Alejandro Sisniega

List of Publications by Year
in descending order

48	586	686830 13	713013 21
papers	citations	h-index	g-index

48	48	48	641
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Technical Note: <scp>spektr</scp> 3.0-A computational tool for x-ray spectrum modeling and analysis. Medical Physics, 2016, 43, 4711-4717.	1.6	170
2	Assessment of a New High-Performance Small-Animal X-Ray Tomograph. IEEE Transactions on Nuclear Science, 2008, 55, 898-905.	1.2	48
3	Split operator method for fluorescence diffuse optical tomography using anisotropic diffusion regularisation with prior anatomical information. Biomedical Optics Express, 2011, 2, 2632.	1.5	38
4	Software architecture for multi-bed FDK-based reconstruction in X-ray CT scanners. Computer Methods and Programs in Biomedicine, 2012, 107, 218-232.	2.6	37
5	Penalized-Likelihood Reconstruction With High-Fidelity Measurement Models for High-Resolution Cone-Beam Imaging. IEEE Transactions on Medical Imaging, 2018, 37, 988-999.	5.4	24
6	Modeling and evaluation of a highâ€resolution <scp>CMOS</scp> detector for coneâ€beam <scp>CT</scp> of the extremities. Medical Physics, 2018, 45, 114-130.	1.6	22
7	Technical assessment of a prototype coneâ€beam CT system for imaging of acute intracranial hemorrhage. Medical Physics, 2016, 43, 5745-5757.	1.6	21
8	Multiresolution iterative reconstruction in high-resolution extremity cone-beam CT. Physics in Medicine and Biology, 2016, 61, 7263-7281.	1.6	21
9	Motion compensation in extremity cone-beam computed tomography. Skeletal Radiology, 2019, 48, 1999-2007.	1.2	20
10	Multi-resolution statistical image reconstruction for mitigation of truncation effects: application to cone-beam CT of the head. Physics in Medicine and Biology, 2017, 62, 539-559.	1.6	18
11	Bismuth labeling for the CT assessment of local administration of magnetic nanoparticles. Nanotechnology, 2015, 26, 135101.	1.3	17
12	Coneâ€beam CT for imaging of the head/brain: Development and assessment of scanner prototype and reconstruction algorithms. Medical Physics, 2020, 47, 2392-2407.	1.6	17
13	Evaluation of detector readout gain mode and bowtie filters for cone-beam CT imaging of the head. Physics in Medicine and Biology, 2016, 61, 5973-5992.	1.6	15
14	Deformable motion compensation for interventional cone-beam CT. Physics in Medicine and Biology, 2021, 66, 055010.	1.6	13
15	Task-based statistical image reconstruction for high-quality cone-beam CT. Physics in Medicine and Biology, 2017, 62, 8693-8719.	1.6	11
16	Integration of free-hand 3D ultrasound and mobile C-arm cone-beam CT: Feasibility and characterization for real-time guidance of needle insertion. Computerized Medical Imaging and Graphics, 2017, 58, 13-22.	3.5	9
17	Investigation of Different Sparsity Transforms for the PICCS Algorithm in Small-Animal Respiratory Gated CT. PLoS ONE, 2015, 10, e0120140.	1.1	8
18	Method for metal artifact avoidance in C-Arm cone-beam CT. , 2020, , .		7

#	Article	IF	Citations
19	Reference-free learning-based similarity metric for motion compensation in cone-beam CT. Physics in Medicine and Biology, 2022, 67, 125020.	1.6	7
20	Accelerated 3D image reconstruction with a morphological pyramid and noise-power convergence criterion. Physics in Medicine and Biology, 2021, 66, 055012.	1.6	5
21	Quantitative cone-beam CT of bone mineral density using model-based reconstruction. , 2019, 10948, .		5
22	VrPET/CT: Development of a rotating multimodality scanner for small-animal imaging. , 2008, , .		4
23	A super-resolution feasibility study in small-animal SPECT imaging. , 2008, , .		4
24	A SPECT Scanner for Rodent Imaging Based on Small-Area Gamma Cameras. IEEE Transactions on Nuclear Science, 2010, 57, 2524-2531.	1.2	4
25	Volume-of-interest CT imaging with dynamic beam filtering using multiple aperture devices. , 2018, 2018, 213-217.		4
26	Validation of a retrospective respiratory gating method for small-animal CT scanners. , 2008, , .		3
27	Investigation of different Compressed Sensing approaches for respiratory gating in small animal CT. , 2012, , .		3
28	Image-based deformable motion compensation for interventional cone-beam CT. , 2019, , .		3
29	Clinical study of soft-tissue contrast resolution in cone-beam CT of the head using multi-resolution PWLS with multi-motion correction and an electronic noise model. , 2019, , .		3
30	Estimation of local deformable motion in image-based motion compensation for interventional cone-beam CT. , 2020, , .		3
31	PET/CT alignment for small animal scanners based on capillary detection. , 2008, , .		2
32	Comparative study of two flat-panel X-ray detectors applied to small-animal imaging cone-beam micro-CT. , 2008, , .		2
33	Design and development of a co-planar fluorescence and X-ray tomograph. , 2008, , .		2
34	Drill-mounted video guidance for orthopaedic trauma surgery. Journal of Medical Imaging, 2021, 8, 015002.	0.8	2
35	Cone-beam CT statistical reconstruction with a model for fluence modulation and electronic readout noise. , 2019, , .		2
36	Convergence criterion for MBIR based on the local noise-power spectrum: Theory and implementation in a framework for accelerated 3D image reconstruction with a morphological pyramid. , 2019, 11072, .		2

#	Article	IF	Citations
37	Calibration and registration of a freehand video-guided surgical drill for orthopaedic trauma. , 2020, 11315, .		2
38	High-Fidelity Modeling of Detector Lag and Gantry Motion in CT Reconstruction. , 2018, 2018, 318-322.		2
39	Image-based deformable motion compensation in cone-beam CT: translation to clinical studies in interventional body radiology. , 2020, , .		1
40	Design and Assessment Principles of Semiconductor Flat-Panel Detector-Based X-Ray Micro-CT Systems for Small-Animal Imaging. , 2017, , 309-336.		1
41	High-resolution extremity cone-beam CT with a CMOS detector: evaluation of a clinical prototype in quantitative assessment of bone microarchitecture. , 2018, 10573, .		1
42	Image quality, scatter, and dose in compact CBCT systems with flat and curved detectors. , 2018, , .		1
43	Evaluation of the reconstruction-of-difference (RoD) algorithm for cone-beam CT neuro-angiography. , 2018, , .		1
44	Targeted deformable motion compensation for vascular interventional cone-beam CT imaging. , 2022, , .		1
45	rSPECT: A compact gamma camera based SPECT system for small-animal imaging. , 2009, , .		0
46	Automated dual-exposure technique to extend the dynamic range of flat-panel detectors used in small-animal cone-beam micro-CT. , 2009, , .		0
47	TH-CD-206-12: Image-Based Motion Estimation for Plaque Visualization in Coronary Computed Tomography Angiography. Medical Physics, 2016, 43, 3885-3885.	1.6	0
48	An investigation of slot-scanning for mammography and breast CT. , 2020, 11312, .		0