

Eric L Miller

List of Publications by Citations

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187
papers

4,570
citations

38
h-index

63
g-index

253
ext. papers

5,424
ext. citations

4.7
avg, IF

5.41
L-index

| # | Paper | IF | Citations |
|-----|---|------|-----------|
| 187 | Imaging the body with diffuse optical tomography. <i>IEEE Signal Processing Magazine</i> , 2001 , 18, 57-75 | 9.4 | 437 |
| 186 | A shape reconstruction method for electromagnetic tomography using adjoint fields and level sets. <i>Inverse Problems</i> , 2000 , 16, 1119-1156 | 2.3 | 188 |
| 185 | Tensor-based formulation and nuclear norm regularization for multienergy computed tomography. <i>IEEE Transactions on Image Processing</i> , 2014 , 23, 1678-93 | 8.7 | 183 |
| 184 | Combined optical and X-ray tomosynthesis breast imaging. <i>Radiology</i> , 2011 , 258, 89-97 | 20.5 | 151 |
| 183 | Efficient determination of multiple regularization parameters in a generalized L-curve framework. <i>Inverse Problems</i> , 2002 , 18, 1161-1183 | 2.3 | 150 |
| 182 | Closed-loop control of targeted ultrasound drug delivery across the blood-brain/tumor barriers in a rat glioma model. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017 , 114, E10281-E10290 | 11.5 | 142 |
| 181 | Nonlocal means denoising of ECG signals. <i>IEEE Transactions on Biomedical Engineering</i> , 2012 , 59, 2383-6 | 5 | 141 |
| 180 | Tomographic optical breast imaging guided by three-dimensional mammography. <i>Applied Optics</i> , 2003 , 42, 5181-90 | 1.7 | 134 |
| 179 | Hybrid FMT-CT imaging of amyloid-beta plaques in a murine Alzheimer's disease model. <i>NeuroImage</i> , 2009 , 44, 1304-11 | 7.9 | 125 |
| 178 | Flexible pH-Sensing Hydrogel Fibers for Epidermal Applications. <i>Advanced Healthcare Materials</i> , 2016 , 5, 711-9 | 10.1 | 122 |
| 177 | Combined optical imaging and mammography of the healthy breast: optical contrast derived from breast structure and compression. <i>IEEE Transactions on Medical Imaging</i> , 2009 , 28, 30-42 | 11.7 | 102 |
| 176 | Reconstructing chromosphere concentration images directly by continuous-wave diffuse optical tomography. <i>Optics Letters</i> , 2004 , 29, 256-8 | 3 | 98 |
| 175 | Fully automated, quantitative, noninvasive assessment of collagen fiber content and organization in thick collagen gels. <i>Journal of Applied Physics</i> , 2009 , 105, 102042 | 2.5 | 89 |
| 174 | Wavelet domain image restoration with adaptive edge-preserving regularization. <i>IEEE Transactions on Image Processing</i> , 2000 , 9, 597-608 | 8.7 | 89 |
| 173 | A comparison study of linear reconstruction techniques for diffuse optical tomographic imaging of absorption coefficient. <i>Physics in Medicine and Biology</i> , 2000 , 45, 1051-70 | 3.8 | 85 |
| 172 | Large-scale automatic reconstruction of neuronal processes from electron microscopy images. <i>Medical Image Analysis</i> , 2015 , 22, 77-88 | 15.4 | 75 |
| 171 | Parametric Level Set Methods for Inverse Problems. <i>SIAM Journal on Imaging Sciences</i> , 2011 , 4, 618-650 | 1.9 | 73 |

