Simon R Arridge

List of Publications by Year
in descending order

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393	17,681	14655 66	17105 122
papers	citations	h-index	g-index

398	398	398	9328
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Detection Efficiency Modeling and Joint Activity and Attenuation Reconstruction in Non-TOF 3-D PET From Multiple-Energy Window Data. IEEE Transactions on Radiation and Plasma Medical Sciences, 2022, 6, 87-97.	3.7	1
2	A Model-Based Iterative Learning Approach for Diffuse Optical Tomography. IEEE Transactions on Medical Imaging, 2022, 41, 1289-1299.	8.9	17
3	Deep Learning for Instrumented Ultrasonic Tracking: From Synthetic Training Data to In Vivo Application. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2022, 69, 543-552.	3.0	7
4	Neural Network Kalman Filtering for 3-D Object Tracking From Linear Array Ultrasound Data. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2022, 69, 1691-1702.	3.0	9
5	Evaluation of a pipeline for simulation, reconstruction, and classification in ultrasound-aided diffuse optical tomography of breast tumors. Journal of Biomedical Optics, 2022, 27, .	2.6	6
6	Adaptive stochastic Gaussâ€“Newton method with optical Monte Carlo for quantitative photoacoustic tomography. Journal of Biomedical Optics, 2022, 27, .	2.6	5
7	Diffuse optical tomography utilizing model-based learning. , 2022, , .		0
8	Uncertainty quantification in medical image synthesis. , 2022, , 601-641.		1
9	Penalized PET/CT Reconstruction Algorithms With Automatic Realignment for Anatomical Priors. IEEE Transactions on Radiation and Plasma Medical Sciences, 2021, 5, 362-372.	3.7	1
10	Quantifying Model Uncertainty in Inverse Problems via Bayesian Deep Gradient Descent. , 2021, , .		4
11	Photoacoustic Reconstruction Using Sparsity in Curvelet Frame: Image Versus Data Domain. IEEE Transactions on Computational Imaging, 2021, 7, 879-893.	4.4	3
12	On Learned Operator Correction in Inverse Problems. SIAM Journal on Imaging Sciences, 2021, 14, 92-127.	2.2	24
13	(An overview of) Synergistic reconstruction for multimodality/multichannel imaging methods. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2021, 379, 20200205.	3.4	10
14	Realâ€time deep artifact suppression using recurrent Uâ€Nets for lowâ€latency cardiac MRI. Magnetic Resonance in Medicine, 2021, 86, 1904-1916.	3.0	16
15	Enhanced diffuse optical tomographic reconstruction using concurrent ultrasound information. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2021, 379, 20200195.	3.4	5
16	A Helmholtz equation solver using unsupervised learning: Application to transcranial ultrasound. Journal of Computational Physics, 2021, 441, 110430.	3.8	11
17	Deep artifact suppression for spiral real-time phase contrast cardiac magnetic resonance imaging in congenital heart disease. Magnetic Resonance Imaging, 2021, 83, 125-132.	1.8	4
18	Material Decomposition in Spectral CT Using Deep Learning: A Sim2Real Transfer Approach. IEEE Access, 2021, 9, 25632-25647.	4.2	18

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19	Pyroelectric ultrasound sensor model: directional response. Measurement Science and Technology, 2021, 32, 035106.	2.6	2
20	Stochastic EM methods with variance reduction for penalised PET reconstructions. Inverse Problems, 2021, 37, 115006.	2.0	5
21	Joint reconstruction and low-rank decomposition for dynamic inverse problems. Inverse Problems and Imaging, 2021, .	1.1	1
22	Scalable full-wave simulation of coherent light propagation through biological tissue. , 2021, , .		3
23	Benefits of Using a Spatially-Variant Penalty Strength With Anatomical Priors in PET Reconstruction. IEEE Transactions on Medical Imaging, 2020, 39, 11-22.	8.9	10
