Eric L Miller

List of Publications by Year
in descending order

248 papers	6,159 citations	66234 42 h-index	79541 73 g-index
253 all docs	253 docs citations	253 times ranked	5595 citing authors

#	Article	IF	Citations
1	Imaging the body with diffuse optical tomography. IEEE Signal Processing Magazine, 2001, 18, 57-75.	4.6	578
2	Tensor-Based Formulation and Nuclear Norm Regularization for Multienergy Computed Tomography. IEEE Transactions on Image Processing, 2014, 23, 1678-1693.	6.0	289
3	A shape reconstruction method for electromagnetic tomography using adjoint fields and level sets. Inverse Problems, 2000, 16, 1119-1156.	1.0	218
4	Combined Optical and X-ray Tomosynthesis Breast Imaging. Radiology, 2011, 258, 89-97.	3.6	192
5	Efficient determination of multiple regularization parameters in a generalized L-curve framework. Inverse Problems, 2002, 18, 1161-1183.	1.0	186
6	Nonlocal Means Denoising of ECG Signals. IEEE Transactions on Biomedical Engineering, 2012, 59, 2383-2386.	2.5	185
7	Closed-loop control of targeted ultrasound drug delivery across the bloodâ€“brain/tumor barriers in a rat glioma model. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, E10281-E10290.	3.3	183
8	Tomographic optical breast imaging guided by three-dimensional mammography. Applied Optics, 2003, 42, 5181.	2.1	176
9	Flexible pHâ€Sensing Hydrogel Fibers for Epidermal Applications. Advanced Healthcare Materials, 2016, 5, 711-719.	3.9	172
10	Hybrid FMTâ€“CT imaging of amyloid-Î² plaques in a murine Alzheimer's disease model. NeuroImage, 2009, 44, 1304-1311.	2.1	165
11	Combined optical imaging and mammography of the healthy breast: Optical contrast derived from breast structure and compression. IEEE Transactions on Medical Imaging, 2009, 28, 30-42.	5.4	131
12	Wavelet domain image restoration with adaptive edge-preserving regularization. IEEE Transactions on Image Processing, 2000, 9, 597-608.	6.0	124
13	Reconstructing chromosphere concentration images directly by continuous-wave diffuse optical tomography. Optics Letters, 2004, 29, 256.	1.7	123
14	Fully automated, quantitative, noninvasive assessment of collagen fiber content and organization in thick collagen gels. Journal of Applied Physics, 2009, 105, 102042.	1.1	105
15	A comparison study of linear reconstruction techniques for diffuse optical tomographic imaging of absorption coefficient. Physics in Medicine and Biology, 2000, 45, 1051-1070.	1.6	104
16	Parametric Level Set Methods for Inverse Problems. SIAM Journal on Imaging Sciences, 2011, 4, 618-650.	1.3	101
17	Low cost smart phone diagnostics for food using paper-based colorimetric sensor arrays. Food Control, 2017, 82, 227-232.	2.8	101
18	Large-scale automatic reconstruction of neuronal processes from electron microscopy images. Medical Image Analysis, 2015, 22, 77-88.	7.0	91

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19	Performance dependence of hybrid x-ray computed tomography/fluorescence molecular tomography on the optical forward problem. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2009, 26, 919.	0.8	79
20	Evaluation of bone marrow lesion volume as a knee osteoarthritis biomarker - longitudinal relationships with pain and structural changes: data from the Osteoarthritis Initiative. Arthritis Research and Therapy, 2013, 15, R112.	1.6	79
21	A Parametric Level-Set Approach to Simultaneous Object Identification and Background Reconstruction for Dual-Energy Computed Tomography. IEEE Transactions on Image Processing, 2012, 21, 2719-2734.	6.0	78
22	Time domain reconstruction of sound speed and attenuation in ultrasound computed tomography using full wave inversion. Journal of the Acoustical Society of America, 2017, 141, 1595-1604.	0.5	78
