

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	High-Resolution Radar via Compressed Sensing. IEEE Transactions on Signal Processing, 2009, 57, 2275-2284.	3.2	859
2	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
3	Grassmannian frames with applications to coding and communication. Applied and Computational Harmonic Analysis, 2003, 14, 257-275.	1.1	714
4	A Randomized Kaczmarz Algorithm with Exponential Convergence. Journal of Fourier Analysis and Applications, 2009, 15, 262-278.	0.5	500
5	Phase Retrieval via Matrix Completion. SIAM Journal on Imaging Sciences, 2013, 6, 199-225.	1.3	391
6	Phase Retrieval via Matrix Completion. SIAM Review, 2015, 57, 225-251.	4.2	293
7	General Deviants: An Analysis of Perturbations in Compressed Sensing. IEEE Journal on Selected Topics in Signal Processing, 2010, 4, 342-349.	7.3	263
8	Efficient numerical methods in non-uniform sampling theory. Numerische Mathematik, 1995, 69, 423-440.	0.9	215
9	Sparse Signal Processing Concepts for Efficient 5G System Design. IEEE Access, 2015, 3, 195-208.	2.6	193
10	Self-calibration and biconvex compressive sensing. Inverse Problems, 2015, 31, 115002.	1.0	174
11	Compressed Remote Sensing of Sparse Objects. SIAM Journal on Imaging Sciences, 2010, 3, 595-618.	1.3	106
12	Measure What Should be Measured: Progress and Challenges in Compressive Sensing. IEEE Signal Processing Letters, 2012, 19, 887-893.	2.1	99
13	Approximation of Dual Gabor Frames, Window Decay, and Wireless Communications. Applied and Computational Harmonic Analysis, 2001, 11, 243-262.	1.1	77
14	The finite section method and problems in frame theory. Journal of Approximation Theory, 2005, 133, 221-237.	0.5	73
15	Rapid, robust, and reliable blind deconvolution via nonconvex optimization. Applied and Computational Harmonic Analysis, 2019, 47, 893-934.	1.1	73
16	Convergence Analysis of the Finite Section Method and Banach Algebras of Matrices. Integral Equations and Operator Theory, 2010, 67, 183-202.	0.4	68
17	Pseudodifferential operators and Banach algebras in mobile communications. Applied and Computational Harmonic Analysis, 2006, 20, 237-249.	1.1	65
18	Blind Deconvolution Meets Blind Demixing: Algorithms and Performance Bounds. IEEE Transactions on Information Theory, 2017, 63, 4497-4520.	1.5	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.	1.1	61
21	Hyperbolic Secants Yield Gabor Frames. Applied and Computational Harmonic Analysis, 2002, 12, 259-267.	1.1	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.	6.3	46
25	Four short stories about Toeplitz matrix calculations. Linear Algebra and Its Applications, 2002, 343-344, 321-344.	0.4	45
26	Analysis of sparse MIMO radar. Applied and Computational Harmonic Analysis, 2014, 37, 361-388.	1.1	42
27	Characterization and Computation of Canonical Tight Windows for Gabor Frames. Journal of Fourier Analysis and Applications, 2002, 8, 1-28.	0.5	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.	0.7	40
29	Compressed sensing radar. , 2008, , .		36
30	A note on equiangular tight frames. Linear Algebra and Its Applications, 2008, 429, 326-330.	0.4	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.	1.4	28
33	Wilson Bases for General Time-Frequency Lattices. SIAM Journal on Mathematical Analysis, 2005, 37, 685-711.	0.9	28
34	Comments on the Randomized Kaczmarz Method. Journal of Fourier Analysis and Applications, 2009, 15, 437-440.	0.5	27
35	Self-Calibration and Bilinear Inverse Problems via Linear Least Squares. SIAM Journal on Imaging Sciences, 2018, 11, 252-292.	1.3	27
36	Rates of convergence for the approximation of dual shift-invariant systems in \mathbb{R}^2 . Journal of Fourier Analysis and Applications, 1999, 5, 599-615.	0.5	26

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37	Regularized gradient descent: a non-convex recipe for fast joint blind deconvolution and demixing. <i>Information and Inference</i> , 2019, 8, 1-49.	0.9	23
38	On the Reconstruction of Irregularly Sampled Time Series. <i>Publications of the Astronomical Society of the Pacific</i> , 2000, 112, 74-90.	1.0	20
39	Remote Sensing via ℓ_1 -Minimization. <i>Foundations of Computational Mathematics</i> , 2014, 14, 115-150.	1.5	20
40	Pseudodifferential operators on locally compact abelian groups and Sj�strand's symbol class. <i>Journal Fur Die Reine Und Angewandte Mathematik</i> , 2007, 2007, .	0.4	16
41	When do birds of a feather flock together? k -Means, proximity, and conic programming. <i>Mathematical Programming</i> , 2020, 179, 295-341.	1.6	16
42	Accurate imaging of moving targets via random sensor arrays and Kerdock codes. <i>Inverse Problems</i> , 2013, 29, 085001.	1.0	14
43	Fast scattered data approximation with Neumann and other boundary conditions. <i>Linear Algebra and Its Applications</i> , 2004, 391, 99-123.	0.4	10
44	A multi-level algorithm for the solution of moment problems. <i>Numerical Functional Analysis and Optimization</i> , 1998, 19, 353-375.	0.6	9
45	A Levinson–Galerkin Algorithm for Regularized Trigonometric Approximation. <i>SIAM Journal of Scientific Computing</i> , 2000, 22, 1160-1183.	1.3	9
46	Fast Algorithms for Blind Calibration in Time-Interleaved Analog-to-Digital Converters. , 2007, , .		9
47	Localization of Matrix Factorizations. <i>Foundations of Computational Mathematics</i> , 2015, 15, 931-951.	1.5	9
48	Compressive Spectral Clustering. <i>AIP Conference Proceedings</i> , 2010, , .	0.3	7
49	Painless Breakups – Efficient Demixing of Low Rank Matrices. <i>Journal of Fourier Analysis and Applications</i> , 2019, 25, 1-31.	0.5	7
50	Implementations of Shannon’s sampling theorem, a time-frequency approach. <i>Sampling Theory in Signal and Information Processing</i> , 2005, 4, 2-17.	0.2	7
51	Pulse Construction in OFDM Systems Via Convex Optimization. <i>IEEE Transactions on Communications</i> , 2008, 56, 1225-1230.	4.9	6
52	Sparsity Enhanced Decision Feedback Equalization. <i>IEEE Transactions on Signal Processing</i> , 2012, 60, 2422-2432.	3.2	6
53	Certifying Global Optimality of Graph Cuts via Semidefinite Relaxation: A Performance Guarantee for Spectral Clustering. <i>Foundations of Computational Mathematics</i> , 2020, 20, 367-421.	1.5	6
54	Krylov Subspace Algorithms and Circulant-Embedding Method for Efficient Wideband Single-Carrier Equalization. <i>IEEE Transactions on Signal Processing</i> , 2008, 56, 2483-2495.	3.2	5

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55	Eigenvalue Estimates and Mutual Information for the Linear Time-Varying Channel. IEEE Transactions on Information Theory, 2011, 57, 5710-5719.	1.5	4
56	A Performance Guarantee for Spectral Clustering. SIAM Journal on Mathematics of Data Science, 2021, 3, 369-387.	1.0	4
57	Average power reduction for MSM optical signals via sparsity and uncertainty principle. IEEE Transactions on Communications, 2010, 58, 1505-1513.	4.9	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.	0.1	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