

# Jeffrey A Fessler

## List of Publications by Year in descending order

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205  
papers

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h-index

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206  
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206  
docs citations

206  
times ranked

6054  
citing authors

| #  | ARTICLE   | IF   | CITATIONS |
|----|---|------|-----------|
| 1  | Statistical image reconstruction for polyenergetic X-ray computed tomography. IEEE Transactions on Medical Imaging, 2002, 21, 89-99.  | 8.9  | 531       |
| 2  | Image Reconstruction is a New Frontier of Machine Learning. IEEE Transactions on Medical Imaging, 2018, 37, 1289-1296.  | 8.9  | 366       |
| 3  | Fast, iterative image reconstruction for MRI in the presence of field inhomogeneities. IEEE Transactions on Medical Imaging, 2003, 22, 178-188.   | 8.9  | 323       |
| 4  | Spatial domain method for the design of RF pulses in multicoil parallel excitation. Magnetic Resonance in Medicine, 2006, 56, 620-629.  | 3.0  | 282       |
| 5  | Globally convergent image reconstruction for emission tomography using relaxed ordered subsets algorithms. IEEE Transactions on Medical Imaging, 2003, 22, 613-626.                               | 8.9  | 256       |
| 6  | Model-Based Image Reconstruction for MRI. IEEE Signal Processing Magazine, 2010, 27, 81-89.   | 5.6  | 234       |
| 7  | A Splitting-Based Iterative Algorithm for Accelerated Statistical X-Ray CT Reconstruction. IEEE Transactions on Medical Imaging, 2012, 31, 677-688.   | 8.9  | 208       |
| 8  | Grouped-coordinate ascent algorithms for penalized-likelihood transmission image reconstruction. IEEE Transactions on Medical Imaging, 1997, 16, 166-175.   | 8.9  | 193       |
| 9  | Regularization Parameter Selection for Nonlinear Iterative Image Restoration and MRI Reconstruction Using GCV and SURE-Based Methods. IEEE Transactions on Image Processing, 2012, 21, 3659-3672. | 9.8  | 193       |
| 10 | Reducing between scanner differences in multi-center PET studies. NeuroImage, 2009, 46, 154-159.  | 4.2  | 192       |
| 11 | Image Reconstruction: From Sparsity to Data-Adaptive Methods and Machine Learning. Proceedings of the IEEE, 2020, 108, 86-109.  | 21.3 | 187       |
| 12 | Parallel MR Image Reconstruction Using Augmented Lagrangian Methods. IEEE Transactions on Medical Imaging, 2011, 30, 694-706.   | 8.9  | 186       |
| 13 | Conjugate-gradient preconditioning methods for shift-variant PET image reconstruction. IEEE Transactions on Image Processing, 1999, 8, 688-699.   | 9.8  | 183       |
| 14 | 3D Forward and Back-Projection for X-Ray CT Using Separable Footprints. IEEE Transactions on Medical Imaging, 2010, 29, 1839-1850.  | 8.9  | 182       |
| 15 | On NUFFT-based gridding for non-Cartesian MRI. Journal of Magnetic Resonance, 2007, 188, 191-195.   | 2.1  | 179       |
| 16 | Multi-Material Decomposition Using Statistical Image Reconstruction for Spectral CT. IEEE Transactions on Medical Imaging, 2014, 33, 1614-1626.   | 8.9  | 173       |
| 17 | Modelling the physics in the iterative reconstruction for transmission computed tomography. Physics in Medicine and Biology, 2013, 58, R63-R96.   | 3.0  | 163       |
| 18 | Segmentation-free statistical image reconstruction for polyenergetic x-ray computed tomography with experimental validation. Physics in Medicine and Biology, 2003, 48, 2453-2477.                | 3.0  | 124       |

