J Alison Noble

List of Publications by Year in Descending Order

250 papers	5,813 citations	34 h-index	67 g-index
277 ext. papers	6,911 ext. citations	4.5 avg, IF	6.07 L-index

#	Paper	IF	Citations
250	Image quality assessment for machine learning tasks using meta-reinforcement learning.. *Medical Image Analysis*, **2022**, 78, 102427	15.4	2
249	International gestational age-specific centiles for blood pressure in pregnancy from the INTERGROWTH-21st Project in 8 countries: A longitudinal cohort study. *PLoS Medicine*, **2021**, 18, e1003611	11.6	0
248	Multi-Modal Learning from Video, Eye Tracking, and Pupillometry for Operator Skill Characterization in Clinical Fetal Ultrasound **2021**, 2021, 1646-1649	1.5	2
247	Knowledge representation and learning of operator clinical workflow from full-length routine fetal ultrasound scan videos. *Medical Image Analysis*, **2021**, 69, 101973	15.4	9
246	A Course-Focused Dual Curriculum For Image Captioning **2021**, 2021, 716-720	1.5	1
245	Transforming obstetric ultrasound into data science using eye tracking, voice recording, transducer motion and ultrasound video. *Scientific Reports*, **2021**, 11, 14109	4.9	6
244	Fetal growth velocity standards from the Fetal Growth Longitudinal Study of the INTERGROWTH-21 Project. *American Journal of Obstetrics and Gynecology*, **2021**, 224, 208.e1-208.e18	6.4	4
243	Visual-Assisted Probe Movement Guidance for Obstetric Ultrasound Scanning using Landmark Retrieval.. *Lecture Notes in Computer Science*, **2021**, 12908, 670-679	0.9	4
242	Adaptable Image Quality Assessment Using Meta-Reinforcement Learning of Task Amenability. *Lecture Notes in Computer Science*, **2021**, 191-201	0.9	1
241	Modelling Cardiac Motion via Spatio-Temporal Graph Convolutional Networks to Boost the Diagnosis of Heart Conditions. *Lecture Notes in Computer Science*, **2021**, 56-65	0.9	3
240	Principled Ultrasound Data Augmentation for Classification of Standard Planes. *Lecture Notes in Computer Science*, **2021**, 729-741	0.9	1
239	Multiscale Graph Convolutional Networks for Cardiac Motion Analysis. *Lecture Notes in Computer Science*, **2021**, 264-272	0.9	2
238	Facial Anatomical Landmark Detection using Regularized Transfer Learning with Application to Fetal Alcohol Syndrome Recognition. *IEEE Journal of Biomedical and Health Informatics*, **2021**, PP,	7.2	0
237	Multimodal Continual Learning with Sonographer Eye-Tracking in Fetal Ultrasound.. *Lecture Notes in Computer Science*, **2021**, 12967, 14-24	0.9	1
236	First Trimester Gaze Pattern Estimation Using Stochastic Augmentation Policy Search for Single Frame Saliency Prediction. *Lecture Notes in Computer Science*, **2021**, 2021, 361-374	0.9	1
235	The effect of maternal body mass index on fetal ultrasound image quality. *American Journal of Obstetrics and Gynecology*, **2021**, 225, 200-202	6.4	1
234	Machine learning-based analysis of operator pupillary response to assess cognitive workload in clinical ultrasound imaging. *Computers in Biology and Medicine*, **2021**, 135, 104589	7	2

233	Towards Scale and Position Invariant Task Classification using Normalised Visual Scanpaths in Clinical Fetal Ultrasound.. *Lecture Notes in Computer Science*, **2021**, 12967, 129-138	0.9	1
232	Self-Supervised Representation Learning for Ultrasound Video **2020**, 2020, 1847-1850	1.5	7
231	Spatio-temporal visual attention modelling of standard biometry plane-finding navigation. *Medical Image Analysis*, **2020**, 65, 101762	15.4	11
230	Automatic Determination of the Fetal Cardiac Cycle in Ultrasound Using Spatio-Temporal Neural Networks **2020**,		2
229	Safety Indices of Ultrasound: Adherence to Recommendations and Awareness During Routine Obstetric Ultrasound Scanning. *Ultraschall in Der Medizin*, **2020**, 41, 138-145	3.8	10
228	Hierarchical Class Incremental Learning of Anatomical Structures in Fetal Echocardiography Videos. *IEEE Journal of Biomedical and Health Informatics*, **2020**, 24, 1046-1058	7.2	7
227	Late weaning and maternal closeness, associated with advanced motor and visual maturation, reinforce autonomy in healthy, 2-year-old children. *Scientific Reports*, **2020**, 10, 5251	4.9	4
226	Toward point-of-care ultrasound estimation of fetal gestational age from the trans-cerebellar diameter using CNN-based ultrasound image analysis. *Journal of Medical Imaging*, **2020**, 7, 014501	2.6	6
225	Multi-task CNN for Structural Semantic Segmentation in 3D Fetal Brain Ultrasound. *Communications in Computer and Information Science*, **2020**, 164-173	0.3	0
224	Longitudinal Image Registration with Temporal-Order and Subject-Specificity Discrimination. *Lecture Notes in Computer Science*, **2020**, 243-252	0.9	2
223	Knowledge-guided Pretext Learning for Utero-placental Interface Detection. *Lecture Notes in Computer Science*, **2020**, 12261, 582-593	0.9	0
222	Simulating realistic fetal neurosonography images with appearance and growth change using cycle-consistent adversarial networks and an evaluation. *Journal of Medical Imaging*, **2020**, 7, 057001	2.6	0
221	A Curriculum Learning Based Approach to Captioning Ultrasound Images. *Lecture Notes in Computer Science*, **2020**, 12437, 75-84	0.9	3
220	Calibrated Bayesian Neural Networks to Estimate Gestational Age and Its Uncertainty on Fetal Brain Ultrasound Images. *Lecture Notes in Computer Science*, **2020**, 13-22	0.9	0
219	Cross-Device Cross-Anatomy Adaptation Network for Ultrasound Video Analysis. *Lecture Notes in Computer Science*, **2020**, 42-51	0.9	
218	Incremental Learning of Fetal Heart Anatomies Using Interpretable Saliency Maps. *Communications in Computer and Information Science*, **2020**, 129-141	0.3	2
217	Towards Capturing Sonographic Experience: Cognition-Inspired Ultrasound Video Saliency Prediction. *Communications in Computer and Information Science*, **2020**, 174-186	0.3	3
216	Going Deeper into Cardiac Motion Analysis to Model Fine Spatio-Temporal Features. *Communications in Computer and Information Science*, **2020**, 294-306	0.3	3