23	Subsurface Sensing of Buried Objects Under a Randomly Rough Surface Using Scattered Electromagnetic Field Data. IEEE Transactions on Geoscience and Remote Sensing, 2007, 45, 104-117.	2.7	77
24	Template matching based object recognition with unknown geometric parameters. IEEE Transactions on Image Processing, 2002, 11, 1385-1396.	6.0	76
25	Optimal linear inverse solution with multiple priors in diffuse optical tomography. Applied Optics, 2005, 44, 1948.	2.1	75
26	Three-Dimensional Surface Mesh Segmentation Using Curvedness-Based Region Growing Approach. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2007, 29, 2195-2204.	9.7	73
27	Three-dimensional subsurface analysis of electromagnetic scattering from penetrable/PEC objects buried under rough surfaces: use of the steepest descent fast multipole method. IEEE Transactions on Geoscience and Remote Sensing, 2001, 39, 1174-1182.	2.7	66
28	Quantitative spectroscopic diffuse optical tomography of the breast guided by imperfecta prioristructural information. Physics in Medicine and Biology, 2005, 50, 3941-3956.	1.6	61
29	Spatio-temporal imaging of the hemoglobin in the compressed breast with diffuse optical tomography. Physics in Medicine and Biology, 2007, 52, 3619-3641.	1.6	58
30	A novel computational approach for automatic dendrite spines detection in two-photon laser scan microscopy. Journal of Neuroscience Methods, 2007, 165, 122-134.	1.3	56
31	Statistical method to detect subsurface objects using array ground-penetrating radar data. IEEE Transactions on Geoscience and Remote Sensing, 2002, 40, 963-976.	2.7	55
32	A new shape-based method for object localization and characterization from scattered field data. IEEE Transactions on Geoscience and Remote Sensing, 2000, 38, 1682-1696.	2.7	54
33	Minimum entropy regularization in frequency-wavenumber migration to localize subsurface objects. IEEE Transactions on Geoscience and Remote Sensing, 2003, 41, 1804-1812.	2.7	54
34	A multiscale, statistically based inversion scheme for linearized inverse scattering problems. IEEE Transactions on Geoscience and Remote Sensing, 1996, 34, 346-357.	2.7	53
35	Adaptive Two-Pass Rank Order Filter to Remove Impulse Noise in Highly Corrupted Images. IEEE Transactions on Image Processing, 2004, 13, 238-247.	6.0	52
36	Spherical harmonics microwave algorithm for shape and location reconstruction of breast cancer tumor. IEEE Transactions on Medical Imaging, 2006, 25, 1258-1271.	5.4	52

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37	Data Specific Spatially Varying Regularization for Multimodal Fluorescence Molecular Tomography. IEEE Transactions on Medical Imaging, 2010, 29, 365-374.	5.4	52
38	Three-dimensional shape-based imaging of absorption perturbation for diffuse optical tomography. Applied Optics, 2003, 42, 3129.	2.1	50
39	Segmentation fusion for connectomics. , 2011, , .		49
40	Automated detection of intracranial aneurysms based on parent vessel 3D analysis. Medical Image Analysis, 2010, 14, 149-159.	7.0	48
41	Adaptive multiscale reconstruction of buried objects. Inverse Problems, 2004, 20, S1-S15.	1.0	47
42	Quantitative bone marrow lesion size in osteoarthritic knees correlates with cartilage damage and predicts longitudinal cartilage loss. BMC Musculoskeletal Disorders, 2011, 12, 217.	0.8	46
43	A sliding window RLS-like adaptive algorithm for filtering alpha-stable noise. IEEE Signal Processing Letters, 2000, 7, 86-89.	2.1	42
44	Optimum PML ABC conductivity profile in FDFD. IEEE Transactions on Magnetics, 1999, 35, 1506-1509.	1.2	39
45	SWAN: A distributed knowledge infrastructure for Alzheimer disease research. Web Semantics, 2006, 4, 222-228.	2.2	38
46	A Multiscale Approach to Sensor Fusion and the Solution of Linear Inverse Problems. Applied and Computational Harmonic Analysis, 1995, 2, 127-147.	1.1	36
