Morten Nielsen

List of Publications by Year
in descending order

75 papers	1,743 citations	331670 21 h-index	289244 40 g-index
78 all docs	78 docs citations	78 times ranked	1053 citing authors

#	Article	IF	Citations
1	Sparse representations in unions of bases. IEEE Transactions on Information Theory, 2003, 49, 3320-3325.	2.4	666
2	Highly sparse representations from dictionaries are unique and independent of the sparseness measure. Applied and Computational Harmonic Analysis, 2007, 22, 335-355.	2.2	108
3	Frame Decomposition of Decomposition Spaces. Journal of Fourier Analysis and Applications, 2007, 13, 39-70.	1.0	84
4	Anisotropic Mixed-Norm Hardy Spaces. Journal of Geometric Analysis, 2017, 27, 2758-2787.	1.0	60
5	On the Construction and Frequency Localization of Finite Orthogonal Quadrature Filters. Journal of Approximation Theory, 2001, 108, 36-52.	0.8	51
6	Bi-framelet systems with few vanishing moments characterize Besov spaces. Applied and Computational Harmonic Analysis, 2004, 17, 3-28.	2.2	44
7	Molecular decomposition of anisotropic homogeneous mixed-norm spaces with applications to the boundedness of operators. Applied and Computational Harmonic Analysis, 2019, 47, 447-480.	2.2	43
8	Wavelet transforms for homogeneous mixed-norm Triebel–Lizorkin spaces. Monatshefte Fur Mathematik, 2017, 183, 587-624.	0.9	40
9	Beyond sparsity: Recovering structured representations by ${ell}^1$ minimization and greedy algorithms. Advances in Computational Mathematics, 2007, 28, 23-41.	1.6	35
10	Pseudodifferential operators on mixed–norm Besov and Triebel–Lizorkin spaces. Mathematische Nachrichten, 2016, 289, 2019-2036.	0.8	35
11	Banach frames for multivariate α-modulation spaces. Journal of Mathematical Analysis and Applications, 2006, 321, 880-895.	1.0	31
12	Approximation Spaces of Deep Neural Networks. Constructive Approximation, 2022, 55, 259-367.	3.0	31
13	Approximate Weak Greedy Algorithms. Advances in Computational Mathematics, 2001, 14, 361-378.	1.6	27
14	Boundedness for pseudodifferential operators on multivariate α-modulation spaces. Arkiv for Matematik, 2006, 44, 241-259.	0.5	27
15	On anisotropic Triebel-Lizorkin type spaces, with applications to the study of pseudo-differential operators. Journal of Function Spaces and Applications, 2008, 6, 107-154.	0.5	27
16	Schauder bases of integer translates. Applied and Computational Harmonic Analysis, 2007, 23, 259-262.	2.2	26
17	Nonlinear Approximation with Dictionaries I. Direct Estimates. Journal of Fourier Analysis and Applications, 2004, 10, 51-71.	1.0	24
18	Stylometry of paintings using hidden Markov modelling of contourlet transforms. Signal Processing, 2013, 93, 579-591.	3.7	24

