Aditya Ramamoorthy

List of Publications by Year
in descending order

69 papers	1,379 citations	566801 15 h-index	454577 30 g-index
69 all docs	69 docs citations	69 times ranked	793 citing authors

#	ARTICLE	IF	CITATIONS
1	Mobile Element Scheduling with Dynamic Deadlines. IEEE Transactions on Mobile Computing, 2007, 6, 395-410.	3.9	224
2	Recognition of dynamic hand gestures. Pattern Recognition, 2003, 36, 2069-2081.	5.1	125
3	Coded Caching Schemes With Reduced Subpacketization From Linear Block Codes. IEEE Transactions on Information Theory, 2018, 64, 3099-3120.	1.5	82
4	Improved Lower Bounds for Coded Caching. IEEE Transactions on Information Theory, 2017, 63, 4388-4413.	1.5	77
5	The design of efficiently-encodable rate-compatible LDPC codes - [transactions papers]. IEEE Transactions on Communications, 2009, 57, 365-375.	4.9	65
6	Overlay Protection Against Link Failures Using Network Coding. IEEE/ACM Transactions on Networking, 2011, 19, 1071-1084.	2.6	51
7	Fractional Repetition Codes With Flexible Repair From Combinatorial Designs. IEEE Transactions on Information Theory, 2016, 62, 1565-1591.	1.5	40
8	Universally Decodable Matrices for Distributed Matrix-Vector Multiplication. , 2019, , .		39
9	Communicating the sum of sources over a network. , 2008, , .		37
10	C^{3}LES: Codes for Coded Computation that Leverage Stragglers. , 2018, , .		36
11	Repairable replication-based storage systems using resolvable designs. , 2012, , .		30
12	Coded caching for networks with the resolvability property. , 2016, , .		30
13	Degrees of Freedom Region for an Interference Network With General Message Demands. IEEE Transactions on Information Theory, 2012, 58, 3787-3797.	1.5	28
14	Communicating the Sum of Sources Over a Network. IEEE Journal on Selected Areas in Communications, 2013, 31, 655-665.	9.7	27
15	Straggler-Resistant Distributed Matrix Computation via Coding Theory: Removing a Bottleneck in Large-Scale Data Processing. IEEE Signal Processing Magazine, 2020, 37, 136-145.	4.6	25
16	Leveraging Coding Techniques for Speeding up Distributed Computing. , 2018, , .		22
17	Distributed Matrix-Vector Multiplication: A Convolutional Coding Approach. , 2019, , .		22
18	Communicating the sum of sources in a 3-sources/3-terminals network. , 2009, , .		20

#	Article	IF	Citations
19	Resolvable Designs for Speeding Up Distributed Computing. IEEE/ACM Transactions on Networking, 2020, 28, 1657-1670.	2.6	20
20	Coded Sparse Matrix Computation Schemes That Leverage Partial Stragglers. IEEE Transactions on Information Theory, 2022, 68, 4156-4181.	1.5	20
21	Low subpacketization schemes for coded caching. , 2017, , .		19
22	Efficient and Robust Distributed Matrix Computations via Convolutional Coding. IEEE Transactions on Information Theory, 2021, 67, 6266-6282.	1.5	17
23	Minimum Cost Distributed Source Coding Over a Network. IEEE Transactions on Information Theory, 2011, 57, 461-475.	1.5	16
24	On the Multiple-Unicast Capacity of 3-Source, 3-Terminal Directed Acyclic Networks. IEEE/ACM Transactions on Networking, 2014, 22, 285-299.	2.6	16
25	Numerically Stable Coded Matrix Computations via Circulant and Rotation Matrix Embeddings. IEEE Transactions on Information Theory, 2022, 68, 2684-2703.	1.5	16
26	Design and analysis of E^2RC codes. IEEE Journal on Selected Areas in Communications, 2009, 27, 889-898.	9.7	14
27	Replication based storage systems with local repair. , 2013, , .		14
28	Erasure Coding for Distributed Matrix Multiplication for Matrices With Bounded Entries. IEEE Communications Letters, 2019, 23, 8-11.	2.5	14
29	Minimum cost distributed source coding over a network. , 2007, , .		13
30	Maximum-likelihood sequence detector for dynamic mode high density probe storage. IEEE Transactions on Communications, 2010, 58, 1686-1694.	4.9	13
31	Improved Compression of Network Coding Vectors Using Erasure Decoding and List Decoding. IEEE Communications Letters, 2010, 14, 749-751.	2.5	13
32	A Note on the Multiple Unicast Capacity of Directed Acyclic Networks. , 2011, , .		11
33	Coded Caching with Low Subpacketization Levels. , 2016, , .		11
34	Overlay protection against link failures using network coding. , 2008, , .		10
35	Minimum Cost Mirror Sites Using Network Coding: Replication versus Coding at the Source Nodes. IEEE Transactions on Information Theory, 2011, 57, 1080-1091.	1.5	10
36	Constructions of fractional repetition codes from combinatorial designs. , 2013, , .		10