215	Uncertainty Estimates as Data Selection Criteria to Boost Omni-Supervised Learning. *Lecture Notes in Computer Science*, **2020**, 689-698	0.9	4
214	Self-supervised Contrastive Video-Speech Representation Learning for Ultrasound. *Lecture Notes in Computer Science*, **2020**, 12263, 534-543	0.9	10
213	Automatic Probe Movement Guidance for Freehand Obstetric Ultrasound. *Lecture Notes in Computer Science*, **2020**, 12263, 583-592	0.9	18
212	Cross-Task Representation Learning for Anatomical Landmark Detection. *Lecture Notes in Computer Science*, **2020**, 583-592	0.9	2
211	Label Efficient Localization of Fetal Brain Biometry Planes in Ultrasound Through Metric Learning. *Lecture Notes in Computer Science*, **2020**, 126-135	0.9	3
210	Differentiating Operator Skill during Routine Fetal Ultrasound Scanning using Probe Motion Tracking. *Lecture Notes in Computer Science*, **2020**, 12437, 180-188	0.9	4
209	Contrastive Fairness in Machine Learning. *IEEE Letters of the Computer Society*, **2020**, 3, 38-41	0.9	4
208	Self-Supervised Ultrasound to MRI Fetal Brain Image Synthesis. *IEEE Transactions on Medical Imaging*, **2020**, 39, 4413-4424	11.7	6
207	Achieving accurate estimates of fetal gestational age and personalised predictions of fetal growth based on data from an international prospective cohort study: a population-based machine learning study. *The Lancet Digital Health*, **2020**, 2, e368-e375	14.4	13
206	Evaluation of Gaze Tracking Calibration for Longitudinal Biomedical Imaging Studies. *IEEE Transactions on Cybernetics*, **2020**, 50, 153-163	10.2	9
205	Neurodevelopmental milestones and associated behaviours are similar among healthy children across diverse geographical locations. *Nature Communications*, **2019**, 10, 511	17.4	22
204	Automated 3D ultrasound image analysis for first trimester assessment of fetal health. *Physics in Medicine and Biology*, **2019**, 64, 185010	3.8	16
203	Multi-anatomy localization in fetal echocardiography videos **2019**,		6
202	Anatomy-Aware Self-supervised Fetal MRI Synthesis from Unpaired Ultrasound Images. *Lecture Notes in Computer Science*, **2019**, 178-186	0.9	1
201	Learning and Understanding Deep Spatio-Temporal Representations from Free-Hand Fetal Ultrasound Sweeps. *Lecture Notes in Computer Science*, **2019**, 299-308	0.9	1
200	An Automated CNN-based 3D Anatomical Landmark Detection Method to Facilitate Surface-Based 3D Facial Shape Analysis. *Lecture Notes in Computer Science*, **2019**, 163-171	0.9	2
199	Ultrasound Image Representation Learning by Modeling Sonographer Visual Attention. *Lecture Notes in Computer Science*, **2019**, 26, 592-604	0.9	13
198	Conditional Segmentation in Lieu of Image Registration. *Lecture Notes in Computer Science*, **2019**, 401-409	0.9	5

