David J Hawkes

List of Publications by Year
in descending order

69 papers	1,352 citations	304743 22 h-index	377865 34 g-index
70 all docs	70 docs citations	70 times ranked	2420 citing authors

#	Article	IF	Citations
1	Automatic, global registration in laparoscopic liver surgery. International Journal of Computer Assisted Radiology and Surgery, 2022, 17, 167-176.	2.8	12
2	Performance of image guided navigation in laparoscopic liver surgery â€" A systematic review. Surgical Oncology, 2021, 38, 101637.	1.6	19
3	Disease Progression Modeling in Chronic Obstructive Pulmonary Disease. American Journal of Respiratory and Critical Care Medicine, 2020, 201, 294-302.	5.6	56
4	Thoracic Imaging at Exacerbation of Chronic Obstructive Pulmonary Disease: A Systematic Review . International Journal of COPD, 2020, Volume 15, 1751-1787.	2.3	5
5	Thoracic Imaging at Exacerbation of Chronic Obstructive Pulmonary Disease: A Systematic Review. , 2020, , .		0
6	A critical evaluation of visual proportion of Gleason 4 and maximum cancer core length quantified by histopathologists. Scientific Reports, 2020, 10, 17177.	3.3	4
7	The challenges of deploying artificial intelligence models in a rapidly evolving pandemic. Nature Machine Intelligence, 2020, 2, 298-300.	16.0	45
8	Evaluation of MRI-derived surrogate signals to model respiratory motion. Biomedical Physics and Engineering Express, 2020, 6, 045015.	1.2	12
9	VERDICT MRI for Prostate Cancer: Intracellular Volume Fraction versus Apparent Diffusion Coefficient. Radiology, 2019, 291, 391-397.	7.3	52
10	VERDICT MRI validation in fresh and fixed prostate specimens using patientâ€specific moulds for histological and MR alignment. NMR in Biomedicine, 2019, 32, e4073.	2.8	22
11	The SmartTarget Biopsy Trial: A Prospective, Within-person Randomised, Blinded Trial Comparing the Accuracy of Visual-registration and Magnetic Resonance Imaging/Ultrasound Image-fusion Targeted Biopsies for Prostate Cancer Risk Stratification. European Urology, 2019, 75, 733-740.	1.9	67
12	Reproducibility of an airway tapering measurement in computed tomography with application to bronchiectasis. Journal of Medical Imaging, 2019, 6, 1.	1.5	1
13	Towards a Computed-Aided Diagnosis System in Colonoscopy: Automatic Polyp Segmentation Using Convolution Neural Networks. Journal of Medical Robotics Research, 2018, 03, 1840002.	1.2	52
14	In vivo estimation of target registration errors during augmented reality laparoscopic surgery. International Journal of Computer Assisted Radiology and Surgery, 2018, 13, 865-874.	2.8	38
15	Growth Trajectories, Breast Size, and Breast-Tissue Composition in a British Prebirth Cohort of Young Women. American Journal of Epidemiology, 2018, 187, 1259-1268.	3.4	6
16	Long term radiological features of radiation-induced lung damage. Radiotherapy and Oncology, 2018, 126, 300-306.	0.6	18
17	Circulating Growth and Sex Hormone Levels and Breast Tissue Composition in Young Nulliparous Women. Cancer Epidemiology Biomarkers and Prevention, 2018, 27, 1500-1508.	2.5	4
18	Novel CT-Based Objective Imaging Biomarkers of Long-Term Radiation-Induced Lung Damage. International Journal of Radiation Oncology Biology Physics, 2018, 102, 1287-1298.	0.8	7

