## 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

20 h-index 24 g-index

36 all docs 36 docs citations

times ranked

36

5062 citing authors

| #  | Article  | IF           | CITATIONS |
|----|--|--------------|-----------|
| 1  | 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        |
| 2  | On Continuous-Domain Inverse Problems with Sparse Superpositions of Decaying Sinusoids as Solutions. , 2022, , .   |              | 2         |
| 3  | Tensor Methods for Nonlinear Matrix Completion. SIAM Journal on Mathematics of Data Science, 2021, 3, 253-279.   | 1.8          | 8         |
| 4  | The Role of Neural Network Activation Functions. IEEE Signal Processing Letters, 2020, 27, 1779-1783.  | 3 <b>.</b> 6 | 43        |
| 5  | 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        |
| 6  | Sketching Sparse Matrices, Covariances, and Graphs via Tensor Products. IEEE Transactions on Information Theory, 2015, 61, 1373-1388.                          | 2.4          | 35        |
| 7  | Sequential Testing for Sparse Recovery. IEEE Transactions on Information Theory, 2014, 60, 7862-7873.  | 2.4          | 21        |
| 8  | Computational segmentation of collagen fibers from second-harmonic generation images of breast cancer. Journal of Biomedical Optics, 2014, 19, 016007.         | 2.6          | 294       |
| 9  | Near-Optimal Adaptive Compressed Sensing. IEEE Transactions on Information Theory, 2014, 60, 4001-4012.  | 2.4          | 187       |
| 10 | The Sample Complexity of Search Over Multiple Populations. IEEE Transactions on Information Theory, 2013, 59, 5039-5050.                                       | 2.4          | 7         |
| 11 | Near-optimal adaptive Compressed Sensing. , 2012, , .  |              | 25        |
| 12 | Quickest search for a rare distribution. , 2012, , .   |              | 20        |
| 13 | Correlated gaussian designs for compressive imaging. , 2012, , .   |              | 4         |
| 14 | The Geometry of Generalized Binary Search. IEEE Transactions on Information Theory, 2011, 57, 7893-7906.   | 2.4          | 36        |
| 15 | Empirical Comparison of Full-Waveform Lidar Algorithms. Photogrammetric Engineering and Remote Sensing, 2011, 77, 825-838.                                     | 0.6          | 76        |
| 16 | Convex approaches to model wavelet sparsity patterns. , 2011, , .  |              | 35        |
| 17 | Image reconstruction of multiphoton microscopy data., 2009,, 803-806.  |              | O         |
| 18 | Compressive distilled sensing: Sparse recovery using adaptivity in compressive measurements., 2009,,.  |              | 50        |

| #  | Article  | lF   | CITATIONS |
|----|--|------|-----------|
| 19 | Improved Approach to LIDAR Airport Obstruction Surveying Using Full-Waveform Data. Journal of Surveying Engineering, - ASCE, 2009, 135, 72-82.                                       | 1.7  | 36        |
| 20 | Minimax Bounds for Active Learning. IEEE Transactions on Information Theory, 2008, 54, 2339-2353.  | 2.4  | 74        |
| 21 | Network Inference From Co-Occurrences. IEEE Transactions on Information Theory, 2008, 54, 4053-4068.   | 2.4  | 29        |
| 22 | Sparse reconstruction by separable approximation. Proceedings of the IEEE International Conference on Acoustics, Speech, and Signal Processing, 2008, , .                            | 1.8  | 79        |
| 23 | SPACE-TIME SPARSITY REGULARIZATION FOR THE MAGNETOENCEPHALOGRAPHY INVERSE PROBLEM. , 2007, , .   |      | 5         |
| 24 | Genomic Network Tomography. , 2007, , .  |      | 0         |
| 25 | An expectation-maximization algorithm for space-time sparsity regularization of the MEG inverse problem. International Congress Series, 2007, 1300, 113-116.                         | 0.2  | 2         |
| 26 | 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     |
| 27 | Majorization–Minimization Algorithms for Wavelet-Based Image Restoration. IEEE Transactions on Image Processing, 2007, 16, 2980-2991.  | 9.8  | 490       |
| 28 | Multiscale Poisson Intensity and Density Estimation. IEEE Transactions on Information Theory, 2007, 53, 3171-3187.   | 2.4  | 80        |
| 29 | Multiscale likelihood analysis and complexity penalized estimation. Annals of Statistics, 2004, 32, 500.   | 2.6  | 64        |
| 30 | An EM algorithm for wavelet-based image restoration. IEEE Transactions on Image Processing, 2003, 12, 906-916.   | 9.8  | 938       |
| 31 | 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       |
| 32 | Wavelet-based adaptive image deconvolution. , 2002, , .  |      | 3         |
| 33 | Multiresolution nonparametric intensity and density estimation. , 2002, , .  |      | 2         |
| 34 | Nonlinear system identification. Circuits, Systems, and Signal Processing, 2002, 21, 109-122.  | 2.0  | 49        |
| 35 | <title>Bayesian multiscale approach to joint image restoration and edge detection</title> ., 1999, 3813, 73.   |      | 20        |
| 36 | Multiscale Hidden Markov Models for Bayesian Image Analysis. Lecture Notes in Statistics, 1999, , 243-265.   | 0.2  | 27        |