading channels. , 2017, , .		36
120	Comparison of linear precoding schemes for downlink massive MIMO. , 2012, , .		35
121	Vandermonde frequency division multiplexing for cognitive radio. , 2008, , .		34
122	Cooperative Interference Alignment in Femtocell Networks. , 2011, , .		34
123	Hardware impairments in large-scale MISO systems: Energy efficiency, estimation, and capacity limits. , 2013, , .		32
124	Optimizing multi-cell massive MIMO for spectral efficiency: How Many users should be scheduled?. , 2014, , .		32
125	Asymptotic moments for interference mitigation in correlated fading channels. , 2011, , .		31
126	A Bayesian Game-Theoretic Approach for Distributed Resource Allocation in Fading Multiple Access Channels. Eurasip Journal on Wireless Communications and Networking, 2010, 2010, .	2.4	30

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127	Enhanced Max-Min SINR for Uplink Cell-Free Massive MIMO Systems. , 2018, , .		30
128	Online Energy-Efficient Power Control in Wireless Networks by Deep Neural Networks. , 2018, , .		30
129	Asymptotic analysis of distributed multi-cell beamforming. , 2010, , .		29
130	Cognitive Orthogonal Precoder for Two-Tiered Networks Deployment. IEEE Journal on Selected Areas in Communications, 2013, 31, 2338-2348.	14.0	29
131	Opportunistic Beamforming Using an Intelligent Reflecting Surface Without Instantaneous CSI. IEEE Wireless Communications Letters, 2021, 10, 146-150.	5.0	29
132	A Multi-Game Framework for Harmonized LTE-U and WiFi Coexistence over Unlicensed Bands. IEEE Wireless Communications, 2016, 23, 62-69.	9.0	27
133	Ultra-Reliable Communication in 5G mmWave Networks: A Risk-Sensitive Approach. IEEE Communications Letters, 2018, 22, 708-711.	4.1	27
134	Wireless Communications and Control for Swarms of Cellular-Connected UAVs. , 2018, , .		27
135	Phase Configuration Learning in Wireless Networks with Multiple Reconfigurable Intelligent Surfaces. , 2020, , .		27
136	Random Beamforming Over Quasi-Static and Fading Channels: A Deterministic Equivalent Approach. IEEE Transactions on Information Theory, 2012, 58, 6392-6425.	2.4	26
137	Vandermonde-Subspace Frequency Division Multiplexing for Two-Tiered Cognitive Radio Networks. IEEE Transactions on Communications, 2013, 61, 2212-2220.	7.8	26
138	Efficient linear precoding for massive MIMO systems using truncated polynomial expansion. , 2014, , .		26
139	Interference-Aware RZF Precoding for Multicell Downlink Systems. IEEE Transactions on Signal Processing, 2015, 63, 3959-3973.	5.3	26
140	Path selection and rate allocation in self-backhauled mmWave networks. , 2018, , .		26
141	Asynchronous CDMA Systems With Random Spreading Part I: Fundamental Limits. IEEE Transactions on Information Theory, 2010, 56, 1477-1497.	2.4	25
142	A Bayesian Framework for Collaborative Multi-Source Signal Sensing. IEEE Transactions on Signal Processing, 2010, 58, 5186-5195.	5.3	25
143	Channel Capacity Estimation Using Free-Probability Theory. IEEE Transactions on Signal Processing, 2008, 56, 5654-5667.	5.3	24
144	Non-Atomic Games for Multi-User Systems. IEEE Journal on Selected Areas in Communications, 2008, 26, 1047-1058.	14.0	24

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145	An Energy-Efficient Framework for the Analysis of MIMO Slow Fading Channels. IEEE Transactions on Signal Processing, 2013, 61, 2647-2659.	5.3	24
146	Low-complexity channel estimation in large-scale MIMO using polynomial expansion. , 2013, , .		24
147	Large System Analysis of Base Station Cooperation for Power Minimization. IEEE Transactions on Wireless Communications, 2016, 15, 5480-5496.	9.2	24
148	Human-in-the-Loop Wireless Communications: Machine Learning and Brain-Aware Resource Management. IEEE Transactions on Communications, 2019, 67, 7727-7743.	7.8	24
149	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
150	Performance Optimization for UAV-Enabled Wireless Communications under Flight Time Constraints. , 2017, , .		22
151	On the Asymptotic Sum Rate of Downlink Cellular Systems With Random User Locations. IEEE Wireless Communications Letters, 2015, 4, 333-336.	5.0	21
152	K-player Bayesian waterfilling game for fading multiple access channels. , 2009, , .		19
153	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
154	Collaborative Artificial Intelligence (AI) for User-Cell Association in Ultra-Dense Cellular Systems. , 2018, , .		19
155	A Tractable Closed-Form Expression of the Coverage Probability in Poisson Cellular Networks. IEEE Wireless Communications Letters, 2019, 8, 249-252.	5.0	19
156	Theoretical Performance Limits of Massive MIMO With Uncorrelated Rician Fading Channels. IEEE Transactions on Communications, 2019, 67, 1939-1955.	7.8	19
157	Satisfaction Equilibrium: A General Framework for QoS Provisioning in Self-Configuring Networks. , 2010, , .		18
158	Distributed Coalition Formation Games for Secure Wireless Transmission. Mobile Networks and Applications, 2011, 16, 231-245.	3.3	18
159	Asymptotic Analysis of RZF Over Double Scattering Channels With MMSE Estimation. IEEE Transactions on Wireless Communications, 2019, 18, 2509-2526.	9.2	18
160	Asynchronous CDMA Systems With Random Spreading” Part II: Design Criteria. IEEE Transactions on Information Theory, 2010, 56, 1498-1520.	2.4	17
161	Asymptotic analysis of double-scattering channels. , 2011, , .		17
162	Performance Analysis of Compact FD-MIMO Antenna Arrays in a Correlated Environment. IEEE Access, 2017, 5, 4163-4178.	4.2	16

