

Ahmed Alkhateeb

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/310077/publications.pdf>

Version: 2024-02-01

72
papers

11,911
citations

236612

25
h-index

377514

34
g-index

72
all docs

72
docs citations

72
times ranked

6696
citing authors

#	ARTICLE	IF	CITATIONS
1	Channel Estimation and Hybrid Precoding for Millimeter Wave Cellular Systems. IEEE Journal on Selected Topics in Signal Processing, 2014, 8, 831-846.	7.3	1,897
2	MIMO Precoding and Combining Solutions for Millimeter-Wave Systems. IEEE Communications Magazine, 2014, 52, 122-131.	4.9	1,871
3	Wireless Communications and Applications Above 100 GHz: Opportunities and Challenges for 6G and Beyond. IEEE Access, 2019, 7, 78729-78757.	2.6	1,228
4	Limited Feedback Hybrid Precoding for Multi-User Millimeter Wave Systems. IEEE Transactions on Wireless Communications, 2015, 14, 6481-6494.	6.1	912
5	Hybrid MIMO Architectures for Millimeter Wave Communications: Phase Shifters or Switches?. IEEE Access, 2016, 4, 247-267.	2.6	670
6	Modeling and Analyzing Millimeter Wave Cellular Systems. IEEE Transactions on Communications, 2016, , 1-1.	4.9	486
7	Frequency Selective Hybrid Precoding for Limited Feedback Millimeter Wave Systems. IEEE Transactions on Communications, 2016, 64, 1801-1818.	4.9	419
8	Deep Learning Coordinated Beamforming for Highly-Mobile Millimeter Wave Systems. IEEE Access, 2018, 6, 37328-37348.	2.6	329
9	Dynamic Subarrays for Hybrid Precoding in Wideband mmWave MIMO Systems. IEEE Transactions on Wireless Communications, 2017, 16, 2907-2920.	6.1	320
10	Channel Estimation for Hybrid Architecture-Based Wideband Millimeter Wave Systems. IEEE Journal on Selected Areas in Communications, 2017, 35, 1996-2009.	9.7	291
11	Coverage and capacity of millimeter-wave cellular networks. , 2014, 52, 70-77.		284
12	Enabling Large Intelligent Surfaces With Compressive Sensing and Deep Learning. IEEE Access, 2021, 9, 44304-44321.	2.6	284
13	Hybrid precoding for millimeter wave cellular systems with partial channel knowledge. , 2013, , .		244
14	Compressed sensing based multi-user millimeter wave systems: How many measurements are needed?. , 2015, , .		189
15	Hybrid Architectures With Few-Bit ADC Receivers: Achievable Rates and Energy-Rate Tradeoffs. IEEE Transactions on Wireless Communications, 2017, 16, 2274-2287.	6.1	181
16	Channel estimation and hybrid combining for mmWave: Phase shifters or switches?. , 2015, , .		156
17	Deep Learning for mmWave Beam and Blockage Prediction Using Sub-6 GHz Channels. IEEE Transactions on Communications, 2020, 68, 5504-5518.	4.9	154
18	Deep Reinforcement Learning for 5G Networks: Joint Beamforming, Power Control, and Interference Coordination. IEEE Transactions on Communications, 2020, 68, 1581-1592.	4.9	131

#	ARTICLE	IF	CITATIONS
19	Millimeter Wave Energy Harvesting. IEEE Transactions on Wireless Communications, 2016, 15, 6048-6062.	6.1	113
20	Initial Beam Association in Millimeter Wave Cellular Systems: Analysis and Design Insights. IEEE Transactions on Wireless Communications, 2017, 16, 2807-2821.	6.1	105
21	Deep Learning for TDD and FDD Massive MIMO: Mapping Channels in Space and Frequency. , 2019, , .		103
22	Initial beamforming for mmWave communications. , 2014, , .		94
23	Deep Transfer Learning-Based Downlink Channel Prediction for FDD Massive MIMO Systems. IEEE Transactions on Communications, 2020, 68, 7485-7497.	4.9	92
24	Deep Learning for Large Intelligent Surfaces in Millimeter Wave and Massive MIMO Systems. , 2019, , .		91
25	Deep Reinforcement Learning for Intelligent Reflecting Surfaces: Towards Standalone Operation. , 2020, , .		88
26	Millimeter Wave Base Stations with Cameras: Vision-Aided Beam and Blockage Prediction. , 2020, , .		87
27	Deep Learning for Direct Hybrid Precoding in Millimeter Wave Massive MIMO Systems. , 2019, , .		82
28	MACHINE LEARNING FOR RELIABLE MMWAVE SYSTEMS: BLOCKAGE PREDICTION AND PROACTIVE HANDOFF. , 2018, , .		77
29	Massive MIMO Combining with Switches. IEEE Wireless Communications Letters, 2016, 5, 232-235.	3.2	73
30	Vision-Aided 6G Wireless Communications: Blockage Prediction and Proactive Handoff. IEEE Transactions on Vehicular Technology, 2021, 70, 10193-10208.	3.9	56
31	Design and Evaluation of Reconfigurable Intelligent Surfaces in Real-World Environment. IEEE Open Journal of the Communications Society, 2022, 3, 462-474.	4.4	54
32	Deep Learning for Massive MIMO With 1-Bit ADCs: When More Antennas Need Fewer Pilots. IEEE Wireless Communications Letters, 2020, 9, 1273-1277.	3.2	49
33	ViWi: A Deep Learning Dataset Framework for Vision-Aided Wireless Communications. , 2020, , .		46
34	Achievable rates of multi-user millimeter wave systems with hybrid precoding. , 2015, , .		45
35	3D Scene-Based Beam Selection for mmWave Communications. IEEE Wireless Communications Letters, 2020, 9, 1850-1854.	3.2	44
36	Time-domain channel estimation for wideband millimeter wave systems with hybrid architecture. , 2017, , .		42

