

Lawrence Carin

List of Publications by Year in descending order

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285
papers

14,674
citations

36271

51
h-index

25770

108
g-index

287
all docs

287
docs citations

287
times ranked

14170
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|---|------|-----------|
| 1 | Bayesian Compressive Sensing. IEEE Transactions on Signal Processing, 2008, 56, 2346-2356. | 3.2 | 1,837 |
| 2 | Digital technology and COVID-19. Nature Medicine, 2020, 26, 459-461. | 15.2 | 997 |
| 3 | Sparse multinomial logistic regression: fast algorithms and generalization bounds. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2005, 27, 957-968. | 9.7 | 703 |
| 4 | Compressive Coded Aperture Spectral Imaging: An Introduction. IEEE Signal Processing Magazine, 2014, 31, 105-115. | 4.6 | 471 |
| 5 | Gene Expression Signatures Diagnose Influenza and Other Symptomatic Respiratory Viral Infections in Humans. Cell Host and Microbe, 2009, 6, 207-217. | 5.1 | 408 |
| 6 | Exploiting Structure in Wavelet-Based Bayesian Compressive Sensing. IEEE Transactions on Signal Processing, 2009, 57, 3488-3497. | 3.2 | 407 |
| 7 | An Integrated Clinico-Metabolomic Model Improves Prediction of Death in Sepsis. Science Translational Medicine, 2013, 5, 195ra95. | 5.8 | 380 |
| 8 | Nonparametric Bayesian Dictionary Learning for Analysis of Noisy and Incomplete Images. IEEE Transactions on Image Processing, 2012, 21, 130-144. | 6.0 | 335 |
| 9 | Coded aperture compressive temporal imaging. Optics Express, 2013, 21, 10526. | 1.7 | 320 |
| 10 | Bayesian Robust Principal Component Analysis. IEEE Transactions on Image Processing, 2011, 20, 3419-3430. | 6.0 | 302 |
| 11 | Semantic Compositional Networks for Visual Captioning. , 2017, , . | | 282 |
| 12 | Joint Embedding of Words and Labels for Text Classification. , 2018, , . | | 237 |
| 13 | Relationship between intracortical electrode design and chronic recording function. Biomaterials, 2013, 34, 8061-8074. | 5.7 | 220 |
| 14 | Host gene expression classifiers diagnose acute respiratory illness etiology. Science Translational Medicine, 2016, 8, 322ra11. | 5.8 | 202 |
| 15 | Probabilistic Topic Models. IEEE Signal Processing Magazine, 2010, 27, 55-65. | 4.6 | 201 |
| 16 | Computational Snapshot Multispectral Cameras: Toward dynamic capture of the spectral world. IEEE Signal Processing Magazine, 2016, 33, 95-108. | 4.6 | 178 |
| 17 | Temporal Dynamics of Host Molecular Responses Differentiate Symptomatic and Asymptomatic Influenza A Infection. PLoS Genetics, 2011, 7, e1002234. | 1.5 | 173 |
| 18 | Video Compressive Sensing Using Gaussian Mixture Models. IEEE Transactions on Image Processing, 2014, 23, 4863-4878. | 6.0 | 158 |

