

# Robert D Nowak

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/11973584/publications.pdf>

Version: 2024-02-01

36  
papers

5,743  
citations

361413

20  
h-index

610901

24  
g-index

36  
all docs

36  
docs citations

36  
times ranked

5062  
citing authors

#	ARTICLE	IF	CITATIONS
1	Gradient Projection for Sparse Reconstruction: Application to Compressed Sensing and Other Inverse Problems. IEEE Journal on Selected Topics in Signal Processing, 2007, 1, 586-597.	10.8	2,723
2	An EM algorithm for wavelet-based image restoration. IEEE Transactions on Image Processing, 2003, 12, 906-916.	9.8	938
3	Majorizationâ€“Minimization Algorithms for Wavelet-Based Image Restoration. IEEE Transactions on Image Processing, 2007, 16, 2980-2991.	9.8	490
4	Computational segmentation of collagen fibers from second-harmonic generation images of breast cancer. Journal of Biomedical Optics, 2014, 19, 016007.	2.6	294
5	Platelets: a multiscale approach for recovering edges and surfaces in photon-limited medical imaging. IEEE Transactions on Medical Imaging, 2003, 22, 332-350.	8.9	227
6	Near-Optimal Adaptive Compressed Sensing. IEEE Transactions on Information Theory, 2014, 60, 4001-4012.	2.4	187
7	Multiscale Poisson Intensity and Density Estimation. IEEE Transactions on Information Theory, 2007, 53, 3171-3187.	2.4	80
8	Sparse reconstruction by separable approximation. Proceedings of the IEEE International Conference on Acoustics, Speech, and Signal Processing, 2008, , .	1.8	79
9	Empirical Comparison of Full-Waveform Lidar Algorithms. Photogrammetric Engineering and Remote Sensing, 2011, 77, 825-838.	0.6	76
10	Minimax Bounds for Active Learning. IEEE Transactions on Information Theory, 2008, 54, 2339-2353.	2.4	74
11	Multiscale likelihood analysis and complexity penalized estimation. Annals of Statistics, 2004, 32, 500.	2.6	64
12	Compressive distilled sensing: Sparse recovery using adaptivity in compressive measurements. , 2009, , .		50
13	Nonlinear system identification. Circuits, Systems, and Signal Processing, 2002, 21, 109-122.	2.0	49
14	The Role of Neural Network Activation Functions. IEEE Signal Processing Letters, 2020, 27, 1779-1783.	3.6	43
15	A Characterization of Deterministic Sampling Patterns for Low-Rank Matrix Completion. IEEE Journal on Selected Topics in Signal Processing, 2016, 10, 623-636.	10.8	40
16	Improved Approach to LIDAR Airport Obstruction Surveying Using Full-Waveform Data. Journal of Surveying Engineering, - ASCE, 2009, 135, 72-82.	1.7	36
17	The Geometry of Generalized Binary Search. IEEE Transactions on Information Theory, 2011, 57, 7893-7906.	2.4	36
18	Convex approaches to model wavelet sparsity patterns. , 2011, , .		35

#	ARTICLE	IF	CITATIONS
19	Sketching Sparse Matrices, Covariances, and Graphs via Tensor Products. IEEE Transactions on Information Theory, 2015, 61, 1373-1388.	2.4	35
20	Network Inference From Co-Occurrences. IEEE Transactions on Information Theory, 2008, 54, 4053-4068.	2.4	29
21	Multiscale Hidden Markov Models for Bayesian Image Analysis. Lecture Notes in Statistics, 1999, , 243-265.	0.2	27
22	Near-optimal adaptive Compressed Sensing. , 2012, , .		25
23	Sequential Testing for Sparse Recovery. IEEE Transactions on Information Theory, 2014, 60, 7862-7873.	2.4	21
24	<title>Bayesian multiscale approach to joint image restoration and edge detection</title>. , 1999, 3813, 73.		20
25	Quickest search for a rare distribution. , 2012, , .		20
26	What Kinds of Functions Do Deep Neural Networks Learn? Insights from Variational Spline Theory. SIAM Journal on Mathematics of Data Science, 2022, 4, 464-489.	1.8	12
27	Tensor Methods for Nonlinear Matrix Completion. SIAM Journal on Mathematics of Data Science, 2021, 3, 253-279.	1.8	8
28	The Sample Complexity of Search Over Multiple Populations. IEEE Transactions on Information Theory, 2013, 59, 5039-5050.	2.4	7
29	SPACE-TIME SPARSITY REGULARIZATION FOR THE MAGNETOENCEPHALOGRAPHY INVERSE PROBLEM. , 2007, , .		5
30	Correlated gaussian designs for compressive imaging. , 2012, , .		4
31	Wavelet-based adaptive image deconvolution. , 2002, , .		3
32	Multiresolution nonparametric intensity and density estimation. , 2002, , .		2
33	An expectation-maximization algorithm for space-time sparsity regularization of the MEG inverse problem. International Congress Series, 2007, 1300, 113-116.	0.2	2
34	On Continuous-Domain Inverse Problems with Sparse Superpositions of Decaying Sinusoids as Solutions. , 2022, , .		2
35	Genomic Network Tomography. , 2007, , .		0
36	Image reconstruction of multiphoton microscopy data. , 2009, , 803-806.		0