47	<title>Simultaneous multiple regularization parameter selection by means of the L-hypersurface with applications to linear inverse problems posed in the wavelet transform domain</title>. , 1998, 3459, 328.		36
48	Parallel-beam backprojection. , 2002, , .		36
49	Wavelet-based methods for the nonlinear inverse scattering problem using the extended Born approximation. Radio Science, 1996, 31, 51-65.	0.8	35
50	Accuracy considerations in using the PML ABC with FDFD Helmholtz equation computation. International Journal of Numerical Modelling: Electronic Networks, Devices and Fields, 2000, 13, 471-482.	1.2	34
51	Parallel-Beam Backprojection: An FPGA Implementation Optimized for Medical Imaging. Journal of Signal Processing Systems, 2005, 39, 295-311.	1.0	31
52	3D Shape Analysis of Intracranial Aneurysms Using the Writhe Number as a Discriminant for Rupture. Annals of Biomedical Engineering, 2011, 39, 1457-1469.	1.3	29
53	A projection-based level-set approach to enhance conductivity anomaly reconstruction in electrical resistance tomography. Inverse Problems, 2007, 23, 2375-2400.	1.0	27
54	Statistical Classification of Buried Unexploded Ordnance Using Nonparametric Prior Models. IEEE Transactions on Geoscience and Remote Sensing, 2007, 45, 2794-2806.	2.7	27

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55	Development of a rapid knee cartilage damage quantification method using magnetic resonance images. BMC Musculoskeletal Disorders, 2014, 15, 264.	0.8	27
56	Multiple-incidence and multifrequency for profile reconstruction of random rough surfaces using the 3-D electromagnetic fast multipole model. IEEE Transactions on Geoscience and Remote Sensing, 2004, 42, 2499-2510.	2.7	26
57	Quantification of bone marrow lesion volume and volume change using semi-automated segmentation: data from the osteoarthritis initiative. BMC Musculoskeletal Disorders, 2013, 14, 3.	0.8	25
58	Flat-Top Footprint Pattern Synthesis Through the Design of Arbitrary Planar-Shaped Apertures. IEEE Transactions on Antennas and Propagation, 2010, 58, 2539-2552.	3.1	23
59	Hyperspectral image reconstruction for diffuse optical tomography. Biomedical Optics Express, 2011, 2, 946.	1.5	23
60	Multiphase geometric couplings for the segmentation of neural processes. , 2009, , .		21
61	A geometric approach to joint inversion with applications to contaminant source zone characterization. Inverse Problems, 2013, 29, 115014.	1.0	21
62	A shape-based reconstruction technique for DPDW data. Optics Express, 2000, 7, 481.	1.7	20
63	Determining the pulse-echo electromechanical characteristic of a transducer using flat plates and point targets. Journal of the Acoustical Society of America, 2004, 116, 90-96.	0.5	20
64	Subsurface Sensing Under Sensor Positional Uncertainty. IEEE Transactions on Geoscience and Remote Sensing, 2007, 45, 675-688.	2.7	19
65	Nonlinear inverse scattering methods for thermal-wave slice tomography: a wavelet domain approach. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 1998, 15, 1545.	0.8	18
66	Object detection using high resolution near-field array processing. IEEE Transactions on Geoscience and Remote Sensing, 2001, 39, 136-141.	2.7	18
67	Statistical classification of buried objects from spatially sampled time or frequency domain electromagnetic induction data. Radio Science, 2004, 39, n/a-n/a.	0.8	18
68	A Statistical Approach to Inverting the Born Ratio. IEEE Transactions on Medical Imaging, 2007, 26, 893-905.	5.4	18
69	Title is missing!. Multidimensional Systems and Signal Processing, 1997, 8, 151-184.	1.7	17
70	QMR-Based Projection Techniques for the Solution of Non-Hermitian Systems with Multiple Right-Hand Sides. SIAM Journal of Scientific Computing, 2001, 23, 761-780.	1.3	17