#	ARTICLE	IF	CITATIONS
163	Spectral-Energy Efficiency Pareto Front in Cellular Networks: A Stochastic Geometry Framework. IEEE Wireless Communications Letters, 2019, 8, 424-427.	5.0	16
164	Asymptotic Optimality of Reconfigurable Intelligent Surfaces: Passive Beamforming and Achievable Rate. , 2020, , .		16
165	Improved Wireless Secrecy Rate Using Distributed Auction Theory. , 2009, , .		15
166	Outage performance of cooperative small-cell systems under Rician fading channels. , 2011, , .		15
167	Optimal linear precoding in multi-user MIMO systems: A large system analysis. , 2014, , .		15
168	Massive MIMO systems with hardware-constrained base stations. , 2014, , .		15
169	Random Access in Uplink Massive MIMO Systems: How to Exploit Asynchronicity and Excess Antennas. , 2016, , .		15
170	Asymptotic analysis of downlink MISO systems over Rician fading channels. , 2016, , .		15
171	Drone-Based Antenna Array for Service Time Minimization in Wireless Networks. , 2018, , .		15
172	Pricing and bandwidth allocation problems in wireless multi-tier networks. , 2011, , .		14
173	Network Formation Games for Distributed Uplink Tree Construction in IEEE 802.16J Networks. , 2008, , .		13
174	Traffic-Aware Training and Scheduling for MISO Wireless Downlink Systems. IEEE Transactions on Information Theory, 2015, 61, 2574-2599.	2.4	13
175	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
176	Asymptotic performance of linear receivers in network MIMO. , 2010, , .		12
177	Random Access in Massive MIMO by Exploiting Timing Offsets and Excess Antennas. IEEE Transactions on Communications, 2018, 66, 6081-6095.	7.8	12
178	Spectrum-Learning-Aided Reconfigurable Intelligent Surfaces for "Green" 6G Networks. IEEE Network, 2021, 35, 20-26.	6.9	12
179	Cognitive interference alignment for OFDM two-tiered networks. , 2012, , .		11
180	Deep Learning Based Online Power Control for Large Energy Harvesting Networks. , 2019, , .		11

#	ARTICLE	IF	CITATIONS
181	Interference Analysis and Management for Spatially Reused Cooperative Multihop Wireless Networks. IEEE Transactions on Communications, 2014, 62, 3778-3790.	7.8	10
182	Circuit-aware design of energy-efficient massive MIMO systems. , 2014, , .		10
183	Deep Learning-Aided Finite-Capacity Fronthaul Cell-Free Massive MIMO with Zero Forcing. , 2020, , .		10
184	The Space Frontier: Physical Limits of Multiple Antenna Information Transfer. , 2008, , .		10
185	Improving Macrocell-Small Cell Coexistence Through Adaptive Interference Draining. IEEE Transactions on Wireless Communications, 2014, 13, 942-955.	9.2	9
186	3D Cellular Network Architecture with Drones for beyond 5G. , 2018, , .		9
187	Capacity Optimization using Reconfigurable Intelligent Surfaces: A Large System Approach. , 2021, , .		9
188	Finite Dimensional Statistical Inference. IEEE Transactions on Information Theory, 2011, 57, 2457-2473.	2.4	8
189	Convolution Operations Arising From Vandermonde Matrices. IEEE Transactions on Information Theory, 2011, 57, 4647-4659.	2.4	8
190	Power efficient low complexity precoding for massive MIMO systems. , 2014, , .		8
191	Spatial correlation characterization of a uniform circular array in 3D MIMO systems. , 2016, , .		8
192	Popular Matching Games for Correlation-Aware Resource Allocation in the Internet of Things. , 2017, , .		8
193	Wardrop Equilibrium for CDMA Systems. , 2007, , .		7
194	Free deconvolution for OFDM multicell SNR detection. , 2008, , .		7
195	Outage Probability Analysis of Multi-Relay Delay-Limited Hybrid-ARQ Channels. , 2010, , .		7
196	On optimal channel training for uplink network MIMO systems. , 2011, , .		7
197	A Differential Feedback Scheme Exploiting the Temporal and Spectral Correlation. IEEE Transactions on Vehicular Technology, 2013, 62, 4701-4707.	6.3	7
198	A framework for energy-efficient design of 5G technologies. , 2015, , .		7

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199	Echo State Networks for Proactive Caching and Content Prediction in Cloud Radio Access Networks. , 2016, , .		7
200	Spatial Correlation Characterization of a Full Dimension Massive MIMO System. , 2016, , .		7
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