24	Joint B0 and image estimation integrated with model based reconstruction for field map update and distortion correction in prostate diffusion MRI. Magnetic Resonance Imaging, 2020, 65, 90-99.	1.8	4
25	PET/MRI attenuation estimation in the lung: A review of past, present, and potential techniques. Medical Physics, 2020, 47, 790-811.	3.0	19
26	Rapid whole-heart CMR with single volume super-resolution. Journal of Cardiovascular Magnetic Resonance, 2020, 22, 56.	3.3	39
27	Multi-Scale Learned Iterative Reconstruction. IEEE Transactions on Computational Imaging, 2020, 6, 843-856.	4.4	21
28	Preface to special issue on joint reconstruction and multi-modality/multi-spectral imaging. Inverse Problems, 2020, 36, 020302.	2.0	4
29	Joint Activity and Attenuation Reconstruction From Multiple Energy Window Data With Photopeak Scatter Re-Estimation in Non-TOF 3-D PET. IEEE Transactions on Radiation and Plasma Medical Sciences, 2020, 4, 410-421.	3.7	12
30	Dual wavelength spread-spectrum time-resolved diffuse optical instrument for the measurement of human brain functional responses. Biomedical Optics Express, 2020, 11, 3477.	2.9	1
31	Efficient inversion strategies for estimating optical properties with Monte Carlo radiative transport models. Journal of Biomedical Optics, 2020, 25, .	2.6	6
32	Representation and reconstruction of covariance operators in linear inverse problems. Inverse Problems, 2020, 36, 085002.	2.0	2
33	Characterization of B0-field fluctuations in prostate MRI. Physics in Medicine and Biology, 2020, 65, 21NT01.	3.0	1
34	Preface for the special issue â€˜Variational methods and effective algorithms for imaging and visionâ€™. Inverse Problems, 2020, 36, 110401.	2.0	0
35	Multi Simulation Platform for Time Domain Diffuse Optical Tomography: An Application to a Compact Hand-Held Reflectance Probe. Applied Sciences (Switzerland), 2019, 9, 2849.	2.5	5
36	Solving inverse problems using data-driven models. Acta Numerica, 2019, 28, 1-174.	10.7	359

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37	Expectation propagation for Poisson data. Inverse Problems, 2019, 35, 085006.	2.0	8
38	A pseudospectral method for solution of the radiative transport equation. Journal of Computational Physics, 2019, 384, 376-382.	3.8	10
39	Joint reconstruction of activity and attenuation in non-TOF PET using a synergistic prior to enforce structural similarities. , 2019, , .		0
40	Iterative PET Image Reconstruction using Adaptive Adjustment of Subset Size and Random Subset Sampling. , 2019, , .		3
41	Realâ€time cardiovascular MR with spatioâ€temporal artifact suppression using deep learningâ€“proof of concept in congenital heart disease. Magnetic Resonance in Medicine, 2019, 81, 1143-1156.	3.0	146
42	Modelâ€based reconstruction framework for correction of signal pileâ€up and geometric distortions in prostate diffusion MRI. Magnetic Resonance in Medicine, 2019, 81, 1979-1992.	3.0	10
43	Single-pixel camera photoacoustic tomography. Journal of Biomedical Optics, 2019, 24, 1.	2.6	16
44	Hybrid time-domain and continuous-wave diffuse optical tomography instrument with concurrent, clinical magnetic resonance imaging for breast cancer imaging. Journal of Biomedical Optics, 2019, 24, 1.	2.6	26
45	Incorporating structural prior information and sparsity into EIT using parallel level sets. Inverse Problems and Imaging, 2019, 13, 285-307.	1.1	16
46	A dual-wavelength spread spectrum-based spectroscopic system For time-domain near-infrared diffuse optical imaging. , 2019, , .		0
47	Multi-wavelength time domain diffuse optical tomography for breast cancer: initial results on silicone phantoms. , 2019, , .		1
48	An adaptive scheme for diffuse-optical tomography based on combined structured-light illumination and single-pixel camera detection. , 2019, , .		2