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|----|---|------|-----------|
| 19 | Statistical Image Reconstruction Methods for Transmission Tomography. , 0, , 1-70.  |      | 116       |
| 20 | Combining Ordered Subsets and Momentum for Accelerated X-Ray CT Image Reconstruction. IEEE Transactions on Medical Imaging, 2015, 34, 167-178.                              | 8.9  | 113       |
| 21 | Optimization Methods for Magnetic Resonance Image Reconstruction: Key Models and Optimization Algorithms. IEEE Signal Processing Magazine, 2020, 37, 33-40.                 | 5.6  | 109       |
| 22 | Convolutional Dictionary Learning: Acceleration and Convergence. IEEE Transactions on Image Processing, 2018, 27, 1697-1712.  | 9.8  | 102       |
| 23 | Regularized Field Map Estimation in MRI. IEEE Transactions on Medical Imaging, 2008, 27, 1484-1494.   | 8.9  | 98        |
| 24 | An Expanded Theoretical Treatment of Iteration-Dependent Majorize-Minimize Algorithms. IEEE Transactions on Image Processing, 2007, 16, 2411-2422.                          | 9.8  | 93        |
| 25 | Separate Magnitude and Phase Regularization via Compressed Sensing. IEEE Transactions on Medical Imaging, 2012, 31, 1713-1723.  | 8.9  | 87        |
| 26 | Dynamic field map estimation using a spiral-in/spiral-out acquisition. Magnetic Resonance in Medicine, 2004, 51, 1194-1204.   | 3.0  | 86        |
| 27 | Compensation for Nonuniform Resolution Using Penalized-Likelihood Reconstruction in Space-Variant Imaging Systems. IEEE Transactions on Medical Imaging, 2004, 23, 269-284. | 8.9  | 85        |
| 28 | Conjugate phase MRI reconstruction with spatially variant sample density correction. IEEE Transactions on Medical Imaging, 2005, 24, 325-336.                               | 8.9  | 82        |
| 29 | Optimized first-order methods for smooth convex minimization. Mathematical Programming, 2016, 159, 81-107.  | 2.4  | 81        |
| 30 | Deep BCD-Net Using Identical Encoding-Decoding CNN Structures for Iterative Image Recovery. , 2018, , .   |      | 80        |
| 31 | Ranging and light field imaging with transparent photodetectors. Nature Photonics, 2020, 14, 143-148.   | 31.4 | 80        |
| 32 | Statistical image reconstruction methods for randoms-precorrected PET scans. Medical Image Analysis, 1998, 2, 369-378.  | 11.6 | 79        |
| 33 | Estimating 3-D Respiratory Motion From Orbiting Views by Tomographic Image Registration. IEEE Transactions on Medical Imaging, 2007, 26, 153-163.                           | 8.9  | 79        |
| 34 | PWLS-ULTRA: An Efficient Clustering and Learning-Based Approach for Low-Dose 3D CT Image Reconstruction. IEEE Transactions on Medical Imaging, 2018, 37, 1498-1510.         | 8.9  | 77        |
| 35 | Iterative RF pulse design for multidimensional, small-tip-angle selective excitation. Magnetic Resonance in Medicine, 2005, 54, 908-917.                                    | 3.0  | 73        |
| 36 | Efficient and accurate likelihood for iterative image reconstruction in x-ray computed tomography. , 2003, , .  |      | 70        |

