

# Angel Lozano

## List of Publications by Year in descending order

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135  
papers

16,404  
citations

109321

35  
h-index

114465

63  
g-index

147  
all docs

147  
docs citations

147  
times ranked

10835  
citing authors

#	ARTICLE	IF	CITATIONS
1	Unsupervised Learning for Cellular Power Control. IEEE Communications Letters, 2021, 25, 682-686.	4.1	5
2	Unsupervised Learning for C-RAN Power Control and Power Allocation. IEEE Communications Letters, 2021, 25, 687-691.	4.1	8
3	Unsupervised Learning for Parametric Optimization. IEEE Communications Letters, 2021, 25, 678-681.	4.1	8
4	Terahertz Line-of-Sight MIMO Communication: Theory and Practical Challenges. IEEE Communications Magazine, 2021, 59, 104-109.	6.1	48
5	Linear Interference Cancellation for the Cell-Free C-RAN Uplink. IEEE Transactions on Wireless Communications, 2021, 20, 1544-1556.	9.2	6
6	Reconfigurable ULAs for Line-of-Sight MIMO Transmission. IEEE Transactions on Wireless Communications, 2021, 20, 2933-2947.	9.2	38
7	Subset Regularized Zero-Forcing Precoders for Cell-Free C-RANs. , 2021, , .		4
8	Millimeter-Wave UAV Coverage in Urban Environments. , 2021, , .		7
9	On the Deployment Problem in Cell-Free UAV Networks. , 2021, , .		3
10	Capacity of Line-of-Sight MIMO Channels. , 2020, , .		13
11	Unsupervised-Learning Power Allocation for the Cell-Free Downlink. , 2020, , .		5
12	Subset MMSE Receivers for Cell-Free Networks. IEEE Transactions on Wireless Communications, 2020, 19, 4183-4194.	9.2	32
13	Uplink Fractional Power Control and Downlink Power Allocation for Cell-Free Networks. IEEE Wireless Communications Letters, 2020, 9, 774-777.	5.0	44
14	Pseudo-Inverse vs Generalized Inverse for C-RAN Downlink Precoding. , 2020, , .		2
15	Millimeter Wave Channel Modeling via Generative Neural Networks. , 2020, , .		17
16	Parallel Interference Cancellation for Cell-Free C-RANs. , 2020, , .		0
17	Uplink Fractional Power Control for Cell-Free Wireless Networks. , 2019, , .		20
18	Computation-Bandwidth Trading for Mobile Edge Computing. , 2019, , .		6

#	ARTICLE	IF	CITATIONS
19	Massive MIMO Forward Link Analysis for Cellular Networks. IEEE Transactions on Wireless Communications, 2019, 18, 2964-2976.	9.2	29
20	Unsupervised-Learning Power Control for Cell-Free Wireless Systems. , 2019, , .		13
21	Modified Conjugate Beamforming for Cell-Free Massive MIMO. IEEE Wireless Communications Letters, 2019, 8, 616-619.	5.0	66
22	Distribution of the Number of Users per Base Station in Cellular Networks. IEEE Wireless Communications Letters, 2019, 8, 520-523.	5.0	33
23	Dual-Kernel Online Reconstruction of Power Maps. , 2018, , .		23
24	A primer on information theory and MMSE estimation. , 2018, , 3-56.		0
25	A signal processing perspective. , 2018, , 57-130.		1
26	Channel modeling. , 2018, , 131-208.		0
27	Single-user SISO. , 2018, , 209-294.		0
28	SU-MIMO with optimum receivers. , 2018, , 297-385.		0
29	SU-MIMO with linear receivers. , 2018, , 386-412.		0
30	Multiuser communication prelude. , 2018, , 415-435.		0
31	MU-MIMO with optimum transceivers. , 2018, , 436-496.		0
32	MU-MIMO with linear transceivers. , 2018, , 497-577.		0
33	Massive MIMO. , 2018, , 578-642.		0
34	Random vs Structured Pilot Assignment in Cell-Free Massive MIMO Wireless Networks. , 2018, , .		93
35	Low-Complexity MIMO Precoding for Finite-Alphabet Signals. IEEE Transactions on Wireless Communications, 2017, 16, 4571-4584.	9.2	46
36	Enclosed mmWave Wearable Networks: Feasibility and Performance. IEEE Transactions on Wireless Communications, 2017, 16, 2300-2313.	9.2	12