49	Fitting a spectral model for component analysis in diffuse optical tomography. , 2019, , .		0
50	Fast Quasi-Newton Algorithms for Penalized Reconstruction in Emission Tomography and Further Improvements via Preconditioning. IEEE Transactions on Medical Imaging, 2018, 37, 1000-1010.	8.9	14
51	Dynamic causal modelling on infant fNIRS data: A validation study on a simultaneously recorded fNIRS-fMRI dataset. NeuroImage, 2018, 175, 413-424.	4.2	30
52	DAGAN: Deep De-Aliasing Generative Adversarial Networks for Fast Compressed Sensing MRI Reconstruction. IEEE Transactions on Medical Imaging, 2018, 37, 1310-1321.	8.9	724
53	Variational Gaussian approximation for Poisson data. Inverse Problems, 2018, 34, 025005.	2.0	9
54	NiftyPET: a High-throughput Software Platform for High Quantitative Accuracy and Precision PET Imaging and Analysis. Neuroinformatics, 2018, 16, 95-115.	2.8	40

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55	Model-Based Learning for Accelerated, Limited-View 3-D Photoacoustic Tomography. IEEE Transactions on Medical Imaging, 2018, 37, 1382-1393.	8.9	212
56	Clinical Impact of Respiratory Motion Correction in Simultaneous PET/MR, Using a Joint PET/MR Predictive Motion Model. Journal of Nuclear Medicine, 2018, 59, 1467-1473.	5.0	16
57	Non-invasive kinetic modelling of PET tracers with radiometabolites using a constrained simultaneous estimation method: evaluation with 11C-SB201745. EJNMMI Research, 2018, 8, 58.	2.5	17
58	Enhancing Compressed Sensing 4D Photoacoustic Tomography by Simultaneous Motion Estimation. SIAM Journal on Imaging Sciences, 2018, 11, 2224-2253.	2.2	25
59	Three dimensional photoacoustic tomography in Bayesian framework. Journal of the Acoustical Society of America, 2018, 144, 2061-2071.	1.1	16
60	Maximum-likelihood estimation of emission and attenuation images in 3D PET from multiple energy window measurements. , 2018, , .		6
61	Algorithms for Solving Misalignment Issues in Penalized PET/CT Reconstruction Using Anatomical Priors. , 2018, , .		5
62	Incorporating reflection boundary conditions in the Neumann series radiative transport equation: application to photon propagation and reconstruction in diffuse optical imaging. Biomedical Optics Express, 2018, 9, 1389.	2.9	3
63	A spread spectrum approach to time-domain near-infrared diffuse optical imaging using inexpensive optical transceiver modules. Biomedical Optics Express, 2018, 9, 2648.	2.9	11
64	Approximate k-Space Models and Deep Learning for Fast Photoacoustic Reconstruction. Lecture Notes in Computer Science, 2018, , 103-111.	1.3	12
65	Time-resolved diffuse optical tomography system based on adaptive structured light illumination and compressive sensing detection. , 2018, , .		2
66	Slice-illuminated optical projection tomography. Optics Letters, 2018, 43, 5555.	3.3	5
67	Photoacoustic image reconstruction in Bayesian framework. , 2018, , .		0
68	Basis mapping methods for forward and inverse problems. International Journal for Numerical Methods in Engineering, 2017, 109, 3-28.	2.8	5
69	Estimation of an image derived input function with MR-defined carotid arteries in FDG-PET human studies using a novel partial volume correction method. Journal of Cerebral Blood Flow and Metabolism, 2017, 37, 1398-1409.	4.3	48
70	Direct Parametric Reconstruction With Joint Motion Estimation/Correction for Dynamic Brain PET Data. IEEE Transactions on Medical Imaging, 2017, 36, 203-213.	8.9	25
71	Bayesian Estimation of Intrinsic Tissue Oxygenation and Perfusion From RGB Images. IEEE Transactions on Medical Imaging, 2017, 36, 1491-1501.	8.9	12
72	Utilising the radiative transfer equation in quantitative photoacoustic tomography. , 2017, , .		2