197	Captioning Ultrasound Images Automatically. *Lecture Notes in Computer Science*, **2019**, 22, 338-346	0.9	9
196	Efficient Ultrasound Image Analysis Models with Sonographer Gaze Assisted Distillation. *Lecture Notes in Computer Science*, **2019**, 22, 394-402	0.9	7
195	UPI-Net: Semantic Contour Detection in Placental Ultrasound **2019**,		4
194	Left Ventricular Strain Is Abnormal in Preclinical and Overt Hypertrophic Cardiomyopathy: Cardiac MR Feature Tracking. *Radiology*, **2019**, 290, 640-648	20.5	30
193	Fully-automated alignment of 3D fetal brain ultrasound to a canonical reference space using multi-task learning. *Medical Image Analysis*, **2018**, 46, 1-14	15.4	39
192	Automated Visualization and Quantification of Spiral Artery Blood Flow Entering the First-Trimester Placenta, Using 3-D Power Doppler Ultrasound. *Ultrasound in Medicine and Biology*, **2018**, 44, 522-531	3.5	11
191	VP-Nets : Efficient automatic localization of key brain structures in 3D fetal neurosonography. *Medical Image Analysis*, **2018**, 47, 127-139	15.4	15
190	SiSSR: Simultaneous subdivision surface registration for the quantification of cardiac function from computed tomography in canines. *Medical Image Analysis*, **2018**, 46, 215-228	15.4	5
189	Microscopy cell counting and detection with fully convolutional regression networks. *Computer Methods in Biomechanics and Biomedical Engineering: Imaging and Visualization*, **2018**, 6, 283-292	0.9	150
188	Weakly-supervised convolutional neural networks for multimodal image registration. *Medical Image Analysis*, **2018**, 49, 1-13	15.4	154
187	Learning to segment key clinical anatomical structures in fetal neurosonography informed by a region-based descriptor. *Journal of Medical Imaging*, **2018**, 5, 014007	2.6	6
186	Deep clinical and biological phenotyping of the preterm birth and small for gestational age syndromes: The INTERBIO-21 Newborn Case-Control Study protocol. *Gates Open Research*, **2018**, 2, 49	2.4	5
185	Can Dilated Convolutions Capture Ultrasound Video Dynamics?. *Lecture Notes in Computer Science*, **2018**, 116-124	0.9	1
184	Multi-task SonoEyeNet: Detection of Fetal Standardized Planes Assisted by Generated Sonographer Attention Maps. *Lecture Notes in Computer Science*, **2018**, 11070, 871-879	0.9	15
183	Improving Visual Detection of Wall Motion Abnormality with Echocardiographic Image Enhancing Methods. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference*, **2018**, 2018, 1128-1131	0.9	3
182	Adversarial Deformation Regularization for Training Image Registration Neural Networks. *Lecture Notes in Computer Science*, **2018**, 774-782	0.9	27
181	Omni-Supervised Learning: Scaling Up to Large Unlabelled Medical Datasets. *Lecture Notes in Computer Science*, **2018**, 572-580	0.9	13
180	Automatic Lacunae Localization in Placental Ultrasound Images via Layer Aggregation. *Lecture Notes in Computer Science*, **2018**, 11071, 921-929	0.9	6

179	Ω-Net (Omega-Net): Fully automatic, multi-view cardiac MR detection, orientation, and segmentation with deep neural networks. *Medical Image Analysis*, **2018**, 48, 95-106	15.4	70
178	Label-driven weakly-supervised learning for multimodal deformable image registration **2018**,		46
177	Quantification of cardiac bull's-eye map based on principal strain analysis for myocardial wall motion assessment in stress echocardiography **2018**,		17
176	CAT & MAUS: A novel system for true dynamic motion measurement of underlying bony structures with compensation for soft tissue movement. *Journal of Biomechanics*, **2017**, 62, 156-164	2.9	5
175	Automated characterization of the fetal heart in ultrasound images using fully convolutional neural networks **2017**,		18
174	A Deep Learning Solution for Automatic Fetal Neurosonographic Diagnostic Plane Verification Using Clinical Standard Constraints. *Ultrasound in Medicine and Biology*, **2017**, 43, 2925-2933	3.5	32
173	Protocol and quality assurance for carotid imaging in 100,000 participants of UK Biobank: development and assessment. *European Journal of Preventive Cardiology*, **2017**, 24, 1799-1806	3.9	15
172	Learning Spatio-Temporal Aggregation for Fetal Heart Analysis in Ultrasound Video. *Lecture Notes in Computer Science*, **2017**, 276-284	0.9	7
171	3D fractional moving blood volume (3D-FMBV) demonstrates decreased first trimester placental vascularity in pre-eclampsia but not the term, small for gestation age baby. *PLoS ONE*, **2017**, 12, e0178675	3.7	11
170	Robust Regression of Brain Maturation from 3D Fetal Neurosonography Using CRNs. *Lecture Notes in Computer Science*, **2017**, 73-80	0.9	6
169	Intraoperative Organ Motion Models with an Ensemble of Conditional Generative Adversarial Networks. *Lecture Notes in Computer Science*, **2017**, 368-376	0.9	7
168	Temporal HeartNet: Towards Human-Level Automatic Analysis of Fetal Cardiac Screening Video. *Lecture Notes in Computer Science*, **2017**, 341-349	0.9	13
167	Automated annotation and quantitative description of ultrasound videos of the fetal heart. *Medical Image Analysis*, **2017**, 36, 147-161	15.4	32
166	Feature Tracking Cardiac Magnetic Resonance via Deep Learning and Spline Optimization. *Lecture Notes in Computer Science*, **2017**, 183-194	0.9	6
165	Weakly Supervised Learning of Placental Ultrasound Images with Residual Networks. *Communications in Computer and Information Science*, **2017**, 723, 98-108	0.3	4
164	Detection and Characterization of the Fetal Heartbeat in Free-hand Ultrasound Sweeps with Weakly-supervised Two-streams Convolutional Networks. *Lecture Notes in Computer Science*, **2017**, 305-313	0.9	16
163	Freehand Ultrasound Image Simulation with Spatially-Conditioned Generative Adversarial Networks. *Lecture Notes in Computer Science*, **2017**, 105-115	0.9	23
162	Localizing Cardiac Structures in Fetal Heart Ultrasound Video. *Lecture Notes in Computer Science*, **2017**, 247-255	0.9	

