Viveck R Cadambe

List of Publications by Year
in descending order

28 papers	607 citations	1163117 8 h-index	1199594 12 g-index
28 all docs	28 docs citations	28 times ranked	342 citing authors

#	Article	IF	Citations
1	On the Optimal Recovery Threshold of Coded Matrix Multiplication. IEEE Transactions on Information Theory, 2020, 66, 278-301.	2.4	146
2	Coded convolution for parallel and distributed computing within a deadline. , 2017, , .		89
3	â€œShort-Dotâ€ Computing Large Linear Transforms Distributedly Using Coded Short Dot Products. IEEE Transactions on Information Theory, 2019, 65, 6171-6193.	2.4	75
4	On the optimal recovery threshold of coded matrix multiplication. , 2017, , .		53
5	Expanding the Compute-and-Forward Framework: Unequal Powers, Signal Levels, and Multiple Linear Combinations. IEEE Transactions on Information Theory, 2016, 62, 4879-4909.	2.4	43
6	Numerically Stable Polynomially Coded Computing. , 2019, , .		27
7	Numerically Stable Polynomially Coded Computing. IEEE Transactions on Information Theory, 2021, 67, 2758-2785.	2.4	25
8	Probabilistic characterisation of baseline noise in STR profiles. Forensic Science International: Genetics, 2015, 19, 107-122.	3.1	22
9	A coded shared atomic memory algorithm for message passing architectures. Distributed Computing, 2017, 30, 49-73.	0.8	17
10	Codes for Distributed Finite Alphabet Matrix-Vector Multiplication. , 2018, , .		17
11	Lagrange Coded Computing with Sparsity Constraints. , 2019, , .		15
12	Addressing Unreliability in Emerging Devices and Non-von Neumann Architectures Using Coded Computing. Proceedings of the IEEE, 2020, 108, 1219-1234.	21.3	12
13	File updates under random/arbitrary insertions and deletions. , 2015, , .		10
14	Cross-Iteration Coded Computing. , 2018, , .		10
15	Multi-Version Codingâ€"An Information-Theoretic Perspective of Consistent Distributed Storage. IEEE Transactions on Information Theory, 2018, 64, 4540-4561.	2.4	9
16	ϵ-Approximate Coded Matrix Multiplication Is Nearly Twice as Efficient as Exact Multiplication. IEEE Journal on Selected Areas in Information Theory, 2021, 2, 845-854.	2.5	8
17	File Updates Under Random/Arbitrary Insertions and Deletions. IEEE Transactions on Information Theory, 2017, 63, 6487-6513.	2.4	5
18	On multi-version coding for distributed storage. , 2014, , .		4

#	Article	IF	Citations
19	Consistent distributed storage of correlated data updates via multi-version coding. , 2016, , .		4
20	Alignment-Based Network Coding for Two-Unicast-Z Networks. IEEE Transactions on Information Theory, 2016, 62, 3183-3211.	2.4	4
21	A signal model for forensic DNA mixtures. , 2014, , .		3
22	Alphabet-size dependent bounds for exact repair in distributed storage. , 2015, , .		3
23	Multi-version Coding with Side Information. , 2018, , .		2
24	Harnessing Correlations in Distributed Erasure-Coded Key-Value Stores. IEEE Transactions on Communications, 2019, 67, 5907-5920.	7.8	2
25	E-Approximate Coded Matrix Multiplication is Nearly Twice as Efficient as Exact Multiplication. , 2021, , .		1
26	CassandrEAS: Highly Available and Storage-Efficient Distributed Key-Value Store with Erasure Coding. , 2020, , .		1
27	Fundamental Limits of Erasure-Coded Key-Value Stores With Side Information. IEEE Transactions on Communications, 2020, 68, 4126-4140.	7.8	0
28	3D Coded SUMMA: Communication-Efficient and Robust Parallel Matrix Multiplication. Lecture Notes in Computer Science, 2020, , 392-407.	1.3	0