

# Alexandre Bousse

## List of Publications by Year in descending order

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#	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	Multi-channel convolutional analysis operator learning for dual-energy CT reconstruction. Physics in Medicine and Biology, 2022, 67, 065001.	3.0	2
3	PET respiratory motion correction: quo vadis?. Physics in Medicine and Biology, 2022, 67, 03TR02.	3.0	10
4	LRR-CED: low-resolution reconstruction-aware convolutional encoder-decoder network for direct sparse-view CT image reconstruction. Physics in Medicine and Biology, 2022, 67, 155007.	3.0	3
5	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
6	DUG-RECON: A Framework for Direct Image Reconstruction Using Convolutional Generative Networks. IEEE Transactions on Radiation and Plasma Medical Sciences, 2021, 5, 44-53.	3.7	19
7	A Pseudo-TOF Image Reconstruction Approach for Three-Gamma Small Animal Imaging. IEEE Transactions on Radiation and Plasma Medical Sciences, 2021, 5, 826-834.	3.7	5
8	PET Reconstruction With Non-Negativity Constraint in Projection Space: Optimization Through Hypo-Convergence. IEEE Transactions on Medical Imaging, 2020, 39, 75-86.	8.9	3
9	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
10	Improved PET/CT Respiratory Motion Compensation by Incorporating Changes in Lung Density. IEEE Transactions on Radiation and Plasma Medical Sciences, 2020, 4, 594-602.	3.7	3
11	Effect of attenuation mismatches in time of flight PET reconstruction. Physics in Medicine and Biology, 2020, 65, 085009.	3.0	10
12	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
13	A Single Dual-Tracer PET Imaging Acquisition to Provide Information on Tumor Heterogeneities. , 2020, , .		0
14	Normalisation Factor Estimation in non-TOF 3D PET from Multiple-Energy Window Data. , 2020, , .		0
15	Ensemble of neural networks for 3D position estimation in monolithic PET detectors. Physics in Medicine and Biology, 2019, 64, 195010.	3.0	28
16	Mass Preservation for Respiratory Motion Registration in both PET and CT. , 2019, , .		1
17	Respiratory Motion Correction in Dynamic PET with a Single Attenuation Map. , 2019, , .		1
18	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

#	ARTICLE	IF	CITATIONS
19	Maximum-likelihood estimation of emission and attenuation images in 3D PET from multiple energy window measurements. , 2018, , .		6
20	Algorithms for Solving Misalignment Issues in Penalized PET/CT Reconstruction Using Anatomical Priors. , 2018, , .		5
21	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
22	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
23	Potential benefits of incorporating energy information when estimating attenuation from PET data. , 2017, , .		10
24	Spatially-variant Strength for Anatomical Priors in PET Reconstruction. , 2017, , .		2
25	Performance improvement and validation of a new MAP reconstruction algorithm. , 2016, , .		3
26	Joint activity/attenuation reconstruction in SPECT using photopeak and scatter sinograms. , 2016, , .		7
27	Joint reconstruction of activity and attenuation in dynamic PET. , 2016, , .		2
28	PETPVC: a toolbox for performing partial volume correction techniques in positron emission tomography. Physics in Medicine and Biology, 2016, 61, 7975-7993.	3.0	117
29	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
30	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
31	Performance evaluation of MAP algorithms with different penalties, object geometries and noise levels. , 2015, , .		5
32	Evaluation of a partial ring design for the INSERT SPECT/MRI system. EJNMMI Physics, 2015, 2, A47.	2.7	2
33	Collimator Design for a Brain SPECT/MRI Insert. IEEE Transactions on Nuclear Science, 2015, 62, 1716-1724.	2.0	20
34	Collimator design for a clinical brain SPECT/MRI insert. EJNMMI Physics, 2014, 1, A21.	2.7	2
35	4-D PET joint image reconstruction/non-rigid motion estimation with limited MRI prior information. EJNMMI Physics, 2014, 1, A27.	2.7	2
36	Framework for the construction of a Monte Carlo simulated brain PETâ€“MR image database. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2014, 734, 162-165.	1.6	2

#	ARTICLE	IF	CITATIONS
37	Novel collimation for simultaneous SPECT/MRI. , 2014, , .		7
38	An algorithm for direct 4-D PET image reconstruction/non-rigid motion estimation with limited MRI prior information. , 2014, , .		1
39	Joint Parametric Reconstruction and Motion Correction Framework for Dynamic PET Data. Lecture Notes in Computer Science, 2014, 17, 114-121.	1.3	6
40	Variance prediction in SPECT reconstruction based on the Fisher information using a novel angular blurring algorithm for computation of the system matrix. , 2013, , .		2
41	What approach to brain partial volume correction is best for PET/MRI?. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2013, 702, 29-33.	1.6	39
42	Design optimization and evaluation of a human brain SPECT-MRI insert based on high-resolution detectors and slit-slat collimators. , 2013, , .		2
43	Monotonic algorithm for joint entropy-based anatomical priors in parametric PET image reconstruction. , 2012, , .		2
44	Unifying global and local statistical measures for anatomy-guided emission tomography reconstruction. , 2012, , .		0
45	A comparison of the options for brain partial volume correction using PET/MRI. , 2012, , .		3
46	An anatomically driven anisotropic diffusion filtering method for 3D SPECT reconstruction. Physics in Medicine and Biology, 2012, 57, 3793-3810.	3.0	27
47	Markov random field and Gaussian mixture for segmented MRI-based partial volume correction in PET. Physics in Medicine and Biology, 2012, 57, 6681-6705.	3.0	32
48	Edge preserving bowsher prior with nonlocal weighting for 3D spect reconstruction. , 2011, , .		17
49	4-D Generative Model for PET/MRI Reconstruction. Lecture Notes in Computer Science, 2011, 14, 581-588.	1.3	12
50	Class conditional entropic prior for MRI enhanced SPECT reconstruction. , 2010, , .		5
51	Point spread function optimization in SPECT. , 2010, , .		2
52	Weighted MRI-Based bowsher priors for SPECT brain image reconstruction. , 2010, , .		14
53	ET Bayesian reconstruction using automatic bandwidth selection for joint entropy optimization. , 2010, , .		2
54	GPU accelerated rotation-based emission tomography reconstruction. , 2010, , .		26

#	ARTICLE	IF	CITATIONS
55	Collimator design in SPECT, an optimisation tool. , 2010, , .		3
56	Motion Compensated Tomography Reconstruction of Coronary Arteries in Rotational Angiography. IEEE Transactions on Biomedical Engineering, 2009, 56, 1254-1257.	4.2	12
57	A blob-based tomographic reconstruction of 3D coronary trees from rotational x-ray angiography. , 2008, , .		7
58	Motion estimation in X-ray rotational angiography using a 3-D deformable coronary tree model. , 2008, , .		0
59	Simulation Environment for the Evaluation of 3D Coronary Tree Reconstruction Algorithms in Rotational Angiography. Annual International Conference of the IEEE Engineering in Medicine and Biology Society, 2007, 2007, 4484-7.	0.5	1
60	A Bayesian MAP-EM Algorithm for PET Image Reconstruction Using Wavelet Transform. IEEE Transactions on Nuclear Science, 2007, 54, 1660-1669.	2.0	19
61	Coronary extraction and characterization in multi-detector computed tomography. IRBM News, 2006, 27, 217-226.	0.1	4
62	A Multiscale Tracking Algorithm for the Coronary Extraction in MSCT Angiography. , 2006, 2006, 3066-9.		16
63	Temporal Tracking of Coronaries in MSCTA by Means of 3D Geometrical Moments. , 2006, 2006, 924-7.		1