#	ARTICLE	IF	CITATIONS
37	Leveraging mmWave Imaging and Communications for Simultaneous Localization and Mapping. , 2019, , .		39
38	Single-sided adaptive estimation of multi-path millimeter wave channels. , 2014, , .		31
39	Gains of Restricted Secondary Licensing in Millimeter Wave Cellular Systems. IEEE Journal on Selected Areas in Communications, 2016, 34, 2935-2950.	9.7	31
40	Opportunistic beam training with hybrid analog/digital codebooks for mmWave systems. , 2015, , .		30
41	Multi-Layer Precoding: A Potential Solution for Full-Dimensional Massive MIMO Systems. IEEE Transactions on Wireless Communications, 2017, 16, 5810-5824.	6.1	30
42	Generative Adversarial Estimation of Channel Covariance in Vehicular Millimeter Wave Systems. , 2018, , .		28
43	Deep Learning for THz Drones with Flying Intelligent Surfaces: Beam and Handoff Prediction. , 2021, , .		26
44	Reinforcement Learning of Beam Codebooks in Millimeter Wave and Terahertz MIMO Systems. IEEE Transactions on Communications, 2022, 70, 904-919.	4.9	25
45	Vision-Position Multi-Modal Beam Prediction Using Real Millimeter Wave Datasets. , 2022, , .		24
46	Deep Multimodal Learning: Merging Sensory Data for Massive MIMO Channel Prediction. IEEE Journal on Selected Areas in Communications, 2021, 39, 1885-1898.	9.7	22
47	Deep Learning-Based Antenna Selection and CSI Extrapolation in Massive MIMO Systems. IEEE Transactions on Wireless Communications, 2021, 20, 7669-7681.	6.1	21
48	Vision-Aided Dynamic Blockage Prediction for 6G Wireless Communication Networks. , 2021, , .		18
49	Deep Learning Predictive Band Switching in Wireless Networks. IEEE Transactions on Wireless Communications, 2021, 20, 96-109.	6.1	17
50	Blockage Prediction Using Wireless Signatures: Deep Learning Enables Real-World Demonstration. IEEE Open Journal of the Communications Society, 2022, 3, 776-796.	4.4	17
51	Deep Learning Based Channel Covariance Matrix Estimation With User Location and Scene Images. IEEE Transactions on Communications, 2021, 69, 8145-8158.	4.9	16
52	Advanced Receiver Architectures for Millimeter-Wave Communications with Low-Resolution ADCs. IEEE Communications Magazine, 2020, 58, 42-48.	4.9	14
53	Multi-layer precoding for full-dimensional massive MIMO systems. , 2014, , .		13
54	Learning Beam Codebooks with Neural Networks: Towards Environment-Aware mmWave MIMO. , 2020, , .		13

#	ARTICLE	IF	CITATIONS
55	Millimeter Wave MIMO-Based Depth Maps for Wireless Virtual and Augmented Reality. IEEE Access, 2021, 9, 48341-48363.	2.6	13
56	Gram Schmidt based greedy hybrid precoding for frequency selective millimeter wave MIMO systems. , 2016, , .		12
57	LiDAR-Aided Mobile Blockage Prediction in Real-World Millimeter Wave Systems. , 2022, , .		11
58	Energy Coverage in Millimeter Wave Energy Harvesting Networks. , 2015, , .		10
59	Neural Networks Based Beam Codebooks: Learning mmWave Massive MIMO Beams That Adapt to Deployment and Hardware. IEEE Transactions on Communications, 2022, 70, 3818-3833.	4.9	10
60	Enabling Cell-Free Massive MIMO Systems With Wireless Millimeter Wave Fronthaul. IEEE Transactions on Wireless Communications, 2022, 21, 9482-9496.	6.1	10
61	A tractable model for per user rate in multiuser millimeter wave cellular networks. , 2015, , .		9
62	Dynamic subarray architecture for wideband hybrid precoding in millimeter wave massive MIMO systems. , 2016, , .		7
63	Beamforming in Millimeter Wave Systems: Prototyping and Measurement Results. , 2018, , .		5
64	Reinforcement Learning for Beam Pattern Design in Millimeter Wave and Massive MIMO Systems. , 2020, , .		5
65	Restricted Secondary Licensing for mmWave Cellular: How Much Gain Can Be Obtained?. , 2016, , .		3
66	Deep Learning Based Channel Covariance Matrix Estimation with Scene Images. , 2021, , .		3
67	Deep Learning Based MIMO Channel Prediction: An Initial Proof of Concept Prototype. , 2020, , .		3
68	Situation-Aware Channel Covariance Prediction for Deep Learning Aided Massive MIMO Systems. , 2020, , .		3
69	Autoencoder-based Communications with Reconfigurable Intelligent Surfaces. , 2021, , .		3
70	Deep Learning based Antenna Selection and CSI Extrapolation in Massive MIMO Systems. , 2021, , .		1
71	Vision Aided URLL Communications: Proactive Service Identification and Coexistence. , 2020, , .		1
72	Sensory Data Assisted Downlink Channel Prediction for Massive MIMO. , 2021, , .		0