71	Automated Axon Tracking of 3D Confocal Laser Scanning Microscopy Images Using Guided Probabilistic Region Merging. Neuroinformatics, 2007, 5, 189-203.	1.5	17
72	Development of a Rapid Cartilage Damage Quantification Method for the Lateral Tibiofemoral Compartment Using Magnetic Resonance Images: Data from the Osteoarthritis Initiative. BioMed Research International, 2015, 2015, 1-5.	0.9	17

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73	Recursive T-matrix methods for scattering from multiple dielectric and metallic objects. IEEE Transactions on Antennas and Propagation, 1998, 46, 672-678.	3.1	16
74	Robust Estimation of a Random Parameter in a Gaussian Linear Model With Joint Eigenvalue and Elementwise Covariance Uncertainties. IEEE Transactions on Signal Processing, 2010, 58, 1001-1011.	3.2	16
75	Membrane potential depolarization causes alterations in neuron arrangement and connectivity in cocultures. Brain and Behavior, 2015, 5, 24-38.	1.0	15
76	Adaptive B -spline scheme for solving an inverse scattering problem. Inverse Problems, 2004, 20, 347-365.	1.0	14
77	Parametric level set reconstruction methods for hyperspectral diffuse optical tomography. Biomedical Optics Express, 2012, 3, 1006.	1.5	13
78	Parametric estimation of 3D tubular structures for diffuse optical tomography. Biomedical Optics Express, 2013, 4, 271.	1.5	13
79	<title>Object-based localization of buried objects using high-resolution array processing techniques</title>. , 1996, 2765, 409.		12
80	Rupture Status Discrimination in Intracranial Aneurysms Using the Centroidâ€“Radii Model. IEEE Transactions on Biomedical Engineering, 2011, 58, 2895-2903.	2.5	12
81	Disposable colorimetric geometric barcode sensor for food quality monitoring. , 2017, , .		12
82	Head motion classification using thread-based sensor and machine learning algorithm. Scientific Reports, 2021, 11, 2646.	1.6	12
83	A novel method for identifying a graph-based representation of 3-D microvascular networks from fluorescence microscopy image stacks. Medical Image Analysis, 2015, 20, 208-223.	7.0	11
84	Cerebrovascular network registration via an efficient attributed graph matching technique. Medical Image Analysis, 2018, 46, 118-129.	7.0	11
85	A joint reconstruction and lambda tomography regularization technique for energy-resolved x-ray imaging. Inverse Problems, 2020, 36, 074002.	1.0	11
86	Statistically based methods for anomaly characterization in images from observations of scattered radiation. IEEE Transactions on Image Processing, 1999, 8, 92-101.	6.0	10
87	An Overview of W3C Semantic Web Activity. Bulletin of the American Society for Information Science, 2005, 29, 8-11.	0.3	10
88	Sensitivity Calculations for Poisson's Equation via the Adjoint Field Method. IEEE Geoscience and Remote Sensing Letters, 2012, 9, 237-241.	1.4	10
89	Minimum entropy autofocus for 3D SAR images from a UAV platform. , 2016, , .		10
90	Subsurface Source Zone Characterization and Uncertainty Quantification Using Discriminative Random Fields. Water Resources Research, 2020, 56, e2019WR026481.	1.7	10

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91	Adaptive two-pass median filter to remove impulsive noise. , 0, , .		9
92	Bone marrow lesion volume reduction is not associated with improvement of other periarticular bone measures: data from the Osteoarthritis Initiative. Arthritis Research and Therapy, 2013, 15, R153.	1.6	9
93	Automatic neuron segmentation and neural network analysis method for phase contrast microscopy images. Biomedical Optics Express, 2015, 6, 4395.	1.5	9
94	Transcranial cavitation-mediated ultrasound therapy at sub-MHz frequency via temporal interference modulation. Applied Physics Letters, 2017, 111, .	1.5	9