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| 170 | Low cost smart phone diagnostics for food using paper-based colorimetric sensor arrays. <i>Food Control</i> , 2017 , 82, 227-232 | 6.2 | 65 |
| 169 | Performance dependence of hybrid x-ray computed tomography/fluorescence molecular tomography on the optical forward problem. <i>Journal of the Optical Society of America A: Optics and Image Science, and Vision</i> , 2009 , 26, 919-23 | 1.8 | 65 |
| 168 | Subsurface Sensing of Buried Objects Under a Randomly Rough Surface Using Scattered Electromagnetic Field Data. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , 2007 , 45, 104-117 | 8.1 | 60 |
| 167 | Template matching based object recognition with unknown geometric parameters. <i>IEEE Transactions on Image Processing</i> , 2002 , 11, 1385-96 | 8.7 | 55 |
| 166 | Evaluation of bone marrow lesion volume as a knee osteoarthritis biomarker–longitudinal relationships with pain and structural changes: data from the Osteoarthritis Initiative. <i>Arthritis Research and Therapy</i> , 2013 , 15, R112 | 5.7 | 54 |
| 165 | Optimal linear inverse solution with multiple priors in diffuse optical tomography. <i>Applied Optics</i> , 2005 , 44, 1948-56 | 1.7 | 54 |
| 164 | Multiple Hypothesis Video Segmentation from Superpixel Flows. <i>Lecture Notes in Computer Science</i> , 2010 , 268-281 | 0.9 | 50 |
| 163 | Data specific spatially varying regularization for multimodal fluorescence molecular tomography. <i>IEEE Transactions on Medical Imaging</i> , 2010 , 29, 365-74 | 11.7 | 49 |
| 162 | Quantitative spectroscopic diffuse optical tomography of the breast guided by imperfect a priori structural information. <i>Physics in Medicine and Biology</i> , 2005 , 50, 3941-56 | 3.8 | 49 |
| 161 | A parametric level-set approach to simultaneous object identification and background reconstruction for dual-energy computed tomography. <i>IEEE Transactions on Image Processing</i> , 2012 , 21, 2719-34 | 8.7 | 48 |
| 160 | A novel computational approach for automatic dendrite spines detection in two-photon laser scan microscopy. <i>Journal of Neuroscience Methods</i> , 2007 , 165, 122-34 | 3 | 46 |
| 159 | Spherical harmonics microwave algorithm for shape and location reconstruction of breast cancer tumor. <i>IEEE Transactions on Medical Imaging</i> , 2006 , 25, 1258-71 | 11.7 | 45 |
| 158 | Three-dimensional subsurface analysis of electromagnetic scattering from penetrable/PEC objects buried under rough surfaces: use of the steepest descent fast multipole method. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , 2001 , 39, 1174-1182 | 8.1 | 45 |
| 157 | Segmentation fusion for connectomics 2011 , | | 44 |
| 156 | Spatio-temporal imaging of the hemoglobin in the compressed breast with diffuse optical tomography. <i>Physics in Medicine and Biology</i> , 2007 , 52, 3619-41 | 3.8 | 44 |
| 155 | A multiscale, statistically based inversion scheme for linearized inverse scattering problems. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , 1996 , 34, 346-357 | 8.1 | 44 |
| 154 | Three-dimensional surface mesh segmentation using curvedness-based region growing approach. <i>IEEE Transactions on Pattern Analysis and Machine Intelligence</i> , 2007 , 29, 2195-204 | 13.3 | 43 |
| 153 | A new shape-based method for object localization and characterization from scattered field data. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , 2000 , 38, 1682-1696 | 8.1 | 42 |