161	Plane Localization in 3-D Fetal Neurosonography for Longitudinal Analysis of the Developing Brain. *IEEE Journal of Biomedical and Health Informatics*, **2016**, 20, 1120-8	7.2	13
160	Detecting overlapping instances in microscopy images using extremal region trees. *Medical Image Analysis*, **2016**, 27, 3-16	15.4	41
159	Probabilistic sensor network design **2016**,		1
158	Gestational weight gain standards based on women enrolled in the Fetal Growth Longitudinal Study of the INTERGROWTH-21st Project: a prospective longitudinal cohort study. *BMJ, The*, **2016**, 352, i555	5.9	78
157	A computer-aided tracking and motion analysis with ultrasound (CAT & MAUS) system for the description of hip joint kinematics. *International Journal of Computer Assisted Radiology and Surgery*, **2016**, 11, 1965-1977	3.9	9
156	Right ventricular strain by MR quantitatively identifies regional dysfunction in patients with arrhythmogenic right ventricular cardiomyopathy. *Journal of Magnetic Resonance Imaging*, **2016**, 43, 1132-9	5.6	31
155	Breast-lesion Segmentation Combining B-Mode and Elastography Ultrasound. *Ultrasonic Imaging*, **2016**, 38, 209-24	1.9	13
154	Automated 3D Ultrasound Biometry Planes Extraction for First Trimester Fetal Assessment. *Lecture Notes in Computer Science*, **2016**, 196-204	0.9	11
153	Heterogeneous Tissue Characterization Using Ultrasound: A Comparison of Fractal Analysis Backscatter Models on Liver Tumors. *Ultrasound in Medicine and Biology*, **2016**, 42, 1612-26	3.5	15
152	Globally Optimal Registration for Describing Joint Kinematics. *Procedia Computer Science*, **2016**, 90, 188-193	1.03	2
151	Feature-based fuzzy connectedness segmentation of ultrasound images with an object completion step. *Medical Image Analysis*, **2015**, 26, 30-46	15.4	19
150	Regional Strain Analysis with Multidetector CT in a Swine Cardiomyopathy Model: Relationship to Cardiac MR Tagging and Myocardial Fibrosis. *Radiology*, **2015**, 277, 88-94	20.5	23
149	A technique for the estimation of fractional moving blood volume by using three-dimensional power Doppler US. *Radiology*, **2015**, 274, 230-7	20.5	28
148	Object localisation in fetal ultrasound images using invariant features **2015**,		8
147	3-D Ultrasound Segmentation of the Placenta Using the Random Walker Algorithm: Reliability and Agreement. *Ultrasound in Medicine and Biology*, **2015**, 41, 3182-93	3.5	31
146	Monitoring human growth and development: a continuum from the womb to the classroom. *American Journal of Obstetrics and Gynecology*, **2015**, 213, 494-9	6.4	32
145	Towards quantifying the impact of cell boundary estimation on morphometric analysis for phenotypic screening **2015**,		2
144	Why is Designing for Developing Countries More Challenging? Modelling the Product Design Domain for Medical Devices. *Procedia Manufacturing*, **2015**, 3, 5693-5698	1.5	4