95	Compton scattering tomography in translational geometries. Inverse Problems, 2020, 36, 025007.	1.0	9
96	Thermo-Mechanically Trained Shape Memory Alloy for Temperature Recording With Visual Readout. , 2021, 5, 1-4.		9
97	Wavelet domain image restoration using edge preserving prior models. , 0, , .		8
98	An adaptive multiscale inverse scattering approach to photothermal depth profilometry. Circuits, Systems, and Signal Processing, 2000, 19, 339-363.	1.2	8
99	Particle swarm optimization as an inversion tool for a nonlinear UXO model. , 2007, , .		8
100	Estimation and Statistical Bounds for Three-Dimensional Polar Shapes in Diffuse Optical Tomography. IEEE Transactions on Medical Imaging, 2008, 27, 752-765.	5.4	8
101	Nonlinear Filtering Using a New Proposal Distribution and the Improved Fast Gauss Transform With Tighter Performance Bounds. IEEE Transactions on Signal Processing, 2008, 56, 5746-5757.	3.2	8
102	Stabilizing dual-energy x-ray computed tomography reconstructions using patch-based regularization. Inverse Problems, 2015, 31, 105004.	1.0	8
103	A doubly adaptive approach to dynamic MRI sequence estimation. IEEE Transactions on Image Processing, 2002, 11, 1168-1178.	6.0	7
104	Entropy optimized contrast stretch to enhance remote sensing imagery. , 0, , .		7
105	Multi-parameter acoustic imaging of uniform objects in inhomogeneous soft tissue. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2012, 59, 1700-1712.	1.7	7
106	Exploiting structural complexity for robust and rapid hyperspectral imaging. , 2013, , .		7
107	A constrained optimization approach to combining multiple non-local means denoising estimates. Signal Processing, 2014, 103, 60-68.	2.1	7
108	Fast Kalman filter using hierarchical matrices and a low-rank perturbative approach. Inverse Problems, 2015, 31, 015009.	1.0	7

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109	Automated Image Processing for Spatially Resolved Analysis of Lipid Droplets in Cultured 3T3-L1 Adipocytes. Tissue Engineering - Part C: Methods, 2015, 21, 605-613.	1.1	7
110	An innerâ€“outer iterative method for edge preservation in image restoration and reconstruction [*]. Inverse Problems, 2020, 36, 124004.	1.0	7
111	An efficient region of interest acquisition method for dynamic magnetic resonance imaging. IEEE Transactions on Image Processing, 2001, 10, 1118-1128.	6.0	6
112	On the use of coupled shape priors for segmentation of magnetic resonance images of the knee. IEEE Journal of Biomedical and Health Informatics, 2014, 19, 1-1.	3.9	6
113	Manifold Regression Framework for Characterizing Source Zone Architecture. IEEE Transactions on Geoscience and Remote Sensing, 2016, 54, 3-17.	2.7	6
114	Joint volumetric extraction and enhancement of vasculature from low-SNR 3-D fluorescence microscopy images. Pattern Recognition, 2017, 63, 710-718.	5.1	6
115	Limited-View X-Ray Tomography Combining Attenuation and Compton Scatter Data: Approach and Experimental Results. IEEE Access, 2019, 7, 165734-165747.	2.6	6
116	Detection of buried mines from GPR array measurement: A statistical approach. , 0, , .		5
117	Recursive T-matrix algorithm for multiple metallic cylinders. Microwave and Optical Technology Letters, 1997, 15, 360-363.	0.9	5
118	<title>Direct object localization and characterization from diffuse photon-density wave data</title>. , 1999, , .		5
119	Statistically based sequential detection of buried mines from array ground-penetrating radar data. , 1999, 3710, 1063.		5
120	GPR imaging approaches for buried plastic land mine detection. , 2000, 4038, 1485.		5
121	New techniques for data fusion in multimodal FMT-CT imaging. , 2008, , .		5
122	Modeling habituation in rat EEG-evoked responses via a neural mass model with feedback. Biological Cybernetics, 2011, 105, 371-397.	0.6	5