| #  | ARTICLE   | IF   | CITATIONS |
|----|---|------|-----------|
| 37 | Mean and variance of single photon counting with deadtime. <i>Physics in Medicine and Biology</i> , 2000, 45, 2043-2056.  | 3.0  | 67        |
| 38 | A Simple Regularizer for B-spline Nonrigid Image Registration That Encourages Local Invertibility. <i>IEEE Journal on Selected Topics in Signal Processing</i> , 2009, 3, 159-169.                  | 10.8 | 64        |
| 39 | Maximum-likelihood dual-energy tomographic image reconstruction. , 2002, 4684, 38.  |      | 61        |
| 40 | Advanced three-dimensional tailored RF pulse for signal recovery in T2*-weighted functional magnetic resonance imaging. <i>Magnetic Resonance in Medicine</i> , 2006, 56, 1050-1059.                | 3.0  | 61        |
| 41 | Penalized-likelihood image reconstruction for digital holography. <i>Journal of the Optical Society of America A: Optics and Image Science, and Vision</i> , 2004, 21, 737.                         | 1.5  | 60        |
| 42 | Fast Large-Tip-Angle Multidimensional and Parallel RF Pulse Design in MRI. <i>IEEE Transactions on Medical Imaging</i> , 2009, 28, 1548-1559.   | 8.9  | 58        |
| 43 | A feasibility study of mutual information based setup error estimation for radiotherapy. <i>Medical Physics</i> , 2001, 28, 2507-2517.  | 3.0  | 57        |
| 44 | Statistical Sinogram Restoration in Dual-Energy CT for PET Attenuation Correction. <i>IEEE Transactions on Medical Imaging</i> , 2009, 28, 1688-1702.   | 8.9  | 55        |
| 45 | Dual Energy CT Attenuation Correction Methods for Quantitative Assessment of Response to Cancer Therapy with PET/CT Imaging. <i>Technology in Cancer Research and Treatment</i> , 2006, 5, 319-327. | 1.9  | 53        |
| 46 | Improved quantitative $^{90}\text{Y}$ bremsstrahlung SPECT/CT reconstruction with Monte Carlo scatter modeling. <i>Medical Physics</i> , 2017, 44, 6364-6376.                                       | 3.0  | 53        |
| 47 | 3-D Monte Carlo-based scatter compensation in quantitative I-131 SPECT reconstruction. <i>IEEE Transactions on Nuclear Science</i> , 2006, 53, 181-188.   | 2.0  | 52        |
| 48 | Low-Rank and Adaptive Sparse Signal (LASSI) Models for Highly Accelerated Dynamic Imaging. <i>IEEE Transactions on Medical Imaging</i> , 2017, 36, 1116-1128.                                       | 8.9  | 52        |
| 49 | Accelerated Edge-Preserving Image Restoration Without Boundary Artifacts. <i>IEEE Transactions on Image Processing</i> , 2013, 22, 2019-2029.   | 9.8  | 51        |
| 50 | Respiratory motion estimation from slowly rotating x-ray projections: Theory and simulation. <i>Medical Physics</i> , 2005, 32, 984-991.  | 3.0  | 47        |
| 51 | Additive angle method for fast large-tip-angle RF pulse design in parallel excitation. <i>Magnetic Resonance in Medicine</i> , 2008, 59, 779-787.   | 3.0  | 44        |
| 52 | Improved Low-Count Quantitative PET Reconstruction With an Iterative Neural Network. <i>IEEE Transactions on Medical Imaging</i> , 2020, 39, 3512-3522.   | 8.9  | 43        |
| 53 | Another Look at the Fast Iterative Shrinkage/Thresholding Algorithm (FISTA). <i>SIAM Journal on Optimization</i> , 2018, 28, 223-250.   | 2.0  | 42        |
| 54 | Accelerating Ordered Subsets Image Reconstruction for X-ray CT Using Spatially Nonuniform Optimization Transfer. <i>IEEE Transactions on Medical Imaging</i> , 2013, 32, 1965-1978.                 | 8.9  | 41        |