| # | ARTICLE | IF | CITATIONS |
|----|--|------|-----------|
| 19 | Baseline Needs More Love: On Simple Word-Embedding-Based Models and Associated Pooling Mechanisms. , 2018, , . | | 158 |
| 20 | A Host Transcriptional Signature for Presymptomatic Detection of Infection in Humans Exposed to Influenza H1N1 or H3N2. PLoS ONE, 2013, 8, e52198. | 1.1 | 157 |
| 21 | Compressive Hyperspectral Imaging With Side Information. IEEE Journal on Selected Topics in Signal Processing, 2015, 9, 964-976. | 7.3 | 152 |
| 22 | Nonparametric factor analysis with beta process priors. , 2009, , . | | 143 |
| 23 | The potential for Bayesian compressive sensing to significantly reduce electron dose in high-resolution STEM images. Microscopy (Oxford, England), 2014, 63, 41-51. | 0.7 | 140 |
| 24 | On Classification with Incomplete Data. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2007, 29, 427-436. | 9.7 | 136 |
| 25 | Compressive Sensing by Learning a Gaussian Mixture Model From Measurements. IEEE Transactions on Image Processing, 2015, 24, 106-119. | 6.0 | 136 |
| 26 | Brain-wide Electrical Spatiotemporal Dynamics Encode Depression Vulnerability. Cell, 2018, 173, 166-180.e14. | 13.5 | 135 |
| 27 | Tree-Structured Compressive Sensing With Variational Bayesian Analysis. IEEE Signal Processing Letters, 2010, 17, 233-236. | 2.1 | 133 |
| 28 | A Host-Based RT-PCR Gene Expression Signature to Identify Acute Respiratory Viral Infection. Science Translational Medicine, 2013, 5, 203ra126. | 5.8 | 133 |
| 29 | Logistic regression with an auxiliary data source. , 2005, , . | | 132 |
| 30 | A Bayesian approach to joint feature selection and classifier design. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2004, 26, 1105-1111. | 9.7 | 128 |
| 31 | Compressive Sensing on Manifolds Using a Nonparametric Mixture of Factor Analyzers: Algorithm and Performance Bounds. IEEE Transactions on Signal Processing, 2010, 58, 6140-6155. | 3.2 | 117 |
| 32 | Cost-sensitive feature acquisition and classification. Pattern Recognition, 2007, 40, 1474-1485. | 5.1 | 115 |
| 33 | Generalized Alternating Projection for Weighted- $\ell_{2,1}$ Minimization with Applications to Model-Based Compressive Sensing. SIAM Journal on Imaging Sciences, 2014, 7, 797-823. | 1.3 | 114 |
| 34 | Learning Discriminative Sparse Representations for Modeling, Source Separation, and Mapping of Hyperspectral Imagery. IEEE Transactions on Geoscience and Remote Sensing, 2011, 49, 4263-4281. | 2.7 | 108 |
| 35 | Negative Binomial Process Count and Mixture Modeling. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2015, 37, 307-320. | 9.7 | 100 |
| 36 | Dysregulation of Prefrontal Cortex-Mediated Slow-Evolving Limbic Dynamics Drives Stress-Induced Emotional Pathology. Neuron, 2016, 91, 439-452. | 3.8 | 98 |

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| 37 | An Investigation of Using the Spectral Characteristics From Ground Penetrating Radar for Landmine/Clutter Discrimination. IEEE Transactions on Geoscience and Remote Sensing, 2008, 46, 1177-1191. | 2.7 | 93 |
| 38 | Dictionary Learning for Noisy and Incomplete Hyperspectral Images. SIAM Journal on Imaging Sciences, 2012, 5, 33-56. | 1.3 | 93 |
| 39 | Spectral-temporal compressive imaging. Optics Letters, 2015, 40, 4054. | 1.7 | 82 |
| 40 | Bayesian Gaussian Copula Factor Models for Mixed Data. Journal of the American Statistical Association, 2013, 108, 656-665. | 1.8 | 80 |
| 41 | Deep Learning with Hierarchical Convolutional Factor Analysis. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2013, 35, 1887-1901. | 9.7 | 80 |
| 42 | StoryGAN: A Sequential Conditional GAN for Story Visualization. , 2019, , . | | 73 |
| 43 | The dynamic hierarchical Dirichlet process. , 2008, , . | | 72 |
| 44 | An integrated transcriptome and expressed variant analysis of sepsis survival and death. Genome Medicine, 2014, 6, 111. | 3.6 | 70 |
| 45 | On Deep Learning for Medical Image Analysis. JAMA - Journal of the American Medical Association, 2018, 320, 1192. | 3.8 | 69 |
| 46 | Electromagnetic Time-Reversal Source Localization in Changing Media: Experiment and Analysis. IEEE Transactions on Antennas and Propagation, 2007, 55, 344-354. | 3.1 | 68 |
| 47 | A Bayesian Nonparametric Approach to Image Super-Resolution. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2015, 37, 346-358. | 9.7 | 66 |
| 48 | Semisupervised Multitask Learning. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2009, 31, 1074-1086. | 9.7 | 63 |
| 49 | Bayesian joint analysis of heterogeneous genomics data. Bioinformatics, 2014, 30, 1370-1376. | 1.8 | 63 |
| 50 | Cybersecurity Strategies: The QuERIES Methodology. Computer, 2008, 41, 20-26. | 1.2 | 62 |
| 51 | Low-Cost Compressive Sensing for Color Video and Depth. , 2014, , . | | 62 |
| 52 | Communications-Inspired Projection Design with Application to Compressive Sensing. SIAM Journal on Imaging Sciences, 2012, 5, 1185-1212. | 1.3 | 60 |
| 53 | Coded Hyperspectral Imaging and Blind Compressive Sensing. SIAM Journal on Imaging Sciences, 2013, 6, 782-812. | 1.3 | 59 |
| 54 | Method of moments analysis of electromagnetic scattering from a general three-dimensional dielectric target embedded in a multilayered medium. Radio Science, 2000, 35, 305-313. | 0.8 | 58 |