123	A Shape-Based Inversion Algorithm Applied to Microwave Imaging of Breast Tumors. IEEE Transactions on Antennas and Propagation, 2011, 59, 3719-3729.	3.1	5
124	Fast Algorithms for Hyperspectral Diffuse Optical Tomography. SIAM Journal of Scientific Computing, 2015, 37, B712-B743.	1.3	5
125	On the Use of Gaussian Random Processes for Probabilistic Interpolation of CubeSat Data in the Presence of Geolocation Error. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2016, 9, 2777-2793.	2.3	5
126	On Matched Filtering for Statistical Change Point Detection. IEEE Open Journal of Signal Processing, 2020, 1, 159-176.	2.3	5

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127	Statistical signal restoration with 1/f wavelet domain prior models. Signal Processing, 1999, 78, 289-307.	2.1	4
128	An admissible solution approach for diffuse optical tomography. , 0, , .		4
129	Recent work in shape-based methods for diffusive inverse problems. Review of Scientific Instruments, 2003, 74, 2580-2582.	0.6	4
130	New inverse method for simultaneous reconstruction of object buried beneath rough ground and the ground surface structure using SAMM forward model. , 2005, 5674, 382.		4
131	Analysis of reconstructions in full view fluorescence molecular tomography. , 2007, 6498, 11.		4
132	Oriented Markov Random Field Based Dendritic Spine Segmentation for Fluorescence Microscopy Images. Neuroinformatics, 2010, 8, 157-170.	1.5	4
133	pHâ€Sensing Hydrogel Fibers: Flexible pHâ€Sensing Hydrogel Fibers for Epidermal Applications (Adv.) Tj ETQq1 1 0.784314 rgBT /Ove	3.9	4
134	Multiple output Gaussian process regression algorithm for multi-frequency scattered data interpolation. , 2017, , .		4
135	Artifact Suppression for Passive Cavitation Imaging Using U-Net CNNs with Uncertainty Quantification. , 2019, , .		4
136	Multiphase geometric couplings for the segmentation of neural processes. , 2009, , .		4
137	Statistical estimation with 1/f-type prior models: robustness to mismatch and efficient model determination. , 0, , .		3
138	Detection of buried mines from array inductive measurements. , 1998, , .		3
139	Combined high-dimensional analysis of variance (HANOVA) and sequential probability ratio test (SPRT) to detect buried mines. , 2000, , .		3
140	<title>Geometric parameter estimation with a multiscale template library</title>. , 2000, 4050, 397.		3
141	A statistical approach to multichannel blind signal detection for ground penetrating radar arrays. , 0, , .		3
142	Statistical method to localize buried landmines from GPR array measurement. , 2001, , .		3
143	Feature-Enhancing Inverse Methods for Limited-View Tomographic Imaging Problems. Subsurface Sensing Technologies and Applications, 2003, 4, 327-353.	0.9	3
144	Estimation-Theoretic Algorithms and Bounds for Three-Dimensional Polar Shape-Based Imaging in Diffuse Optical Tomography. , 0, , .		3

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145	Semi-analytical computation of the acoustic field of a segment of a cylindrically concave transducer in lossless and attenuating media. Journal of the Acoustical Society of America, 2007, 121, 1226-1237.	0.5	3
146	3-D CENTERLINE EXTRACTION OF AXONS IN MICROSCOPIC STACKS FOR THE STUDY OF MOTOR NEURON BEHAVIOR IN DEVELOPING MUSCLES. , 2007, , .		3
147	Fast Gauss Transforms based on a High Order Singular Value Decomposition for Nonlinear Filtering. , 2007, , .		3
148	A curve evolution method for identifying weak edges with applications to the segmentation of magnetic resonance images of the knee. , 2011, , .		3
149	Manifold regression for subsurface contaminant characterization. , 2012, , .		3
150	Environmental Remediation and Restoration: Hydrological and Geophysical Processing Methods. IEEE Signal Processing Magazine, 2012, 29, 16-26.	4.6	3
