# D J Hawkes

## List of Publications by Year in Descending Order



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| 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 | Performance of image guided navigation in laparoscopic liver surgery - A systematic review. *Surgical Oncology*, **2021**, 38, 101637 | 2.5 | 3 |
| 65 | 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 |
| 64 | Patient-specific respiratory models using dynamic 3D MRI: preliminary volunteer results. *Physica Medica*, **2013**, 29, 214-20 | 2.7 | 7 |
| 63 | Respiratory motion models: a review. *Medical Image Analysis*, **2013**, 17, 19-42 | 15.4 | 251 |
| 62 | 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 | |
| 61 | Inter-fraction variations in respiratory motion models. *Physics in Medicine and Biology*, **2011**, 56, 251-72 | 3.8 | 70 |
| 60 | 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 |
| 59 | Anisotropic behaviour of breast tissue for large compressions **2009**, | | 9 |
| 58 | 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 |
| 57 | A subject-specific technique for respiratory motion correction in image-guided cardiac catheterisation procedures. *Medical Image Analysis*, **2009**, 13, 419-31 | 15.4 | 68 |
| 56 | A technique for respiratory motion correction in image guided cardiac catheterisation procedures **2008**, | | 6 |
| 55 | 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 |
| 54 | Cadaver validation of intensity-based ultrasound to CT registration. *Medical Image Analysis*, **2006**, 10, 385-95 | 15.4 | 59 |
| 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 | A Framework for Image-Guided Breast Surgery. *Lecture Notes in Computer Science*, **2006**, 203-210 | 0.9 | 10 |
| 51 | 4D motion models over the respiratory cycle for use in lung cancer radiotherapy planning **2005**, | | 12 |
| 50 | Tissue deformation and shape models in image-guided interventions: a discussion paper. *Medical Image Analysis*, **2005**, 9, 163-75 | 15.4 | 58 |

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| 49 | Anisotropic multi-scale fluid registration: evaluation in magnetic resonance breast imaging. *Physics in Medicine and Biology*, **2005**, 50, 5153-74 | 3.8 | 82 |
| 48 | 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 |
| 47 | Assessment of a technique for 2D-3D registration of cerebral intra-arterial angiography. *British Journal of Radiology*, **2004**, 77, 123-8 | 3.4 | 28 |
| 46 | Registration of freehand 3D ultrasound and magnetic resonance liver images. *Medical Image Analysis*, **2004**, 8, 81-91 | 15.4 | 170 |
| 45 | Zen and the art of medical image registration: correspondence, homology, and quality. *NeuroImage*, **2003**, 20, 1425-37 | 7.9 | 153 |
| 44 | Medical image registration: an overview. *Imaging*, **2002**, 14, 455-463 | | 14 |
| 43 | 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 |
| 42 | Deforming a Preoperative Volume to Represent the Intraoperative Scene. *Computer Aided Surgery*, **2002**, 7, 63-73 | | 3 |
| 41 | Validation of Non-rigid Registration of Contrast-Enhanced MR Mammography Using Finite Element Methods. *Informatik Aktuell*, **2002**, 143-146 | 0.3 | 2 |
| 40 | White paper: validation of medical image processing in image-guided therapy **2002**, 299-305 | | 4 |
| 39 | Using Points and Surfaces to Improve Voxel-Based Non-rigid Registration. *Lecture Notes in Computer Science*, **2002**, 565-572 | 0.9 | 24 |
| 38 | Medical image registration. *Physics in Medicine and Biology*, **2001**, 46, R1-45 | 3.8 | 906 |
| 37 | Constructing Patient Specific Models for Correcting Intraoperative Brain Deformation. *Lecture Notes in Computer Science*, **2001**, 1091-1098 | 0.9 | 33 |
| 36 | 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 |
| 35 | A Stochastic Iterative Closest Point Algorithm (stochastICP). *Lecture Notes in Computer Science*, **2001**, 762-769 | 0.9 | 22 |
| 34 | A Statistical Model of Respiratory Motion and Deformation of the Liver. *Lecture Notes in Computer Science*, **2001**, 1338-1340 | 0.9 | 20 |
| 33 | 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 |
| 32 | An Image Registration Approach to Automated Calibration for Freehand 3D Ultrasound. *Lecture Notes in Computer Science*, **2000**, 462-471 | 0.9 | 32 |

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| 31 | Sources of error in comparing functional magnetic resonance imaging and invasive electrophysiological recordings. *Journal of Neurosurgery*, **2000**, 93, 214-23 | 3.2 | 94 |
| 30 | Non-rigid registration using higher-order mutual information **2000**, | | 67 |
| 29 | Stereo Augmented Reality in the Surgical Microscope. *Presence: Teleoperators and Virtual Environments*, **2000**, 9, 360-368 | 2.9 | 26 |
| 28 | Design and evaluation of a system for microscope-assisted guided interventions (MAGI). *IEEE Transactions on Medical Imaging*, **2000**, 19, 1082-93 | 11.7 | 150 |
| 27 | Voxel similarity measures for 3-D serial MR brain image registration. *IEEE Transactions on Medical Imaging*, **2000**, 19, 94-102 | 11.7 | 207 |
| 26 | Nonrigid registration using free-form deformations: application to breast MR images. *IEEE Transactions on Medical Imaging*, **1999**, 18, 712-21 | 11.7 | 3492 |
| 25 | 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 |
| 24 | Algorithms for radiological image registration and their clinical application. *Journal of Anatomy*, **1998**, 193 ( Pt 3), 347-61 | 2.9 | 79 |
| 23 | 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 |
| 22 | Non-rigid registration of breast MR images using mutual information. *Lecture Notes in Computer Science*, **1998**, 1144-1152 | 0.9 | 34 |
| 21 | 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 |
| 20 | Image registration **1998**, 679-690 | | |
| 19 | Pitfalls in comparing functional magnetic resonance imaging and invasive electrophysiology recordings. *Lecture Notes in Computer Science*, **1998**, 842-852 | 0.9 | |
| 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 | 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 |
| 16 | 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 |
| 15 | 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 |
| 14 | Comparison and evaluation of retrospective intermodality brain image registration techniques. *Journal of Computer Assisted Tomography*, **1997**, 21, 554-66 | 2.2 | 608 |

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| 13 | Deformation for image guided interventions using a three component tissue model. *Lecture Notes in Computer Science*, **1997**, 218-231 | 0.9 | 14 |
| 12 | 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 |
| 11 | Automated 3-D registration of MR and CT images of the head. *Medical Image Analysis*, **1996**, 1, 163-75 | 15.4 | 308 |
| 10 | Augmentation of Reality Using an Operating Microscope for Otolaryngology and Neurosurgical Guidance. *Computer Aided Surgery*, **1995**, 1, 172-178 | | 18 |
| 9 | Neurosurgical Guidance Using the Stereo Microscope. *Lecture Notes in Computer Science*, **1995**, 555-564 | 0.9 | 7 |
| 8 | 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 |
| 7 | 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 |
| 6 | 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 |
| 5 | 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 |
| 4 | Volume Rendering of Multimodal Images for the Planning of Skull Base Surgery **1993**, 574-579 | | 3 |
| 3 | 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 |
| 2 | 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 | | |
| 1 | Algorithms for radiological image registration and their clinical application | | 1 |