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| 55 | On the Relationship Between Compressive Sensing and Random Sensor Arrays. IEEE Antennas and Propagation Magazine, 2009, 51, 72-81. | 1.2 | 58 |
| 56 | Variational Bayes for continuous hidden Markov models and its application to active learning. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2006, 28, 522-532. | 9.7 | 56 |
| 57 | Convolutional neural network to identify symptomatic Alzheimer's disease using multimodal retinal imaging. British Journal of Ophthalmology, 2022, 106, 388-395. | 2.1 | 56 |
| 58 | Music Analysis Using Hidden Markov Mixture Models. IEEE Transactions on Signal Processing, 2007, 55, 5209-5224. | 3.2 | 55 |
| 59 | Applying compressive sensing to TEM video: a substantial frame rate increase on any camera. Advanced Structural and Chemical Imaging, 2015, 1, . | 4.0 | 55 |
| 60 | Infinite Hidden Markov Models for Unusual-Event Detection in Video. IEEE Transactions on Image Processing, 2008, 17, 811-822. | 6.0 | 54 |
| 61 | Electromagnetic Target Detection in Uncertain Media: Time-Reversal and Minimum-Variance Algorithms. IEEE Transactions on Geoscience and Remote Sensing, 2007, 45, 934-944. | 2.7 | 53 |
| 62 | Application of a machine learning algorithm to predict malignancy in thyroid cytopathology. Cancer Cytopathology, 2020, 128, 287-295. | 1.4 | 53 |
| 63 | Coherence, Compressive Sensing, and Random Sensor Arrays. IEEE Antennas and Propagation Magazine, 2011, 53, 28-39. | 1.2 | 52 |
| 64 | Weakly supervised instance learning for thyroid malignancy prediction from whole slide cytopathology images. Medical Image Analysis, 2021, 67, 101814. | 7.0 | 52 |
| 65 | Diffraction theory of frequency- and time-domain scattering by weakly aperiodic truncated thin-wire gratings. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 1994, 11, 1291. | 0.8 | 51 |
| 66 | Compressed sampling strategies for tomography. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2014, 31, 1369. | 0.8 | 51 |
| 67 | Task-Driven Adaptive Statistical Compressive Sensing of Gaussian Mixture Models. IEEE Transactions on Signal Processing, 2013, 61, 585-600. | 3.2 | 47 |
| 68 | Continuing progress of spike sorting in the era of big data. Current Opinion in Neurobiology, 2019, 55, 90-96. | 2.0 | 47 |
| 69 | Learning Generic Sentence Representations Using Convolutional Neural Networks. , 2017, , . | | 47 |
| 70 | Sparse Signal Recovery and Acquisition with Graphical Models. IEEE Signal Processing Magazine, 2010, , . | 4.6 | 45 |
| 71 | The Matrix Stick-Breaking Process. Journal of the American Statistical Association, 2008, 103, 317-327. | 1.8 | 44 |
| 72 | Artificial Intelligence Mapping of Structure to Function in Glaucoma. Translational Vision Science and Technology, 2020, 9, 19. | 1.1 | 42 |

