

# Michael W Mahoney

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/1399012/publications.pdf>

Version: 2024-02-01

20  
papers

2,008  
citations

1040056

9  
h-index

1125743

13  
g-index

20  
all docs

20  
docs citations

20  
times ranked

1740  
citing authors

#	ARTICLE	IF	CITATIONS
1	Community Structure in Large Networks: Natural Cluster Sizes and the Absence of Large Well-Defined Clusters. <i>Internet Mathematics</i> , 2009, 6, 29-123.	0.7	1,246
2	Fast Monte Carlo Algorithms for Matrices I: Approximating Matrix Multiplication. <i>SIAM Journal on Computing</i> , 2006, 36, 132-157.	1.0	288
3	RandNLA. <i>Communications of the ACM</i> , 2016, 59, 80-90.	4.5	119
4	Think locally, act locally: Detection of small, medium-sized, and large communities in large networks. <i>Physical Review E</i> , 2015, 91, 012821.	2.1	88
5	Sub-sampled Newton methods. <i>Mathematical Programming</i> , 2019, 174, 293-326.	2.4	56
6	Newton-type methods for non-convex optimization under inexact Hessian information. <i>Mathematical Programming</i> , 2020, 184, 35-70.	2.4	43
7	A local perspective on community structure in multilayer networks. <i>Network Science</i> , 2017, 5, 144-163.	1.0	42
8	Second-order Optimization for Non-convex Machine Learning: an Empirical Study. , 2020, , 199-207.		35
9	Group Collaborative Representation for Image Set Classification. <i>International Journal of Computer Vision</i> , 2019, 127, 181-206.	15.6	25
10	Predicting trends in the quality of state-of-the-art neural networks without access to training or testing data. <i>Nature Communications</i> , 2021, 12, 4122.	12.8	23
11	Heavy-Tailed Universality Predicts Trends in Test Accuracies for Very Large Pre-Trained Deep Neural Networks. , 2020, , 505-513.		11
12	Alchemist: An Apache Spark "MPI interface. <i>Concurrency Computation Practice and Experience</i> , 2018, 31, e5026.	2.2	9
13	Variational perspective on local graph clustering. <i>Mathematical Programming</i> , 2019, 174, 553-573.	2.4	6
14	Inexact Nonconvex Newton-Type Methods. <i>INFORMS Journal on Optimization</i> , 2021, 3, 154-182.	1.4	4
15	Improved Guarantees and a Multiple-descent Curve for Column Subset Selection and the Nystrom Method (Extended Abstract). , 2021, , .		4
16	JumpReLU: A Retrofit Defense Strategy for Adversarial Attacks. , 2020, , .		3
17	A Multi-Platform Evaluation of the Randomized CX Low-Rank Matrix Factorization in Spark. , 2016, , .		2
18	Newton-ADMM: A Distributed GPU-Accelerated Optimizer for Multiclass Classification Problems. , 2020, , .		2

#	ARTICLE	IF	CITATIONS
19	Statistical Mechanics Methods for Discovering Knowledge from Modern Production Quality Neural Networks. , 2019, , .		1
20	Newton-MR: Inexact Newton Method with minimum residual sub-problem solver. EURO Journal on Computational Optimization, 2022, 10, 100035.	2.4	1