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73	Three-dimensional photoacoustic imaging and inversion for accurate quantification of chromophore distributions. , 2017, , .		5
74	Sub-sampled Fabry-Perot photoacoustic scanner for fast 3D imaging. Proceedings of SPIE, 2017, , .	0.8	8
75	A generalized framework unifying image registration and respiratory motion models and incorporating image reconstruction, for partial image data or full images. Physics in Medicine and Biology, 2017, 62, 4273-4292.	3.0	43
76	Evaluation of a direct motion estimation/correction method in respiratory-gated PET/MRI with motion-adjusted attenuation. Medical Physics, 2017, 44, 2379-2390.	3.0	11
77	Sign determination methods for the respiratory signal in data-driven PET gating. Physics in Medicine and Biology, 2017, 62, 3204-3220.	3.0	22
78	Radiance Monte-Carlo for application of the radiative transport equation in the inverse problem of diffuse optical tomography. Proceedings of SPIE, 2017, , .	0.8	2
79	Multiple-view time-resolved diffuse optical tomography based on structured illumination and compressive detection. , 2017, , .		0
80	A simulation study of spectral ÄŒerenkov luminescence imaging for tumour margin estimation. , 2017, , .		0
81	Acoustic Wave Field Reconstruction From Compressed Measurements With Application in Photoacoustic Tomography. IEEE Transactions on Computational Imaging, 2017, 3, 710-721.	4.4	22
82	Potential benefits of incorporating energy information when estimating attenuation from PET data. , 2017, , .		10
83	Multiple-view diffuse optical tomography system based on time-domain compressive measurements. Optics Letters, 2017, 42, 2822.	3.3	19
84	Time-Domain Functional Diffuse Optical Tomography System Based on Fiber-Free Silicon Photomultipliers. Applied Sciences (Switzerland), 2017, 7, 1235.	2.5	16
85	Detection of Lung Density Variations With Principal Component Analysis in PET. , 2017, , .		2
86	Spatially-variant Strength for Anatomical Priors in PET Reconstruction. , 2017, , .		2
87	Improvement of the Sign Determination Method for Data-Driven respiratory signal in TOF-PET. , 2017, , .		1
88	Fast Estimation of Haemoglobin Concentration in Tissue Via Wavelet Decomposition. Lecture Notes in Computer Science, 2017, , 100-108.	1.3	1
89	Estimation and uncertainty quantification of optical properties directly from the photoacoustic time series. , 2017, , .		0
90	Time-resolved Diffuse Optical Tomography based on Single pixel camera. , 2016, , .		0

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91	Performance improvement and validation of a new MAP reconstruction algorithm. , 2016, , .		3
92	Direct Estimation of Optical Parameters From Photoacoustic Time Series in Quantitative Photoacoustic Tomography. IEEE Transactions on Medical Imaging, 2016, 35, 2497-2508.	8.9	35
93	Quantitative photoacoustic tomography using forward and adjoint Monte Carlo models of radiance. Journal of Biomedical Optics, 2016, 21, 126004.	2.6	36
94	Heterodyne frequencyâ€domain multispectral diffuse optical tomography of breast cancer in the parallelâ€plane transmission geometry. Medical Physics, 2016, 43, 4383-4395.	3.0	21
95	Accelerated high-resolution photoacoustic tomography via compressed sensing. Physics in Medicine and Biology, 2016, 61, 8908-8940.	3.0	112
96	Reconstruction of an optical inhomogeneity map improves fluorescence diffuse optical tomography. Biomedical Physics and Engineering Express, 2016, 2, 055020.	1.2	4
97	Image reconstruction with noise and error modelling in quantitative photoacoustic tomography. , 2016, , .		1
98	On the adjoint operator in photoacoustic tomography. Inverse Problems, 2016, 32, 115012.	2.0	79
