Andrew P Bradley

List of Publications by Citations

118 papers	**6,265** citations	**29** h-index	**78** g-index
133 ext. papers	**7,600** ext. citations	**3.6** avg, IF	**6.46** L-index

#	Paper	IF	Citations
118	The use of the area under the ROC curve in the evaluation of machine learning algorithms. *Pattern Recognition*, **1997**, 30, 1145-1159	7.7	3578
117	Perceptual quality metrics applied to still image compression. *Signal Processing*, **1998**, 70, 177-200	4.4	227
116	A deep learning approach for the analysis of masses in mammograms with minimal user intervention. *Medical Image Analysis*, **2017**, 37, 114-128	15.4	175
115	Intelligible support vector machines for diagnosis of diabetes mellitus. *IEEE Transactions on Information Technology in Biomedicine*, **2010**, 14, 1114-20		153
114	Rule extraction from support vector machines: A review. *Neurocomputing*, **2010**, 74, 178-190	5.4	134
113	Why rankings of biomedical image analysis competitions should be interpreted with care. *Nature Communications*, **2018**, 9, 5217	17.4	112
112	An improved joint optimization of multiple level set functions for the segmentation of overlapping cervical cells. *IEEE Transactions on Image Processing*, **2015**, 24, 1261-72	8.7	111
111	Automated Mass Detection in Mammograms Using Cascaded Deep Learning and Random Forests **2015**,		97
110	Automated Analysis of Unregistered Multi-View Mammograms With Deep Learning. *IEEE Transactions on Medical Imaging*, **2017**, 36, 2355-2365	11.7	94
109	Precision Radiology: Predicting longevity using feature engineering and deep learning methods in a radiomics framework. *Scientific Reports*, **2017**, 7, 1648	4.9	86
108	Unregistered Multiview Mammogram Analysis with Pre-trained Deep Learning Models. *Lecture Notes in Computer Science*, **2015**, 652-660	0.9	84
107	A wavelet visible difference predictor. *IEEE Transactions on Image Processing*, **1999**, 8, 717-30	8.7	80
106	Evaluation of Three Algorithms for the Segmentation of Overlapping Cervical Cells. *IEEE Journal of Biomedical and Health Informatics*, **2017**, 21, 441-450	7.2	61
105	Rule Extraction from Support Vector Machines: A Sequential Covering Approach. *IEEE Transactions on Knowledge and Data Engineering*, **2007**, 19, 729-741	4.2	57
104	Stimulus specificity of a steady-state visual-evoked potential-based brain-computer interface. *Journal of Neural Engineering*, **2012**, 9, 036008	5	55
103	Deep Learning and Structured Prediction for the Segmentation of Mass in Mammograms. *Lecture Notes in Computer Science*, **2015**, 605-612	0.9	54
102	On wavelet analysis of auditory evoked potentials. *Clinical Neurophysiology*, **2004**, 115, 1114-28	4.3	53

101	The Automated Learning of Deep Features for Breast Mass Classification from Mammograms. *Lecture Notes in Computer Science*, **2016**, 106-114	0.9	47
100	Denoising of dynamic contrast-enhanced MR images using dynamic nonlocal means. *IEEE Transactions on Medical Imaging*, **2010**, 29, 302-10	11.7	46
99	Precision-recall operating characteristic (P-ROC) curves in imprecise environments **2006**,		46
98	Visual attention for region of interest coding in JPEG 2000. *Journal of Visual Communication and Image Representation*, **2003**, 14, 232-250	2.7	46
97	Automated nucleus and cytoplasm segmentation of overlapping cervical cells. *Lecture Notes in Computer Science*, **2013**, 16, 452-60	0.9	39
96	Deep Reinforcement Learning for Active Breast Lesion Detection from DCE-MRI. *Lecture Notes in Computer Science*, **2017**, 665-673	0.9	37
95	Nature of orchestral noise. *Journal of the Acoustical Society of America*, **2008**, 124, 926-39	2.2	33
94	The multiscale classifier. *IEEE Transactions on Pattern Analysis and Machine Intelligence*, **1996**, 18, 124-137	13.3	33
93	Teaching histology to first-year veterinary science students using virtual microscopy and traditional microscopy: a comparison of student responses. *Journal of Veterinary Medical Education*, **2007**, 34, 177-82	1.3	31
92	Fully automated classification of mammograms using deep residual neural networks **2017**,		29
91	Deep structured learning for mass segmentation from mammograms **2015**,		29
90	Nearest neighbour group-based classification. *Pattern Recognition*, **2010**, 43, 3458-3467	7.7	29
89	Use of pulse transit time to distinguish respiratory events from tidal breathing in sleeping children. *Chest*, **2005**, 128, 3013-9	5.3	27
88	On chirp stimuli and neural synchrony in the suprathreshold auditory brainstem response. *Journal of the Acoustical Society of America*, **2010**, 128, 235-46	2.2	25
87	Far-infrared spectroscopy of protein higher-order structures. *Applied Spectroscopy*, **2010**, 64, 1259-64	3.1	25
86	Screening of obstructive and central apnoea/hypopnoea in children using variability: a preliminary study. *Acta Paediatrica, International Journal of Paediatrics*, **2006**, 95, 561-4	3.1	25
85	Physiological control of dual rotary pumps as a biventricular assist device using a master/slave approach. *Artificial Organs*, **2014**, 38, 766-74	2.6	24
84	A hybrid mock circulation loop for a total artificial heart. *Artificial Organs*, **2014**, 38, 775-82	2.6	22

