

Suhas N Diggavi

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/1107433/publications.pdf>

Version: 2024-02-01

120
papers

3,852
citations

257450

24
h-index

155660

55
g-index

120
all docs

120
docs citations

120
times ranked

2395
citing authors

#	ARTICLE	IF	CITATIONS
1	Secure Estimation and Control for Cyber-Physical Systems Under Adversarial Attacks. IEEE Transactions on Automatic Control, 2014, 59, 1454-1467.	5.7	958
2	Wireless Network Information Flow: A Deterministic Approach. IEEE Transactions on Information Theory, 2011, 57, 1872-1905.	2.4	691
3	Hierarchical Coded Caching. IEEE Transactions on Information Theory, 2016, 62, 3212-3229.	2.4	174
4	Secure State Estimation Against Sensor Attacks in the Presence of Noise. IEEE Transactions on Control of Network Systems, 2017, 4, 49-59.	3.7	100
5	Secure state-estimation for dynamical systems under active adversaries. , 2011, , .		92
6	Transmission techniques for relay-interference networks. , 2008, , .		81
7	Approximate capacity of Gaussian relay networks. , 2008, , .		77
8	Successive Refinement Via Broadcast: Optimizing Expected Distortion of a Gaussian Source Over a Gaussian Fading Channel. IEEE Transactions on Information Theory, 2008, 54, 2903-2918.	2.4	66
9	Approximately achieving Gaussian relay network capacity with lattice codes. , 2010, , .		66
10	Qsparse-Local-SGD: Distributed SGD With Quantization, Sparsification, and Local Computations. IEEE Journal on Selected Areas in Information Theory, 2020, 1, 217-226.	2.5	59
11	Degrees of Freedom of Cache-Aided Wireless Interference Networks. IEEE Transactions on Information Theory, 2018, 64, 5359-5380.	2.4	57
12	On Multistage Successive Refinement for Wyner's Ziv Source Coding With Degraded Side Informations. IEEE Transactions on Information Theory, 2007, 53, 2946-2960.	2.4	56
13	Approximate Capacity of a Class of Gaussian Interference-Relay Networks. IEEE Transactions on Information Theory, 2011, 57, 2837-2864.	2.4	54
14	Capacity Upper Bounds for the Deletion Channel. , 2007, , .		50
15	Secret-Key Agreement With Channel State Information at the Transmitter. IEEE Transactions on Information Forensics and Security, 2011, 6, 672-681.	6.9	49
16	Secret-Key Generation Using Correlated Sources and Channels. IEEE Transactions on Information Theory, 2012, 58, 652-670.	2.4	49
17	Toward an Internet of Battlefield Things: A Resilience Perspective. Computer, 2018, 51, 24-36.	1.1	48
18	Diversity Embedded Space-Time Codes. IEEE Transactions on Information Theory, 2008, 54, 33-50.	2.4	42