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37	Ergodic Spectral Efficiency in MIMO Cellular Networks. IEEE Transactions on Wireless Communications, 2017, 16, 2835-2849.	9.2	68
38	Full-Duplex MIMO in Cellular Networks: System-Level Performance. IEEE Transactions on Wireless Communications, 2017, 16, 3124-3137.	9.2	35
39	A novel approach for spectral efficiency analysis in MIMO cellular networks. , 2017, , .		1
40	Analytical handle for ZF reception in distributed massive MIMO. , 2016, , .		4
41	Low-complexity MIMO precoding with discrete signals and statistical CSI. , 2016, , .		34
42	Analytical Characterization of ITLinQ: Channel Allocation for Device-to-Device Communication Networks. IEEE Transactions on Wireless Communications, 2016, 15, 3603-3615.	9.2	8
43	Interference surge in full-duplex wireless systems. , 2015, , .		8
44	Impact of reflections in enclosed mmWave wearable networks. , 2015, , .		7
45	Performance evaluation of ITLinQ and FlashLinQ for overlaid device-to-device communication. , 2015, , .		6
46	Optimum exclusion regions for interference protection in device-to-device wireless networks. , 2015, , .		3
47	An Analytical Framework for Device-to-Device Communication in Cellular Networks. IEEE Transactions on Wireless Communications, 2015, 14, 6297-6310.	9.2	87
48	Spectral Efficiency of Dynamic Coordinated Beamforming: A Stochastic Geometry Approach. IEEE Transactions on Wireless Communications, 2015, 14, 230-241.	9.2	109
49	System-Level Performance of Interference Alignment. IEEE Transactions on Wireless Communications, 2015, 14, 1060-1070.	9.2	42
50	Overlaid device-to-device communication in cellular networks. , 2014, , .		6
51	System-level performance of interference alignment. , 2014, , .		1
52	On the spatial spectral efficiency of ITLinQ. , 2014, , .		11
53	Coordinated beamforming with dynamic clustering: A stochastic geometry approach. , 2014, , .		3
54	Five disruptive technology directions for 5G. IEEE Communications Magazine, 2014, 52, 74-80.	6.1	3,763

#	ARTICLE	IF	CITATIONS
55	Connections Between the Generalized Marcum $Q$ -Function and a Class of Hypergeometric Functions. IEEE Transactions on Information Theory, 2014, 60, 1077-1082.	2.4	22
56	Overhead and Spectral Efficiency of Pilot-Assisted Interference Alignment in Time-Selective Fading Channels. IEEE Transactions on Wireless Communications, 2014, 13, 4884-4895.	9.2	25
57	What Will 5G Be?. IEEE Journal on Selected Areas in Communications, 2014, 32, 1065-1082.	14.0	6,564
58	Fundamental Limits of Cooperation. IEEE Transactions on Information Theory, 2013, 59, 5213-5226.	2.4	259
59	Antenna Subset Modulation for Secure Millimeter-Wave Wireless Communication. IEEE Transactions on Communications, 2013, 61, 3231-3245.	7.8	222
60	Base station cooperation with dynamic clustering in super-dense cloud-RAN. , 2013, , .		13
61	Antenna Subset Modulation for secure millimeter-wave wireless communication. , 2013, , .		8
62	Pilot-assisted interference alignment in time-selective fading channels. , 2013, , .		3
63	Design and Analysis of Deterministic Distributed Beamforming Algorithms in the Presence of Noise. IEEE Transactions on Communications, 2013, 61, 1595-1607.	7.8	15
64	Successive deterministic distributed beamforming. , 2013, , .		0
65	Ergodic sum-rate of proportional fair scheduling with multiple antennas. , 2013, , .		21
66	Non-Peaky Signals in Wideband Fading Channels: Achievable Bit Rates and Optimal Bandwidth. IEEE Transactions on Wireless Communications, 2012, 11, 246-257.	9.2	43
67	System-level performance of distributed cooperation. , 2012, , .		14
68	Are yesterday-s information-theoretic fading models and performance metrics adequate for the analysis of today's wireless systems?. , 2012, 50, 210-217.		61
69	On the Overhead of Interference Alignment: Training, Feedback, and Cooperation. IEEE Transactions on Wireless Communications, 2012, 11, 4192-4203.	9.2	109
70	Outage Probability Analysis for MRC in $\hat{\gamma}$ -Fading Channels with Co-Channel Interference. IEEE Communications Letters, 2012, 16, 674-677.	4.1	32
71	Performance of a Radio Transmission System with Spectrum Pooling and Unequal User Priorities. IEEE Communications Letters, 2012, 16, 975-977.	4.1	0
72	Bit loading for MIMO with statistical channel information at the transmitter and MMSE receivers. , 2012, , .		0