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| 73 | Incomplete-data classification using logistic regression. , 2005, , . | | 41 |
| 74 | Hidden Markov Models With Stick-Breaking Priors. IEEE Transactions on Signal Processing, 2009, 57, 3905-3917. | 3.2 | 40 |
| 75 | Image translation for single-shot focal tomography. Optica, 2015, 2, 822. | 4.8 | 39 |
| 76 | SAGES consensus recommendations on an annotation framework for surgical video. Surgical Endoscopy and Other Interventional Techniques, 2021, 35, 4918-4929. | 1.3 | 39 |
| 77 | Anomaly detection for medical images based on a one-class classification. , 2018, , . | | 39 |
| 78 | Application of the theory of optimal experiments to adaptive electromagnetic-induction sensing of buried targets. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2004, 26, 961-972. | 9.7 | 38 |
| 79 | The contextual focused topic model. , 2012, , . | | 38 |
| 80 | Hierarchical Bayesian Modeling of Topics in Time-Stamped Documents. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2010, 32, 996-1011. | 9.7 | 37 |
| 81 | Adaptive temporal compressive sensing for video. , 2013, , . | | 36 |
| 82 | Multichannel Electrophysiological Spike Sorting via Joint Dictionary Learning and Mixture Modeling. IEEE Transactions on Biomedical Engineering, 2014, 61, 41-54. | 2.5 | 35 |
| 83 | Machine-learning-based multiple abnormality prediction with large-scale chest computed tomography volumes. Medical Image Analysis, 2021, 67, 101857. | 7.0 | 35 |
| 84 | Wasserstein Contrastive Representation Distillation. , 2021, , . | | 35 |
| 85 | Reconstruction of Signals Drawn From a Gaussian Mixture Via Noisy Compressive Measurements. IEEE Transactions on Signal Processing, 2014, 62, 2265-2277. | 3.2 | 34 |
| 86 | Joint Classifier and Feature Optimization for Comprehensive Cancer Diagnosis Using Gene Expression Data. Journal of Computational Biology, 2004, 11, 227-242. | 0.8 | 32 |
| 87 | Multi-task compressive sensing with Dirichlet process priors. , 2008, , . | | 32 |
| 88 | Bayesian compressive sensing and projection optimization. , 2007, , . | | 31 |
| 89 | Classification and Reconstruction of High-Dimensional Signals From Low-Dimensional Features in the Presence of Side Information. IEEE Transactions on Information Theory, 2016, 62, 6459-6492. | 1.5 | 31 |
| 90 | NASH: Toward End-to-End Neural Architecture for Generative Semantic Hashing. , 2018, , . | | 31 |

