

Thomas Strohmer

List of Publications by Year in descending order

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65
papers

5,994
citations

186265
28
h-index

161849
54
g-index

65
all docs

65
docs citations

65
times ranked

3371
citing authors

#	ARTICLE	IF	CITATIONS
1	High-Resolution Radar via Compressed Sensing. IEEE Transactions on Signal Processing, 2009, 57, 2275-2284.	5.3	859
2	PhaseLift: Exact and Stable Signal Recovery from Magnitude Measurements via Convex Programming. Communications on Pure and Applied Mathematics, 2013, 66, 1241-1274.	3.1	808
3	Grassmannian frames with applications to coding and communication. Applied and Computational Harmonic Analysis, 2003, 14, 257-275.	2.2	714
4	A Randomized Kaczmarz Algorithm with Exponential Convergence. Journal of Fourier Analysis and Applications, 2009, 15, 262-278.	1.0	500
5	Phase Retrieval via Matrix Completion. SIAM Journal on Imaging Sciences, 2013, 6, 199-225.	2.2	391
6	Phase Retrieval via Matrix Completion. SIAM Review, 2015, 57, 225-251.	9.5	293
7	General Deviants: An Analysis of Perturbations in Compressed Sensing. IEEE Journal on Selected Topics in Signal Processing, 2010, 4, 342-349.	10.8	263
8	Efficient numerical methods in non-uniform sampling theory. Numerische Mathematik, 1995, 69, 423-440.	1.9	215
9	Sparse Signal Processing Concepts for Efficient 5G System Design. IEEE Access, 2015, 3, 195-208.	4.2	193
10	Self-calibration and biconvex compressive sensing. Inverse Problems, 2015, 31, 115002.	2.0	174
11	Compressed Remote Sensing of Sparse Objects. SIAM Journal on Imaging Sciences, 2010, 3, 595-618.	2.2	106
12	Measure What Should be Measured: Progress and Challenges in Compressive Sensing. IEEE Signal Processing Letters, 2012, 19, 887-893.	3.6	99
13	Approximation of Dual Gabor Frames, Window Decay, and Wireless Communications. Applied and Computational Harmonic Analysis, 2001, 11, 243-262.	2.2	77
14	The finite section method and problems in frame theory. Journal of Approximation Theory, 2005, 133, 221-237.	0.8	73
15	Rapid, robust, and reliable blind deconvolution via nonconvex optimization. Applied and Computational Harmonic Analysis, 2019, 47, 893-934.	2.2	73
16	Convergence Analysis of the Finite Section Method and Banach Algebras of Matrices. Integral Equations and Operator Theory, 2010, 67, 183-202.	0.8	68
17	Pseudodifferential operators and Banach algebras in mobile communications. Applied and Computational Harmonic Analysis, 2006, 20, 237-249.	2.2	65
18	Blind Deconvolution Meets Blind Demixing: Algorithms and Performance Bounds. IEEE Transactions on Information Theory, 2017, 63, 4497-4520.	2.4	62

#	ARTICLE	IF	CITATIONS
19	Numerical algorithms for discrete Gabor expansions. , 1998, , 267-294.		62
20	Numerical analysis of the non-uniform sampling problem. Journal of Computational and Applied Mathematics, 2000, 122, 297-316.	2.0	61
21	Hyperbolic Secants Yield Gabor Frames. Applied and Computational Harmonic Analysis, 2002, 12, 259-267.	2.2	60
22	Compressed sensing radar. Proceedings of the IEEE International Conference on Acoustics, Speech, and Signal Processing, 2008, , .	1.8	57
23	Compressed sensing for MIMO radar - algorithms and performance. , 2009, , .		52
24	The numerics of phase retrieval. Acta Numerica, 2020, 29, 125-228.	10.7	46
25	Four short stories about Toeplitz matrix calculations. Linear Algebra and Its Applications, 2002, 343-344, 321-344.	0.9	45
26	Analysis of sparse MIMO radar. Applied and Computational Harmonic Analysis, 2014, 37, 361-388.	2.2	42
27	Characterization and Computation of Canonical Tight Windows for Gabor Frames. Journal of Fourier Analysis and Applications, 2002, 8, 1-28.	1.0	41
28	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.	1.5	40
29	Compressed sensing radar. , 2008, , .		36
30	A note on equiangular tight frames. Linear Algebra and Its Applications, 2008, 429, 326-330.	0.9	34
31	<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
32	Smooth approximation of potential fields from noisy scattered data. Geophysics, 1998, 63, 85-94.	2.6	28
33	Wilson Bases for General Time-Frequency Lattices. SIAM Journal on Mathematical Analysis, 2005, 37, 685-711.	1.9	28
34	Comments on the Randomized Kaczmarz Method. Journal of Fourier Analysis and Applications, 2009, 15, 437-440.	1.0	27
35	Self-Calibration and Bilinear Inverse Problems via Linear Least Squares. SIAM Journal on Imaging Sciences, 2018, 11, 252-292.	2.2	27
36	Rates of convergence for the approximation of dual shift-invariant systems in $\ell_2(\mathbb{Z})$. Journal of Fourier Analysis and Applications, 1999, 5, 599-615.	1.0	26