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|----|--|-----|-----------|
| 55 | Asymptotic performance of PCA for high-dimensional heteroscedastic data. Journal of Multivariate Analysis, 2018, 167, 435-452.   | 1.0 | 41        |
| 56 | Regularization Designs for Uniform Spatial Resolution and Noise Properties in Statistical Image Reconstruction for 3-D X-ray CT. IEEE Transactions on Medical Imaging, 2015, 34, 678-689.                      | 8.9 | 38        |
| 57 | Correction for Collimator-Detector Response in SPECT Using Point Spread Function Template. IEEE Transactions on Medical Imaging, 2013, 32, 295-305.  | 8.9 | 37        |
| 58 | Fast Joint Reconstruction of Dynamic $R_2^*$ and Field Maps in Functional MRI. IEEE Transactions on Medical Imaging, 2008, 27, 1177-1188.  | 8.9 | 35        |
| 59 | Regularized reconstruction in quantitative SPECT using CT side information from hybrid imaging. Physics in Medicine and Biology, 2010, 55, 2523-2539.  | 3.0 | 34        |
| 60 | Relaxed Linearized Algorithms for Faster X-Ray CT Image Reconstruction. IEEE Transactions on Medical Imaging, 2016, 35, 1090-1098.   | 8.9 | 33        |
| 61 | Convolutional Analysis Operator Learning: Acceleration and Convergence. IEEE Transactions on Image Processing, 2020, 29, 2108-2122.  | 9.8 | 33        |
| 62 | A deep neural network for fast and accurate scatter estimation in quantitative SPECT/CT under challenging scatter conditions. European Journal of Nuclear Medicine and Molecular Imaging, 2020, 47, 2956-2967. | 6.4 | 33        |
| 63 | Mean position tracking of respiratory motion. Medical Physics, 2008, 35, 782-792.  | 3.0 | 32        |
| 64 | Exploring breathing pattern irregularity with projection-based method. Medical Physics, 2006, 33, 2491-2499.   | 3.0 | 30        |
| 65 | Fast Predictions of Variance Images for Fan-Beam Transmission Tomography With Quadratic Regularization. IEEE Transactions on Medical Imaging, 2007, 26, 335-346.   | 8.9 | 30        |
| 66 | Comparison of SIRT and SQS for Regularized Weighted Least Squares Image Reconstruction. IEEE Transactions on Computational Imaging, 2015, 1, 44-55.  | 4.4 | 30        |
| 67 | Joint design of trajectory and RF pulses for parallel excitation. Magnetic Resonance in Medicine, 2007, 58, 598-604.   | 3.0 | 29        |
| 68 | Efficient Sum of Outer Products Dictionary Learning (SOUP-DIL) and Its Application to Inverse Problems. IEEE Transactions on Computational Imaging, 2017, 3, 694-709.  | 4.4 | 29        |
| 69 | Image recovery using partitioned-separable paraboloidal surrogate coordinate ascent algorithms. IEEE Transactions on Image Processing, 2002, 11, 306-317.  | 9.8 | 26        |
| 70 | Iterative sorting for four-dimensional CT images based on internal anatomy motion. Medical Physics, 2008, 35, 917-926.   | 3.0 | 26        |
| 71 | Noise Properties of Motion-Compensated Tomographic Image Reconstruction Methods. IEEE Transactions on Medical Imaging, 2013, 32, 141-152.  | 8.9 | 26        |
| 72 | Alternating Direction Method of Multiplier for Tomography With Nonlocal Regularizers. IEEE Transactions on Medical Imaging, 2014, 33, 1960-1968.   | 8.9 | 26        |