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| 91 | Nonmyopic Multiaspect Sensing With Partially Observable Markov Decision Processes. IEEE Transactions on Signal Processing, 2007, 55, 2720-2730. | 3.2 | 30 |
| 92 | Migratory Logistic Regression for Learning Concept Drift Between Two Data Sets With Application to UXO Sensing. IEEE Transactions on Geoscience and Remote Sensing, 2009, 47, 1454-1466. | 2.7 | 29 |
| 93 | Bayesian inference of the number of factors in gene-expression analysis: application to human virus challenge studies. BMC Bioinformatics, 2010, 11, 552. | 1.2 | 29 |
| 94 | Dual hidden Markov model for characterizing wavelet coefficients from multi-aspect scattering data. Signal Processing, 2001, 81, 1303-1316. | 2.1 | 28 |
| 95 | Compressive sensing for multi-static scattering analysis. Journal of Computational Physics, 2009, 228, 3464-3477. | 1.9 | 28 |
| 96 | Active learning for online bayesian matrix factorization. , 2012, , . | | 28 |
| 97 | Dynamically Timed Stimulation of Corticolimbic Circuitry Activates a Stress-Compensatory Pathway. Biological Psychiatry, 2017, 82, 904-913. | 0.7 | 28 |
| 98 | A simple preconditioner for electric-field integral equations. Microwave and Optical Technology Letters, 2001, 30, 51-54. | 0.9 | 27 |
| 99 | Quantitative Arbor Analytics: Unsupervised Harmonic Co-Clustering of Populations of Brain Cell Arbors Based on L-Measure. Neuroinformatics, 2015, 13, 47-63. | 1.5 | 27 |
| 100 | Multi-shot Imaging: Joint Alignment, Deblurring, and Resolution-Enhancement. , 2014, , . | | 26 |
| 101 | Multiaspect identification of submerged elastic targets via wave-based matching pursuits and hidden Markov models. Journal of the Acoustical Society of America, 1999, 106, 605-616. | 0.5 | 25 |
| 102 | <i>In situ</i> compressive sensing. Inverse Problems, 2008, 24, 015023. | 1.0 | 25 |
| 103 | On Artificial Intelligence and Deep Learning Within Medical Education. Academic Medicine, 2020, 95, S10-S11. | 0.8 | 25 |
| 104 | Detection of Viruses Via Statistical Gene Expression Analysis. IEEE Transactions on Biomedical Engineering, 2011, 58, 468-479. | 2.5 | 24 |
| 105 | Predicting Viral Infection From High-Dimensional Biomarker Trajectories. Journal of the American Statistical Association, 2011, 106, 1259-1279. | 1.8 | 24 |
| 106 | An Active Learning Approach for Rapid Characterization of Endothelial Cells in Human Tumors. PLoS ONE, 2014, 9, e90495. | 1.1 | 24 |
| 107 | Wideband time-reversal imaging of an elastic target in an acoustic waveguide. Journal of the Acoustical Society of America, 2004, 115, 259-268. | 0.5 | 23 |
| 108 | Compressive particle filtering for target tracking. , 2009, , . | | 23 |

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| 109 | Active Learning and Basis Selection for Kernel-Based Linear Models: A Bayesian Perspective. IEEE Transactions on Signal Processing, 2010, 58, 2686-2700. | 3.2 | 23 |
| 110 | Experimental validation of a transport-based imaging method in highly scattering environments. Inverse Problems, 2007, 23, 2527-2539. | 1.0 | 22 |
| 111 | Semisupervised Learning of Hidden Markov Models via a Homotopy Method. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2009, 31, 275-287. | 9.7 | 22 |
| 112 | Nonparametric Bayesian matrix completion. , 2010, , . | | 22 |
| 113 | Learning Low-Dimensional Signal Models. IEEE Signal Processing Magazine, 2011, 28, 39-51. | 4.6 | 22 |
| 114 | Off-policy reinforcement learning with Gaussian processes. IEEE/CAA Journal of Automatica Sinica, 2014, 1, 227-238. | 8.5 | 22 |
| 115 | Signal processing for NQR discrimination of buried land mines. , 1999, 3710, 474. | | 20 |
| 116 | Efficient patch-based approach for compressive depth imaging. Applied Optics, 2016, 55, 7556. | 2.1 | 20 |
| 117 | A modified SPIHT algorithm for image coding with a joint MSE and classification distortion measure. IEEE Transactions on Image Processing, 2006, 15, 713-725. | 6.0 | 19 |
| 118 | Hierarchical Infinite Divisibility for Multiscale Shrinkage. IEEE Transactions on Signal Processing, 2014, 62, 4363-4374. | 3.2 | 19 |
| 119 | Multivariate time-series analysis and diffusion maps. Signal Processing, 2015, 116, 13-28. | 2.1 | 19 |
| 120 | Hierarchical kernel stick-breaking process for multi-task image analysis. , 2008, , . | | 18 |
| 121 | Survival cluster analysis. , 2020, , . | | 18 |
| 122 | Logistic Stick-Breaking Process. Journal of Machine Learning Research, 2011, 12, 203-239. | 62.4 | 18 |
| 123 | Wideband electromagnetic induction for metal-target identification: theory, measurement, and signal processing. , 1998, , . | | 17 |
| 124 | Fast multipole method for scattering from 3-D PEC targets situated in a half-space environment. Microwave and Optical Technology Letters, 1999, 21, 399-405. | 0.9 | 17 |
| 125 | Pseudospectral method based on prolate spheroidal wave functions for semiconductor nanodevice simulation. Computer Physics Communications, 2006, 175, 78-85. | 3.0 | 17 |
| 126 | Sticky Hidden Markov Modeling of Comparative Genomic Hybridization. IEEE Transactions on Signal Processing, 2010, 58, 5353-5368. | 3.2 | 17 |

