# Mohammad Ali Maddah-Ali

List of Publications by Year
in descending order



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|---|---|---|---|
| 39 papers | 5,458 citations | 567281 15 h-index | 940533 16 g-index |
| 39 all docs | 39 docs citations | 39 times ranked | 2118 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Fundamental Limits of Caching. IEEE Transactions on Information Theory, 2014, 60, 2856-2867. | 2.4 | 1,342 |
| 2 | Communication Over MIMO X Channels: Interference Alignment, Decomposition, and Performance Analysis. IEEE Transactions on Information Theory, 2008, 54, 3457-3470. | 2.4 | 808 |
| 3 | Decentralized Coded Caching Attains Order-Optimal Memory-Rate Tradeoff. IEEE/ACM Transactions on Networking, 2015, 23, 1029-1040. | 3.8 | 493 |
| 4 | Completely Stale Transmitter Channel State Information is Still Very Useful. IEEE Transactions on Information Theory, 2012, 58, 4418-4431. | 2.4 | 414 |
| 5 | A Fundamental Tradeoff Between Computation and Communication in Distributed Computing. IEEE Transactions on Information Theory, 2018, 64, 109-128. | 2.4 | 294 |
| 6 | The Exact Rate-Memory Tradeoff for Caching With Uncoded Prefetching. IEEE Transactions on Information Theory, 2018, 64, 1281-1296. | 2.4 | 236 |
| 7 | Coded Caching With Nonuniform Demands. IEEE Transactions on Information Theory, 2017, 63, 1146-1158. | 2.4 | 208 |
| 8 | Hierarchical Coded Caching. IEEE Transactions on Information Theory, 2016, 62, 3212-3229. | 2.4 | 174 |
| 9 | Online Coded Caching. IEEE/ACM Transactions on Networking, 2016, 24, 836-845. | 3.8 | 164 |
| 10 | Signaling over MIMO Multi-Base Systems: Combination of Multi-Access and Broadcast Schemes. , 2006, , . | | 153 |
| 11 | Cache-aided interference channels. , 2015, , . | | 137 |
| 12 | Straggler Mitigation in Distributed Matrix Multiplication: Fundamental Limits and Optimal Coding. IEEE Transactions on Information Theory, 2020, 66, 1920-1933. | 2.4 | 131 |
| 13 | A Unified Coding Framework for Distributed Computing with Straggling Servers. , 2016, , . | | 127 |
| 14 | Coded MapReduce. , 2015, , . | | 113 |
| 15 | Characterizing the Rate-Memory Tradeoff in Cache Networks Within a Factor of 2. IEEE Transactions on Information Theory, 2019, 65, 647-663. | 2.4 | 99 |
| 16 | A Scalable Framework for Wireless Distributed Computing. IEEE/ACM Transactions on Networking, 2017, 25, 2643-2654. | 3.8 | 87 |
| 17 | Completely stale transmitter channel state information is still very useful. , 2010, , . | | 80 |
| 18 | Coding for caching: fundamental limits and practical challenges. , 2016, 54, 23-29. | | 65 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | Cellular Interference Alignment. IEEE Transactions on Information Theory, 2015, 61, 1194-1217. | 2.4 | 56 |
| 20 | Private function retrieval. , 2018, , . | | 44 |
| 21 | The exact rate-memory tradeoff for caching with uncoded prefetching. , 2017, , . | | 42 |
| 22 | Fundamental tradeoff between computation and communication in distributed computing. , 2016, , . | | 41 |
| 23 | On fading broadcast channels with partial channel state information at the transmitter. , 2012, , . | | 24 |
| 24 | Coded distributed computing: Fundamental limits and practical challenges. , 2016, , . | | 21 |
| 25 | Approximate Capacity Region of the MISO Broadcast Channels With Delayed CSIT. IEEE Transactions on Communications, 2016, 64, 2913-2924. | 7.8 | 19 |
| 26 | Edge-Facilitated Wireless Distributed Computing. , 2016, , . | | 18 |
| 27 | Interference neutralization in distributed lossy source coding. , 2010, , . | | 15 |
| 28 | CodedSketch: A Coding Scheme for Distributed Computation of Approximated Matrix Multiplication. IEEE Transactions on Information Theory, 2021, 67, 4185-4196. | 2.4 | 15 |
| 29 | Cellular interference alignment. , 2014, , . | | 10 |
| 30 | Erasure Coding for Decentralized Coded Caching. , 2018, , . | | 8 |
| 31 | On the Capacity of Time-Varying Channels With Periodic Feedback. IEEE Transactions on Information Theory, 2007, 53, 2910-2915. | 2.4 | 6 |
| 32 | Approximating the rate-distortion region of the distributed source coding for three jointly Gaussian tree-structured sources. , 2009, , . | | 4 |
| 33 | Blind index coding over wireless channels: the value of repetition coding. , 2015, , . | | 3 |
| 34 | The Discrepancy Attack on Polyshard-ed Blockchains. , 2021, , . | | 3 |
| 35 | Decomposition of the MIMO X Channels. , 2007, , . | | 2 |
| 36 | Design cost versus access cost trade-off in distributed storage systems: A combinatorial approach. , 2016, , . | | 1 |

| # | Article | IF | Citations |
|---|---|---|---|
| 37 | Subspace Coding for Coded Caching: Decentralized and Centralized Placements Meet for Three Users. , 2019, , . | | 1 |
| 38 | Communication-optimal coding designs for caching networks. , 2017, , . | | 0 |
| 39 | Cache-Aided Two-User Broadcast Channels with State Information at Receivers. , 2019, , . | | 0 |