99	Data driven respiratory signal detection in PET taking advantage of time-of-flight data. , 2016, , .		8
100	Photonics advancements in time-domain diffuse imaging: towards hand-held and wearable devices. , 2016, , .		0
101	Joint PET-MR respiratory motion models for clinical PET motion correction. Physics in Medicine and Biology, 2016, 61, 6515-6530.	3.0	27
102	Bayesian parameter estimation in spectral quantitative photoacoustic tomography. , 2016, , .		1
103	Multispectral reconstruction methods for quantitative photoacoustic tomography. , 2016, , .		2
104	PET Reconstruction With an Anatomical MRI Prior Using Parallel Level Sets. IEEE Transactions on Medical Imaging, 2016, 35, 2189-2199.	8.9	82
105	Patch-based anisotropic diffusion scheme for fluorescence diffuse optical tomographyâ€”part 1: technical principles. Physics in Medicine and Biology, 2016, 61, 1439-1451.	3.0	4
106	Maximum-Likelihood Joint Image Reconstruction/Motion Estimation in Attenuation-Corrected Respiratory Gated PET/CT Using a Single Attenuation Map. IEEE Transactions on Medical Imaging, 2016, 35, 217-228.	8.9	41
107	Gradient-Based Quantitative Image Reconstruction in Ultrasound-Modulated Optical Tomography: First Harmonic Measurement Type in a Linearised Diffusion Formulation. IEEE Transactions on Medical Imaging, 2016, 35, 456-467.	8.9	9
108	Improved Parameter-Estimation With MRI-Constrained PET Kinetic Modeling: A Simulation Study. IEEE Transactions on Nuclear Science, 2016, 63, 2464-2470.	2.0	2

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109	Maximum-likelihood joint image reconstruction and motion estimation with misaligned attenuation in TOF-PET/CT. Physics in Medicine and Biology, 2016, 61, L11-L19.	3.0	14
110	Patch-based anisotropic diffusion scheme for fluorescence diffuse optical tomographyâ€”part 2: image reconstruction. Physics in Medicine and Biology, 2016, 61, 1452-1475.	3.0	8
111	Single-pixel optical camera for video rate ultrasonic imaging. Optica, 2016, 3, 26.	9.3	66
112	MR Imagingâ€“Guided Partial Volume Correction of PET Data in PET/MR Imaging. PET Clinics, 2016, 11, 161-177.	3.0	32
113	Quantitative in vivo optical tomography of cancer progression & vasculature development in adult zebrafish. Oncotarget, 2016, 7, 43939-43948.	1.8	23
114	Approximate marginalization of absorption and scattering in fluorescence diffuse optical tomography. Inverse Problems and Imaging, 2016, 10, 227-246.	1.1	8
115	Multimodal Structural Priors for Spatially-Dense Diffuse Optical Tomography of Breast Cancer. , 2016, , .		1
116	Inference of Tissue Haemoglobin Concentration from Stereo RGB. Lecture Notes in Computer Science, 2016, , 50-58.	1.3	3
117	Real-time dynamic image reconstruction in time-domain diffuse optical tomography. , 2016, , .		0
118	Evaluating real-time image reconstruction in diffuse optical tomography using physiologically realistic test data. Biomedical Optics Express, 2015, 6, 4719.	2.9	10
119	Rapid workflow of mMR PET list-mode data processing using CUDA. EJNMMI Physics, 2015, 2, A42.	2.7	0
120	A fast boundary element method for the scattering analysis of high-intensity focused ultrasound. Journal of the Acoustical Society of America, 2015, 138, 2726-2737.	1.1	26
121	Performance evaluation of MAP algorithms with different penalties, object geometries and noise levels. , 2015, , .		5
122	Sign determination methods for the respiratory signal in data-driven PET gating. , 2015, , .		0
123	Adaptive adjustment of the number of subsets during iterative image reconstruction. , 2015, , .		2
124	Forward and adjoint radiance Monte Carlo models for quantitative photoacoustic imaging. , 2015, , .		1
125	Practical PET Respiratory Motion Correction in Clinical PET/MR. Journal of Nuclear Medicine, 2015, 56, 890-896.	5.0	76