#	ARTICLE	IF	CITATIONS
19	Approximately Achieving Gaussian Relay Network Capacity With Lattice-Based QMF Codes. IEEE Transactions on Information Theory, 2013, 59, 8275-8294.	2.4	42
20	Side-Information Scalable Source Coding. IEEE Transactions on Information Theory, 2008, 54, 5591-5608.	2.4	41
21	Approximating the Gaussian Multiple Description Rate Region Under Symmetric Distortion Constraints. IEEE Transactions on Information Theory, 2009, 55, 3869-3891.	2.4	41
22	Security for control systems under sensor and actuator attacks. , 2012, , .		41
23	The Achievable Distortion Region of Sending a Bivariate Gaussian Source on the Gaussian Broadcast Channel. IEEE Transactions on Information Theory, 2011, 57, 6419-6427.	2.4	40
24	On the Capacity of Noncoherent Network Coding. IEEE Transactions on Information Theory, 2011, 57, 1046-1066.	2.4	33
25	On the Maximum Achievable Sum-Rate With Successive Decoding in Interference Channels. IEEE Transactions on Information Theory, 2012, 58, 3798-3820.	2.4	33
26	The Approximate Capacity of the Gaussian \mathbb{R}^2 -Relay Diamond Network. IEEE Transactions on Information Theory, 2013, 59, 845-859.	2.4	29
27	Design and Analysis of Stability-Guaranteed PUFs. IEEE Transactions on Information Forensics and Security, 2018, 13, 978-992.	6.9	29
28	Subspace Properties of Randomized Network Coding. , 2007, , .		27
29	Securing state reconstruction under sensor and actuator attacks: Theory and design. Automatica, 2020, 116, 108920.	5.0	27
30	On Locating Byzantine Attackers. , 2008, , .		26
31	Optimal Rate-Reliability-Delay Tradeoff in Networks with Composite Links. IEEE Transactions on Communications, 2009, 57, 1390-1401.	7.8	26
32	Asymmetric Multilevel Diversity Coding and Asymmetric Gaussian Multiple Descriptions. IEEE Transactions on Information Theory, 2010, 56, 4367-4387.	2.4	25
33	Models and Information-Theoretic Bounds for Nanopore Sequencing. IEEE Transactions on Information Theory, 2018, 64, 3216-3236.	2.4	25
34	Approximate capacity of a class of Gaussian relay-interference networks. , 2009, , .		24
35	Shuffled Model of Federated Learning: Privacy, Accuracy and Communication Trade-Offs. IEEE Journal on Selected Areas in Information Theory, 2021, 2, 464-478.	2.5	23
36	Approximate Characterizations for the Gaussian Source Broadcast Distortion Region. IEEE Transactions on Information Theory, 2011, 57, 124-136.	2.4	21

#	ARTICLE	IF	CITATIONS
37	On Maximum Likelihood Reconstruction over Multiple Deletion Channels. , 2018, , .		21
38	Group testing for overlapping communities. , 2021, , .		18
39	A Deterministic Model for Wireless Relay Networks an its Capacity. , 2007, , .		17
40	Will Distributed Computing Revolutionize Peace? The Emergence of Battlefield IoT. , 2018, , .		17
41	An Approximation Approach to Network Information Theory. Foundations and Trends in Communications and Information Theory, 2015, 12, 1-183.	3.1	15
42	Matched Multiuser Gaussian Source Channel Communications via Uncoded Schemes. IEEE Transactions on Information Theory, 2017, 63, 4155-4171.	2.4	15
43	Computation over Mismatched Channels. IEEE Journal on Selected Areas in Communications, 2013, 31, 666-677.	14.0	14
44	Subspace Properties of Network Coding and Their Applications. IEEE Transactions on Information Theory, 2012, 58, 2599-2619.	2.4	13
45	When Are Dynamic Relaying Strategies Necessary in Half-Duplex Wireless Networks?. IEEE Transactions on Information Theory, 2015, 61, 1720-1738.	2.4	13
46	Sybil Attack Resilient Traffic Networks: A Physics-Based Trust Propagation Approach. , 2018, , .		13
47	Quantization of Distributed Data for Learning. IEEE Journal on Selected Areas in Information Theory, 2021, 2, 987-1001.	2.5	13
48	SQuARM-SGD: Communication-Efficient Momentum SGD for Decentralized Optimization. IEEE Journal on Selected Areas in Information Theory, 2021, 2, 954-969.	2.5	13
49	Enhancing Multiuser MIMO Through Opportunistic D2D Cooperation. IEEE Transactions on Wireless Communications, 2017, 16, 5616-5629.	9.2	12
50	Data Encoding Methods for Byzantine-Resilient Distributed Optimization. , 2019, , .		12
51	Secret Communication Over Broadcast Erasure Channels With State-Feedback. IEEE Transactions on Information Theory, 2015, 61, 4788-4808.	2.4	11
52	LEDPUF: Stability-guaranteed physical unclonable functions through locally enhanced defectivity. , 2016, , .		11
53	On Distributed Quantization for Classification. IEEE Journal on Selected Areas in Information Theory, 2020, 1, 237-249.	2.5	11
54	Data Encoding for Byzantine-Resilient Distributed Optimization. IEEE Transactions on Information Theory, 2021, 67, 1117-1140.	2.4	11