151	A fast Kalman filter for time-lapse electrical resistivity tomography. , 2014, , .		3
152	A multiscale, decision-theoretic algorithm for anomaly detection in images based upon scattered radiation. , 0, , .		2
153	Frequency domain simulation of focused array radar returns from buried mines in clutter. , 1998, , .		2
154	ELECTROMAGNETIC SCATTERING-BASED ARRAY PROCESSING METHODS FOR NEAR-FIELD OBJECT CHARACTERIZATION. Journal of Electromagnetic Waves and Applications, 1999, 13, 1209-1236.	1.0	2
155	Efficient computational methods for wavelet domain signal restoration problems. IEEE Transactions on Signal Processing, 1999, 47, 1184-1188.	3.2	2
156	Options for statistical classification of buried objects from spatially sampled time or frequency domain EMI data. , 2001, , .		2
157	On the use of contrast stretch and adaptive filter to enhance ground penetrating radar imagery. , 0, , .		2
158	Cortical constraint method for diffuse optical brain imaging. , 2004, , .		2
159	Unstructured Point Cloud Matching within Graph-Theoretic and Thermodynamic Frameworks. , 0, , .		2
160	A Bayesian Approach for Classification of Buried Objects using Non-Parametric Prior Model. , 2006, , .		2
161	Analysis and Exploitation of Matrix Structure Arising in Linearized Optical Tomographic Imaging. SIAM Journal on Matrix Analysis and Applications, 2008, 29, 1065-1082.	0.7	2
162	Shape-based ultrasound tomography using a Born model with application to high intensity focused ultrasound therapy. Journal of the Acoustical Society of America, 2008, 123, 2944-2956.	0.5	2

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163	Synthesis of planar arrays with arbitrary geometry for flat-top footprint patterns. , 2009, , .		2
164	Denoising approaches for X-ray personnel screening systems. , 2012, , .		2
165	High-Order Regularized Regression in Electrical Impedance Tomography. SIAM Journal on Imaging Sciences, 2012, 5, 912-943.	1.3	2
166	Microvasculature network identification in 3-D fluorescent microscopy images. , 2013, , .		2
167	Geometic image formation for target identification in multi-energy computed tomography. , 2013, , .		2
168	Exploiting Algebraic and Structural Complexity for Single Snapshot Computed Tomography Hyperspectral Imaging Systems. IEEE Journal on Selected Topics in Signal Processing, 2015, 9, 990-1002.	7.3	2
169	Patellar cartilage change is not associated with difficulty with stairs and crepitus: a two year longitudinal study of data from the osteoarthritis initiative. Osteoarthritis and Cartilage, 2016, 24, S356-S357.	0.6	2
170	Sparse view Compton scatter tomography with energy resolved data: experimental and simulation results. , 2017, , .		2
171	Optimal Transport Based Change Point Detection and Time Series Segment Clustering. , 2020, , .		2
172	Randomized approaches to accelerate MCMC algorithms for Bayesian inverse problems. Journal of Computational Physics, 2021, 440, 110391.	1.9	2
173	Spectrally Constrained Optical Breast Imaging with Co-registered X-Ray Tomosynthesis. , 2008, , .		2
174	A scale-recursive, statistically-based method for anomaly characterization in images based upon observations of scattered radiation. , 0, , .		1
175	Comparison of a recursive T-matrix method and the FDTD method for scattering problems in lossy dispersive soil. , 1998, , .		1
176	<title>Comparison of linear reconstruction techniques for 3D DPDW imaging of absorption coefficient</title>. , 1999, , .		1
177	Baseband Weiner filter processing for mine detection from scanned laser-induced acoustic data. , 1999, 3710, 1373.		1
178	Impulse restoration template matching under geometric uncertainties. , 2000, , .		1