126	Reconstruction-classification method for quantitative photoacoustic tomography. Journal of Biomedical Optics, 2015, 20, 126004.	2.6	11

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127	First-harmonic sensitivity functions for a linearised diffusion model of ultrasound-modulated optical tomography. , 2015, , .		0
128	Multi-contrast attenuation map synthesis for PET/MR scanners: assessment on FDG and Florbetapir PET tracers. European Journal of Nuclear Medicine and Molecular Imaging, 2015, 42, 1447-1458.	6.4	35
129	Incorporation of MRI-AIF Information For Improved Kinetic Modelling of Dynamic PET Data. IEEE Transactions on Nuclear Science, 2015, 62, 612-618.	2.0	4
130	Towards next generation time-domain diffuse optics devices. , 2015, , .		2
131	Whole-head functional brain imaging of neonates at cot-side using time-resolved diffuse optical tomography. Proceedings of SPIE, 2015, , .	0.8	3
132	Quantitative photoacoustic tomography using illuminations from a single direction. Journal of Biomedical Optics, 2015, 20, 036015.	2.6	21
133	Joint reconstruction of PET-MRI by exploiting structural similarity. Inverse Problems, 2015, 31, 015001.	2.0	106
134	A real-time ultrasonic field mapping system using a Fabry PÃ©rot single pixel camera for 3D photoacoustic imaging. Proceedings of SPIE, 2015, , .	0.8	4
135	Dynamic image reconstruction in time-resolved diffuse optical tomography. Proceedings of SPIE, 2015, , .	0.8	2
136	A Reconstruction-Classification Method for Multifrequency Electrical Impedance Tomography. IEEE Transactions on Medical Imaging, 2015, 34, 1486-1497.	8.9	32
137	Towards next-generation time-domain diffuse optics for extreme depth penetration and sensitivity. Biomedical Optics Express, 2015, 6, 1749.	2.9	100
138	Fast silicon photomultiplier improves signal harvesting and reduces complexity in time-domain diffuse optics. Optics Express, 2015, 23, 13937.	3.4	68
139	Practical PET respiratory motion correction in clinical simultaneous PET/MR. , 2015, , .		3
140	Solving Boundary Integral Problems with BEM++. ACM Transactions on Mathematical Software, 2015, 41, 1-40.	2.9	134
141	Nonlinear approach to difference imaging in diffuse optical tomography. Journal of Biomedical Optics, 2015, 20, 105001.	2.6	8
142	Improved parameter-estimation with combined PET-MRI kinetic modelling. EJNMMI Physics, 2015, 2, A25.	2.7	2
143	CT synthesis in the head & neck region for PET/MR attenuation correction: an iterative multi-atlas approach. EJNMMI Physics, 2015, 2, A31.	2.7	7
144	Time-domain diffuse optics: towards next generation devices. , 2015, , .		1

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145	Finite element approximation of the radiative transport equation in a medium with piece-wise constant refractive index. Journal of Computational Physics, 2015, 282, 345-359.	3.8	22
146	Optical Imaging. , 2015, , 1033-1079.		2
147	Detail-Preserving PET Reconstruction with Sparse Image Representation and Anatomical Priors. Lecture Notes in Computer Science, 2015, 24, 540-551.	1.3	12
148	Robust CT Synthesis for Radiotherapy Planning: Application to the Head and Neck Region. Lecture Notes in Computer Science, 2015, , 476-484.	1.3	20
149	Accelerated Optical Projection Tomography Applied to In Vivo Imaging of Zebrafish. PLoS ONE, 2015, 10, e0136213.	2.5	45
150	Whole-head functional brain imaging of neonates at cot-side using time-resolved diffuse optical tomography. , 2015, , .		2
151	Subject-specific Models for the Analysis of Pathological FDG PET Data. Lecture Notes in Computer Science, 2015, , 651-658.	1.3	1
152	Optical Tomography: Applications. , 2015, , 1092-1096.		0