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| 127 | High-Dimensional Longitudinal Genomic Data: An analysis used for monitoring viral infections. IEEE Signal Processing Magazine, 2012, 29, 108-123. | 4.6 | 17 |
| 128 | Quadratically gated mixture of experts for incomplete data classification. , 2007, , . | | 16 |
| 129 | The matrix stick-breaking process for flexible multi-task learning. , 2007, , . | | 16 |
| 130 | Dynamic Nonparametric Bayesian Models for Analysis of Music. Journal of the American Statistical Association, 2010, 105, 458-472. | 1.8 | 16 |
| 131 | Automatic threat recognition of prohibited items at aviation checkpoint with x-ray imaging: a deep learning approach. , 2018, , . | | 16 |
| 132 | An interpretable deep learning workflow for discovering subvisual abnormalities in CT scans of COVID-19 inpatients and survivors. Nature Machine Intelligence, 2022, 4, 494-503. | 8.3 | 16 |
| 133 | Beam-tracing-based inverse scattering for general aperture antennas. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 1999, 16, 2219. | 0.8 | 15 |
| 134 | Discriminative sparse representations in hyperspectral imagery. , 2010, , . | | 15 |
| 135 | A Bregman Matrix and the Gradient of Mutual Information for Vector Poisson and Gaussian Channels. IEEE Transactions on Information Theory, 2014, 60, 2611-2629. | 1.5 | 15 |
| 136 | Estimation of the CSAâ€œODF using Bayesian compressed sensing of multiâ€œshell HARDI. Magnetic Resonance in Medicine, 2014, 72, 1471-1485. | 1.9 | 15 |
| 137 | Nonlocal Low-Rank Tensor Factor Analysis for Image Restoration. , 2018, , . | | 15 |
| 138 | Time-domain wave-oriented data processing of scattering by nonuniform truncated gratings. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 1994, 11, 2685. | 0.8 | 14 |
| 139 | Multilevel fast multipole algorithm for three-dimensional dielectric targets in the vicinity of a lossy half space. Microwave and Optical Technology Letters, 2001, 29, 100-104. | 0.9 | 14 |
| 140 | Three-Dimensional Bayesian Inversion With Application to Subsurface Sensing. IEEE Transactions on Geoscience and Remote Sensing, 2007, 45, 1258-1270. | 2.7 | 14 |
| 141 | Sparse linear regression with beta process priors. , 2010, , . | | 14 |
| 142 | Learning Weight Uncertainty with Stochastic Gradient MCMC for Shape Classification. , 2016, , . | | 14 |
| 143 | Scalable Bayesian Learning of Recurrent Neural Networks for Language Modeling. , 2017, , . | | 14 |
| 144 | Frequency and time domain Braggâ€œmodulated ray acoustics for truncated periodic arrays. Journal of the Acoustical Society of America, 1994, 95, 638-649. | 0.5 | 13 |