143	Quantification of ultrasonic texture intra-heterogeneity via volumetric stochastic modeling for tissue characterization. *Medical Image Analysis*, **2015**, 21, 59-71	15.4	21
142	"3D fusion" echocardiography improves 3D left ventricular assessment: comparison with 2D contrast echocardiography. *Echocardiography*, **2015**, 32, 302-9	1.5	7
141	Data-driven shape parameterization for segmentation of the right ventricle from 3D+t echocardiography. *Medical Image Analysis*, **2015**, 21, 29-39	15.4	18
140	Learning-based prediction of gestational age from ultrasound images of the fetal brain. *Medical Image Analysis*, **2015**, 21, 72-86	15.4	47
139	Guided Random Forests for Identification of Key Fetal Anatomy and Image Categorization in Ultrasound Scans. *Lecture Notes in Computer Science*, **2015**, 687-694	0.9	20
138	An approach to the symbolic representation of brain arteriovenous malformations for management and treatment planning. *Neuroradiology*, **2014**, 56, 195-209	3.2	4
137	Modeling of errors in Nakagami imaging: illustration on breast mass characterization. *Ultrasound in Medicine and Biology*, **2014**, 40, 917-30	3.5	22
136	Interactive Object Counting. *Lecture Notes in Computer Science*, **2014**, 504-518	0.9	51
135	Difference of Gaussians revolved along elliptical paths for ultrasound fetal head segmentation. *Computerized Medical Imaging and Graphics*, **2014**, 38, 774-84	7.6	14
134	An efficient block matching and spectral shift estimation algorithm with applications to ultrasound elastography. *IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control*, **2014**, 61, 407-19	3.2	5
133	International standards for fetal growth based on serial ultrasound measurements: the Fetal Growth Longitudinal Study of the INTERGROWTH-21st Project. *Lancet, The*, **2014**, 384, 869-79	40	470
132	Evaluation and comparison of current fetal ultrasound image segmentation methods for biometric measurements: a grand challenge. *IEEE Transactions on Medical Imaging*, **2014**, 33, 797-813	11.7	91
131	Quantification of the heterogeneity of prognostic cellular biomarkers in ewing sarcoma using automated image and random survival forest analysis. *PLoS ONE*, **2014**, 9, e107105	3.7	13
130	Class-Specific Regression Random Forest for Accurate Extraction of Standard Planes from 3D Echocardiography. *Lecture Notes in Computer Science*, **2014**, 53-62	0.9	9
129	Predicting fetal neurodevelopmental age from ultrasound images. *Lecture Notes in Computer Science*, **2014**, 17, 260-7	0.9	2
128	A Constrained Regression Forests Solution to 3D Fetal Ultrasound Plane Localization for Longitudinal Analysis of Brain Growth and Maturation. *Lecture Notes in Computer Science*, **2014**, 109-116	0.9	8
127	Searching for Structures of Interest in an Ultrasound Video Sequence. *Lecture Notes in Computer Science*, **2014**, 133-140	0.9	14
126	Structured Random Forests for Myocardium Delineation in 3D Echocardiography. *Lecture Notes in Computer Science*, **2014**, 215-222	0.9	8

125	Anatomical Object Detection in Fetal Ultrasound: Computer-Expert Agreements. *Communications in Computer and Information Science*, **2014**, 207-218	0.3	5
124	Local Phase-Based Fast Ray Features for Automatic Left Ventricle Apical View Detection in 3D Echocardiography. *Lecture Notes in Computer Science*, **2014**, 119-129	0.9	2
123	Local Phase-Based Fast Ray Features for Automatic Left Ventricle Apical View Detection in 3D Echocardiography. *Lecture Notes in Computer Science*, **2014**, 119-129	0.9	2
122	Global and regional left ventricular myocardial deformation measures by magnetic resonance feature tracking in healthy volunteers: comparison with tagging and relevance of gender. *Journal of Cardiovascular Magnetic Resonance*, **2013**, 15, 8	6.9	196
121	Volumetric Segmentation of Key Fetal Brain Structures in 3D Ultrasound. *Lecture Notes in Computer Science*, **2013**, 25-32	0.9	5
120	Imaging techniques for cardiac strain and deformation: comparison of echocardiography, cardiac magnetic resonance and cardiac computed tomography. *Expert Review of Cardiovascular Therapy*, **2013**, 11, 221-31	2.5	67
119	The AutoQual ultrasound elastography method for quantitative assessment of lateral strain in post-rupture Achilles tendons. *Journal of Biomechanics*, **2013**, 46, 2695-700	2.9	13
118	Delineating anatomical boundaries using the boundary fragment model. *Medical Image Analysis*, **2013**, 17, 1123-36	15.4	6
117	Rapid calculation of standardized placental volume at 11 to 13 weeks and the prediction of small for gestational age babies. *Ultrasound in Medicine and Biology*, **2013**, 39, 253-60	3.5	30
116	Registration of 3D fetal neurosonography and MRI. *Medical Image Analysis*, **2013**, 17, 1137-50	15.4	27
115	Novel Context Rich LoCo and GloCo Features with Local and Global Shape Constraints for Segmentation of 3D Echocardiograms with Random Forests. *Lecture Notes in Computer Science*, **2013**, 59-69	0.9	2
114	Fetal cranial segmentation in 2D ultrasound images using shape properties of pixel clusters **2013**,		16
113	Evaluating lesion segmentation on breast sonography as related to lesion type. *Journal of Ultrasound in Medicine*, **2013**, 32, 1659-70	2.9	12
112	Fusion of 3D ultrasound images of the fetal femur improves boundary definition and volume measurement. *Fetal Diagnosis and Therapy*, **2013**, 34, 158-65	2.4	
111	Learning to Detect Partially Overlapping Instances **2013**,		24
110	Oriented feature-based coupled ellipse fitting for soft tissue quantification in ultrasound images **2013**,		3
109	Ultrasound image segmentation using feature asymmetry and shape guided live wire **2013**,		5
108	Effect of malaria on placental volume measured using three-dimensional ultrasound: a pilot study. *Malaria Journal*, **2012**, 11, 5	3.6	12