153	Time-domain diffuse optics: towards next generation devices. , 2015, , .		0
154	Low-rank and (X-F)-space sparsity via fast composite splitting for accelerated dynamic MR imaging. , 2014, , .		0
155	Patterned interrogation scheme for compressed sensing photoacoustic imaging using a Fabry Perot planar sensor. Proceedings of SPIE, 2014, , .	0.8	2
156	Compensation of modeling errors due to unknown domain boundary in diffuse optical tomography. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2014, 31, 1847.	1.5	16
157	Efficient Determination of the Uncertainty for the Optimization of SPECT System Design: A Subsampled Fisher Information Matrix. IEEE Transactions on Medical Imaging, 2014, 33, 618-635.	8.9	5
158	Multifrequency Electrical Impedance Tomography Using Spectral Constraints. IEEE Transactions on Medical Imaging, 2014, 33, 340-350.	8.9	82
159	The Toast++ software suite for forward and inverse modeling in optical tomography. Journal of Biomedical Optics, 2014, 19, 040801.	2.6	202
160	Dynamic MR Image Reconstructionâ€“Separation From Undersampled (${f k},t$)-Space via Low-Rank Plus Sparse Prior. IEEE Transactions on Medical Imaging, 2014, 33, 1689-1701.	8.9	106
161	A novel technique to incorporate structural prior information into multi-modal tomographic reconstruction. Inverse Problems, 2014, 30, 065004.	2.0	19
162	Stroke type differentiation using spectrally constrained multifrequency EIT: evaluation of feasibility in a realistic head model. Physiological Measurement, 2014, 35, 1051-1066.	2.1	61

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163	A 4D neonatal head model for diffuse optical imaging of pre-term to term infants. NeuroImage, 2014, 100, 385-394.	4.2	61
164	Vector-Valued Image Processing by Parallel Level Sets. IEEE Transactions on Image Processing, 2014, 23, 9-18.	9.8	66
165	Radiative transfer equation for media with spatially varying refractive index. Physical Review A, 2014, 90, .	2.5	3
166	Attenuation Correction Synthesis for Hybrid PET-MR Scanners: Application to Brain Studies. IEEE Transactions on Medical Imaging, 2014, 33, 2332-2341.	8.9	311
167	4-D PET joint image reconstruction/non-rigid motion estimation with limited MRI prior information. EJNMMI Physics, 2014, 1, A27.	2.7	2
168	Incorporation of MRI-AIF information for improved kinetic modelling of dynamic PET data. EJNMMI Physics, 2014, 1, A43.	2.7	7
169	Image reconstruction of mMR PET data using the open source software STIR. EJNMMI Physics, 2014, 1, A44.	2.7	1
170	Attenuation correction synthesis for hybrid PET-MR scanners: validation for brain study applications. EJNMMI Physics, 2014, 1, A52.	2.7	3
171	Modelling the impact of injection time on the bolus shapes in PET-MRI AIF Conversion. EJNMMI Physics, 2014, 1, A54.	2.7	6
172	Direct parametric reconstruction from undersampled (k, t)-space data in dynamic contrast enhanced MRI. Medical Image Analysis, 2014, 18, 989-1001.	11.6	33
173	Exploiting an MRI derived arterial input function to improve the PET simultaneous estimation method: Validation of assumptions. , 2014, , .		2
174	An algorithm for direct 4-D PET image reconstruction/non-rigid motion estimation with limited MRI prior information. , 2014, , .		1
175	Effect of scatter correction when comparing attenuation maps: Application to brain PET/MR. , 2014, , .		10
176	Joint reconstruction of PET-MRI by parallel level sets. , 2014, , .		4
177	Joint Parametric Reconstruction and Motion Correction Framework for Dynamic PET Data. Lecture Notes in Computer Science, 2014, 17, 114-121.	1.3	6
178	Compensation of optode position and sensitivity errors in diffuse optical tomography. , 2014, , .		2
179	Approximate marginalization of unknown scattering in quantitative photoacoustic tomography. Inverse Problems and Imaging, 2014, 8, 811-829.	1.1	16