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73	Coding for a radio transmission system with spectrum pooling and unequal resource sharing. , 2012, , .		0
74	On the limitations of cooperation in wireless networks. , 2012, , .		36
75	Prioritized resource allocation in wireless spectrum pooling. Journal of Communications and Networks, 2012, 14, 495-500.	2.6	1
76	Interference priority: A new scheme for prioritized resource allocation in wireless. Journal of Communications and Networks, 2012, 14, 487-494.	2.6	2
77	Spectral efficiency limits in pilot-assisted cooperative communications. , 2012, , .		30
78	Mutual Information of IID Complex Gaussian Signals on Block Rayleigh-Faded Channels. IEEE Transactions on Information Theory, 2012, 58, 331-340.	2.4	47
79	A Smartphone-Based Healthcare Monitoring Systemâ€™PHY Challenges and Behavioral Aspects. Lecture Notes of the Institute for Computer Sciences, Social-Informatics and Telecommunications Engineering, 2012, , 127-134.	0.3	3
80	Is the PHY layer dead?. , 2011, 49, 159-165.		171
81	Optimizing training and feedback for MIMO interference alignment. , 2011, , .		6
82	Transmit diversity vs. spatial multiplexing in modern MIMO systems. IEEE Transactions on Wireless Communications, 2010, 9, 186-197.	9.2	160
83	Comprehensive Evaluation of the IEEE 802.15.4 MAC Layer Performance With Retransmissions. IEEE Transactions on Vehicular Technology, 2010, 59, 3917-3932.	6.3	69
84	Per-antenna rate and power control for MIMO layered architectures in the low- and high-power regimes. IEEE Transactions on Communications, 2010, 58, 652-659.	7.8	28
85	A Unified Treatment of Optimum Pilot Overhead in Multipath Fading Channels. IEEE Transactions on Communications, 2010, 58, 2939-2948.	7.8	105
86	Fading models and metrics for contemporary wireless systems. , 2010, , .		4
87	Mutual information of IID complex Gaussian signals on block Rayleigh-faded channels. , 2010, , .		11
88	Optimum pilot overhead in wireless communication: A unified treatment of continuous and block-fading channels. , 2010, , .		10
89	De-Hyping Transmit Diversity in Modern MIMO Cellular Systems. , 2009, , .		2
90	What is the value of joint processing of pilots and data in block-fading channels?. , 2009, , .		17

#	ARTICLE	IF	CITATIONS
91	3GPP LTE and LTE-Advanced. Eurasip Journal on Wireless Communications and Networking, 2009, 2009, .	2.4	31
92	Bit Loading for MIMO with Statistical Channel Information at the Transmitter and ZF Receivers. , 2009, , .		6
93	A WiMAX-Based Implementation of Network MIMO for Indoor Wireless Systems. Eurasip Journal on Advances in Signal Processing, 2009, 2009, .	1.7	54
94	Optimum Power Allocation for Multiuser OFDM with Arbitrary Signal Constellations. IEEE Transactions on Communications, 2008, 56, 828-837.	7.8	59
95	Spectral Efficiency in Reference-Signal-Assisted Low-Power Wireless Communication. , 2008, , .		0
96	Capacity to within one bit of a class of Gaussian multicast channels with interference. , 2008, , .		3
97	Interplay of spectral efficiency, power and doppler spectrum for reference-signal-assisted wireless communication. IEEE Transactions on Wireless Communications, 2008, 7, 5020-5029.	9.2	27
98	Long-Term Transmit Beamforming for Wireless Multicasting. , 2007, , .		70
99	Network MIMO: Overcoming Intercell Interference in Indoor Wireless Systems. Conference Record of the Asilomar Conference on Signals, Systems and Computers, 2007, , .	0.0	165
100	MIMO Capacity in Correlated Interference-Limited Channels. , 2007, , .		32
101	CTH01-2: Optimum Ergodic Power Allocation for Multiuser OFDM with Arbitrary Signal Constellations. IEEE Global Telecommunications Conference (GLOBECOM), 2006, , .	0.0	2
102	Guest editorial - Advances in smart antennas. IEEE Wireless Communications, 2006, 13, 6-7.	9.0	3
103	Multiuser Mercury/waterfilling for Downlink OFDM with Arbitrary Signal Constellations. , 2006, , .		26
104	Eigenvalue Statistics of Finite-Dimensional Random Matrices for MIMO Wireless Communications. , 2006, , .		37
105	Optimum power allocation for parallel Gaussian channels with arbitrary input distributions. IEEE Transactions on Information Theory, 2006, 52, 3033-3051.	2.4	397
106	Capacity-achieving input covariance for single-user multi-antenna channels. IEEE Transactions on Wireless Communications, 2006, 5, 662-671.	9.2	1
107	Design and Experimental Validation of MIMO Multiuser Detection for Downlink Packet Data. Eurasip Journal on Advances in Signal Processing, 2005, 2005, 1.	1.7	1
108	Doppler sensitivity of link reciprocity in TDD MIMO systems. , 2005, , .		4