83   ROC curves and the X2 test. *Pattern Recognition Letters*, **1996**, 17, 287-294   4.7   19

82   Rule Extraction from Support Vector Machines: Measuring the Explanation Capability Using the Area under the ROC Curve **2006**,   17

81   Automated, quantitative measures of grey and white matter lesion burden correlates with motor and cognitive function in children with unilateral cerebral palsy. *NeuroImage: Clinical*, **2016**, 11, 751-759   5.3   17

80   Training Medical Image Analysis Systems like Radiologists. *Lecture Notes in Computer Science*, **2018**, 546-554   17

79   **2017**,   15

78   Tree RE-weighted belief propagation using deep learning potentials for mass segmentation from mammograms **2015**,   15

77   Low-frequency spectroscopic analysis of monomeric and fibrillar lysozyme. *Applied Spectroscopy*, **2011**, 65, 260-4   3.1   15

76   Automated Segmentation of Skin Strata in Reflectance Confocal Microscopy Depth Stacks. *PLoS ONE*, **2016**, 11, e0153208   3.7   15

75   Effect of competing stimuli on SSVEP-based BCI. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference*, **2011**, 2011, 6307-10   0.9   14

74   ROC curve equivalence using the Kolmogorov-Smirnov test. *Pattern Recognition Letters*, **2013**, 34, 470-475   4.7   13

73   Automated analysis of the auditory brainstem response using derivative estimation wavelets. *Audiology and Neuro-Otology*, **2005**, 10, 6-21   2.2   13

72   Correspondence-free determination of the affine fundamental matrix. *IEEE Transactions on Pattern Analysis and Machine Intelligence*, **2007**, 29, 82-97   13.3   12

71   Pre and post-hoc diagnosis and interpretation of malignancy from breast DCE-MRI. *Medical Image Analysis*, **2019**, 58, 101562   15.4   11

70   Deep Learning Models for Classifying Mammogram Exams Containing Unregistered Multi-View Images and Segmentation Maps of Lesions **2017**, 321-339   11

69   Spectral and synchrony differences in auditory brainstem responses evoked by chirps of varying durations. *Journal of the Acoustical Society of America*, **2010**, 128, 1896-907   2.2   11

68   Alterations in regional shape on ipsilateral and contralateral cortex contrast in children with unilateral cerebral palsy and are predictive of multiple outcomes. *Human Brain Mapping*, **2016**, 37, 3588-603   5.9   11

67   A method for quantitative analysis of clump thickness in cervical cytology slides. *Micron*, **2016**, 80, 73-82   2.3   10