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|----|---|-----|-----------|
| 73 | Alternating Dual Updates Algorithm for X-ray CT Reconstruction on the GPU. IEEE Transactions on Computational Imaging, 2015, 1, 186-199.  | 4.4 | 25        |
| 74 | Undersampled Phase Retrieval With Outliers. IEEE Transactions on Computational Imaging, 2015, 1, 247-258.   | 4.4 | 25        |
| 75 | Mean and variance of coincidence counting with deadtime. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2002, 488, 362-374. | 1.6 | 24        |
| 76 | Adaptive Restart of the Optimized Gradient Method for Convex Optimization. Journal of Optimization Theory and Applications, 2018, 178, 240-263.   | 1.5 | 24        |
| 77 | Accelerated Regularized Estimation of MR Coil Sensitivities Using Augmented Lagrangian Methods. IEEE Transactions on Medical Imaging, 2013, 32, 556-564.  | 8.9 | 23        |
| 78 | Spectral-spatial pulse design for through-plane phase precompensatory slice selection in T <sub>2</sub> -weighted functional MRI. Magnetic Resonance in Medicine, 2009, 61, 1137-1147.                        | 3.0 | 22        |
| 79 | Post-reconstruction non-local means filtering methods using CT side information for quantitative SPECT. Physics in Medicine and Biology, 2013, 58, 6225-6240.   | 3.0 | 22        |
| 80 | Monte Carlo SURE-based parameter selection for parallel magnetic resonance imaging reconstruction. Magnetic Resonance in Medicine, 2014, 71, 1760-1770.   | 3.0 | 22        |
| 81 | Fast Parallel MR Image Reconstruction via B1-Based, Adaptive Restart, Iterative Soft Thresholding Algorithms (BARISTA). IEEE Transactions on Medical Imaging, 2015, 34, 578-588.                              | 8.9 | 22        |
| 82 | Quadratic Regularization Design for 2-D CT. IEEE Transactions on Medical Imaging, 2009, 28, 645-656.  | 8.9 | 21        |
| 83 | Spatial Resolution Properties of Motion-Compensated Tomographic Image Reconstruction Methods. IEEE Transactions on Medical Imaging, 2012, 31, 1413-1425.  | 8.9 | 21        |
| 84 | On the Convergence Analysis of the Optimized Gradient Method. Journal of Optimization Theory and Applications, 2017, 172, 187-205.  | 1.5 | 21        |
| 85 | Generalizing the Optimized Gradient Method for Smooth Convex Minimization. SIAM Journal on Optimization, 2018, 28, 1920-1950.   | 2.0 | 21        |
| 86 | DECT-MULTRA: Dual-Energy CT Image Decomposition With Learned Mixed Material Models and Efficient Clustering. IEEE Transactions on Medical Imaging, 2020, 39, 1223-1234.                                       | 8.9 | 21        |
| 87 | Low dose CT image reconstruction with learned sparsifying transform. , 2016, , .  |     | 20        |
| 88 | Dictionary-Free MRI PERK: Parameter Estimation via Regression with Kernels. IEEE Transactions on Medical Imaging, 2018, 37, 2103-2114.  | 8.9 | 20        |
| 89 | Edge-Preserving Image Denoising via Group Coordinate Descent on the GPU. IEEE Transactions on Image Processing, 2015, 24, 1273-1281.  | 9.8 | 19        |
| 90 | Deep Convolutional Neural Network With Adversarial Training for Denoising Digital Breast Tomosynthesis Images. IEEE Transactions on Medical Imaging, 2021, 40, 1805-1816.                                     | 8.9 | 19        |