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| 152 | Statistical method to detect subsurface objects using array ground-penetrating radar data. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , 2002 , 40, 963-976 | 8.1 | 41 |
| 151 | Minimum entropy regularization in frequency-wavenumber migration to localize subsurface objects. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , 2003 , 41, 1804-1812 | 8.1 | 40 |
| 150 | Quantitative bone marrow lesion size in osteoarthritic knees correlates with cartilage damage and predicts longitudinal cartilage loss. <i>BMC Musculoskeletal Disorders</i> , 2011 , 12, 217 | 2.8 | 39 |
| 149 | Three-dimensional shape-based imaging of absorption perturbation for diffuse optical tomography. <i>Applied Optics</i> , 2003 , 42, 3129-44 | 1.7 | 38 |
| 148 | Time domain reconstruction of sound speed and attenuation in ultrasound computed tomography using full wave inversion. <i>Journal of the Acoustical Society of America</i> , 2017 , 141, 1595 | 2.2 | 36 |
| 147 | Automated detection of intracranial aneurysms based on parent vessel 3D analysis. <i>Medical Image Analysis</i> , 2010 , 14, 149-59 | 15.4 | 36 |
| 146 | Adaptive multiscale reconstruction of buried objects. <i>Inverse Problems</i> , 2004 , 20, S1-S15 | 2.3 | 36 |
| 145 | Adaptive two-pass rank order filter to remove impulse noise in highly corrupted images. <i>IEEE Transactions on Image Processing</i> , 2004 , 13, 238-47 | 8.7 | 34 |
| 144 | Optimum PML ABC conductivity profile in FDFD. <i>IEEE Transactions on Magnetics</i> , 1999 , 35, 1506-1509 | 2 | 30 |
| 143 | A Multiscale Approach to Sensor Fusion and the Solution of Linear Inverse Problems. <i>Applied and Computational Harmonic Analysis</i> , 1995 , 2, 127-147 | 3.1 | 30 |
| 142 | SWAN: A distributed knowledge infrastructure for Alzheimer disease research. <i>Web Semantics</i> , 2006 , 4, 222-228 | 2.9 | 29 |
| 141 | Wavelet-based methods for the nonlinear inverse scattering problem using the extended Born approximation. <i>Radio Science</i> , 1996 , 31, 51-65 | 1.4 | 29 |
| 140 | A sliding window RLS-like adaptive algorithm for filtering alpha-stable noise. <i>IEEE Signal Processing Letters</i> , 2000 , 7, 86-89 | 3.2 | 28 |
| 139 | A projection-based level-set approach to enhance conductivity anomaly reconstruction in electrical resistance tomography. <i>Inverse Problems</i> , 2007 , 23, 2375-2400 | 2.3 | 25 |
| 138 | Statistical Classification of Buried Unexploded Ordnance Using Nonparametric Prior Models. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , 2007 , 45, 2794-2806 | 8.1 | 23 |
| 137 | Simultaneous multiple regularization parameter selection by means of the L-hypersurface with applications to linear inverse problems posed in the wavelet transform domain 1998 , 3459, 328 | | 22 |
| 136 | 3D shape analysis of intracranial aneurysms using the writhe number as a discriminant for rupture. <i>Annals of Biomedical Engineering</i> , 2011 , 39, 1457-69 | 4.7 | 21 |
| 135 | Quantification of bone marrow lesion volume and volume change using semi-automated segmentation: data from the osteoarthritis initiative. <i>BMC Musculoskeletal Disorders</i> , 2013 , 14, 3 | 2.8 | 20 |

