D J Hawkes

List of Publications by Citations

66 papers	9,214 citations	32 h-index	68 g-index
68 ext. papers	10,244 ext. citations	5 avg, IF	5.4 L-index

#	Paper	IF	Citations
66	Nonrigid registration using free-form deformations: application to breast MR images. *IEEE Transactions on Medical Imaging*, **1999**, 18, 712-21	11.7	3492
65	Medical image registration. *Physics in Medicine and Biology*, **2001**, 46, R1-45	3.8	906
64	Comparison and evaluation of retrospective intermodality brain image registration techniques. *Journal of Computer Assisted Tomography*, **1997**, 21, 554-66	2.2	608
63	A comparison of similarity measures for use in 2-D-3-D medical image registration. *IEEE Transactions on Medical Imaging*, **1998**, 17, 586-95	11.7	521
62	Automated three-dimensional registration of magnetic resonance and positron emission tomography brain images by multiresolution optimization of voxel similarity measures. *Medical Physics*, **1997**, 24, 25-35	4.4	495
61	Automated 3-D registration of MR and CT images of the head. *Medical Image Analysis*, **1996**, 1, 163-75	15.4	308
60	Respiratory motion models: a review. *Medical Image Analysis*, **2013**, 17, 19-42	15.4	251
59	Voxel similarity measures for 3-D serial MR brain image registration. *IEEE Transactions on Medical Imaging*, **2000**, 19, 94-102	11.7	207
58	Registration of freehand 3D ultrasound and magnetic resonance liver images. *Medical Image Analysis*, **2004**, 8, 81-91	15.4	170
57	Zen and the art of medical image registration: correspondence, homology, and quality. *NeuroImage*, **2003**, 20, 1425-37	7.9	153
56	Registration of MR and CT images for skull base surgery using point-like anatomical features. *British Journal of Radiology*, **1991**, 64, 1030-5	3.4	153
55	Design and evaluation of a system for microscope-assisted guided interventions (MAGI). *IEEE Transactions on Medical Imaging*, **2000**, 19, 1082-93	11.7	150
54	Voxel-based 2-D/3-D registration of fluoroscopy images and CT scans for image-guided surgery. *IEEE Transactions on Information Technology in Biomedicine*, **1997**, 1, 284-93		118
53	MRI-based measurements of respiratory motion variability and assessment of imaging strategies for radiotherapy planning. *Physics in Medicine and Biology*, **2006**, 51, 4147-69	3.8	109
52	Accurate frameless registration of MR and CT images of the head: applications in planning surgery and radiation therapy. *Radiology*, **1994**, 191, 447-54	20.5	106
51	Sources of error in comparing functional magnetic resonance imaging and invasive electrophysiological recordings. *Journal of Neurosurgery*, **2000**, 93, 214-23	3.2	94
50	Comparison and evaluation of rigid, affine, and nonrigid registration of breast MR images. *Journal of Computer Assisted Tomography*, **1999**, 23, 800-5	2.2	87

49	Validation of a two- to three-dimensional registration algorithm for aligning preoperative CT images and intraoperative fluoroscopy images. *Medical Physics*, **2001**, 28, 1024-32	4.4	85
48	Anisotropic multi-scale fluid registration: evaluation in magnetic resonance breast imaging. *Physics in Medicine and Biology*, **2005**, 50, 5153-74	3.8	82
47	Algorithms for radiological image registration and their clinical application. *Journal of Anatomy*, **1998**, 193 (Pt 3), 347-61	2.9	79
46	Inter-fraction variations in respiratory motion models. *Physics in Medicine and Biology*, **2011**, 56, 251-72	3.8	70
45	A subject-specific technique for respiratory motion correction in image-guided cardiac catheterisation procedures. *Medical Image Analysis*, **2009**, 13, 419-31	15.4	68
44	Non-rigid registration using higher-order mutual information **2000**,		67
43	Cadaver validation of intensity-based ultrasound to CT registration. *Medical Image Analysis*, **2006**, 10, 385-95	15.4	59
42	Tissue deformation and shape models in image-guided interventions: a discussion paper. *Medical Image Analysis*, **2005**, 9, 163-75	15.4	58
41	Validation and clinical application of computer-combined computed tomography and positron emission tomography with 2-[18F]fluoro-2-deoxy-D-glucose head and neck images. *American Journal of Surgery*, **1996**, 172, 628-32	2.7	56
40	Combined and three-dimensional rendered multimodal data for planning cranial base surgery: a prospective evaluation. *Neurosurgery*, **1994**, 35, 463-70; discussion 471	3.2	48
39	Non-rigid registration of breast MR images using mutual information. *Lecture Notes in Computer Science*, **1998**, 1144-1152	0.9	34
38	Tracking differential organ motion with a breathing multileaf collimator: magnitude of problem assessed using 4D CT data and a motion-compensation strategy. *Physics in Medicine and Biology*, **2007**, 52, 4805-26	3.8	34
37	Correcting scaling errors in tomographic images using a nine degree of freedom registration algorithm. *Journal of Computer Assisted Tomography*, **1998**, 22, 317-23	2.2	34
36	Constructing Patient Specific Models for Correcting Intraoperative Brain Deformation. *Lecture Notes in Computer Science*, **2001**, 1091-1098	0.9	33
35	Evaluation of the limits of visual detection of image misregistration in a brain fluorine-18 fluorodeoxyglucose PET-MRI study. *European Journal of Nuclear Medicine and Molecular Imaging*, **1997**, 24, 642-50		32
34	An Image Registration Approach to Automated Calibration for Freehand 3D Ultrasound. *Lecture Notes in Computer Science*, **2000**, 462-471	0.9	32
33	VTK CISG Registration Toolkit An Open Source Software Package for Affine and Non-rigid Registration of Single- and Multimodal 3D Images. *Informatik Aktuell*, **2002**, 409-412	0.3	30
32	The effect of motion correction on pharmacokinetic parameter estimation in dynamic-contrast-enhanced MRI. *Physics in Medicine and Biology*, **2011**, 56, 7693-708	3.8	29