107	Lesion segmentation and bias correction in breast ultrasound B-mode images including elastography information **2012**,		1
106	Interpreting edge information for improved endocardium delineation in echocardiograms **2012**,		2
105	Modified Hough transform for left ventricle myocardium segmentation in 3-D echocardiogram images **2012**,		1
104	Image Analysis Using Machine Learning: Anatomical Landmarks Detection in Fetal Ultrasound Images **2012**,		7
103	Image analysis of the human fetus and newborn Developing new clinical tools for perinatal care **2012**,		1
102	Computational modelling for the embolization of brain arteriovenous malformations. *Medical Engineering and Physics*, **2012**, 34, 873-81	2.4	12
101	Integration of local and global features for anatomical object detection in ultrasound. *Lecture Notes in Computer Science*, **2012**, 15, 402-9	0.9	23
100	Controlled motion strain measurement using lateral speckle tracking in Achilles tendons during healing **2012**,		3
99	Towards 3D registration of fetal brain MRI and ultrasound **2012**,		1
98	Learning to detect cells using non-overlapping extremal regions. *Lecture Notes in Computer Science*, **2012**, 15, 348-56	0.9	88
97	Registration of 3D fetal brain US and MRI. *Lecture Notes in Computer Science*, **2012**, 15, 667-74	0.9	7
96	Improving the Classification Accuracy of the Classic RF Method by Intelligent Feature Selection and Weighted Voting of Trees with Application to Medical Image Segmentation. *Lecture Notes in Computer Science*, **2011**, 184-192	0.9	15
95	Feature extraction and wall motion classification of 2D stress echocardiography with relevance vector machines **2011**,		10
94	Multiview fusion 3-D echocardiography: improving the information and quality of real-time 3-D echocardiography. *Ultrasound in Medicine and Biology*, **2011**, 37, 1056-72	3.5	31
93	Towards treatment planning for the embolization of arteriovenous malformations of the brain: intranidal hemodynamics modeling. *IEEE Transactions on Biomedical Engineering*, **2011**, 58, 1994-2001	5	7
92	Quality control of fetal ultrasound images: Detection of abdomen anatomical landmarks using AdaBoost **2011**,		17
91	The evaluation of single-view and multi-view fusion 3D echocardiography using image-driven segmentation and tracking. *Medical Image Analysis*, **2011**, 15, 514-28	15.4	39
90	Spatio-temporal (2D+T) non-rigid registration of real-time 3D echocardiography and cardiovascular MR image sequences. *Physics in Medicine and Biology*, **2011**, 56, 1341-60	3.8	16

89	Automated segmentation and alignment of mitotic nuclei for kymograph visualisation **2011**,		9
88	Recent advances in biomedical ultrasonic imaging techniques. *Interface Focus*, **2011**, 1, 475-476	3.9	17
87	Simultaneous Lesion Segmentation and Bias Correction in Breast Ultrasound Images. *Lecture Notes in Computer Science*, **2011**, 692-699	0.9	5
86	A novel local-phase method of automatic atlas construction in fetal ultrasound **2011**,		1
85	Ultrasonic image analysis and image-guided interventions. *Interface Focus*, **2011**, 1, 673-85	3.9	37
84	The challenges of modern interdisciplinary medical research. *Nature Biotechnology*, **2011**, 29, 1145-8	44.5	6
83	Learning Optical Flow Propagation Strategies Using Random Forests for Fast Segmentation in Dynamic 2D & 3D Echocardiography. *Lecture Notes in Computer Science*, **2011**, 75-82	0.9	3
82	Automated Selection of Standardized Planes from Ultrasound Volume. *Lecture Notes in Computer Science*, **2011**, 35-42	0.9	17
81	Model-based ultrasound temperature visualization during and following HIFU exposure. *Ultrasound in Medicine and Biology*, **2010**, 36, 234-49	3.5	25
80	Investigation into the fusion of multiple 4-D fetal echocardiography images to improve image quality. *Ultrasound in Medicine and Biology*, **2010**, 36, 957-66	3.5	28
79	Interpreting ultrasound elastography: Image registration of breast cancer ultrasound elastography to histopathology images **2010**,		3
78	The Effect of Attenuation Coefficient on Radiation Force Impulse Monitoring of Thermal Lesions **2010**,		2
77	Real-time 3D fusion echocardiography. *JACC: Cardiovascular Imaging*, **2010**, 3, 682-90	8.4	26
76	Segmentation of cell clumps for quantitative analysis. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference*, **2010**, 2010, 4813-6	0.9	
75	Slip imaging: reducing ambiguity in breast lesion assessment. *Ultrasound in Medicine and Biology*, **2010**, 36, 2027-35	3.5	6
74	A Malignant Breast Carcinoma Size Assessment Using Multiple Orientation Axial, Lateral, and Shear Elastographies: The Second Stage of a Pilot Study. *Lecture Notes in Computer Science*, **2010**, 295-304	0.9	
73	Ultrasound phase velocities in SonoVue as a function of pressure and bubble concentration **2009**,		2
72	Demons algorithms for fluid and curvature registration **2009**,		10