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|-----|---|------|-----------|
| 91  | Concurrent correction of geometric distortion and motion using the map-slice-to-volume method in echo-planar imaging. <i>Magnetic Resonance Imaging</i> , 2008, 26, 703-714.                                      | 1.8  | 18        |
| 92  | SPULTRA: Low-Dose CT Image Reconstruction With Joint Statistical and Learned Image Models. <i>IEEE Transactions on Medical Imaging</i> , 2020, 39, 729-741.   | 8.9  | 18        |
| 93  | Spatial Resolution and Noise Tradeoffs in Pinhole Imaging System Design: A Density Estimation Approach. <i>Optics Express</i> , 1998, 2, 237.   | 3.4  | 17        |
| 94  | Exact distribution of edge-preserving MAP estimators for linear signal models with Gaussian measurement noise. <i>IEEE Transactions on Image Processing</i> , 2000, 9, 1049-1055.                                 | 9.8  | 17        |
| 95  | Joint image reconstruction and nonrigid motion estimation with a simple penalty that encourages local invertibility. <i>Proceedings of SPIE</i> , 2009, , .   | 0.8  | 17        |
| 96  | Fast joint design method for parallel excitation radiofrequency pulse and gradient waveforms considering off-resonance. <i>Magnetic Resonance in Medicine</i> , 2012, 68, 278-285.                                | 3.0  | 17        |
| 97  | Optimizing MR Scan Design for Model-Based $T_1$ , $T_2$ Estimation From Steady-State Sequences. <i>IEEE Transactions on Medical Imaging</i> , 2017, 36, 467-477.  | 8.9  | 17        |
| 98  | Detector Blur and Correlated Noise Modeling for Digital Breast Tomosynthesis Reconstruction. <i>IEEE Transactions on Medical Imaging</i> , 2018, 37, 116-127.   | 8.9  | 17        |
| 99  | Optimizing MRF-ASL scan design for precise quantification of brain hemodynamics using neural network regression. <i>Magnetic Resonance in Medicine</i> , 2020, 83, 1979-1991.                                     | 3.0  | 16        |
| 100 | Neural network based 3D tracking with a graphene transparent focal stack imaging system. <i>Nature Communications</i> , 2021, 12, 2413.   | 12.8 | 16        |
| 101 | BCD-Net for Low-Dose CT Reconstruction: Acceleration, Convergence, and Generalization. <i>Lecture Notes in Computer Science</i> , 2019, , 31-40.  | 1.3  | 16        |
| 102 | Preliminary results from intensity-based CT-SPECT fusion in I-131 anti-B1 monoclonal-antibody therapy of lymphoma. <i>Cancer</i> , 1997, 80, 2538-2544.   | 4.1  | 15        |
| 103 | A PET reconstruction formulation that enforces non-negativity in projection space for bias reduction in Y-90 imaging. <i>Physics in Medicine and Biology</i> , 2018, 63, 035042.                                  | 3.0  | 15        |
| 104 | Image Reconstruction for Limited-Angle Electron Beam X-Ray Computed Tomography With Energy-Integrating Detectors for Multiphase Flows. <i>IEEE Transactions on Computational Imaging</i> , 2018, 4, 112-124.      | 4.4  | 15        |
| 105 | Joint Design of Excitation k-Space Trajectory and RF Pulse for Small-Tip 3D Tailored Excitation in MRI. <i>IEEE Transactions on Medical Imaging</i> , 2016, 35, 468-479.  | 8.9  | 14        |
| 106 | DblurDoseNet: A deep residual learning network for voxel radionuclide dosimetry compensating for single-photon emission computerized tomography imaging resolution. <i>Medical Physics</i> , 2022, 49, 1216-1230. | 3.0  | 14        |
| 107 | Non-Cartesian MRI Reconstruction With Automatic Regularization Via Monte-Carlo SURE. <i>IEEE Transactions on Medical Imaging</i> , 2013, 32, 1411-1422.   | 8.9  | 13        |
| 108 | Deep dictionary-transform learning for image reconstruction. , 2018, , .  |      | 13        |

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|-----|--|-----|-----------|
| 109 | A GRAPPA algorithm for arbitrary 2D/3D non-Cartesian sampling trajectories with rapid calibration. <i>Magnetic Resonance in Medicine</i> , 2019, 82, 1101-1112.  | 3.0 | 13        |
| 110 | Efficient Dynamic Parallel MRI Reconstruction for the Low-Rank Plus Sparse Model. <i>IEEE Transactions on Computational Imaging</i> , 2019, 5, 17-26.  | 4.4 | 13        |
| 111 | Optimization transfer approach to joint registration / reconstruction for motion-compensated image reconstruction. , 2010, , .   |     | 12        |
| 112 | Convolutional Analysis Operator Learning: Dependence on Training Data. <i>IEEE Signal Processing Letters</i> , 2019, 26, 1137-1141.  | 3.6 | 12        |
| 113 | Incorporation of system resolution compensation (RC) in the ordered-subset transmission (OSTR) algorithm for transmission imaging in SPECT. <i>IEEE Transactions on Medical Imaging</i> , 2006, 25, 941-949. | 8.9 | 11        |
| 114 | Model-based image reconstruction for dual-energy X-ray CT with fast KVP switching. , 2009, , .   |     | 11        |
| 115 | Joint reconstruction of Stokes images from polarimetric measurements. <i>Journal of the Optical Society of America A: Optics and Image Science, and Vision</i> , 2009, 26, 962.                              | 1.5 | 11        |
| 116 | Optimizing the Efficiency of First-Order Methods for Decreasing the Gradient of Smooth Convex Functions. <i>Journal of Optimization Theory and Applications</i> , 2021, 188, 192-219.                        | 1.5 | 11        |
| 117 | High-Resolution Oscillating Steady-State fMRI Using Patch-Tensor Low-Rank Reconstruction. <i>IEEE Transactions on Medical Imaging</i> , 2020, 39, 4357-4368.   | 8.9 | 11        |
| 118 | Benefits of Position-Sensitive Detectors for Radioactive Source Detection. <i>IEEE Transactions on Signal Processing</i> , 2010, 58, 4473-4483.  | 5.3 | 10        |
| 119 | Non-local means methods using CT side information for I-131 SPECT image reconstruction. , 2012, , .  |     | 10        |
| 120 | Statistical X-ray CT reconstruction using a splitting-based iterative algorithm with orthonormal wavelets. , 2012, , .   |     | 10        |
| 121 | Fast Variance Prediction for Iteratively Reconstructed CT Images With Locally Quadratic Regularization. <i>IEEE Transactions on Medical Imaging</i> , 2017, 36, 17-26.                                       | 8.9 | 10        |
| 122 | Low-Rank Plus Sparse Tensor Models for Light-field Reconstruction from Focal Stack Data. , 2018, , .   |     | 10        |
| 123 | Effect of source blur on digital breast tomosynthesis reconstruction. <i>Medical Physics</i> , 2019, 46, 5572-5592.  | 3.0 | 10        |
| 124 | Discontinuity preserving regularization for modeling sliding in medical image registration. , 2008, , .  |     | 9         |
| 125 | Regularized Image Reconstruction Algorithms for Dual-Isotope Myocardial Perfusion SPECT (MPS) Imaging Using a Cross-Tracer Prior. <i>IEEE Transactions on Medical Imaging</i> , 2011, 30, 1169-1183.         | 8.9 | 9         |
| 126 | Steady-state functional MRI using spoiled small-tip fast recovery imaging. <i>Magnetic Resonance in Medicine</i> , 2015, 73, 536-543.  | 3.0 | 9         |