#	Article	IF	Citations
37	Asynchronous coded caching. , 2017, , .		10
38	Protection Against Link Errors and Failures Using Network Coding. IEEE Transactions on Communications, 2011, 59, 518-528.	4.9	8
39	CAMR: Coded Aggregated MapReduce. , 2019, , .		8
40	Numerically stable coded matrix computations via circulant and rotation matrix embeddings. , 2021, , .		8
41	Rate and power allocation under the pairwise distributed source coding constraint. IEEE Transactions on Communications, 2009, 57, 3771-3781.	4.9	7
42	An achievable region for the double unicast problem based on a minimum cut analysis. , 2011, , .		7
43	On the multiple unicast capacity of 3-source, 3-terminal directed acyclic networks. , 2012, , .		7
44	Capacity of sum-networks for different message alphabets. , 2015, , .		7
45	Asynchronous Coded Caching With Uncoded Prefetching. IEEE/ACM Transactions on Networking, 2020, 28, 2146-2159.	2.6	7
46	A Unified Treatment of Partial Stragglers and Sparse Matrices in Coded Matrix Computation. IEEE Journal on Selected Areas in Information Theory, 2022, 3, 241-256.	1.9	7
47	Channel modeling and detector design for dynamic mode high density probe storage. , 2008, , .		6
48	Sum-networks from undirected graphs: Construction and capacity analysis. , 2014, , .		6
49	Sum-Networks From Incidence Structures: Construction and Capacity Analysis. IEEE Transactions on Information Theory, 2018, 64, 3461-3480.	1.5	6
50	Improved combinatorial algorithms for wireless information flow. , 2010, , .		5
51	Distributed Matrix Multiplication Using Group Algebra for On-Device Edge Computing. IEEE Signal Processing Letters, 2021, 28, 2097-2101.	2.1	5
52	Rate and power allocation under the pairwise distributed source coding constraint. , 2008, , .		4
53	Performance Evaluation for ML Sequence Detection in ISI Channels with Gauss Markov Noise. , 2010, , .		4
54	PREMIER — PRobabilistic error-correction using Markov inference in errored reads. , 2013, , .		4

#	Article	IF	Citations
55	On computation rates for arithmetic sum. , 2016, , .		4
56	Zero-error Function Computation on a Directed Acyclic Network. , 2018, , .		4
57	Protection against link errors and failures using network coding in overlay networks. , 2009, , .		3
58	Topography detection using innovations mismatch method for high speed and high density dynamic mode AFM. , 2013, , .		3
59	Algorithms for asynchronous coded caching. , 2017, , .		3
60	A Unified Treatment of Partial Stragglers and Sparse Matrices in Coded Matrix Computation. , 2021, , .		3
61	Error Analysis for ML Sequence Detection in ISI Channels With Gauss Markov Noise. IEEE Transactions on Signal Processing, 2013, 61, 3647-3652.	3.2	2
62	Federated Over-Air Subspace Tracking From Incomplete and Corrupted Data. IEEE Transactions on Signal Processing, 2022, 70, 3906-3920.	3.2	2
63	Multiple-Source Slepian-Wolf Coding Under a Linear Equation Correlation Model. IEEE Transactions on Communications, 2012, 60, 2402-2407.	4.9	1
64	Selfish Distributed Compression Over Networks: Correlation Induces Anarchy. IEEE Transactions on Information Theory, 2012, 58, 3182-3197.	1.5	1
65	Protograph E²RC Codes. , 2008, , .		0
66	Maximum-Likelihood Sequence Detector for Dynamic Mode High Density Probe Storage. , 2009, , .		0
67	High-speed nano-imaging using dynamic mode AFM: A MAP detection approach. , 2010, , .		0
68	Algebraic codes for Slepian-Wolf code design. , 2011, , .		0
69	Efficient and Robust Distributed Matrix Computations via Convolutional Coding. , 2021, , .		0