180	Deblurring Multispectral Laparoscopic Images. Lecture Notes in Computer Science, 2014, , 216-225.	1.3	1

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181	Preconditioning of complex symmetric linear systems with applications in optical tomography. Applied Numerical Mathematics, 2013, 74, 35-48.	2.1	13
182	Utilising the coupled radiative transfer - diffusion model in diffuse optical tomography. Proceedings of SPIE, 2013, , .	0.8	1
183	Use of measured scatter data for the attenuation correction of single photon emission tomography without transmission scanning. Medical Physics, 2013, 40, 082506.	3.0	22
184	Fast dynamic MRI via nuclear norm minimization and accelerated proximal gradient. , 2013, , .		2
185	Bayesian Image Reconstruction in Quantitative Photoacoustic Tomography. IEEE Transactions on Medical Imaging, 2013, 32, 2287-2298.	8.9	48
186	Fluorescence molecular tomography of an animal model using structured light rotating view acquisition. Journal of Biomedical Optics, 2013, 18, 020503.	2.6	39
187	Compensation of optode sensitivity and position errors in diffuse optical tomography using the approximation error approach. Biomedical Optics Express, 2013, 4, 2015.	2.9	18
188	Quantitative fluorescence diffuse optical tomography in the presence of heterogeneities. Optics Letters, 2013, 38, 1903.	3.3	14
189	Use of Split Bregman denoising for iterative reconstruction in fluorescence diffuse optical tomography. Journal of Biomedical Optics, 2013, 18, 076016.	2.6	27
190	Wavelet-based data and solution compression for efficient image reconstruction in fluorescence diffuse optical tomography. Journal of Biomedical Optics, 2013, 18, 086008.	2.6	14
191	Joint reconstruction of low-rank and sparse components from undersampled (k, t)-space small bowel data. , 2013, , .		1
192	Image reconstruction in quantitative photoacoustic tomography using the radiative transfer equation and the diffusion approximation. , 2013, , .		0
193	Efficient image reconstruction in fluorescence diffuse optical tomography (fDOT) using data and solution compression. , 2013, , .		0
194	Attenuation Correction Synthesis for Hybrid PET-MR Scanners. Lecture Notes in Computer Science, 2013, 16, 147-154.	1.3	31
195	Approximation error method can reduce artifacts due to scalp blood flow in optical brain activation imaging. Journal of Biomedical Optics, 2012, 17, 0960121.	2.6	15
196	A virtual source pattern method for fluorescence tomography with structured light. Physics in Medicine and Biology, 2012, 57, 3811-3832.	3.0	24
197	Quantitative spectroscopic photoacoustic imaging: a review. Journal of Biomedical Optics, 2012, 17, 061202.	2.6	550
198	Utilising Approximation Error Modelling in Linear Reconstruction in Diffuse Optical Tomography. , 2012, , .		0

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199	Use of the Fisher Information Matrix to optimize the acquisition protocol for a D-SPECT system. , 2012, , .		1
200	Subsampled Fisher Information Matrix for efficient estimation of the uncertainty in emission tomography. , 2012, , .		1
201	Tomographic imaging with polarized light. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2012, 29, 980.	1.5	12
202	Monotonic algorithm for joint entropy-based anatomical priors in parametric PET image reconstruction. , 2012, , .		2
203	Unifying global and local statistical measures for anatomy-guided emission tomography reconstruction. , 2012, , .		0
204	Inverse Born series for the Calderon problem. Inverse Problems, 2012, 28, 035003.	2.0	17
205	A comparison of the options for brain partial volume correction using PET/MRI. , 2012, , .		3
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