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19	Nonlinear approximation inÎ± -modulation spaces. Mathematische Nachrichten, 2006, 279, 101-120.	0.8	23
20	Determinantal point process models on the sphere. Bernoulli, 2018, 24, .	1.3	23
21	Tight wavelet frames in Lebesgue and Sobolev spaces. Journal of Function Spaces and Applications, 2004, 2, 227-252.	0.5	18
22	An example of an almost greedy uniformly bounded orthonormal basis for ‹mml:math altimg="si1.gif" overflow="scroll" xmlns:xocs="http://www.elsevier.com/xml/xocs/dtd" xmlns:xs="http://www.w3.org/2001/XMLSchema" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns="http://www.elsevier.com/xml/ja/dtd" xmlns:ja="http://www.elsevier.com/xml/ja/dtd" xmlns:mml="http://www.w3.org/1998/Math/MathML" xmlns:tb="http://www.elsevier.com/xml/common/table/dtd" xmlns:sb="http://www.elsevier.com/xml/co	0.8	18
23	Approximation with brushlet systems. Journal of Approximation Theory, 2003, 123, 25-51.	0.8	17
24	Fourier multipliers on anisotropic mixed-norm spaces of distributions. Mathematica Scandinavica, 2019, 124, 289-304.	0.2	16
25	On Approximation with Spline Generated Framelets. Constructive Approximation, 2004, 20, 207-232.	3.0	15
26	Pseudodifferential Operators on Spaces of Distributions Associated with Non-negative Self-Adjoint Operators. Journal of Fourier Analysis and Applications, 2017, 23, 344-378.	1.0	15
27	On Stability of Finitely Generated Shift-Invariant Systems. Journal of Fourier Analysis and Applications, 2010, 16, 901-920.	1.0	14
28	Beyond coherence: Recovering structured time–frequency representations. Applied and Computational Harmonic Analysis, 2008, 24, 120-128.	2.2	13
29	Walsh-Type Wavelet Packet Expansions. Applied and Computational Harmonic Analysis, 2000, 9, 265-285.	2.2	10
30	Approximation with highly redundant dictionaries. , 2003, , .		9
31	Compactly Supported Frames for Decomposition Spaces. Journal of Fourier Analysis and Applications, 2012, 18, 87-117.	1.0	9
32	Nonlinear Approximation with Dictionaries. II. Inverse Estimates. Constructive Approximation, 2006, 24, 157-173.	3.0	8
33	Quasi-greedy systems of integer translates. Journal of Approximation Theory, 2008, 155, 43-51.	0.8	8
34	Sparse decompositions in "incoherent" dictionaries. , 0, , .		7
35	Spectral multipliers on spaces of distributions associated with non-negative self-adjoint operators. Journal of Approximation Theory, 2018, 234, 1-19.	0.8	7
36	On a Problem of Grï¿½chenig About Nonlinear Approximation with Localized Frames. Journal of Fourier Analysis and Applications, 2004, 10, 433-437.	1.0	6

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37	Mean size of wavelet packets. Applied and Computational Harmonic Analysis, 2002, 13, 22-34.	2.2	5
38	Trigonometric Quasi-Greedy Bases for $L^p(T;w)$. Rocky Mountain Journal of Mathematics, 2009, 39, .	0.4	5
39	Orthonormal bases for α-modulation spaces. Collectanea Mathematica, 2010, 61, 173-190.	0.9	5
40	Democratic systems of translates. Journal of Approximation Theory, 2013, 171, 105-127.	0.8	5
41	On stability of Schauder bases of integer translates. Journal of Functional Analysis, 2014, 266, 2281-2293.	1.4	5
42	Frames for decomposition spaces generated by a single function. Collectanea Mathematica, 2014, 65, 183-201.	0.9	5
43	A Characterization of Sparse Nonstationary Gabor Expansions. Journal of Fourier Analysis and Applications, 2018, 24, 1048-1071.	1.0	5
44	Highly Nonstationary Wavelet Packets. Applied and Computational Harmonic Analysis, 2002, 12, 209-229.	2.2	4
45	Molecular decomposition and Fourier multipliers for holomorphic Besov and Triebel–Lizorkin spaces. Monatshefte Fur Mathematik, 2019, 188, 467-493.	0.9	4
46	Trigonometric bases for matrix weighted L_p-spaces. Journal of Mathematical Analysis and Applications, 2010, 371, 784-792.	1.0	3
47	Compactly Supported Curvelet-Type Systems. Journal of Function Spaces and Applications, 2012, 2012, 1-18.	0.5	3
48	Nonlinear approximation with nonstationary Gabor frames. Advances in Computational Mathematics, 2018, 44, 1183-1203.	1.6	3
49	Lifetime Maximization of an Internet of Things (IoT) Network Based on Graph Signal Processing. IEEE Communications Letters, 2021, 25, 2763-2767.	4.1	3
50	Size properties of wavelet packets generated using finite filters. Revista Matematica Iberoamericana, 2002, 18, 249-265.	0.9	3
51	Generalized Sampling in Julia. Journal of Open Research Software, 2017, 5, .	5.9	3
52	Muckenhoupt Class Weight Decomposition and BMO Distance to Bounded Functions. Proceedings of the Edinburgh Mathematical Society, 2019, 62, 1017-1031.	0.3	2
53	On homogeneous decomposition spaces and associated decompositions of distribution spaces. Mathematische Nachrichten, 2019, 292, 2496-2521.	0.8	2
54	Nonlinear approximation with general wave packets. Analysis in Theory and Applications, 2005, 21, 201-215.	0.4	1