71	Local-phase based 3D boundary detection using monogenic signal and its application to real-time 3-D echocardiography images **2009**,		38
70	Overlap invariance of cumulative residual entropy measures for multimodal image alignment **2009**,		5
69	Ultrasound estimation of breast tissue biomechanical properties using a similarity-based non-linear optimization approach. *Journal of Strain Analysis for Engineering Design*, **2009**, 44, 363-374	1.3	10
68	Probabilistic Models for Shapes as Continuous Curves. *Journal of Mathematical Imaging and Vision*, **2009**, 33, 39-65	1.6	1
67	Reproducibility and accuracy of automated measurement for dynamic arterial lumen area by cardiovascular magnetic resonance. *International Journal of Cardiovascular Imaging*, **2009**, 25, 797-808	2.5	20
66	Multiview RT3D Echocardiography Image Fusion. *Lecture Notes in Computer Science*, **2009**, 134-143	0.9	18
65	Random Forest Classification for Automatic Delineation of Myocardium in Real-Time 3D Echocardiography. *Lecture Notes in Computer Science*, **2009**, 447-456	0.9	67
64	Assisted-freehand ultrasound elasticity imaging. *IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control*, **2009**, 56, 36-43	3.2	18
63	A Demons algorithm for image registration with locally adaptive regularization. *Lecture Notes in Computer Science*, **2009**, 12, 574-81	0.9	27
62	Image-driven cardiac left ventricle segmentation for the evaluation of multiview fused real-time 3-dimensional echocardiography images. *Lecture Notes in Computer Science*, **2009**, 12, 893-900	0.9	3
61	Objective quantification of global and regional left ventricular systolic function by endocardial tracking of contrast echocardiographic sequences. *International Journal of Cardiology*, **2008**, 124, 47-56	3.2	7
60	Revisiting overlap invariance in medical image alignment **2008**,		12
59	Vasculature segmentation of CT liver images using graph cuts and graph-based analysis **2008**,		11
58	Elasticity reconstruction from displacement and confidence measures of a multi-compressed ultrasound RF sequence. *IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control*, **2008**, 55, 319-26	3.2	14
57	Spatiotemporal Bayesian cell population tracking and analysis with lineage construction **2008**,		1
56	Segmentation of breast cancer masses in ultrasound using radio-frequency signal derived parameters and strain estimates **2008**,		6
55	Image-based simulation of brain arteriovenous malformation hemodynamics **2008**,		1
54	A model-based displacement outlier removal algorithm for ultrasonic temperature estimation **2008** ,		4

53	Local wall motion classification of stress echocardiography using a Hidden Markov Model approach **2008**,		15
52	Volume segmentation and reconstruction from freehand three-dimensional ultrasound data with application to ovarian follicle measurement. *Ultrasound in Medicine and Biology*, **2008**, 34, 183-95	3.5	13
51	Discrete Wavelet Diffusion for Image Denoising. *Lecture Notes in Computer Science*, **2008**, 20-28	0.9	7
50	A novel explicit 2D+t cyclic shape model applied to echocardiography. *Lecture Notes in Computer Science*, **2008**, 11, 527-34	0.9	4
49	Wall motion classification of stress echocardiography based on combined rest-and-stress data. *Lecture Notes in Computer Science*, **2008**, 11, 139-46	0.9	8
48	FAST FLUID REGISTRATION WITH DIRICHLET BOUNDARY CONDITIONS: A TRANSFORM-BASED APPROACH **2007**,		2
47	Fourier Methods for Nonparametric Image Registration **2007**,		7
46	Registration of multiview real-time 3-D echocardiographic sequences. *IEEE Transactions on Medical Imaging*, **2007**, 26, 1154-65	11.7	81
45	Spatio-temporal registration of real time 3D ultrasound to cardiovascular MR sequences **2007**, 10, 343-50		17
44	Adaptive non-rigid registration of real time 3D ultrasound to cardiovascular MR images. *Information Processing in Medical Imaging*, **2007**, 20, 50-61		18
43	Ultrasound image segmentation: a survey. *IEEE Transactions on Medical Imaging*, **2006**, 25, 987-1010	11.7	712
42	Phase-based registration of multi-view real-time three-dimensional echocardiographic sequences. *Lecture Notes in Computer Science*, **2006**, 9, 612-9	0.9	10
41	A system for simultaneously measuring contact force, ultrasound, and position information for use in force-based correction of freehand scanning. *IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control*, **2005**, 52, 1330-42	3.2	20
40	A comparison of a similarity-based and a feature-based 2-D-3-D registration method for neurointerventional use. *IEEE Transactions on Medical Imaging*, **2005**, 24, 1058-66	11.7	40
39	Tissue perfusion diagnostic classification using a spatio-temporal analysis of contrast ultrasound image sequences. *Lecture Notes in Computer Science*, **2005**, 19, 222-33	0.9	5
38	Pressure-dependent attenuation with microbubbles at low mechanical index. *Ultrasound in Medicine and Biology*, **2005**, 31, 377-84	3.5	47
37	Temporal calibration of freehand three-dimensional ultrasound using image alignment. *Ultrasound in Medicine and Biology*, **2005**, 31, 919-27	3.5	19
36	Cardiology Meets Image Analysis: Just an Application or Can Image Analysis Usefully Impact Cardiology Practice?. *Lecture Notes in Computer Science*, **2005**, 25-30	0.9	1

