Alex Dytso

List of Publications by Year in descending order

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70	441	1039406	996533
papers	citations	h-index	g-index
70	70	70	261
all docs	docs citations	times ranked	citing authors

#	Article	IF	CITATIONS
1	Bayesian Risk With Bregman Loss: A Cramér–Rao Type Bound and Linear Estimation. IEEE Transactions on Information Theory, 2022, 68, 1985-2000.	1.5	5
2	A variational interpretation of the Cramér–Rao bound. Signal Processing, 2021, 182, 107917.	2.1	5
3	Properties of the Support of the Capacity-Achieving Distribution of the Amplitude-Constrained Poisson Noise Channel. IEEE Transactions on Information Theory, 2021, 67, 7050-7066.	1.5	2
4	Measuring Dependencies of Order Statistics: An Information Theoretic Perspective. , 2021, , .		2
5	Finite-Sample Bounds on the Accuracy of Plug-In Estimators of Fisher Information. Entropy, 2021, 23, 545.	1.1	1
6	On the Distribution of the Conditional Mean Estimator in Gaussian Noise. , 2021, , .		3
7	Retrieving Data Permutations from Noisy Observations: High and Low Noise Asymptotics. , 2021, , .		1
8	An Inequality for Bayesian Bregman Risks With Applications in Directional Estimation. , 2021, , .		1
9	Amplitude Constrained Poisson Noise Channel: Properties of the Capacity-Achieving Input Distribution. , 2021, , .		O
10	A General Derivative Identity for the Conditional Expectation with Focus on the Exponential Family. , 2021, , .		6
11	Scalar Gaussian Wiretap Channel: Bounds on the Support Size of the Secrecy-Capacity-Achieving Distribution. , 2021, , .		2
12	Recovering Structure of Noisy Data through Hypothesis Testing. , 2020, , .		4
13	A Class of Lower Bounds for Bayesian Risk with a Bregman Loss. , 2020, , .		3
14	On Nonparametric Estimation of the Fisher Information. , 2020, , .		O
15	A General Derivative Identity for the Conditional Mean Estimator in Gaussian Noise and Some Applications. , 2020, , .		8
16	An Empirical Bayes Approach to Partially Labeled and Shuffled Data Sets. , 2020, , .		0
17	Gradient of Error Probability of \$M\$-ary Hypothesis Testing Problems Under Multivariate Gaussian Noise. IEEE Signal Processing Letters, 2020, 27, 1909-1913.	2.1	О
18	The Vector Poisson Channel: On the Linearity of the Conditional Mean Estimator. IEEE Transactions on Signal Processing, 2020, 68, 5894-5903.	3.2	5

#	Article	IF	Citations
19	Information-Theoretic Bounds on the Generalization Error and Privacy Leakage in Federated Learning. , 2020, , .		9
20	The Capacity Achieving Distribution for the Amplitude Constrained Additive Gaussian Channel: An Upper Bound on the Number of Mass Points. IEEE Transactions on Information Theory, 2020, 66, 2006-2022.	1.5	24
21	Robust Power Allocation for Parallel Gaussian Channels With Approximately Gaussian Input Distributions. IEEE Transactions on Wireless Communications, 2020, 19, 3685-3699.	6.1	1
22	Estimation in Poisson Noise: Properties of the Conditional Mean Estimator. IEEE Transactions on Information Theory, 2020, 66, 4304-4323.	1.5	16
23	MMSE Bounds Under Kullback–Leibler Divergence Constraints on the Joint Input-Output Distribution. , 2020, , .		2
24	Recovering Data Permutations From Noisy Observations: The Linear Regime. IEEE Journal on Selected Areas in Information Theory, 2020, $1,854-869$.	1.9	5
25	Sum-Capacity of the MIMO Gaussian Many-Access Channel. , 2019, , .		2
26	On Estimating the Norm of a Gaussian Vector Under Additive White Gaussian Noise. IEEE Signal Processing Letters, 2019, 26, 1325-1329.	2.1	4
27	Tight Bounds on the Weighted Sum of MMSEs with Applications in Distributed Estimation. , 2019, , .		O
28	MMSE Bounds for Additive Noise Channels Under Kullback–Leibler Divergence Constraints on the Input Distribution. IEEE Transactions on Signal Processing, 2019, 67, 6352-6367.	3.2	13
29	On Estimation under Noisy Order Statistics. , 2019, , .		9
30	Sum-Capacity of the MIMO Many-Access Gaussian Noise Channel. IEEE Transactions on Communications, 2019, 67, 5419-5433.	4.9	5
31	Estimation of Bounded Normal Mean: An Alternative Proof for the Discreteness of the Least Favorable Prior. , $2019, $, .		2
32	Properties of the Conditional Mean Estimator in Poisson Noise. , 2019, , .		1
33	An Upper Bound on the Number of Mass Points in the Capacity Achieving Distribution for the Amplitude Constrained Additive Gaussian Channel. , 2019, , .		3
34	Robust Waterfilling for Approximately Gaussian Inputs. , 2019, , .		2
35	Amplitude Constrained MIMO Channels: Properties of Optimal Input Distributions and Bounds on the Capacity. Entropy, 2019, 21, 200.	1.1	7
36	On Stability of Linear Estimators in Poisson Noise. , 2019, , .		1