#	ARTICLE	IF	CITATIONS
55	An entropy reduction approach to continual testing. , 2021, , .		11
56	On the Role of Encoder Side-Information in Source Coding for Multiple Decoders. , 2006, , .		10
57	Multistage successive refinement for Wyner-Ziv source coding with degraded side informations. , 2006, , .		10
58	On the capacity of multisource non-coherent network coding. , 2009, , .		10
59	Gaussian Interference Channel With Intermittent Feedback. IEEE Transactions on Information Theory, 2015, 61, 4663-4699.	2.4	10
60	Harnessing Bursty Interference in Multicarrier Systems With Output Feedback. IEEE Transactions on Information Theory, 2017, 63, 4430-4452.	2.4	10
61	Symbolwise MAP for Multiple Deletion Channels. , 2019, , .		10
62	Multiple Description Coding for Stationary Gaussian Sources. IEEE Transactions on Information Theory, 2009, 55, 2868-2881.	2.4	9
63	Secure Network Coding With Erasures and Feedback. IEEE Transactions on Information Theory, 2015, 61, 1667-1686.	2.4	9
64	System identification in the presence of adversarial outputs. , 2016, , .		8
65	Models and information-theoretic bounds for nanopore sequencing. , 2017, , .		8
66	Rate splitting is approximately optimal for fading Gaussian interference channels. , 2015, , .		7
67	QAlign: aligning nanopore reads accurately using current-level modeling. Bioinformatics, 2021, 37, 625-633.	4.1	7
68	Capacity Results for Multicasting Nested Message Sets Over Combination Networks. IEEE Transactions on Information Theory, 2016, 62, 4968-4992.	2.4	6
69	Multi-Party Secret Key Agreement Over State-Dependent Wireless Broadcast Channels. IEEE Transactions on Information Forensics and Security, 2017, 12, 323-337.	6.9	6
70	Expected Distortion for Gaussian Source with a Broadcast Transmission Strategy over a Fading Channel. , 2007, , .		5
71	Diversity Embedded Codes: Theory and Practice. IEEE Journal on Selected Topics in Signal Processing, 2008, 2, 202-219.	10.8	5
72	Multuser Successive Refinement and Multiple Description Coding. IEEE Transactions on Information Theory, 2008, 54, 921-931.	2.4	5

#	ARTICLE	IF	CITATIONS
73	Embedded Rank Distance Codes for ISI Channels. IEEE Transactions on Information Theory, 2008, 54, 4866-4886.	2.4	5
74	Network resource allocation for competing multiple description transmissions. IEEE Transactions on Communications, 2010, 58, 1493-1504.	7.8	5
75	A remark on secret-key generation over correlated fading channels. , 2011, , .		5
76	Convex optimization for precoder design in MIMO interference networks. , 2012, , .		5
77	On capacity of noncoherent MIMO with asymmetric link strengths. , 2017, , .		5
78	Data Encoding for Byzantine-Resilient Distributed Gradient Descent. , 2018, , .		5
79	Protecting the Privacy of Networked Multi-Agent Systems Controlled over the Cloud. , 2018, , .		5
80	Byzantine-Tolerant Distributed Coordinate Descent. , 2019, , .		5
81	Algorithms for Reconstruction Over Single and Multiple Deletion Channels. IEEE Transactions on Information Theory, 2021, 67, 3389-3410.	2.4	5
82	Byzantine-Resilient SGD in High Dimensions on Heterogeneous Data. , 2021, , .		5
83	Information flow over compound wireless relay networks. , 2008, , .		4
84	Asymmetric Multi-level Diversity Coding. Proceedings of the Data Compression Conference, 2008, , .	0.0	4
85	Network Resource Allocation for Competing Multiple Description Transmissions. , 2008, , .		4
86	On the sum-capacity with successive decoding in interference channels. , 2011, , .		4
87	Wireless Network Security: Building on Erasures. Proceedings of the IEEE, 2015, 103, 1826-1840.	21.3	4
88	A distortion based approach for protecting inferences. , 2017, , .		4
89	Distorting an Adversary's View in Cyber-Physical Systems. , 2018, , .		4
90	Distortion-Based Lightweight Security for Cyber-Physical Systems. IEEE Transactions on Automatic Control, 2021, 66, 1588-1601.	5.7	4

