Deanna Needell

List of Publications by Citations

62	2,783	20	52
papers	citations	h-index	g-index
69	3,486	2.1	6.01
ext. papers	ext. citations	avg, IF	L-index

#	Paper	IF	Citations
62	Uniform Uncertainty Principle and Signal Recovery via Regularized Orthogonal Matching Pursuit. *Foundations of Computational Mathematics*, **2009**, 9, 317-334	2.7	559
61	Compressed sensing with coherent and redundant dictionaries. *Applied and Computational Harmonic Analysis*, **2011**, 31, 59-73	3.1	501
60	Signal Recovery From Incomplete and Inaccurate Measurements Via Regularized Orthogonal Matching Pursuit. *IEEE Journal on Selected Topics in Signal Processing*, **2010**, 4, 310-316	7.5	493
59	Stable Image Reconstruction Using Total Variation Minimization. *SIAM Journal on Imaging Sciences*, **2013**, 6, 1035-1058	1.9	150
58	Randomized Kaczmarz solver for noisy linear systems. *BIT Numerical Mathematics*, **2010**, 50, 395-403	1.7	109
57	Paved with good intentions: Analysis of a randomized block Kaczmarz method. *Linear Algebra and Its Applications*, **2014**, 441, 199-221	0.9	90
56	HOSVD-Based Algorithm for Weighted Tensor Completion. *Journal of Imaging*, **2021**, 7, 110	3.1	78
55	Convergence Properties of the Randomized Extended Gauss--Seidel and Kaczmarz Methods. *SIAM Journal on Matrix Analysis and Applications*, **2015**, 36, 1590-1604	1.5	75
54	Near-optimal compressed sensing guarantees for total variation minimization. *IEEE Transactions on Image Processing*, **2013**, 22, 3941-9	8.7	67
53	Stochastic gradient descent, weighted sampling, and the randomized Kaczmarz algorithm. *Mathematical Programming*, **2016**, 155, 549-573	2.1	66
52	. *IEEE Transactions on Information Theory*, **2013**, 59, 6820-6829	2.8	64
51	Acceleration of randomized Kaczmarz method via the Johnson□indenstrauss Lemma. *Numerical Algorithms*, **2011**, 58, 163-177	2.1	64
50	Randomized block Kaczmarz method with projection for solving least squares. *Linear Algebra and Its Applications*, **2015**, 484, 322-343	0.9	50
49	. *IEEE Transactions on Information Theory*, **2017**, 63, 3368-3385	2.8	44
48	Greedy signal recovery review **2008**,		41
47	Compressive Sensing with Redundant Dictionaries and Structured Measurements. *SIAM Journal on Mathematical Analysis*, **2015**, 47, 4606-4629	1.7	40
46	Noisy signal recovery via iterative reweighted L1-minimization **2009**,		36

45	Two-Subspace Projection Method for Coherent Overdetermined Systems. *Journal of Fourier Analysis and Applications*, **2013**, 19, 256-269	1.1	23
44	Linear Convergence of Stochastic Iterative Greedy Algorithms With Sparse Constraints. *IEEE Transactions on Information Theory*, **2017**, 63, 6869-6895	2.8	22
43	A Sampling Kaczmarz--Motzkin Algorithm for Linear Feasibility. *SIAM Journal of Scientific Computing* , **2017**, 39, S66-S87	2.6	21
42	Rows versus Columns: Randomized Kaczmarz or Gauss--Seidel for Ridge Regression. *SIAM Journal of Scientific Computing*, **2017**, 39, S528-S542	2.6	18
41	Mixed operators in compressed sensing **2010**,		16
40	Greedy signal space methods for incoherence and beyond. *Applied and Computational Harmonic Analysis*, **2015**, 39, 1-20	3.1	15
39	On Motzkin's method for inconsistent linear systems. *BIT Numerical Mathematics*, **2019**, 59, 387-401	1.7	14
38	Biquasiles and dual graph diagrams. *Journal of Knot Theory and Its Ramifications*, **2017**, 26, 1750048	0.3	12
37	Constrained Adaptive Sensing. *IEEE Transactions on Signal Processing*, **2016**, 64, 5437-5449	4.8	12
36	An algebraic perspective on integer sparse recovery. *Applied Mathematics and Computation*, **2019**, 340, 31-42	2.7	11
35	Block Kaczmarz Method with Inequalities. *Journal of Mathematical Imaging and Vision*, **2015**, 52, 385-396	1.6	9
34	Near oracle performance and block analysis of signal space greedy methods. *Journal of Approximation Theory*, **2015**, 194, 157-174	0.9	7
33	Iterative Methods for Solving Factorized Linear Systems. *SIAM Journal on Matrix Analysis and Applications*, **2018**, 39, 104-122	1.5	7
32	IRG2016: RBF-based regional geoid model of Iran. *Studia Geophysica Et Geodaetica*, **2018**, 62, 380-407	0.7	7
31	Randomized Kaczmarz with averaging. *BIT Numerical Mathematics*, **2021**, 61, 337-359	1.7	7
30	On block Gaussian sketching for the Kaczmarz method. *Numerical Algorithms*, **2021**, 86, 443-473	2.1	5
29	Randomized Projection Methods for Linear Systems with Arbitrarily Large Sparse Corruptions. *SIAM Journal of Scientific Computing*, **2019**, 41, S19-S36	2.6	4
28	. *IEEE Transactions on Signal Processing*, **2019**, 67, 1875-1888	4.8	4

