Monica Abella

List of Publications by Year
in descending order

50	399	1040018	839512
papers	citations	9	18
		h-index	g-index

51	51	51	467
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Simple beam-hardening correction method (2DCalBH) based on 2D linearization. Physics in Medicine and Biology, 2022, , .	3.0	0
2	Optimization of a calibration phantom for quantitative radiography. Medical Physics, 2021, 48, 1039-1053.	3.0	4
3	Tolerance to geometrical inaccuracies in CBCT systems: A comprehensive study. Medical Physics, 2021, 48, 6007-6019.	3.0	2
4	Simplified Statistical Image Reconstruction for X-ray CT With Beam-Hardening Artifact Compensation. IEEE Transactions on Medical Imaging, 2020, 39, 111-118.	8.9	9
5	Accelerated iterative image reconstruction for cone-beam computed tomography through Big Data frameworks. Future Generation Computer Systems, 2020, 106, 534-544.	7.5	3
6	XAP-Lab: A software tool for designing flexible X-ray acquisition protocols. Computer Methods and Programs in Biomedicine, 2019, 177, 243-252.	4.7	1
7	Enabling tomography with low-cost C-arm systems. PLoS ONE, 2018, 13, e0203817.	2.5	5
8	Unsupervised CT Lung Image Segmentation of a Mycobacterium Tuberculosis Infection Model. Scientific Reports, 2018, 8, 9802.	3.3	29
9	GPU-accelerated iterative reconstruction for limited-data tomography in CBCT systems. BMC Bioinformatics, 2018, 19, 171.	2.6	8
10	Medical Imaging Processing on a Big Data Platform Using Python: Experiences with Heterogeneous and Homogeneous Architectures. , 2017, , .		8
11	FUX-Sim: Implementation of a fast universal simulation/reconstruction framework for X-ray systems. PLoS ONE, 2017, 12, e0180363.	2.5	13
12	Calibration-free method for beam-hardening compensation: preliminary results. , 2017, , .		0
13	Architecture for the Execution of Tasks in Apache Spark in Heterogeneous Environments. Lecture Notes in Computer Science, 2017, , 504-515.	1.3	3
14	Sparse reconstruction methods in x-ray CT. , 2017, , .		0
15	A Novel Prior- and Motion-Based Compressed Sensing Method for Small-Animal Respiratory Gated CT. PLoS ONE, 2016, 11, e0149841.	2.5	10
16	Exploring a Distributed Iterative Reconstructor Based on Split Bregman Using PETSc. Lecture Notes in Computer Science, 2016, , 191-200.	1.3	1
17	Geometric calibration workflow for high resolution cone beam micro-computed tomography. , 2015, , .		0
18	Investigation of Different Sparsity Transforms for the PICCS Algorithm in Small-Animal Respiratory Gated CT. PLoS ONE, 2015, 10, e0120140.	2.5	8

#	Article	IF	Citations
19	Surfing the optimization space of a multiple-GPU parallel implementation of a X-ray tomography reconstruction algorithm. Journal of Systems and Software, 2014, 95, 166-175.	4.5	20
20	Dual-exposure technique for extending the dynamic range of x-ray flat panel detectors. Physics in Medicine and Biology, 2014, 59, 421-439.	3.0	9
21	Novel 4D image reconstruction for dynamic X-ray computed tomography in slow rotating scanners. , 2014, , .		0
22	Evaluation of the possibilities of limited angle reconstruction for the use of digital Radiography system as a tomograph. , 2014, , .		1
23	Parallel Implementation of a X-Ray Tomography Reconstruction Algorithm for High-Resolution Studies. IFMBE Proceedings, 2014, , 257-260.	0.3	0
24	Calibration of a C-arm X-Ray System for Its Use in Tomography. IFMBE Proceedings, 2014, , 245-248.	0.3	5
25	Parallel implementation of a X-ray tomography reconstruction algorithm based on MPI and CUDA. , 2013, , .		4
26	Misalignments calibration in small-animal PET scanners based on rotating planar detectors and parallel-beam geometry. Physics in Medicine and Biology, 2012, 57, 7493-7518.	3.0	4
27	Complete scheme for beam hardening correction in small animal computed tomography. , 2012, , .		2
28	Investigation of different Compressed Sensing approaches for respiratory gating in small animal CT. , 2012, , .		3
29	Exploiting Parallelism in a X-ray Tomography Reconstruction Algorithm on Hybrid Multi-GPU and Multi-core Platforms. , 2012, , .		4
30	Accuracy of CT-based attenuation correction in PET/CT bone imaging. Physics in Medicine and Biology, 2012, 57, 2477-2490.	3.0	40
31	Software architecture for multi-bed FDK-based reconstruction in X-ray CT scanners. Computer Methods and Programs in Biomedicine, 2012, 107, 218-232.	4.7	37
32	Automatic Monte-Carlo Based Scatter Correction For X-ray cone-beam CT using general purpose graphic processing units (GP-GPU): A feasibility study. , 2011, , .		5
33	Iterative automatic segmentation in cardiac PET based on TAC correlation: Preliminary results. , 2010, , .		0
34	A SPECT Scanner for Rodent Imaging Based on Small-Area Gamma Cameras. IEEE Transactions on Nuclear Science, 2010, 57, 2524-2531.	2.0	4
35	A new statistical image reconstruction algorithm for polyenergetic X-ray CT. , 2009, , .		5
36	rSPECT: A compact gamma camera based SPECT system for small-animal imaging. , 2009, , .		0

#	Article	IF	Citations
37	Automated dual-exposure technique to extend the dynamic range of flat-panel detectors used in small-animal cone-beam micro-CT. , 2009, , .		0
38	Design and performance evaluation of a coplanar multimodality scanner for rodent imaging. Physics in Medicine and Biology, 2009, 54, 5427-5441.	3.0	49
39	Automatic quantification of histological studies in allergic asthma. Cytometry Part A: the Journal of the International Society for Analytical Cytology, 2009, 75A, 271-277.	1.5	2
40	Sinogram bow–tie filtering in FBP PET reconstruction. Medical Physics, 2009, 36, 1663-1671.	3.0	11
41	Assessment of a New High-Performance Small-Animal X-Ray Tomograph. IEEE Transactions on Nuclear Science, 2008, 55, 898-905.	2.0	48
42	Simulation of mechanical misalignments in a cone-beam micro-CT system. , 2008, , .		5
43	Fully 4D reconstruction of dynamic SPECT images based on the estimation of spatiotemporal basis coefficients directly from projection measurements. , 2008, , .		0
44	Comparative study of two flat-panel X-ray detectors applied to small-animal imaging cone-beam micro-CT. , 2008, , .		2
45	Field of view alignment on a multimodal PET/CT scanner for small animals. , 2007, , .		2
46	Accuracy of CT-Based attenuation correction in bone imaging with PET/CT. , 2007, , .		1
47	Effects of Sinogram Filtering in the Quality of PET Reconstructions: Preliminary Results. , 2006, , .		0
48	Co-Planar PET/CT for Small Animal Imaging. , 0, , .		5
49	Quasi Pseudo-Inverse Reconstruction Technique for Rotating PET Scanners. , 0, , .		1
50	rPET Detectors Design and Data Processing. , 0, , .		24