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| 134 | Parallel-Beam Backprojection: An FPGA Implementation Optimized for Medical Imaging. <i>Journal of Signal Processing Systems</i> , 2005 , 39, 295-311 | | 20 |
| 133 | Development of a rapid knee cartilage damage quantification method using magnetic resonance images. <i>BMC Musculoskeletal Disorders</i> , 2014 , 15, 264 | 2.8 | 18 |
| 132 | Flat-Top Footprint Pattern Synthesis Through the Design of Arbitrary Planar-Shaped Apertures. <i>IEEE Transactions on Antennas and Propagation</i> , 2010 , 58, 2539-2552 | 4.9 | 18 |
| 131 | Multiple-incidence and multifrequency for profile reconstruction of random rough surfaces using the 3-D electromagnetic fast multipole model. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , 2004 , 42, 2499-2510 | 8.1 | 18 |
| 130 | A geometric approach to joint inversion with applications to contaminant source zone characterization. <i>Inverse Problems</i> , 2013 , 29, 115014 | 2.3 | 17 |
| 129 | Hyperspectral image reconstruction for diffuse optical tomography. <i>Biomedical Optics Express</i> , 2011 , 2, 946-65 | 3.5 | 16 |
| 128 | Multiphase geometric couplings for the segmentation of neural processes 2009 , | | 16 |
| 127 | Accuracy considerations in using the PML ABC with FDFD Helmholtz equation computation. <i>International Journal of Numerical Modelling: Electronic Networks, Devices and Fields</i> , 2000 , 13, 471-482 | 1 | 16 |
| 126 | Subsurface Sensing Under Sensor Positional Uncertainty. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , 2007 , 45, 675-688 | 8.1 | 15 |
| 125 | Automated axon tracking of 3D confocal laser scanning microscopy images using guided probabilistic region merging. <i>Neuroinformatics</i> , 2007 , 5, 189-203 | 3.2 | 15 |
| 124 | A statistical approach to inverting the Born ratio. <i>IEEE Transactions on Medical Imaging</i> , 2007 , 26, 893-905 | 1.7 | 15 |
| 123 | Statistical classification of buried objects from spatially sampled time or frequency domain electromagnetic induction data. <i>Radio Science</i> , 2004 , 39, n/a-n/a | 1.4 | 15 |
| 122 | Membrane potential depolarization causes alterations in neuron arrangement and connectivity in cocultures. <i>Brain and Behavior</i> , 2015 , 5, 24-38 | 3.4 | 14 |
| 121 | Parallel-beam backprojection 2002 , | | 14 |
| 120 | Object detection using high resolution near-field array processing. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , 2001 , 39, 136-141 | 8.1 | 14 |
| 119 | QMR-Based Projection Techniques for the Solution of Non-Hermitian Systems with Multiple Right-Hand Sides. <i>SIAM Journal of Scientific Computing</i> , 2001 , 23, 761-780 | 2.6 | 14 |
| 118 | Nonlinear inverse scattering methods for thermal-wave slice tomography: a wavelet domain approach. <i>Journal of the Optical Society of America A: Optics and Image Science, and Vision</i> , 1998 , 15, 1545 | 1.8 | 14 |
| 117 | Development of a Rapid Cartilage Damage Quantification Method for the Lateral Tibiofemoral Compartment Using Magnetic Resonance Images: Data from the Osteoarthritis Initiative. <i>BioMed Research International</i> , 2015 , 2015, 634275 | 3 | 13 |