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| 145 | Multiresolution time domain analysis of scattering from a rough dielectric surface. <i>Radio Science</i> , 2000, 35, 1279-1292. | 0.8 | 13 |
| 146 | Wide-area detection of land mines and unexploded ordnance. <i>Inverse Problems</i> , 2002, 18, 575-609. | 1.0 | 13 |
| 147 | Information-Theoretic Compressive Measurement Design. <i>IEEE Transactions on Pattern Analysis and Machine Intelligence</i> , 2017, 39, 1150-1164. | 9.7 | 13 |
| 148 | Scalable Bayesian Non-negative Tensor Factorization for Massive Count Data. <i>Lecture Notes in Computer Science</i> , 2015, , 53-70. | 1.0 | 13 |
| 149 | Time-reversal imaging for classification of submerged elastic targets via Gibbs sampling and the Relevance Vector Machine. <i>Journal of the Acoustical Society of America</i> , 2005, 117, 1999-2011. | 0.5 | 12 |
| 150 | Rapid Prolate Pseudospectral Differentiation and Interpolation with the Fast Multipole Method. <i>SIAM Journal of Scientific Computing</i> , 2006, 28, 485-497. | 1.3 | 12 |
| 151 | Gaussian mixture model for video compressive sensing. , 2013, , . | | 12 |
| 152 | Signal Recovery and System Calibration from Multiple Compressive Poisson Measurements. <i>SIAM Journal on Imaging Sciences</i> , 2015, 8, 1923-1954. | 1.3 | 12 |
| 153 | Unexploded ordnance detection using Bayesian physics-based data fusion. <i>Integrated Computer-Aided Engineering</i> , 2003, 10, 231-247. | 2.5 | 12 |
| 154 | Photoconductively switched antennas for measuring target resonances. <i>Applied Physics Letters</i> , 1994, 64, 2178-2180. | 1.5 | 11 |
| 155 | Multi-task learning for sequential data via iHMMs and the nested Dirichlet process. , 2007, , . | | 11 |
| 156 | Classification of Unexploded Ordnance Using Incomplete Multisensor Multiresolution Data. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , 2007, 45, 2364-2373. | 2.7 | 11 |
| 157 | Online Bayesian dictionary learning for large datasets. , 2012, , . | | 11 |
| 158 | Joint classifier and feature optimization for cancer diagnosis using gene expression data. , 2003, , . | | 11 |
| 159 | Efficient analytical-numerical modelling of ultra-wideband pulsed plane wave scattering. <i>International Journal of Numerical Modelling: Electronic Networks, Devices and Fields</i> , 1993, 6, 3-17. | 1.2 | 10 |
| 160 | Frequency-domain scattering by nonuniform truncated arrays: wave-oriented data processing for inversion and imaging. <i>Journal of the Optical Society of America A: Optics and Image Science, and Vision</i> , 1994, 11, 2675. | 0.8 | 10 |
| 161 | Multi-Task Learning for Analyzing and Sorting Large Databases of Sequential Data. <i>IEEE Transactions on Signal Processing</i> , 2008, 56, 3918-3931. | 3.2 | 10 |
| 162 | Spatio-Temporal Modeling of Legislation and Votes. <i>Bayesian Analysis</i> , 2013, 8, . | 1.6 | 10 |