#	ARTICLE	IF	CITATIONS
91	A Calculation of the Heegard-Berger Rate-distortion Function for a Binary Source. , 2006, , .		3
92	On Scalable Source Coding With Decoder Side Informations. , 2007, , .		3
93	Approximate Characterization of Capacity in Gaussian Relay Networks. , 2008, , .		3
94	Network Coding for Undirected Information Exchange. IEEE Communications Letters, 2009, 13, 25-27.	4.1	3
95	Facebrowsing: Search and navigation through comparisons. , 2010, , .		3
96	Wiretapped Oblivious Transfer. IEEE Transactions on Information Theory, 2017, 63, 2560-2595.	2.4	3
97	Implementation of stable PUFs using gate oxide breakdown. , 2017, , .		3
98	Caching With Partial Adaptive Matching. IEEE Journal on Selected Areas in Communications, 2018, 36, 1831-1842.	14.0	3
99	Energy-Efficiency Gains of Caching for Interference Channels. IEEE Communications Letters, 2018, 22, 1434-1437.	4.1	3
100	Approximate Capacity of Fast Fading Interference Channels With no Instantaneous CSIT. IEEE Transactions on Communications, 2018, 66, 6015-6027.	7.8	3
101	Compound Gaussian multiple access channels with noisy feedback. , 2008, , .		2
102	Using mm-Waves for Secret Key Establishment. IEEE Communications Letters, 2019, 23, 1077-1080.	4.1	2
103	"Wireless Paint": Code Design for 3D Orientation Estimation with Backscatter Arrays. , 2020, , .		2
104	Equivalence of ML decoding to a continuous optimization problem. , 2020, , .		2
105	Generalized Degrees of Freedom of Noncoherent Diamond Networks. IEEE Transactions on Information Theory, 2020, 66, 5228-5260.	2.4	2
106	Successive Refinement of Privacy. IEEE Journal on Selected Areas in Information Theory, 2020, 1, 745-759.	2.5	2
107	Group Testing for Community Infections. IEEE BITS the Information Theory Magazine, 2021, 1, 57-68.	1.6	2
108	Multuser Successive Refinement and Multiple Description Coding. , 2006, , .		1

#	ARTICLE	IF	CITATIONS
109	Robust Routing for Dynamic Wireless Networks Based on Stable Embeddings. , 2007, , .		1
110	Non-coherent hierarchical cooperation. , 2010, , .		1
111	An achievable rate region for Gaussian interference channel with intermittent feedback. , 2013, , .		1
112	Hierarchical routing over dynamic wireless networks. Random Structures and Algorithms, 2015, 47, 669-709.	1.1	1
113	Secure system identification. , 2016, , .		1
114	Generalized Degrees Freedom of Noncoherent MIMO Channels With Asymmetric Link Strengths. IEEE Transactions on Information Theory, 2020, 66, 4431-4448.	2.4	1
115	Hierarchical routing over dynamic wireless networks. Performance Evaluation Review, 2008, 36, 73-84.	0.6	1
116	Introduction to the Issue on MIMO-Optimized Transmission Systems for Delivering Data and Rich Content. IEEE Journal on Selected Topics in Signal Processing, 2008, 2, 121-123.	10.8	0
117	Routing in Mobile Wireless Networks. , 2008, , .		0
118	A deterministic approach to wireless network error correction. , 2009, , .		0
119	An LP Characterization of the Secret-message Capacity of Three Erasure Networks With Feedback. IEEE Transactions on Information Theory, 2016, 62, 2430-2480.	2.4	0
120	Joy Thomas: legacy, foundation and the IT society. IEEE BITS the Information Theory Magazine, 2021, , 1-1.	1.6	0