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|-----|---|-----|-----------|
| 127 | Y-90 SPECT ML image reconstruction with a new model for tissue-dependent bremsstrahlung production using CT information: a proof-of-concept study. <i>Physics in Medicine and Biology</i> , 2018, 63, 115001. | 3.0 | 9         |
| 128 | Simplified Statistical Image Reconstruction for X-ray CT With Beam-Hardening Artifact Compensation. <i>IEEE Transactions on Medical Imaging</i> , 2020, 39, 111-118.  | 8.9 | 9         |
| 129 | HePPCAT: Probabilistic PCA for Data With Heteroscedastic Noise. <i>IEEE Transactions on Signal Processing</i> , 2021, 69, 4819-4834.  | 5.3 | 9         |
| 130 | Imaging atomic-scale chemistry from fused multi-modal electron microscopy. <i>Npj Computational Materials</i> , 2022, 8, .  | 8.7 | 9         |
| 131 | Performance of a deep learning-based CT image denoising method: Generalizability over dose, reconstruction kernel, and slice thickness. <i>Medical Physics</i> , 2022, 49, 836-853.                           | 3.0 | 9         |
| 132 | Accuracy estimation for projection-to-volume targeting during rotational therapy: A feasibility study. <i>Medical Physics</i> , 2010, 37, 2480-2490.  | 3.0 | 8         |
| 133 | Regularized MR coil sensitivity estimation using augmented Lagrangian methods. , 2012, , .  |     | 8         |
| 134 | Strategies for improved 3D small-tip fast recovery imaging. <i>Magnetic Resonance in Medicine</i> , 2014, 72, 389-398.  | 3.0 | 8         |
| 135 | An optimized first-order method for image restoration. , 2015, , .  |     | 8         |
| 136 | Estrogen depletion and drug treatment alter the microstructure of type I collagen in bone. <i>Bone Reports</i> , 2016, 5, 243-251.  | 0.4 | 8         |
| 137 | Convergent convolutional dictionary learning using Adaptive Contrast Enhancement (CDL-ACE): Application of CDL to image denoising. , 2017, , .  |     | 8         |
| 138 | Application of trained Deep BCD-Net to iterative low-count PET image reconstruction. , 2018, , .  |     | 8         |
| 139 | Joint Design of RF and Gradient Waveforms via Auto-differentiation for 3D Tailored Excitation in MRI. <i>IEEE Transactions on Medical Imaging</i> , 2021, 40, 3305-3314.                                      | 8.9 | 8         |
| 140 | Iterative image reconstruction for dual-energy X-ray CT using regularized material sinogram estimates. , 2011, , .  |     | 7         |
| 141 | Efficient learning of dictionaries with low-rank atoms. , 2016, , .   |     | 7         |
| 142 | Motion Robust Magnetic Susceptibility and Field Inhomogeneity Estimation Using Regularized Image Restoration Techniques for fMRI. <i>Lecture Notes in Computer Science</i> , 2008, 11, 991-998.               | 1.3 | 7         |
| 143 | Deep convolutional neural network denoising for digital breast tomosynthesis reconstruction. , 2020, , .  |     | 7         |
| 144 | Unbiased Filtered Back-Projection in $4\pi$ Compton Imaging With 3D Position Sensitive Detectors. <i>IEEE Transactions on Nuclear Science</i> , 2016, 63, 2750-2756.  | 2.0 | 6         |