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| 116 | A shape-based reconstruction technique for DPDW data. <i>Optics Express</i> , 2000 , 7, 481-91 | 3.3 | 13 |
| 115 | Determining the pulse-echo electromechanical characteristic of a transducer using flat plates and point targets. <i>Journal of the Acoustical Society of America</i> , 2004 , 116, 90-96 | 2.2 | 12 |
| 114 | Robust Estimation of a Random Parameter in a Gaussian Linear Model With Joint Eigenvalue and Elementwise Covariance Uncertainties. <i>IEEE Transactions on Signal Processing</i> , 2010 , 58, 1001-1011 | 4.8 | 11 |
| 113 | Parametric level set reconstruction methods for hyperspectral diffuse optical tomography. <i>Biomedical Optics Express</i> , 2012 , 3, 1006-24 | 3.5 | 11 |
| 112 | Multiscale, Statistical Anomaly Detection Analysis and Algorithms for Linearized Inverse Scattering Problems. <i>Multidimensional Systems and Signal Processing</i> , 1997 , 8, 151-184 | 1.8 | 11 |
| 111 | Adaptive B-spline scheme for solving an inverse scattering problem. <i>Inverse Problems</i> , 2004 , 20, 347-365 | 2.3 | 11 |
| 110 | A novel method for identifying a graph-based representation of 3-D microvascular networks from fluorescence microscopy image stacks. <i>Medical Image Analysis</i> , 2015 , 20, 208-23 | 15.4 | 10 |
| 109 | Parametric estimation of 3D tubular structures for diffuse optical tomography. <i>Biomedical Optics Express</i> , 2013 , 4, 271-86 | 3.5 | 10 |
| 108 | Recursive T-matrix methods for scattering from multiple dielectric and metallic objects. <i>IEEE Transactions on Antennas and Propagation</i> , 1998 , 46, 672-678 | 4.9 | 10 |
| 107 | Statistically based methods for anomaly characterization in images from observations of scattered radiation. <i>IEEE Transactions on Image Processing</i> , 1999 , 8, 92-101 | 8.7 | 9 |
| 106 | Automatic neuron segmentation and neural network analysis method for phase contrast microscopy images. <i>Biomedical Optics Express</i> , 2015 , 6, 4395-416 | 3.5 | 8 |
| 105 | Bone marrow lesion volume reduction is not associated with improvement of other periarticular bone measures: data from the Osteoarthritis Initiative. <i>Arthritis Research and Therapy</i> , 2013 , 15, R153 | 5.7 | 8 |
| 104 | Rupture status discrimination in intracranial aneurysms using the centroid-radii model. <i>IEEE Transactions on Biomedical Engineering</i> , 2011 , 58, 2895-903 | 5 | 8 |
| 103 | Estimation and statistical bounds for three-dimensional polar shapes in diffuse optical tomography. <i>IEEE Transactions on Medical Imaging</i> , 2008 , 27, 752-65 | 11.7 | 8 |
| 102 | Stabilizing dual-energy x-ray computed tomography reconstructions using patch-based regularization. <i>Inverse Problems</i> , 2015 , 31, 105004 | 2.3 | 7 |
| 101 | A joint reconstruction and lambda tomography regularization technique for energy-resolved x-ray imaging. <i>Inverse Problems</i> , 2020 , 36, 074002 | 2.3 | 7 |
| 100 | Cerebrovascular network registration via an efficient attributed graph matching technique. <i>Medical Image Analysis</i> , 2018 , 46, 118-129 | 15.4 | 7 |
| 99 | Sensitivity Calculations for Poisson's Equation via the Adjoint Field Method. <i>IEEE Geoscience and Remote Sensing Letters</i> , 2012 , 9, 237-241 | 4.1 | 7 |

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| 98 | Fast Kalman filter using hierarchical matrices and a low-rank perturbative approach. <i>Inverse Problems</i> , 2015 , 31, 015009 | 2.3 | 7 |
| 97 | Multi-parameter acoustic imaging of uniform objects in inhomogeneous soft tissue. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , 2012 , 59, 1700-12 | 3.2 | 7 |
| 96 | Nonlinear Filtering Using a New Proposal Distribution and the Improved Fast Gauss Transform With Tighter Performance Bounds. <i>IEEE Transactions on Signal Processing</i> , 2008 , 56, 5746-5757 | 4.8 | 7 |
| 95 | Transcranial cavitation-mediated ultrasound therapy at sub-MHz frequency via temporal interference modulation. <i>Applied Physics Letters</i> , 2017 , 111, 163701 | 3.4 | 6 |
| 94 | Subsurface Source Zone Characterization and Uncertainty Quantification Using Discriminative Random Fields. <i>Water Resources Research</i> , 2020 , 56, e2019WR026481 | 5.4 | 6 |
| 93 | Disposable colorimetric geometric barcode sensor for food quality monitoring 2017 , | | 6 |
| 92 | Exploiting structural complexity for robust and rapid hyperspectral imaging 2013 , | | 6 |
| 91 | An efficient region of interest acquisition method for dynamic magnetic resonance imaging. <i>IEEE Transactions on Image Processing</i> , 2001 , 10, 1118-28 | 8.7 | 6 |
| 90 | A doubly adaptive approach to dynamic MRI sequence estimation. <i>IEEE Transactions on Image Processing</i> , 2002 , 11, 1168-78 | 8.7 | 6 |
| 89 | An adaptive multiscale inverse scattering approach to photothermal depth profilometry. <i>Circuits, Systems, and Signal Processing</i> , 2000 , 19, 339-363 | 2.2 | 6 |
| 88 | Automated Image Processing for Spatially Resolved Analysis of Lipid Droplets in Cultured 3T3-L1 Adipocytes. <i>Tissue Engineering - Part C: Methods</i> , 2015 , 21, 605-13 | 2.9 | 5 |
| 87 | Fast Algorithms for Hyperspectral Diffuse Optical Tomography. <i>SIAM Journal of Scientific Computing</i> , 2015 , 37, B712-B743 | 2.6 | 5 |
| 86 | A constrained optimization approach to combining multiple non-local means denoising estimates. <i>Signal Processing</i> , 2014 , 103, 60-68 | 4.4 | 5 |
| 85 | Joint volumetric extraction and enhancement of vasculature from low-SNR 3-D fluorescence microscopy images. <i>Pattern Recognition</i> , 2017 , 63, 710-718 | 7.7 | 5 |
| 84 | A Shape-Based Inversion Algorithm Applied to Microwave Imaging of Breast Tumors. <i>IEEE Transactions on Antennas and Propagation</i> , 2011 , 59, 3719-3729 | 4.9 | 5 |
| 83 | Recursive T-matrix algorithm for multiple metallic cylinders. <i>Microwave and Optical Technology Letters</i> , 1997 , 15, 360-363 | 1.2 | 5 |
| 82 | Wavelet domain image restoration using edge preserving prior models | | 5 |
| 81 | An Overview of W3C Semantic Web Activity. <i>Bulletin of the American Society for Information Science</i> , 2005 , 29, 8-11 | | 5 |