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19	Immunohistochemical biomarker validation in highly selective needle biopsy microarrays derived from mpMRIâ€characterized prostates. Prostate, 2018, 78, 1229-1237.	2.3	9
20	Microstructure Characterization of Bone Metastases from Prostate Cancer with Diffusion MRI: Preliminary Findings. Frontiers in Oncology, 2018, 8, 26.	2.8	9
21	Global rigid registration of CT to video in laparoscopic liver surgery. International Journal of Computer Assisted Radiology and Surgery, 2018, 13, 947-956.	2.8	29
22	Accuracy of Transperineal Targeted Prostate Biopsies, Visual Estimation and Image Fusion in Men Needing Repeat Biopsy in the PICTURE Trial. Journal of Urology, 2018, 200, 1227-1234.	0.4	38
23	A pre-operative planning framework for global registration of laparoscopic ultrasound to CT images. International Journal of Computer Assisted Radiology and Surgery, 2018, 13, 1177-1186.	2.8	11
24	Disease progression patterns in COPD. , 2018, , .		1
25	3D volume reconstruction from serial breast specimen radiographs for mapping between histology and 3D whole specimen imaging. Medical Physics, 2017, 44, 935-948.	3.0	18
26	A hybrid patient-specific biomechanical model based image registration method for the motion estimation of lungs. Medical Image Analysis, 2017, 39, 87-100.	11.6	32
27	Breast MRI segmentation for density estimation: Do different methods give the same results and how much do differences matter?. Medical Physics, 2017, 44, 4573-4592.	3.0	23
28	Intelligent viewpoint selection for efficient CT to video registration in laparoscopic liver surgery. International Journal of Computer Assisted Radiology and Surgery, 2017, 12, 1079-1088.	2.8	16
29	The PICTURE study: diagnostic accuracy of multiparametric MRI in men requiring a repeat prostate biopsy. British Journal of Cancer, 2017, 116, 1159-1165.	6.4	90
30	Microstructural models for diffusion MRI in breast cancer and surrounding stroma: an *ex vivo* study. NMR in Biomedicine, 2017, 30, e3679.	2.8	27
31	Identification of liver metastases with probeâ€based confocal laser endomicroscopy at two excitation wavelengths. Lasers in Surgery and Medicine, 2017, 49, 280-292.	2.1	12
32	Multi-level Multi-task Structured Sparse Learning for Diagnosis of Schizophrenia Disease. Lecture Notes in Computer Science, 2017, 10435, 46-54.	1.3	1
33	Tumour auto-contouring on 2d cine MRI for locally advanced lung cancer: A comparative study. Radiotherapy and Oncology, 2017, 125, 485-491.	0.6	30
34	Apparatus for Histological Validation of In Vivo and Ex Vivo Magnetic Resonance Imaging of the Human Prostate. Frontiers in Oncology, 2017, 7, 47.	2.8	27
35	A Probabilistic Method for Estimation of Bowel Wall Thickness in MR Colonography. PLoS ONE, 2017, 12, e0168317.	2.5	3
36	Multiscale biphasic modelling of peritumoural collagen microstructure: The effect of tumour growth on permeability and fluid flow. PLoS ONE, 2017, 12, e0184511.	2.5	10

