Lizhong Zheng

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/11502252/publications.pdf

Version: 2024-02-01

57 papers	6,067 citations	471061 17 h-index	454577 30 g-index
• •			
57 all docs	57 docs citations	57 times ranked	2889 citing authors

#	Article	IF	Citations
1	Diversity and multiplexing: a fundamental tradeoff in multiple-antenna channels. IEEE Transactions on Information Theory, 2003, 49, 1073-1096.	1.5	3,290
2	Communication on the Grassmann manifold: a geometric approach to the noncoherent multiple-antenna channel. IEEE Transactions on Information Theory, 2002, 48, 359-383.	1.5	763
3	Diversity–Multiplexing Tradeoff in Multiple-Access Channels. IEEE Transactions on Information Theory, 2004, 50, 1859-1874.	1.5	444
4	Fundamental Limits of Communication With Low Probability of Detection. IEEE Transactions on Information Theory, 2016, 62, 3493-3503.	1.5	275
5	Cooperative Routing in Static Wireless Networks. IEEE Transactions on Communications, 2007, 55, 2185-2192.	4.9	192
6	Channel Coherence in the Low-SNR Regime. IEEE Transactions on Information Theory, 2007, 53, 976-997.	1.5	116
7	Amplify-and-Forward in Wireless Relay Networks: Rate, Diversity, and Network Size. IEEE Transactions on Information Theory, 2007, 53, 3302-3318.	1.5	107
8	Efficient fault-diagnosis algorithms for all-optical WDM networks with probabilistic link failures. Journal of Lightwave Technology, 2005, 23, 3358-3371.	2.7	85
9	On Noncoherent MIMO Channels in the Wideband Regime: Capacity and Reliability. IEEE Transactions on Information Theory, 2007, 53, 1983-2009.	1.5	63
10	Reliability and route diversity in wireless networks. IEEE Transactions on Wireless Communications, 2008, 7, 4772-4776.	6.1	63
11	Unequal Error Protection: An Information-Theoretic Perspective. IEEE Transactions on Information Theory, 2009, 55, 5511-5539.	1.5	62
12	Wideband Fading Channels With Feedback. IEEE Transactions on Information Theory, 2010, 56, 6058-6065.	1.5	57
13	Mutual dependence for secret key agreement. , 2010, , .		53
14	Bursty transmission and glue pouring: on wireless channels with overhead costs. IEEE Transactions on Wireless Communications, 2008, 7, 5188-5194.	6.1	51
15	An Efficient Approach to Informative Feature Extraction from Multimodal Data. Proceedings of the AAAI Conference on Artificial Intelligence, 2019, 33, 5281-5288.	3.6	39
16	An Information-Theoretic Approach to Transferability in Task Transfer Learning. , 2019, , .		39
17	A Coordinate System for Gaussian Networks. IEEE Transactions on Information Theory, 2012, 58, 721-733.	1.5	37
18	Euclidean Information Theory. , 2008, , .		32

#	Article	IF	Citations
19	On approaching wideband capacity using multitone FSK. IEEE Journal on Selected Areas in Communications, 2005, 23, 1830-1838.	9.7	29
20	Linear information coupling problems. , 2012, , .		24
21	Limits of low-probability-of-detection communication over a discrete memoryless channel., 2015,,.		21
22	Linear Universal Decoding for Compound Channels. IEEE Transactions on Information Theory, 2010, 56, 5999-6013.	1.5	17
23	Writing on Fading Paper, Dirty Tape With Little Ink: Wideband Limits for Causal Transmitter CSI. IEEE Transactions on Information Theory, 2012, 58, 5388-5397.	1.5	17
24	Communication Theoretic Data Analytics. IEEE Journal on Selected Areas in Communications, 2015, 33, 663-675.	9.7	16
25	An Information Theoretic Interpretation to Deep Neural Networks. , 2019, , .		15
26	Errors-and-Erasures Decoding for Block Codes With Feedback. IEEE Transactions on Information Theory, 2012, 58, 24-49.	1.5	14
27	On capacity of optical channels with coherent detection., 2011,,.		12
28	Bounds between contraction coefficients., 2015,,.		12
29	Multiterminal Secret Key Agreement. IEEE Transactions on Information Theory, 2014, 60, 3379-3412.	1.5	11
30	Euclidean Information Theory of Networks. IEEE Transactions on Information Theory, 2015, 61, 6795-6814.	1.5	11
31	An Information Theoretic Interpretation to Deep Neural Networks. Entropy, 2022, 24, 135.	1.1	10
32	Writing on Fading Paper and Causal Transmitter CSI. , 2006, , .		9
33	Design of Generalized Analog Network Coding for a Multiple-Access Relay Channel. IEEE Transactions on Communications, 2014, , 1-1.	4.9	8
34	Efficient statistics: Extracting information from IID observations. , 2014, , .		8
35	Superadditivity of Quantum Channel Coding Rate With Finite Blocklength Joint Measurements. IEEE Transactions on Information Theory, 2016, 62, 5938-5959.	1.5	7
36	Capacity of optical communications over a lossy bosonic channel with a receiver employing the most general coherent electro-optic feedback control. Physical Review A, 2017, 96, .	1.0	7

#	Article	IF	CITATIONS
37	Upper bounds to error probability with feedback. , 2009, , .		6
38	Bit-Wise Unequal Error Protection for Variable-Length Block Codes With Feedback. IEEE Transactions on Information Theory, 2013, 59, 1475-1504.	1.5	5
39	Polynomial Singular Value Decompositions of a Family of Source-Channel Models. IEEE Transactions on Information Theory, 2017, 63, 7716-7728.	1.5	5
40	OPNO2-4: Efficient Fault Detection and Localization for All-Optical Networks. IEEE Global Telecommunications Conference (GLOBECOM), 2006, , .	0.0	4
41	Polynomial spectral decomposition of conditional expectation operators., 2016,,.		4
42	An information-theoretic approach to unsupervised feature selection for high-dimensional data. , 2017, , .		4
43	Target models and waveform design for detection in MIMO radar. , 2011, , .		3
44	Superadditivity of quantum channel coding rate with finite blocklength quantum measurements. , $2014, , .$		3
45	A Local Characterization for Wyner Common Information. , 2020, , .		3
46	On Error Probability for Non-coherent MIMO Channels in the Wideband Regime. , 2006, , .		2
47	On training with feedback in wideband channels. IEEE Journal on Selected Areas in Communications, 2008, 26, 1607-1614.	9.7	2
48	Achievability of nonlinear degrees of freedom in correlatively changing fading channels. , 2014, , .		2
49	A spectrum decomposition to the feature spaces and the application to big data analytics. , 2015, , .		2
50	Communication theoretic inference on heterogeneous data. , 2016, , .		2
51	On Estimation of Modal Decompositions. , 2020, , .		2
52	Superadditivity of quantum channel coding rate with finite blocklength quantum measurements. , $2013, , .$		1
53	Euclidean information theory of networks. , 2013, , .		1
54	On training with feedback in wideband channels. , 2008, , .		0

LIZHONG ZHENG

#	Article	IF	CITATIONS
55	Upper bounds to error probability with feedback. , 2009, , .		О
56	The design of binary shaping filter of binary code. , 2010, , .		0
57	Degrees of freedom in fading channels with memory: Achievability through nonlinear decoding. , 2014, , .		O