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| 80 | Adaptive two-pass median filter to remove impulsive noise | | 5 |
| 79 | GPR imaging approaches for buried plastic land mine detection 2000 , 4038, 1485 | | 5 |
| 78 | Object-based localization of buried objects using high-resolution array processing techniques 1996 , 2765, 409 | | 5 |
| 77 | Minimum entropy autofocus for 3D SAR images from a UAV platform 2016 , | | 4 |
| 76 | On the Use of Gaussian Random Processes for Probabilistic Interpolation of CubeSat Data in the Presence of Geolocation Error. <i>IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing</i> , 2016 , 9, 2777-2793 | 4.7 | 4 |
| 75 | Manifold Regression Framework for Characterizing Source Zone Architecture. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , 2016 , 54, 3-17 | 8.1 | 4 |
| 74 | On the use of coupled shape priors for segmentation of magnetic resonance images of the knee. <i>IEEE Journal of Biomedical and Health Informatics</i> , 2015 , 19, 1153-67 | 7.2 | 4 |
| 73 | Oriented Markov random field based dendritic spine segmentation for fluorescence microscopy images. <i>Neuroinformatics</i> , 2010 , 8, 157-70 | 3.2 | 4 |
| 72 | Particle swarm optimization as an inversion tool for a nonlinear UXO model 2007 , | | 4 |
| 71 | Recent work in shape-based methods for diffusive inverse problems. <i>Review of Scientific Instruments</i> , 2003 , 74, 2580-2582 | 1.7 | 4 |
| 70 | Statistically based sequential detection of buried mines from array ground-penetrating radar data 1999 , 3710, 1063 | | 4 |
| 69 | Detection of buried mines from GPR array measurement: A statistical approach | | 4 |
| 68 | Compton scattering tomography in translational geometries. <i>Inverse Problems</i> , 2020 , 36, 025007 | 2.3 | 4 |
| 67 | A fast Kalman filter for time-lapse electrical resistivity tomography 2014 , | | 3 |
| 66 | Environmental Remediation and Restoration: Hydrological and Geophysical Processing Methods. <i>IEEE Signal Processing Magazine</i> , 2012 , 29, 16-26 | 9.4 | 3 |
| 65 | Modeling habituation in rat EEG-evoked responses via a neural mass model with feedback. <i>Biological Cybernetics</i> , 2011 , 105, 371-97 | 2.8 | 3 |
| 64 | A curve evolution method for identifying weak edges with applications to the segmentation of magnetic resonance images of the knee 2011 , | | 3 |
| 63 | Semi-analytical computation of the acoustic field of a segment of a cylindrically concave transducer in lossless and attenuating media. <i>Journal of the Acoustical Society of America</i> , 2007 , 121, 1226-37 | 2.2 | 3 |