27	Modified fuzzy clustering with segregated cluster centroids. *Neurocomputing*, **2019**, 361, 10-18	5.4	4
26	On Adaptive Sketch-and-Project for Solving Linear Systems. *SIAM Journal on Matrix Analysis and Applications*, **2021**, 42, 954-989	1.5	4
25	Antibiotic Treatment Response in Chronic Lyme Disease: Why Do Some Patients Improve While Others Do Not?. *Healthcare (Switzerland)*, **2020**, 8,	3.4	3
24	An Introduction to Fourier Analysis with Applications to Music. *Journal of Humanistic Mathematics*, **2014**, 4, 72-91	1.3	3
23	. *IEEE Transactions on Information Theory*, **2021**, 67, 1264-1290	2.8	3
22	A Bayesian Approach for Asynchronous Parallel Sparse Recovery **2018**,		3
21	Matrix Completion for Structured Observations **2018**,		3
20	Lattices from equiangular tight frames. *Linear Algebra and Its Applications*, **2016**, 510, 395-420	0.9	2
19	Randomized projections for corrupted linear systems **2018**,		2
18	Robust CUR Decomposition: Theory and Imaging Applications. *SIAM Journal on Imaging Sciences*, **2021**, 14, 1472-1503	1.9	2
17	Sketching for Motzkin Iterative Method for Linear Systems **2019**,		2
16	Boltzmann enhancements of biquasile counting invariants. *Journal of Knot Theory and Its Ramifications*, **2018**, 27, 1850068	0.3	2
15	Stochastic Gradient Descent Variants for Corrupted Systems of Linear Equations **2020**,		1
14	Optimizing Quantization for Lasso Recovery. *IEEE Signal Processing Letters*, **2018**, 25, 45-49	3.2	1
13	Guaranteed Sparse Signal Recovery with Highly Coherent Sensing Matrices. *Sampling Theory in Signal and Information Processing*, **2014**, 13, 91-109	0.5	1
12	Stochastic Iterative Hard Thresholding for Low-Tucker-Rank Tensor Recovery **2020**,		1
11	Feature Selection from Lyme Disease Patient Survey Using Machine Learning. *Algorithms*, **2020**, 13, 334	1.8	1
10	Lower Memory Oblivious (Tensor) Subspace Embeddings with Fewer Random Bits: Modewise Methods for Least Squares. *SIAM Journal on Matrix Analysis and Applications*, **2021**, 42, 376-416	1.5	1

List of Publications

9	Quantile-Based Iterative Methods for Corrupted Systems of Linear Equations. *SIAM Journal on Matrix Analysis and Applications*, **2022**, 43, 605-637	1.5	1
8	Guided Semi-Supervised Non-Negative Matrix Factorization. *Algorithms*, **2022**, 15, 136	1.8	1
7	Tribracket Modules. *International Journal of Mathematics*, **2020**, 31, 2050028	0.5	0
6	An iterative method for classification of binary data. *Information and Inference*, **2021**, 10, 261-283	2.4	0
5	Data-driven algorithm selection and tuning in optimization and signal processing. *Annals of Mathematics and Artificial Intelligence*, **2020**, 89, 711	0.8	
4	Bias of Homotopic Gradient Descent for the Hinge Loss. *Applied Mathematics and Optimization*, **2020**, 84, 621	1.5	
3	A Simple Recovery Framework for Signals with Time-Varying Sparse Support. *Association for Women in Mathematics Series*, **2021**, 211-230	0.2	
2	Classification Scheme for Binary Data with Extensions. *Applied and Numerical Harmonic Analysis*, **2019**, 129-151	0.6	
1	Analysis of fast structured dictionary learning. *Information and Inference*, **2020**, 9, 785-811	2.4	