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37	A Validated Multiscale In-Silico Model for Mechano-sensitive Tumour Angiogenesis and Growth. PLoS Computational Biology, 2017, 13, e1005259.	3.2	45
38	Multiscale Mechano-Biological Finite Element Modelling of Oncoplastic Breast Surgery—Numerical Study towards Surgical Planning and Cosmetic Outcome Prediction. PLoS ONE, 2016, 11, e0159766.	2.5	37
39	From clinical imaging and computational models to personalised medicine and image guided interventions. Medical Image Analysis, 2016, 33, 50-55.	11.6	4
40	Hand–eye calibration for rigid laparoscopes using an invariant point. International Journal of Computer Assisted Radiology and Surgery, 2016, 11, 1071-1080.	2.8	36
41	Utilizing confocal laser endomicroscopy for evaluating the adequacy of laparoscopic liver ablation. Lasers in Surgery and Medicine, 2016, 48, 299-310.	2.1	10
42	Pre-natal exposures and breast tissue composition: findings from a British pre-birth cohort of young women and a systematic review. Breast Cancer Research, 2016, 18, 102.	5.0	14
43	Symmetric Biomechanically Guided Prone-to-Supine Breast Image Registration. Annals of Biomedical Engineering, 2016, 44, 154-173.	2.5	24
44	Combined 2D and 3D tracking of surgical instruments for minimally invasive and robotic-assisted surgery. International Journal of Computer Assisted Radiology and Surgery, 2016, 11, 1109-1119.	2.8	44
45	Multiscale modelling of solid tumour growth: the effect of collagen micromechanics. Biomechanics and Modeling in Mechanobiology, 2016, 15, 1079-1090.	2.8	16
46	An Inverse Finite Element u/p-Formulation to Predict the Unloaded State of In Vivo Biological Soft Tissues. Annals of Biomedical Engineering, 2016, 44, 187-201.	2.5	21
47	Locally rigid, vessel-based registration for laparoscopic liver surgery. International Journal of Computer Assisted Radiology and Surgery, 2015, 10, 1951-1961.	2.8	32
48	3D ultrasound simulation based on a biomechanical model of prone MRI in breast cancer imaging. , 2015, , .		3
49	MRI to X-ray mammography intensity-based registration with simultaneous optimisation of pose and biomechanical transformation parameters. Medical Image Analysis, 2014, 18, 674-683.	11.6	36
50	Biomechanically guided prone-to-supine image registration of breast MRI using an estimated reference state. , 2013, , .		18
51	Establishing spatial correspondence for the analysis of images from highly deforming anatomy. , 2012, 2012, 3732-5.		0
52	Motion modelling and motion compensated reconstruction of tumours in cone-beam computed tomography. , 2012, , .		4
53	Integrating structural and diffusion MR information for optic radiation localisation in focal epilepsy patients. , 2011, , .		2
54	Discretisation of 3D deformation fields: Implications for establishing correspondence between 2D X-ray mammographic projections. , 2011, , .		0

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55	Registration-based propagation for whole heart segmentation from compounded 3D echocardiography. , 2010, , .		11
56	Nonrigid registration with differential bias correction using normalised mutual information. , 2010, , .		1
57	Demons algorithms for fluid and curvature registration. , 2009, , .		15
58	Consistency of parametric registration in serial MRI studies of brain tumor progression. International Journal of Computer Assisted Radiology and Surgery, 2008, 3, 201-211.	2.8	15
59	Revisiting overlap invariance in medical image alignment. , 2008, , .		14
60	Quantifying blood flowdivision at bifurcations from rotational angiography. , 2008, , .		0
61	FAST FLUID REGISTRATION WITH DIRICHLET BOUNDARY CONDITIONS: A TRANSFORM-BASED APPROACH. , 2007, , .		2
62	MOTION AND BIOMECHANICAL MODELS FOR IMAGE-GUIDED INTERVENTIONS. , 2007, , .		0
63	Fourier Methods for Nonparametric Image Registration. , 2007, , .		15
64	REGISTRATION OF RCBV AND ADC MAPS WITH STRUCTURAL AND PHYSIOLOGICAL MR IMAGES IN GLIOMA PATIENTS: STUDY AND VALIDATION. , 2007, , .		0
65	Computational Models In Image Guided Interventions. , 2005, 2005, 7246-9.		4
66	Novel approaches to the measurement of arterial blood flow from dynamic digital X-ray images. IEEE Transactions on Medical Imaging, 2005, 24, 500-513.	8.9	33
67	Intraoperative Image Processing for Surgical Guidance. IEEE Transactions on Medical Imaging, 2005, 24, 1401-1404.	8.9	1
68	Alignment of sparse freehand 3-D ultrasound with preoperative images of the liver using models of respiratory motion and deformation. IEEE Transactions on Medical Imaging, 2005, 24, 1405-1416.	8.9	88
69	New Validation Method for Establishing Correspondence Between Pairs of X-Ray Mammograms. , 0, , .		0