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| 62 | Analysis of reconstructions in full view fluorescence molecular tomography 2007 , 6498, 11 | | 3 |
| 61 | Feature-Enhancing Inverse Methods for Limited-View Tomographic Imaging Problems. <i>Subsurface Sensing Technologies and Applications</i> , 2003 , 4, 327-353 | | 3 |
| 60 | Entropy optimized contrast stretch to enhance remote sensing imagery | | 3 |
| 59 | An admissible solution approach for diffuse optical tomography | | 3 |
| 58 | Direct object localization and characterization from diffuse photon-density wave data 1999 , | | 3 |
| 57 | Multiphase geometric couplings for the segmentation of neural processes 2009 , | | 3 |
| 56 | pH-Sensing Hydrogel Fibers: Flexible pH-Sensing Hydrogel Fibers for Epidermal Applications (Adv. Healthcare Mater. 6/2016). <i>Advanced Healthcare Materials</i> , 2016 , 5, 624-624 | 10.1 | 3 |
| 55 | Thermo-Mechanically Trained Shape Memory Alloy for Temperature Recording With Visual Readout 2021 , 5, 1-4 | | 3 |
| 54 | Multiple output Gaussian process regression algorithm for multi-frequency scattered data interpolation 2017 , | | 2 |
| 53 | Microvasculature network identification in 3-D fluorescent microscopy images 2013 , | | 2 |
| 52 | Exploiting Algebraic and Structural Complexity for Single Snapshot Computed Tomography Hyperspectral Imaging Systems. <i>IEEE Journal on Selected Topics in Signal Processing</i> , 2015 , 9, 990-1002 | 7.5 | 2 |
| 51 | Geometric image formation for target identification in multi-energy computed tomography 2013 , | | 2 |
| 50 | Synthesis of planar arrays with arbitrary geometry for flat-top footprint patterns 2009 , | | 2 |
| 49 | Analysis and Exploitation of Matrix Structure Arising in Linearized Optical Tomographic Imaging. <i>SIAM Journal on Matrix Analysis and Applications</i> , 2008 , 29, 1065-1082 | 1.5 | 2 |
| 48 | Shape-based ultrasound tomography using a Born model with application to high intensity focused ultrasound therapy. <i>Journal of the Acoustical Society of America</i> , 2008 , 123, 2944-56 | 2.2 | 2 |
| 47 | New techniques for data fusion in multimodal FMT-CT imaging 2008 , | | 2 |
| 46 | Fast Gauss Transforms based on a High Order Singular Value Decomposition for Nonlinear Filtering 2007 , | | 2 |
| 45 | Estimation-theoretic algorithms and bounds for three-dimensional polar shape-based imaging in diffuse optical tomography | | 2 |