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37	Regularized gradient descent: a non-convex recipe for fast joint blind deconvolution and demixing. Information and Inference, 2019, 8, 1-49.	1.6	23
38	On the Reconstruction of Irregularly Sampled Time Series. Publications of the Astronomical Society of the Pacific, 2000, 112, 74-90.	3.1	20
39	Remote Sensing via ℓ_1 -Minimization. Foundations of Computational Mathematics, 2014, 14, 115-150.	2.5	20
40	Pseudodifferential operators on locally compact abelian groups and Sj�strand's symbol class. Journal Fur Die Reine Und Angewandte Mathematik, 2007, 2007, .	0.9	16
41	When do birds of a feather flock together? k-Means, proximity, and conic programming. Mathematical Programming, 2020, 179, 295-341.	2.4	16
42	Accurate imaging of moving targets via random sensor arrays and Kerdock codes. Inverse Problems, 2013, 29, 085001.	2.0	14
43	Fast scattered data approximation with Neumann and other boundary conditions. Linear Algebra and Its Applications, 2004, 391, 99-123.	0.9	10
44	A multi-level algorithm for the solution of moment problems. Numerical Functional Analysis and Optimization, 1998, 19, 353-375.	1.4	9
45	A Levinson–Galerkin Algorithm for Regularized Trigonometric Approximation. SIAM Journal of Scientific Computing, 2000, 22, 1160-1183.	2.8	9
46	Fast Algorithms for Blind Calibration in Time-Interleaved Analog-to-Digital Converters. , 2007, , .		9
47	Localization of Matrix Factorizations. Foundations of Computational Mathematics, 2015, 15, 931-951.	2.5	9
48	Compressive Spectral Clustering. AIP Conference Proceedings, 2010, , .	0.4	7
49	Painless Breakups – Efficient Demixing of Low Rank Matrices. Journal of Fourier Analysis and Applications, 2019, 25, 1-31.	1.0	7
50	Implementations of Shannon’s sampling theorem, a time-frequency approach. Sampling Theory in Signal and Information Processing, 2005, 4, 2-17.	0.2	7
51	Pulse Construction in OFDM Systems Via Convex Optimization. IEEE Transactions on Communications, 2008, 56, 1225-1230.	7.8	6
52	Sparsity Enhanced Decision Feedback Equalization. IEEE Transactions on Signal Processing, 2012, 60, 2422-2432.	5.3	6
53	Certifying Global Optimality of Graph Cuts via Semidefinite Relaxation: A Performance Guarantee for Spectral Clustering. Foundations of Computational Mathematics, 2020, 20, 367-421.	2.5	6
54	Krylov Subspace Algorithms and Circulant-Embedding Method for Efficient Wideband Single-Carrier Equalization. IEEE Transactions on Signal Processing, 2008, 56, 2483-2495.	5.3	5

#	ARTICLE	IF	CITATIONS
55	Eigenvalue Estimates and Mutual Information for the Linear Time-Varying Channel. IEEE Transactions on Information Theory, 2011, 57, 5710-5719.	2.4	4
56	A Performance Guarantee for Spectral Clustering. SIAM Journal on Mathematics of Data Science, 2021, 3, 369-387.	1.8	4
57	Average power reduction for MSM optical signals via sparsity and uncertainty principle. IEEE Transactions on Communications, 2010, 58, 1505-1513.	7.8	3
58	Methods for Approximation of the Inverse (Gabor) Frame Operator. , 2003, , 171-195.		3
59	Adventures in Compressive Sensing Based MIMO Radar. Applied and Numerical Harmonic Analysis, 2015, , 285-326.	0.3	2
60	Simultaneous blind deconvolution and blind demixing via convex programming. , 2016, , .		2
61	Some theoretical results for compressed MIMO radar. , 2011, , .		1
62	Fast blind deconvolution and blind demixing via nonconvex optimization. , 2017, , .		1
63	Decision feedback equalization with sparsity driven thresholding. , 2010, , .		0
64	Applied Harmonic Analysis and Sparse Approximation. Oberwolfach Reports, 2015, 12, 2189-2263.	0.0	0
65	You Can Have It All – Fast Algorithms for Blind Deconvolution, Self-Calibration, and Demixing. , 2017, , .		0