#	Article	lF	Citations
37	Some Aspects of Totally Positive Kernels Useful in Information Theory. , 2019, , .		1
38	On the Capacity of the Peak Power Constrained Vector Gaussian Channel: An Estimation Theoretic Perspective. IEEE Transactions on Information Theory, 2019, 65, 3907-3921.	1.5	18
39	On the Minimum Mean \$p\$ th Error in Gaussian Noise Channels and Its Applications. IEEE Transactions on Information Theory, 2018, 64, 2012-2037.	1.5	5
40	On Communication Through a Gaussian Channel With an MMSE Disturbance Constraint. IEEE Transactions on Information Theory, 2018, 64, 513-530.	1.5	8
41	On Lossy Compression of Generalized Gaussian Sources. , 2018, , .		1
42	Optimal Inputs for Some Classes of Degraded Wiretap Channels. , 2018, , .		9
43	MVG Mechanism., 2018,,.		21
44	Capacity of the Vector Gaussian Channel in the Small Amplitude Regime. , 2018, , .		1
45	Analytical properties of generalized Gaussian distributions. Journal of Statistical Distributions and Applications, 2018, 5, .	1.2	30
46	Group Paging for Massive Machine-Type Communications with Diverse Access Requirements. , 2018, , .		0
47	Tight MMSE Bounds for the AGN Channel Under KL Divergence Constraints on the Input Distribution. , 2018, , .		1
48	On the Structure of the Least Favorable Prior Distributions. , 2018, , .		8
49	Mutual Information as a Function of Matrix SNR for Linear Gaussian Channels. , 2018, , .		8
50	When are discrete channel inputs optimal? â€" Optimization techniques and some new results. , 2018, , .		18
51	Differentiated Service-Aware Group Paging for Massive Machine-Type Communication. IEEE Transactions on Communications, 2018, 66, 5444-5456.	4.9	12
52	A generalized Ozarow-Wyner capacity bound with applications. , 2017, , .		8
53	On additive channels with generalized Gaussian noise. , 2017, , .		13
54	Upper and Lower Bounds on the Capacity of Amplitude-Constrained MIMO Channels. , 2017, , .		23

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55	On the equality condition for the I-MMSE proof of the entropy power inequality., 2017,,.		1
56	A View of Information-Estimation Relations in Gaussian Networks. Entropy, 2017, 19, 409.	1.1	9
57	On the applications of the minimum mean p-th error (MMPE) to information theoretic quantities. , 2016, , .		1
58	On communications through a Gaussian noise channel with an MMSE disturbance constraint. , 2016, , .		1
59	On the minimum mean p-th error in Gaussian noise channels and its applications. , 2016, , .		6
60	Interference as Noise: Friend or Foe?. IEEE Transactions on Information Theory, 2016, 62, 3561-3596.	1.5	32
61	Nearly optimal non-Gaussian codes for the Gaussian interference channel. , 2015, , .		0
62	i.i.d. mixed inputs and treating interference as noise are gDoF optimal for the symmetric Gaussian two-user interference channel. , 2015 , , .		3
63	The Gaussian Interference Channel with lack of codebook knowledge at one receiver: Symmetric capacity to within a gap with a PAM input. , 2015, , .		0
64	On the Two-User Interference Channel With Lack of Knowledge of the Interference Codebook at One Receiver. IEEE Transactions on Information Theory, 2015, 61, 1257-1276.	1.5	12
65	On the Capacity Region of the Two-User Interference Channel With a Cognitive Relay. IEEE Transactions on Wireless Communications, 2014, 13, 6824-6838.	6.1	10
66	On Gaussian interference channels with mixed gaussian and discrete inputs., 2014,,.		7
67	On discrete alphabets for the two-user Gaussian interference channel with one receiver lacking knowledge of the interfering codebook. , 2014, , .		10
68	On the capacity of interference channels with partial codebook knowledge. , 2013, , .		4
69	On the capacity of the symmetric interference channel with a cognitive relay at high SNR. , 2012, , .		6
70	The sum-capacity of the symmetric linear deterministic Complete K-user Z-Interference Channel. , 2012, , .		O