35	Adaptive multiscale ultrasound compounding using phase information. *Lecture Notes in Computer Science*, **2005**, 8, 589-96	0.9	29
34	Quantitative 3-dimensional echocardiography for accurate and rapid cardiac phenotype characterization in mice. *Circulation*, **2004**, 110, 1632-7	16.7	93
33	On the Choice of Band-Pass Quadrature Filters. *Journal of Mathematical Imaging and Vision*, **2004**, 21, 53-80	1.6	85
32	Computerised planning of the acquisition of cardiac MR images. *Computerized Medical Imaging and Graphics*, **2004**, 28, 411-8	7.6	18
31	Vascular segmentation of phase contrast magnetic resonance angiograms based on statistical mixture modeling and local phase coherence. *IEEE Transactions on Medical Imaging*, **2004**, 23, 1490-507	11.7	35
30	A Spatio-temporal Analysis of Contrast Ultrasound Image Sequences for Assessment of Tissue Perfusion. *Lecture Notes in Computer Science*, **2004**, 899-906	0.9	4
29	A novel ultrasound indentation system for measuring biomechanical properties of in vivo soft tissue. *Ultrasound in Medicine and Biology*, **2003**, 29, 813-23	3.5	96
28	MAP MRF joint segmentation and registration of medical images. *Medical Image Analysis*, **2003**, 7, 539-52	15.4	64
27	Intensity-based 2-D-3-D registration of cerebral angiograms. *IEEE Transactions on Medical Imaging*, **2003**, 22, 1417-26	11.7	95
26	Velocity estimation in ultrasound images: a block matching approach. *Lecture Notes in Computer Science*, **2003**, 18, 586-98	0.9	44
25	Fusing speed and phase information for vascular segmentation of phase contrast MR angiograms. *Medical Image Analysis*, **2002**, 6, 109-28	15.4	31
24	Automated, nonrigid alignment of clinical myocardial contrast echocardiography image sequences: comparison with manual alignment. *Ultrasound in Medicine and Biology*, **2002**, 28, 115-23	3.5	12
23	Segmentation of ultrasound B-mode images with intensity inhomogeneity correction. *IEEE Transactions on Medical Imaging*, **2002**, 21, 48-57	11.7	124
22	A shape-space-based approach to tracking myocardial borders and quantifying regional left-ventricular function applied in echocardiography. *IEEE Transactions on Medical Imaging*, **2002**, 21, 226-38	11.7	100
21	3-D freehand echocardiography for automatic left ventricle reconstruction and analysis based on multiple acoustic windows. *IEEE Transactions on Medical Imaging*, **2002**, 21, 1051-8	11.7	31
20	Automated 3-D echocardiography analysis compared with manual delineations and SPECT MUGA. *IEEE Transactions on Medical Imaging*, **2002**, 21, 1069-76	11.7	27
19	Nonrigid registration of 3-D free-hand ultrasound images of the breast. *IEEE Transactions on Medical Imaging*, **2002**, 21, 405-12	11.7	51
18	Non-invasive Measurement of Biomechanical Properties of in vivo Soft Tissues. *Lecture Notes in Computer Science*, **2002**, 208-215	0.9	4

17	Demarcation of Aneurysms Using the Seed and Cull Algorithm. *Lecture Notes in Computer Science*, **2002**, 419-426	0.9	5
16	MAP MRF Joint Segmentation and Registration. *Lecture Notes in Computer Science*, **2002**, 580-587	0.9	9
15	3D Freehand Echocardiography for Automatic Left Ventricle Reconstruction and Analysis Based on Multiple Acoustic Windows. *Lecture Notes in Computer Science*, **2001**, 778-785	0.9	
14	3D Vascular Segmentation Using MRA Statistics and Velocity Field Information in PC-MRA. *Lecture Notes in Computer Science*, **2001**, 461-467	0.9	2
13	Automating 3D Echocardiographic Image Analysis. *Lecture Notes in Computer Science*, **2000**, 687-696	0.9	8
12	Fusing Speed and Phase Information for Vascular Segmentation in Phase Contrast MR Angiograms. *Lecture Notes in Computer Science*, **2000**, 166-175	0.9	3
11	Evaluating a robust contour tracker on echocardiographic sequences. *Medical Image Analysis*, **1999**, 3, 63-75	15.4	54
10	Statistical 3D Vessel Segmentation Using a Rician Distribution. *Lecture Notes in Computer Science*, **1999**, 82-89	0.9	31
9	Real-time registration of 3D cerebral vessels to X-ray angiograms. *Lecture Notes in Computer Science*, **1998**, 1125-1133	0.9	25
8	Automatically finding optimal working projections for the endovascular coiling of intracranical aneurysms. *Lecture Notes in Computer Science*, **1998**, 814-821	0.9	2
7	2D+T acoustic boundary detection in echocardiography. *Lecture Notes in Computer Science*, **1998**, 806-813	0.9	15
6	Segmentation of cerebral vessels and aneurysms from MR angiography data. *Lecture Notes in Computer Science*, **1997**, 423-428	0.9	30
5	From inspection to process understanding and monitoring: a view on computer vision in manufacturing. *Image and Vision Computing*, **1995**, 13, 197-214	3.7	15
4	Finding half boundaries and junctions in images. *Image and Vision Computing*, **1992**, 10, 219-232	3.7	4
3	Images as functions and sets. *Image and Vision Computing*, **1992**, 10, 19-29	3.7	4
2	Finding corners. *Image and Vision Computing*, **1988**, 6, 121-128	3.7	192
1	Deep clinical and biological phenotyping of the preterm birth and small for gestational age syndromes: The INTERBIO-21st Newborn Case-Control Study protocol. *Gates Open Research*,2, 49	2.4	3