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55	On polynomial symbols for subdivision schemes. Advances in Computational Mathematics, 2007, 27, 195-209.	1.6	1
56	On Transference of Multipliers on Matrix Weighted L p -Spaces. Journal of Geometric Analysis, 2012, 22, 12-22.	1.0	1
57	The restricted isometry property meets nonlinear approximation with redundant frames. Journal of Approximation Theory, 2013, 165, 1-19.	0.8	1
58	On Schauder basis properties of multiply generated Gabor systems. Rocky Mountain Journal of Mathematics, 2016, 46, .	0.4	1
59	Orthonormal, moment preserving boundary wavelet scaling functions in Python. SN Applied Sciences, 2020, 2, 1.	2.9	1
60	On a discrete transform of homogeneous decomposition spaces. Applied and Computational Harmonic Analysis, 2021, 55, 41-70.	2.2	1
61	Nonseparable Walsh-type functions on Rd. Glasnik Matematicki, 2004, 39, 111-138.	0.3	1
62	On quasi-greedy bases associated with unitary representations of countable groups. Glasnik Matematicki, 2015, 50, 193-205.	0.3	1
63	Projection operators on matrix weighted L^p and a simple sufficient Muckenhoupt condition. Mathematica Scandinavica, 2018, 123, 72-84.	0.2	1
64	Fast adaptive expansions in local trigonometric bases. Signal Processing, 2003, 83, 445-451.	3.7	0
65	Nonlinear Approximation with Redundant Dictionaries. , 0, , .		0
66	On the equivalence of brushlet and wavelet bases. Journal of Mathematical Analysis and Applications, 2005, 309, 117-135.	1.0	0
67	Maximal functions, product condition and its eccentricity. Collectanea Mathematica, 2012, 63, 195-202.	0.9	0
68	On traces of general decomposition spaces. Monatshefte Fur Mathematik, 2013, 171, 443-457.	0.9	0
69	Summation of Multiple Fourier Series in Matrix Weighted -Spaces. Journal of Mathematics, 2013, 2013, 1-7.	1.0	0
70	Investigation of the Effects of Data Collection on Visual Stylometry. International Journal of Image and Graphics, 2014, 14, 1450019.	1.5	0
71	Investigations of the effects of random sampling schemes on the stability of generalized sampling. Applied and Computational Harmonic Analysis, 2018, 45, 453-461.	2.2	0
72	Fourier Multipliers on Decomposition Spaces of Modulation and Triebelâ€"Lizorkin Type. Mediterranean Journal of Mathematics, 2018, 15, 1.	0.8	0

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73	Muckenhoupt Matrix Weights. Journal of Geometric Analysis, 2021, 31, 8850-8865.	1.0	0
74	Approximation with wave packets generated by a refinable function. Proceedings of the American Mathematical Society, 2005, 133, 2409-2418.	0.8	0
75	Unconditional Bases for Homogeneous $$alpha $$-Modulation Type Spaces. Mediterranean Journal of Mathematics, 2022, 19, 1.	0.8	0