Thomas Strohmer

List of Publications by Year
in descending order

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65 papers	5,994 citations	185998 28 h-index	161609 54 g-index
65 all docs	65 docs citations	65 times ranked	3371 citing authors

#	Article	IF	Citations
1	A Performance Guarantee for Spectral Clustering. SIAM Journal on Mathematics of Data Science, 2021, 3, 369-387.	1.0	4
2	When do birds of a feather flock together? k-Means, proximity, and conic programming. Mathematical Programming, 2020, 179, 295-341.	1.6	16
3	Certifying Global Optimality of Graph Cuts via Semidefinite Relaxation: A Performance Guarantee for Spectral Clustering. Foundations of Computational Mathematics, 2020, 20, 367-421.	1.5	6
4	The numerics of phase retrieval. Acta Numerica, 2020, 29, 125-228.	6.3	46
5	Painless Breakupsâ€"Efficient Demixing of Low Rank Matrices. Journal of Fourier Analysis and Applications, 2019, 25, 1-31.	0.5	7
6	Regularized gradient descent: a non-convex recipe for fast joint blind deconvolution and demixing. Information and Inference, 2019, 8, 1-49.	0.9	23
7	Rapid, robust, and reliable blind deconvolution via nonconvex optimization. Applied and Computational Harmonic Analysis, 2019, 47, 893-934.	1.1	73
8	Self-Calibration and Bilinear Inverse Problems via Linear Least Squares. SIAM Journal on Imaging Sciences, 2018, 11, 252-292.	1.3	27
9	Blind Deconvolution Meets Blind Demixing: Algorithms and Performance Bounds. IEEE Transactions on Information Theory, 2017, 63, 4497-4520.	1.5	62
10	Fast blind deconvolution and blind demixing via nonconvex optimization. , 2017, , .		1
11	You Can Have It All â€“ Fast Algorithms for Blind Deconvolution, Self-Calibration, and Demixing. , 2017, , .		0
12	Simultaneous blind deconvolution and blind demixing via convex programming. , 2016, , .		2
13	Applied Harmonic Analysis and Sparse Approximation. Oberwolfach Reports, 2015, 12, 2189-2263.	0.0	0
14	Adventures in Compressive Sensing Based MIMO Radar. Applied and Numerical Harmonic Analysis, 2015, , 285-326.	0.1	2
15	Self-calibration and biconvex compressive sensing. Inverse Problems, 2015, 31, 115002.	1.0	174
16	Sparse Signal Processing Concepts for Efficient 5G System Design. IEEE Access, 2015, 3, 195-208.	2.6	193
17	Phase Retrieval via Matrix Completion. SIAM Review, 2015, 57, 225-251.	4.2	293
18	Localization of Matrix Factorizations. Foundations of Computational Mathematics, 2015, 15, 931-951.	1.5	9

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19	Remote Sensing via â„“ 1-Minimization. Foundations of Computational Mathematics, 2014, 14, 115-150.	1.5	20
20	Analysis of sparse MIMO radar. Applied and Computational Harmonic Analysis, 2014, 37, 361-388.	1.1	42
21	PhaseLift: Exact and Stable Signal Recovery from Magnitude Measurements via Convex Programming. Communications on Pure and Applied Mathematics, 2013, 66, 1241-1274.	1.2	808
22	Phase Retrieval via Matrix Completion. SIAM Journal on Imaging Sciences, 2013, 6, 199-225.	1.3	391
23	Accurate imaging of moving targets via random sensor arrays and Kerdock codes. Inverse Problems, 2013, 29, 085001.	1.0	14
24	Sparsity Enhanced Decision Feedback Equalization. IEEE Transactions on Signal Processing, 2012, 60, 2422-2432.	3.2	6
25	Measure What Should be Measured: Progress and Challenges in Compressive Sensing. IEEE Signal Processing Letters, 2012, 19, 887-893.	2.1	99
26	Some theoretical results for compressed MIMO radar. , 2011, , .		1
27	Eigenvalue Estimates and Mutual Information for the Linear Time-Varying Channel. IEEE Transactions on Information Theory, 2011, 57, 5710-5719.	1.5	4
28	Convergence Analysis of the Finite Section Method and Banach Algebras of Matrices. Integral Equations and Operator Theory, 2010, 67, 183-202.	0.4	68
29	Average power reduction for MSM optical signals via sparsity and uncertainty principle. IEEE Transactions on Communications, 2010, 58, 1505-1513.	4.9	3
30	General Deviants: An Analysis of Perturbations in Compressed Sensing. IEEE Journal on Selected Topics in Signal Processing, 2010, 4, 342-349.	7.3	263
31	Decision feedback equalization with sparsity driven thresholding. , 2010, , .		0
32	Compressive Spectral Clustering. AIP Conference Proceedings, 2010, , .	0.3	7
33	Compressed Remote Sensing of Sparse Objects. SIAM Journal on Imaging Sciences, 2010, 3, 595-618.	1.3	106
34	A Randomized Kaczmarz Algorithm with Exponential Convergence. Journal of Fourier Analysis and Applications, 2009, 15, 262-278.	0.5	500
35	Comments on the Randomized Kaczmarz Method. Journal of Fourier Analysis and Applications, 2009, 15, 437-440.	0.5	27
36	High-Resolution Radar via Compressed Sensing. IEEE Transactions on Signal Processing, 2009, 57, 2275-2284.	3.2	859