31	Assessment of a technique for 2D-3D registration of cerebral intra-arterial angiography. *British Journal of Radiology*, **2004**, 77, 123-8	3.4	28
30	Accurate combination of CT and MR data of the head: validation and applications in surgical and therapy planning. *Computerized Medical Imaging and Graphics*, **1993**, 17, 357-63	7.6	28
29	Stereo Augmented Reality in the Surgical Microscope. *Presence: Teleoperators and Virtual Environments*, **2000**, 9, 360-368	2.9	26
28	Using Points and Surfaces to Improve Voxel-Based Non-rigid Registration. *Lecture Notes in Computer Science*, **2002**, 565-572	0.9	24
27	A Stochastic Iterative Closest Point Algorithm (stochastICP). *Lecture Notes in Computer Science*, **2001**, 762-769	0.9	22
26	Motion artifact correction in free-breathing abdominal MRI using overlapping partial samples to recover image deformations. *Magnetic Resonance in Medicine*, **2009**, 62, 440-9	4.4	20
25	A Statistical Model of Respiratory Motion and Deformation of the Liver. *Lecture Notes in Computer Science*, **2001**, 1338-1340	0.9	20
24	Cadaver Validation of the Use of Ultrasound for 3D Model Instantiation of Bony Anatomy in Image Guided Orthopaedic Surgery. *Lecture Notes in Computer Science*, **2004**, 397-404	0.9	19
23	Augmentation of Reality Using an Operating Microscope for Otolaryngology and Neurosurgical Guidance. *Computer Aided Surgery*, **1995**, 1, 172-178		18
22	Validation of volume blood flow measurements using three-dimensional distance-concentration functions derived from digital x-ray angiograms. *Investigative Radiology*, **1994**, 29, 434-42	10.1	15
21	Medical image registration: an overview. *Imaging*, **2002**, 14, 455-463		14
20	Deformation for image guided interventions using a three component tissue model. *Lecture Notes in Computer Science*, **1997**, 218-231	0.9	14
19	4D motion models over the respiratory cycle for use in lung cancer radiotherapy planning **2005**,		12
18	The registration of multiple medical images acquired from a single subject: why, how, what next?. *Statistical Methods in Medical Research*, **1997**, 6, 239-65	2.3	10
17	Bayesian Estimation of Intra-operative Deformation for Image-Guided Surgery Using 3-D Ultrasound. *Lecture Notes in Computer Science*, **2000**, 588-597	0.9	10
16	A Framework for Image-Guided Breast Surgery. *Lecture Notes in Computer Science*, **2006**, 203-210	0.9	10
15	Anisotropic behaviour of breast tissue for large compressions **2009**,		9
14	Detection and modelling of contacts in explicit finite-element simulation of soft tissue biomechanics. *International Journal of Computer Assisted Radiology and Surgery*, **2015**, 10, 1873-91	3.9	8

List of Publications

13	Patient-specific respiratory models using dynamic 3D MRI: preliminary volunteer results. *Physica Medica*, **2013**, 29, 214-20	2.7	7
12	Neurosurgical Guidance Using the Stereo Microscope. *Lecture Notes in Computer Science*, **1995**, 555-564	0.9	7
11	A technique for respiratory motion correction in image guided cardiac catheterisation procedures **2008**,		6
10	White paper: validation of medical image processing in image-guided therapy **2002**, 299-305		4
9	Deforming a Preoperative Volume to Represent the Intraoperative Scene. *Computer Aided Surgery*, **2002**, 7, 63-73		3
8	Volume Rendering of Multimodal Images for the Planning of Skull Base Surgery **1993**, 574-579		3
7	Performance of image guided navigation in laparoscopic liver surgery - A systematic review. *Surgical Oncology*, **2021**, 38, 101637	2.5	3
6	Validation of Non-rigid Registration of Contrast-Enhanced MR Mammography Using Finite Element Methods. *Informatik Aktuell*, **2002**, 143-146	0.3	2
5	Algorithms for radiological image registration and their clinical application		1
4	Establishing spatial correspondence for the analysis of images from highly deforming anatomy. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference*, **2012**, 2012, 3732-5	0.9	
3	Matching of geometric models in the analysis of lumen shape in digital X-ray angiography. *Progress in Clinical and Biological Research*, **1991**, 363, 341-53		
2	Image registration **1998**, 679-690		
1	Pitfalls in comparing functional magnetic resonance imaging and invasive electrophysiology recordings. *Lecture Notes in Computer Science*, **1998**, 842-852	0.9	