Charles A Bouman

List of Publications by Year
in descending order

		840776	839539
40 papers	2,548 citations	11 h-index	18 g-index
40 all docs	40 docs citations	40 times ranked	1984 citing authors

#	Article	IF	Citations
1	A three‐dimensional statistical approach to improved image quality for multislice helical CT. Medical Physics, 2007, 34, 4526-4544.	3.0	806
2	Plug-and-Play priors for model based reconstruction. , 2013, , .		582
3	Fast Model-Based X-Ray CT Reconstruction Using Spatially Nonhomogeneous ICD Optimization. IEEE Transactions on Image Processing, 2011, 20, 161-175.	9.8	242
4	Fluorescence optical diffusion tomography. Applied Optics, 2003, 42, 3081.	2.1	226
5	A Model-Based Image Reconstruction Algorithm With Simultaneous Beam Hardening Correction for X-Ray CT. IEEE Transactions on Computational Imaging, 2015, 1, 200-216.	4.4	130
6	Recent Advances in CT Image Reconstruction. Current Radiology Reports, 2013, 1, 39-51.	1.4	104
7	Model-Based Iterative Reconstruction for Dual-Energy X-Ray CT Using a Joint Quadratic Likelihood Model. IEEE Transactions on Medical Imaging, 2014, 33, 117-134.	8.9	95
8	TIMBIR: A Method for Time-Space Reconstruction From Interlaced Views. IEEE Transactions on Computational Imaging, 2015, 1, 96-111.	4.4	80
9	Phase-error estimation and image reconstruction from digital-holography data using a Bayesian framework. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2017, 34, 1659.	1.5	33
10	Imaging through distributed-volume aberrations using single-shot digital holography. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2019, 36, A20.	1.5	30
11	A Gaussian Mixture MRF for Model-Based Iterative Reconstruction With Applications to Low-Dose X-Ray CT. IEEE Transactions on Computational Imaging, 2016, 2, 359-374.	4.4	24
12	2.5D Deep Learning For CT Image Reconstruction Using A Multi-GPU Implementation. , 2018, , .		22
13	Demonstration of single-shot digital holography using a Bayesian framework. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2018, 35, 103.	1.5	22
14	Massively parallel 3D image reconstruction. , 2017, , .		19
15	DEEP BACK PROJECTION FOR SPARSE-VIEW CT RECONSTRUCTION. , 2018, , .		15
16	Model-based Iterative CT Image Reconstruction on GPUs. , 2017, , .		13
17	Gaussian mixture Markov random field for image denoising and reconstruction. , 2013, , .		12
18	A multiscale stochastic image model for automated inspection. IEEE Transactions on Image Processing, 1995, 4, 1641-1654.	9.8	11

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19	Joint metal artifact reduction and segmentation of CT images using dictionary-based image prior and continuous-relaxed potts model. , 2015, , .		10
20	Model-based Iterative CT Image Reconstruction on GPUs. ACM SIGPLAN Notices, 2017, 52, 207-220.	0.2	10
21	Multi-Slice Fusion for Sparse-View and Limited-Angle 4D CT Reconstruction. IEEE Transactions on Computational Imaging, 2021, 7, 448-462.	4.4	10
22	A Bias-Reducing Loss Function for CT Image Denoising. , 2021, , .		8
23	Algorithm-Driven Advances for Scientific CT Instruments: From model-based to deep learning-based approaches. IEEE Signal Processing Magazine, 2022, 39, 32-43.	5.6	7
24	Implicit Gibbs prior models for tomographic reconstruction. , 2012, , .		6
25	Innovative data weighting for iterative reconstruction in a helical CT security baggage scanner. , 2013, , .		6
26	Advanced prior modeling for 3D bright field electron tomography. Proceedings of SPIE, 2015, , .	0.8	6
27	Implicit priors for model-based inversion. , 2012, , .		5
28	Gaussian mixture prior models for imaging of flow cross sections from sparse hyperspectral measurements. , 2015, , .		3
29	Direct model-based tomographic reconstruction of the complex refractive index. , 2016, , .		3
30	Model based image reconstruction with physics based priors. , 2016, , .		2
31	Physics-Based Regularizer for Joint Soft Segmentation and Reconstruction of Electron Microscopy Images of Polycrystalline Microstructures. IEEE Transactions on Computational Imaging, 2019, 5, 660-674.	4.4	2
32	Physics‐based iterative reconstruction for dual‐source and flying focal spot computed tomography. Medical Physics, 2021, 48, 3595-3613.	3.0	2
33	Rotationally-invariant non-local means for image denoising and tomography. , 2015, , .		1
34	Model-based reconstruction for x-ray diffraction imaging. , 2016, , .		1
35	A method for simultaneous image reconstruction and beam hardening correction. , 2013, , .		0
36	Inverse synthetic aperture LADAR image construction: an inverse model-based approach. Proceedings of SPIE, 2016, , .	0.8	0

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37	EMBIRA: An Accelerator for Model-Based Iterative Reconstruction. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2016, 24, 3243-3256.	3.1	0
38	A Hybrid Prior Model for Tunable Diode Laser Absorption Tomography. , 2018, , .		0
39	Reconstructing 3D Volumes of Biological Specimens Using a Model Based Iterative Approach. Microscopy and Microanalysis, 2021, 27, 278-279.	0.4	0
40	Sparse-View CT Reconstruction using Recurrent Stacked Back Projection. , 2021, , .		0