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| 44 | Cortical constraint method for diffuse optical brain imaging 2004 , | | 2 |
| 43 | On the use of contrast stretch and adaptive filter to enhance ground penetrating radar imagery | | 2 |
| 42 | Combined high-dimensional analysis of variance (HANOVA) and sequential probability ratio test (SPRT) to detect buried mines 2000 , | | 2 |
| 41 | ELECTROMAGNETIC SCATTERING-BASED ARRAY PROCESSING METHODS FOR NEAR-FIELD OBJECT CHARACTERIZATION. <i>Journal of Electromagnetic Waves and Applications</i> , 1999 , 13, 1209-1236 | 1.3 | 2 |
| 40 | Statistical signal restoration with 1/f wavelet domain prior models. <i>Signal Processing</i> , 1999 , 78, 289-307 | 4.4 | 2 |
| 39 | Efficient computational methods for wavelet domain signal restoration problems. <i>IEEE Transactions on Signal Processing</i> , 1999 , 47, 1184-1188 | 4.8 | 2 |
| 38 | Statistical estimation with 1/f-type prior models: robustness to mismatch and efficient model determination | | 2 |
| 37 | Spectrally Constrained Optical Breast Imaging with Co-registered X-Ray Tomosynthesis 2008 , | | 2 |
| 36 | On Matched Filtering for Statistical Change Point Detection. <i>IEEE Open Journal of Signal Processing</i> , 2020 , 1, 159-176 | 1.2 | 2 |
| 35 | Limited-View X-Ray Tomography Combining Attenuation and Compton Scatter Data: Approach and Experimental Results. <i>IEEE Access</i> , 2019 , 7, 165734-165747 | 3.5 | 2 |
| 34 | Head motion classification using thread-based sensor and machine learning algorithm. <i>Scientific Reports</i> , 2021 , 11, 2646 | 4.9 | 2 |
| 33 | Sparse view Compton scatter tomography with energy resolved data: experimental and simulation results 2017 , | | 1 |
| 32 | A Probabilistic Analysis of Positional Errors on Satellite Remote Sensing Data Using Scattered Interpolation. <i>IEEE Geoscience and Remote Sensing Letters</i> , 2017 , 14, 861-865 | 4.1 | 1 |
| 31 | Artifact Suppression for Passive Cavitation Imaging Using U-Net CNNs with Uncertainty Quantification 2019 , | | 1 |
| 30 | On the Fusion of Energy Resolved Scatter and Attenuation Data for Limited-View X-Ray Materials Characterization With Application to Security Screening. <i>IEEE Transactions on Computational Imaging</i> , 2019 , 5, 620-634 | 4.5 | 1 |
| 29 | Optimal Transport Based Change Point Detection and Time Series Segment Clustering 2020 , | | 1 |
| 28 | Robust x-ray based material identification using multi-energy sinogram decomposition 2016 , | | 1 |
| 27 | Markov random field models for quantifying uncertainty in subsurface remediation 2015 , | | 1 |

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| 26 | High-Order Regularized Regression in Electrical Impedance Tomography. <i>SIAM Journal on Imaging Sciences</i> , 2012 , 5, 912-943 | 1.9 | 1 |
| 25 | Flat-top power patterns of arbitrary footprint produced by arrays of arbitrary planar geometry 2009 , | | 1 |
| 24 | HIFU lesion characterization on liver: acquisition and results 2009 , | | 1 |
| 23 | Manifold regression for subsurface contaminant characterization 2012 , | | 1 |
| 22 | Fast computation of the acoustic field for ultrasound elements. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , 2009 , 56, 1903-12 | 3.2 | 1 |
| 21 | Random walk/Markov Chain model for sensor positional uncertainty with application to UXO discrimination 2007 , | | 1 |
| 20 | 3-D CENTERLINE EXTRACTION OF AXONS IN MICROSCOPIC STACKS FOR THE STUDY OF MOTOR NEURON BEHAVIOR IN DEVELOPING MUSCLES 2007 , | | 1 |
| 19 | New inverse method for simultaneous reconstruction of object buried beneath rough ground and the ground surface structure using SAMM forward model 2005 , 5674, 382 | | 1 |
| 18 | Unstructured point cloud matching within graph-theoretic and thermodynamic frameworks | | 1 |
| 17 | Adaptive difference of Gaussians to improve subsurface imagery | | 1 |
| 16 | Geometric parameter estimation with a multiscale template library 2000 , 4050, 397 | | 1 |
| 15 | Comparison of linear reconstruction techniques for 3D DPDW imaging of absorption coefficient 1999 , | | 1 |
| 14 | | | 1 |
| 13 | An innerButer iterative method for edge preservation in image restoration and reconstruction. <i>Inverse Problems</i> , 2020 , 36, 124004 | 2.3 | 1 |
| 12 | 5th International Symposium on Focused Ultrasound. <i>Journal of Therapeutic Ultrasound</i> , 2016 , 4, | | 1 |
| 11 | Bragg scattering tomography. <i>Inverse Problems and Imaging</i> , 2021 , 15, 683 | 2.1 | 1 |
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| 9 | Sparse modeling of space- and time-varying diffraction response of a progressively loaded aluminum alloy. <i>Materials Characterization</i> , 2018 , 145, 713-723 | 3.9 | 0 |

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