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|-----|--|-----|-----------|
| 145 | Towards a theoretical analysis of PCA for heteroscedastic data. , 2016, , .  |     | 6         |
| 146 | Efficient, Convergent SENSE MRI Reconstruction for Nonperiodic Boundary Conditions via Tridiagonal Solvers. IEEE Transactions on Computational Imaging, 2017, 3, 11-21.  | 4.4 | 6         |
| 147 | Asymptotic Source Detection Performance of Gamma-Ray Imaging Systems Under Model Mismatch. IEEE Transactions on Signal Processing, 2011, 59, 5141-5151.  | 5.3 | 5         |
| 148 | Accelerated ordered-subsets algorithm based on separable quadratic surrogates for regularized image reconstruction in X-ray CT. , 2011, , .  |     | 5         |
| 149 | Model-based image reconstruction of chemiluminescence using a plenoptic 2.0 camera. , 2015, , .  |     | 5         |
| 150 | Balanced SSFP-like steady-state imaging using small-tip fast recovery with a spectral prewinding pulse. Magnetic Resonance in Medicine, 2016, 75, 839-844.   | 3.0 | 5         |
| 151 | Fast Spatial Resolution Analysis of Quadratic Penalized Least-Squares Image Reconstruction With Separate Real and Imaginary Roughness Penalty: Application to fMRI. IEEE Transactions on Medical Imaging, 2018, 37, 604-614. | 8.9 | 5         |
| 152 | Online Adaptive Image Reconstruction (OnAIR) Using Dictionary Models. IEEE Transactions on Computational Imaging, 2020, 6, 153-166.  | 4.4 | 5         |
| 153 | Algorithms and Analyses for Joint Spectral Image Reconstruction in Y-90 Bremsstrahlung SPECT. IEEE Transactions on Medical Imaging, 2020, 39, 1369-1379.   | 8.9 | 5         |
| 154 | Myelin water fraction estimation using small-tip fast recovery MRI. Magnetic Resonance in Medicine, 2020, 84, 1977-1990.   | 3.0 | 5         |
| 155 | Spatial resolution and noise properties of regularized motion-compensated image reconstruction. , 2009, , .  |     | 4         |
| 156 | Model-based reconstruction of spectral and spatial source distribution from objects with known motion. , 2010, , .   |     | 4         |
| 157 | Fast variance computation for quadratically penalized iterative reconstruction of 3D axial CT images. , 2012, , .  |     | 4         |
| 158 | Image restoration using non-circulant shift-invariant system models. , 2012, , .   |     | 4         |
| 159 | Ordered subsets with momentum for accelerated X-ray CT image reconstruction. , 2013, , .   |     | 4         |
| 160 | Phase retrieval of sparse signals using optimization transfer and ADMM. , 2014, , .  |     | 4         |
| 161 | Joint spectral image reconstruction for Y-90 SPECT with multi-window acquisition. , 2015, , .  |     | 4         |
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