

Michael Langberg

List of Publications by Year in descending order

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69
papers

1,203
citations

516561

16
h-index

526166

27
g-index

69
all docs

69
docs citations

69
times ranked

584
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|----------------------------------------------------------------------------------------------------------------------------------------|-----|-----------|
| 1 | Approximation Algorithms for Maximization Problems Arising in Graph Partitioning. Journal of Algorithms, 2001, 41, 174-211. | 0.9 | 112 |
| 2 | An Equivalence Between Network Coding and Index Coding. IEEE Transactions on Information Theory, 2015, 61, 2478-2487. | 1.5 | 91 |
| 3 | Local graph coloring and index coding. , 2013, , . | | 72 |
| 4 | On the Hardness of Approximating the Network Coding Capacity. IEEE Transactions on Information Theory, 2011, 57, 1008-1014. | 1.5 | 52 |
| 5 | Communication Efficient Secret Sharing. IEEE Transactions on Information Theory, 2016, 62, 7195-7206. | 1.5 | 51 |
| 6 | On the hardness of approximating the network coding capacity. , 2008, , . | | 43 |
| 7 | The RPR2 rounding technique for semidefinite programs. Journal of Algorithms, 2006, 60, 1-23. | 0.9 | 40 |
| 8 | f-Sensitivity Distance Oracles and Routing Schemes. Algorithmica, 2012, 63, 861-882. | 1.0 | 35 |
| 9 | Network Codes Resilient to Jamming and Eavesdropping. IEEE/ACM Transactions on Networking, 2014, 22, 1978-1987. | 2.6 | 34 |
| 10 | Adversarial models and resilient schemes for network coding. , 2008, , . | | 33 |
| 11 | Oblivious Communication Channels and Their Capacity. IEEE Transactions on Information Theory, 2008, 54, 424-429. | 1.5 | 32 |
| 12 | On the multiple unicast network coding, conjecture. , 2009, , . | | 32 |
| 13 | Improved approximation of Max-Cut on graphs of bounded degree. Journal of Algorithms, 2002, 43, 201-219. | 0.9 | 30 |
| 14 | Graph theory versus minimum rank for index coding. , 2014, , . | | 30 |
| 15 | Universal rewriting in constrained memories. , 2009, , . | | 28 |
| 16 | Upper Bounds on the Capacity of Binary Channels With Causal Adversaries. IEEE Transactions on Information Theory, 2013, 59, 3753-3763. | 1.5 | 27 |
| 17 | Communicating the Sum of Sources Over a Network. IEEE Journal on Selected Areas in Communications, 2013, 31, 655-665. | 9.7 | 27 |
| 18 | Graphs with Tiny Vector Chromatic Numbers and Huge Chromatic Numbers. SIAM Journal on Computing, 2004, 33, 1338-1368. | 0.8 | 26 |

| # | ARTICLE | IF | CITATIONS |
|----|---------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------|
| 19 | Constant-Weight Gray Codes for Local Rank Modulation. IEEE Transactions on Information Theory, 2011, 57, 7431-7442. | 1.5 | 26 |
| 20 | A Characterization of the Capacity of Online (causal) Binary Channels. , 2015, , . | | 23 |
| 21 | Sequence reconstruction for Grassmann graphs and permutations. , 2013, , . | | 21 |
| 22 | Asymmetric Error Correction and Flash-Memory Rewriting Using Polar Codes. IEEE Transactions on Information Theory, 2016, 62, 4024-4038. | 1.5 | 21 |
| 23 | Sufficiently Myopic Adversaries Are Blind. IEEE Transactions on Information Theory, 2019, 65, 5718-5736. | 1.5 | 21 |
| 24 | Communicating the sum of sources in a 3-sources/3-terminals network. , 2009, , . | | 20 |
| 25 | Codes Against Online Adversaries: Large Alphabets. IEEE Transactions on Information Theory, 2013, 59, 3304-3316. | 1.5 | 19 |
| 26 | A note on approximating Max-Bisection on regular graphs. Information Processing Letters, 2001, 79, 181-188. | 0.4 | 18 |
| 27 | Coding against delayed adversaries. , 2010, , . | | 18 |
| 28 | Beating the Gilbert-Varshamov bound for online channels. , 2011, , . | | 14 |
| 29 | Improved upper bounds on the capacity of binary channels with causal adversaries. , 2012, , . | | 14 |
| 30 | Coded Cooperative Data Exchange Problem for General Topologies. IEEE Transactions on Information Theory, 2015, 61, 5656-5669. | 1.5 | 13 |
| 31 | A Characterization of the Number of Subsequences Obtained via the Deletion Channel. IEEE Transactions on Information Theory, 2015, 61, 2300-2312. | 1.5 | 12 |
| 32 | Generalized Gray Codes for Local Rank Modulation. IEEE Transactions on Information Theory, 2013, 59, 6664-6673. | 1.5 | 10 |
| 33 | Trajectory Codes for Flash Memory. IEEE Transactions on Information Theory, 2013, 59, 4530-4541. | 1.5 | 10 |
| 34 | A bit of delay is sufficient and stochastic encoding is necessary to overcome online adversarial erasures. , 2016, , . | | 9 |
| 35 | Coding for the ℓ_∞ -Limited Permutation Channel. IEEE Transactions on Information Theory, 2017, 63, 7676-7686. | 1.5 | 9 |
| 36 | The Unbounded Benefit of Encoder Cooperation for the k-User MAC. IEEE Transactions on Information Theory, 2018, 64, 3655-3678. | 1.5 | 9 |