179	<title>Multimode subsurface sensing and imaging for land mine detection</title>. , 2000, , .		1
180	Object-based reconstruction using coupled tomographic flows. , 2000, , .		1

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181	Adaptive difference of Gaussians to improve subsurface object detection using GPR imagery. , 0, , .		1
182	Adaptive difference of Gaussians to improve subsurface imagery. , 0, , .		1
183	Linear and nonlinear reconstruction for diffuse optical tomography in an inhomogeneous background. , 2004, , .		1
184	Characterization of the Object Buried Beneath a Random Rough Ground Using a New Semi-Analytical Mode Matching Inverse Method. , 0, , .		1
185	Born Inversion for Broadband Ultrasonic Monitoring of Cancer Treatment. AIP Conference Proceedings, 2006, , .	0.3	1
186	Random walk/Markov Chain model for sensor positional uncertainty with application to UXO discrimination. , 2007, , .		1
187	Differential equation-driven regularization for joint FMT-CT imaging. , 2009, , .		1
188	Flat-top power patterns of arbitrary footprint produced by arrays of arbitrary planar geometry. , 2009, , .		1
189	HIFU lesion characterization on liver: acquisition and results. , 2009, , .		1
190	Fast computation of the acoustic field for ultrasound elements. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2009, 56, 1903-1912.	1.7	1
191	A discriminative-generative approach to the characterization of subsurface contaminant source zones. , 2012, , .		1
192	A mixture of experts based discretization approach for characterizing subsurface contaminant source zones. , 2012, , .		1
193	Combined use of backscattered and transmitted images in x-ray personnel screening systems. , 2012, , .		1
194	Manifold regression for subsurface contaminant characterization based on sparse concentration data. , 2014, , .		1
195	Markov random field models for quantifying uncertainty in subsurface remediation. , 2015, , .		1
196	5th International Symposium on Focused Ultrasound. Journal of Therapeutic Ultrasound, 2016, 4, .	2.2	1
197	Robust x-ray based material identification using multi-energy sinogram decomposition. , 2016, , .		1
198	A Probabilistic Analysis of Positional Errors on Satellite Remote Sensing Data Using Scattered Interpolation. IEEE Geoscience and Remote Sensing Letters, 2017, 14, 861-865.	1.4	1

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199	Sparse modeling of space- and time-varying diffraction response of a progressively loaded aluminum alloy. Materials Characterization, 2018, 145, 713-723.	1.9	1
200	On the Fusion of Energy Resolved Scatter and Attenuation Data for Limited-View X-Ray Materials Characterization With Application to Security Screening. IEEE Transactions on Computational Imaging, 2019, 5, 620-634.	2.6	1
201	Bragg scattering tomography. Inverse Problems and Imaging, 2021, 15, 683.	0.6	1
202	Poster reception---Improving the performance of parallel backprojection on a reconfigurable supercomputer. , 2006, , .		1
203	Wavelet transforms and multiscale estimation techniques for the solution of multisensor inverse problems. , 1994, 2242, 28.		0
204	Image restoration with 1/f-type fractal models and statistical estimation of the model parameters. , 0, , .		0
205	Performance bounds for matched field processing in subsurface object detection applications. , 1998, , .		0
206	Detection and localization of obscured objects from near-field sensor array data: physical models and statistical processing. , 0, , .		0
207	<title>Laser-induced acoustic imaging of underground objects</title>. , 1999, 3534, 328.		0
208	Introduction. Optics Express, 2000, 7, 461.	1.7	0
209	Target detection and classification using a deformable template. , 2001, , .		0
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