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37	Compressed sensing for MIMO radar - algorithms and performance. , 2009, , .		52
38	A note on equiangular tight frames. Linear Algebra and Its Applications, 2008, 429, 326-330.	0.4	34
39	Pulse Construction in OFDM Systems Via Convex Optimization. IEEE Transactions on Communications, 2008, 56, 1225-1230.	4.9	6
40	Compressed sensing radar. , 2008, , .		36
41	Krylov Subspace Algorithms and Circulant-Embedding Method for Efficient Wideband Single-Carrier Equalization. IEEE Transactions on Signal Processing, 2008, 56, 2483-2495.	3.2	5
42	Compressed sensing radar. Proceedings of the IEEE International Conference on Acoustics, Speech, and Signal Processing, 2008, , .	1.8	57
43	Fast Algorithms for Blind Calibration in Time-Interleaved Analog-to-Digital Converters. , 2007, , .		9
44	Pseudodifferential operators on locally compact abelian groups and SjÃ¶strand's symbol class. Journal Fur Die Reine Und Angewandte Mathematik, 2007, 2007, .	0.4	16
45	Pseudodifferential operators and Banach algebras in mobile communications. Applied and Computational Harmonic Analysis, 2006, 20, 237-249.	1.1	65
46	The finite section method and problems in frame theory. Journal of Approximation Theory, 2005, 133, 221-237.	0.5	73
47	Wilson Bases for General Time-Frequency Lattices. SIAM Journal on Mathematical Analysis, 2005, 37, 685-711.	0.9	28
48	Implementations of Shannonâ€™s sampling theorem, a time-frequency approach. Sampling Theory in Signal and Information Processing, 2005, 4, 2-17.	0.2	7
49	Fast scattered data approximation with Neumann and other boundary conditions. Linear Algebra and Its Applications, 2004, 391, 99-123.	0.4	10
50	Grassmannian frames with applications to coding and communication. Applied and Computational Harmonic Analysis, 2003, 14, 257-275.	1.1	714
51	Methods for Approximation of the Inverse (Gabor) Frame Operator. , 2003, , 171-195.		3
52	Hyperbolic Secants Yield Gabor Frames. Applied and Computational Harmonic Analysis, 2002, 12, 259-267.	1.1	60
53	Characterization and Computation of Canonical Tight Windows for Gabor Frames. Journal of Fourier Analysis and Applications, 2002, 8, 1-28.	0.5	41
54	Four short stories about Toeplitz matrix calculations. Linear Algebra and Its Applications, 2002, 343-344, 321-344.	0.4	45

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55	Approximation of Dual Gabor Frames, Window Decay, and Wireless Communications. Applied and Computational Harmonic Analysis, 2001, 11, 243-262.	1.1	77
56	Numerical analysis of the non-uniform sampling problem. Journal of Computational and Applied Mathematics, 2000, 122, 297-316.	1.1	61
57	A Levinson–Galerkin Algorithm for Regularized Trigonometric Approximation. SIAM Journal of Scientific Computing, 2000, 22, 1160-1183.	1.3	9
58	On the Reconstruction of Irregularly Sampled Time Series. Publications of the Astronomical Society of the Pacific, 2000, 112, 74-90.	1.0	20
59	Artificial neural networks and spatial temporal contour linking for automated endocardial contour detection on echocardiograms: a novel approach to determine left ventricular contractile function. Ultrasound in Medicine and Biology, 1999, 25, 1069-1076.	0.7	40
60	Rates of convergence for the approximation of dual shift-invariant systems in ?2(?). Journal of Fourier Analysis and Applications, 1999, 5, 599-615.	0.5	26
61	A multi-level algorithm for the solution of moment problems. Numerical Functional Analysis and Optimization, 1998, 19, 353-375.	0.6	9
62	Smooth approximation of potential fields from noisy scattered data. Geophysics, 1998, 63, 85-94.	1.4	28
63	Numerical algorithms for discrete Gabor expansions. , 1998, , 267-294.		62
64	Efficient numerical methods in non-uniform sampling theory. Numerische Mathematik, 1995, 69, 423-440.	0.9	215
65	<title>New variants of the POCS method using affine subspaces of finite codimension with applications to irregular sampling</title>. Proceedings of SPIE, 1992, , .	0.8	30