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109	Impact of Antenna Correlation on the Capacity of Multiantenna Channels. IEEE Transactions on Information Theory, 2005, 51, 2491-2509.	2.4	330
110	High-SNR Power Offset in Multiantenna Communication. IEEE Transactions on Information Theory, 2005, 51, 4134-4151.	2.4	234
111	Duplexing, resource allocation and inter-cell coordination: design recommendations for next generation wireless systems. Wireless Communications and Mobile Computing, 2005, 5, 77-93.	1.2	33
112	Mercury/waterfilling: optimum power allocation with arbitrary input constellations. , 2005, , .		45
113	Approaching the MIMO Capacity with a Low-Rate Feedback Channel in V-BLAST. Eurasip Journal on Advances in Signal Processing, 2004, 2004, 1.	1.7	35
114	Multiple ARQ Processes for MIMO Systems. Eurasip Journal on Advances in Signal Processing, 2004, 2004, 1.	1.7	48
115	Multiple-antenna capacity in the low-power regime. IEEE Transactions on Information Theory, 2003, 49, 2527-2544.	2.4	286
116	Capacity-approaching rate function for layered multiantenna architectures. IEEE Transactions on Wireless Communications, 2003, 24, 616-620.	9.2	49
117	Estimation of continuous flat fading MIMO channels. IEEE Transactions on Wireless Communications, 2002, 1, 549-553.	9.2	114
118	Spectral efficiency of FDMA/TDMA wireless systems with transmit and receive antenna arrays. IEEE Transactions on Wireless Communications, 2002, 1, 591-599.	9.2	62
119	Capacity of multiple-transmit multiple-receive antenna architectures. IEEE Transactions on Information Theory, 2002, 48, 3117-3128.	2.4	168
120	Layered space-time receivers for frequency-selective wireless channels. IEEE Transactions on Communications, 2002, 50, 65-73.	7.8	174
121	Distributed dynamic channel assignment in TDMA mobile communication systems. IEEE Transactions on Vehicular Technology, 2002, 51, 1397-1406.	6.3	14
122	Link-optimal space-time processing with multiple transmit and receive antennas. IEEE Communications Letters, 2001, 5, 85-87.	4.1	236
123	Lifting the limits on high speed wireless data access using antenna arrays. , 2001, 39, 156-162.		89
124	Multiantenna capacity: myths and realities. , 2001, , 87-107.		10
125	Effect of antenna separation on the capacity of BLAST in correlated channels. IEEE Communications Letters, 2000, 4, 337-339.	4.1	237
126	Integrated dynamic channel assignment and power control in TDMA mobile wireless communication systems. IEEE Journal on Selected Areas in Communications, 1999, 17, 2031-2040.	14.0	44



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127	Spectral iterative algorithm for RCS computation in electrically large or intermediate perfectly conducting cavities. IEEE Transactions on Antennas and Propagation, 1994, 42, 790-797.	5.1	7
128	Multiple ARQ processes for MIMO systems. , 0, , .		36
129	Uplink-downlink imbalance in TDMA personal communication systems. , 0, , .		4
130	Antenna separation and capacity of BLAST in correlated channels. , 0, , .		5
131	Approaching eigenmode BLAST channel capacity using V-BLAST with rate and power feedback. , 0, , .		103
132	Low complexity algorithm for rate and power quantization in extended V-BLAST. , 0, , .		18
133	Capacity of multi-antenna channels in the low-power regime. , 0, , .		4
134	Capacity of antenna arrays with space, polarization and pattern diversity. , 0, , .		57
135	Random Matrix Transforms and Applications via Non-Asymptotic Eigenanalysis. , 0, , .		5