| # | ARTICLE | IF | CITATIONS |
|----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------|
| 37 | Approximating Maximum Subgraphs without Short Cycles. SIAM Journal on Discrete Mathematics, 2010, 24, 255-269. | 0.4 | 8 |
| 38 | Routing for security in networks with adversarial nodes. , 2013, , . | | 8 |
| 39 | Outer bounds and a functional study of the edge removal problem. , 2013, , . | | 7 |
| 40 | On the Capacity Advantage of a Single Bit. , 2016, , . | | 7 |
| 41 | Single-Unicast Secure Network Coding and Network Error Correction are as Hard as Multiple-Unicast Network Coding. IEEE Transactions on Information Theory, 2018, 64, 4496-4512. | 1.5 | 7 |
| 42 | One-shot capacity of discrete channels. , 2010, , . | | 6 |
| 43 | Can negligible cooperation increase network reliability?. , 2016, , . | | 6 |
| 44 | On tightness of an entropic region outer bound for network coding and the edge removal property. , 2016, , . | | 6 |
| 45 | The capacity of online (causal) q -ary error-erasure channels. , 2016, , . | | 6 |
| 46 | Symmetrizability for Myopic AVCs. , 2020, , . | | 6 |
| 47 | Analysis of Incomplete Data and an Intrinsic-Dimension Helly Theorem. Discrete and Computational Geometry, 2008, 40, 537-560. | 0.4 | 5 |
| 48 | On an equivalence of the reduction of k -unicast to 2-unicast capacity and the edge removal property. , 2015, , . | | 5 |
| 49 | Data movement in flash memories. , 2009, , . | | 4 |
| 50 | Contraction and Expansion of Convex Sets. Discrete and Computational Geometry, 2009, 42, 594-614. | 0.4 | 4 |
| 51 | Generalized Gray codes for local rank modulation. , 2011, , . | | 4 |
| 52 | Can Negligible Rate Increase Network Reliability?. IEEE Transactions on Information Theory, 2018, 64, 4282-4293. | 1.5 | 4 |
| 53 | The Capacity of Online (Causal) q -Ary Error-Erasure Channels. IEEE Transactions on Information Theory, 2019, 65, 3384-3411. | 1.5 | 4 |
| 54 | Reduced-Rank L1-Norm Principal-Component Analysis With Performance Guarantees. IEEE Transactions on Signal Processing, 2021, 69, 240-255. | 3.2 | 4 |

| # | ARTICLE | IF | CITATIONS |
|----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------|
| 55 | A characterization of the capacity region for network coding with dependent sources. , 2016, , . | | 3 |
| 56 | Constructing cospectral graphs via a new form of graph product. Linear and Multilinear Algebra, 2018, 66, 1838-1852. | 0.5 | 3 |
| 57 | Optimal Universal Schedules for Discrete Broadcast. IEEE Transactions on Information Theory, 2008, 54, 4365-4372. | 1.5 | 2 |
| 58 | Data movement and aggregation in flash memories. , 2010, , . | | 2 |
| 59 | Single-source/sink network error correction is as hard as multiple-unicast. , 2014, , . | | 2 |
| 60 | Secure Network Coding in the Setting in Which a Non-Source Node May Generate Random Keys. , 2019, , . | | 2 |
| 61 | Edge removal in undirected networks. , 2021, , . | | 2 |
| 62 | Is there a canonical network for network information theory?. , 2014, , . | | 1 |
| 63 | Can Negligible Cooperation Increase Capacity? The Average-Error Case. , 2018, , . | | 1 |
| 64 | The Edge-Removal Problem's Connections to the Zero-Error and δ -Dependence Problems in Network Coding. IEEE Transactions on Information Theory, 2020, 66, 900-913. | 1.5 | 1 |
| 65 | Every Bit Counts: Second-Order Analysis of Cooperation in the Multiple-Access Channel. , 2021, , . | | 1 |
| 66 | Error correcting code for flash memories. , 2013, , . | | 0 |
| 67 | The Birthday Problem and Zero-Error List Codes. IEEE Transactions on Information Theory, 2021, 67, 5791-5803. | 1.5 | 0 |
| 68 | Negligible Cooperation: Contrasting the Maximal- and Average-Error Cases. IEEE Transactions on Information Theory, 2021, 67, 5885-5902. | 1.5 | 0 |
| 69 | Latency and Alphabet Size in the Context of Multicast Network Coding. IEEE Transactions on Information Theory, 2022, 68, 4289-4300. | 1.5 | 0 |