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| 163 | RetiNerveNet: using recursive deep learning to estimate pointwise 24-2 visual field data based on retinal structure. Scientific Reports, 2021, 11, 12562. | 1.6 | 10 |
| 164 | Wave-based matching-pursuits detection of submerged elastic targets. Journal of the Acoustical Society of America, 1998, 104, 937-946. | 0.5 | 9 |
| 165 | HMM-based multiresolution image segmentation. , 2002, , . | | 9 |
| 166 | Classification of distant targets situated near channel bottoms. Journal of the Acoustical Society of America, 2004, 115, 1185-1197. | 0.5 | 9 |
| 167 | Compressive Sensing for Video Using a Passive Coding Element. , 2013, , . | | 9 |
| 168 | Quantitative profiling of microglia populations using harmonic co-clustering of arbor morphology measurements. , 2013, , . | | 9 |
| 169 | Stochastic Spectral Descent for Discrete Graphical Models. IEEE Journal on Selected Topics in Signal Processing, 2016, 10, 296-311. | 7.3 | 9 |
| 170 | Short-pulse scattering measurements from dielectric spheres using photoconductively switched antennas. Applied Physics Letters, 1993, 62, 1301-1303. | 1.5 | 8 |
| 171 | ICA and PLS modeling for functional analysis and drug sensitivity for DNA microarray signals. , 2002, , . | | 8 |
| 172 | Adaptive Multimodality Sensing of Landmines. IEEE Transactions on Geoscience and Remote Sensing, 2007, 45, 1756-1774. | 2.7 | 8 |
| 173 | Compressive STEM-EELS. Microscopy and Microanalysis, 2016, 22, 560-561. | 0.2 | 8 |
| 174 | Compressive extended depth of field using image space coding. , 2014, , . | | 8 |
| 175 | Multilevel fast multipole algorithm for general dielectric targets in the presence of a lossy half-space. Radio Science, 2001, 36, 1271-1285. | 0.8 | 7 |
| 176 | Model-based statistical signal processing for UXO discrimination: performance results from the JPG-V demonstration. , 2003, , . | | 7 |
| 177 | Adapted statistical compressive sensing: Learning to sense gaussian mixture models. , 2012, , . | | 7 |
| 178 | Temporal Compressive Sensing for Video. Applied and Numerical Harmonic Analysis, 2015, , 41-74. | 0.1 | 7 |
| 179 | Coded Aperture Compressive Spectral-Temporal Imaging. , 2015, , . | | 7 |
| 180 | Observations and Lessons Learned From the Artificial Intelligence Studies for Diabetic Retinopathy Screening. JAMA Ophthalmology, 2019, 137, 994. | 1.4 | 7 |

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| 181 | Use of Machine Learning-Based Software for the Screening of Thyroid Cytopathology Whole Slide Images. Archives of Pathology and Laboratory Medicine, 2022, 146, 872-878. | 1.2 | 7 |
| 182 | Parallel implementation of the biorthogonal multiresolution time-domain method. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2003, 20, 844. | 0.8 | 6 |
| 183 | Volumetric fast multipole method for modeling Schrödinger's equation. Journal of Computational Physics, 2007, 224, 941-955. | 1.9 | 6 |
| 184 | Classification with Incomplete Data Using Dirichlet Process Priors. Journal of Machine Learning Research, 2010, 11, 3269-3311. | 62.4 | 6 |
| 185 | WAFFLe: Weight Anonymized Factorization for Federated Learning. IEEE Access, 2022, 10, 49207-49218. | 2.6 | 6 |
| 186 | Efficient evaluation of the half-space Green's function for fast-multipole scattering models. Microwave and Optical Technology Letters, 2001, 29, 388-392. | 0.9 | 5 |
| 187 | Inverse scattering with sparse Bayesian vector regression. Inverse Problems, 2004, 20, S217-S231. | 1.0 | 5 |
| 188 | Analysis of wideband forward looking synthetic aperture radar for sensing land mines. Radio Science, 2004, 39, n/a-n/a. | 0.8 | 5 |
| 189 | Direct algorithm for computation of derivatives of the Daubechies basis functions. Applied Mathematics and Computation, 2005, 170, 1006-1013. | 1.4 | 5 |
| 190 | Analysis, design, and construction of a broadband balun for coaxial-to-planar transmission lines. Microwave and Optical Technology Letters, 2005, 44, 501-504. | 0.9 | 5 |
| 191 | A Bivariate Gaussian Model for Unexploded Ordnance Classification with EMI Data. IEEE Geoscience and Remote Sensing Letters, 2007, 4, 629-633. | 1.4 | 5 |
| 192 | Multitask Classification by Learning the Task Relevance. IEEE Signal Processing Letters, 2008, 15, 593-596. | 2.1 | 5 |
| 193 | A nonparametric Bayesian model for kernel matrix completion. , 2010, , . | | 5 |
| 194 | Nonparametric image interpolation and dictionary learning using spatially-dependent Dirichlet and beta process priors. , 2010, , . | | 5 |
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