66   Multi-scale mass segmentation for mammograms via cascaded random forests **2017**,   10

65	Producing Radiologist-Quality Reports for Interpretable Deep Learning. **2019**,		9
64	**2017**,		9
63	New spatiotemporal features for improved discrimination of benign and malignant lesions in dynamic contrast-enhanced-magnetic resonance imaging of the breast. *Journal of Computer Assisted Tomography*, **2011**, 35, 645-52	2.2	9
62	An evaluation of four parametric models of contrast enhancement for dynamic magnetic resonance imaging of the breast. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society*, **2007**, 2007, 71-4		9
61	Sample size estimation using the receiver operating characteristic curve **2004**,		8
60	Multisite accelerometry for sleep and wake classification in children. *Physiological Measurement*, **2015**, 36, 133-47	2.9	7
59	Anatomical Skin Segmentation in Reflectance Confocal Microscopy with Weak Labels **2015**,		7
58	The effects of electrode montage on the amplitude of wave V in the auditory brainstem response to maximum length sequence stimuli. *Audiology and Neuro-Otology*, **2008**, 13, 7-12	2.2	7
57	Conducting shorter VEP tests to estimate visual acuity via assessment of SNR. *Documenta Ophthalmologica*, **2013**, 126, 21-8	2.2	6
56	Half-AUC for the evaluation of sensitive or specific classifiers. *Pattern Recognition Letters*, **2014**, 38, 93-98	4.7	6
55	The audiological health of horn players. *Journal of Occupational and Environmental Hygiene*, **2013**, 10, 590-6	2.9	6
54	Feature and Classifier Selection for Automatic Classification of Lesions in Dynamic Contrast-Enhanced MRI of the Breast **2009**,		6
53	Modeling of a rotary blood pump. *Artificial Organs*, **2014**, 38, 182-90	2.6	5
52	Estimation of neuronal firing rates with the three-state biological point process model. *Journal of Neuroscience Methods*, **2008**, 174, 281-91	3	5
51	Using ventricular modeling to robustly probe significant deep gray matter pathologies: Application to cerebral palsy. *Human Brain Mapping*, **2016**, 37, 3795-3809	5.9	5
50	Dielectric properties of dog brain tissue measured in vitro across the 0.3-3 GHz band. *Bioelectromagnetics*, **2016**, 37, 549-556	1.6	5
49	How to Exploit Weaknesses in Biomedical Challenge Design and Organization. *Lecture Notes in Computer Science*, **2018**, 388-395	0.9	5
48	A Parametric Simulation of Neuronal Noise From Microelectrode Recordings. *IEEE Transactions on Neural Systems and Rehabilitation Engineering*, **2017**, 25, 1-10	4.8	4

47	Closed-form equation to estimate the dielectric properties of biological tissues as a function of age. *Bioelectromagnetics*, **2017**, 38, 474-481	1.6	4
46	Model Agnostic Saliency For Weakly Supervised Lesion Detection From Breast DCE-MRI **2019**,		4
45	**2017**,		4
44	A preliminary investigation into the use of an auditory brainstem response (ABR) simulator for training audiology students in waveform analysis. *International Journal of Audiology*, **2014**, 53, 514-21	2.6	4
43	The filtered words test and the influence of lexicality. *Journal of Speech, Language, and Hearing Research*, **2014**, 57, 1722-30	2.8	4
42	Fast assessment of canine hearing using high click-rate BAER. *Veterinary Journal*, **2011**, 187, 136-8	2.5	4
41	Progress Towards Universal Neonatal Hearing Screening: A World Review. *Australian and New Zealand Journal of Audiology*, **2009**, 31, 3-14		4
40	Physiologic parameters that affect pulse transit time difference between the upper and lower limbs in children. *Journal of Human Hypertension*, **2006**, 20, 221-3	2.6	4
39	Fully Automatic Computer-aided Mass Detection and Segmentation via Pseudo-color Mammograms and Mask R-CNN **2020**,		4
38	Identifying relevant biomarkers of brain injury from structural MRI: Validation using automated approaches in children with unilateral cerebral palsy. *PLoS ONE*, **2017**, 12, e0181605	3.7	3
37	An algorithm for microscopic specimen delineation and focus candidate selection. *Micron*, **2014**, 66, 51-62	2.3	3
36	Multiple instance learning for breast MRI based on generic spatio-temporal features **2015**,		3
35	Enhancing the classification accuracy of Steady-State Visual Evoked Potential-based Brain-Computer Interface using Component Synchrony Measure **2012**,		3
34	Visual quality assessment of watermarked medical images **2007**,		3
33	On the dual structure of the auditory brainstem response in dogs. *Clinical Neurophysiology*, **2006**, 117, 2211-20	4.3	3
32	Automated analysis of the auditory brainstem response		3
31	Combining Deep Learning and Structured Prediction for Segmenting Masses in Mammograms. *Advances in Computer Vision and Pattern Recognition*, **2017**, 225-240	1.1	3
30	Temporal associations between arousal and body/limb movement in children with suspected obstructed sleep apnoea. *Physiological Measurement*, **2016**, 37, 115-27	2.9	3

29	Multi-scale sifting for mammographic mass detection and segmentation. *Biomedical Physics and Engineering Express*, **2019**, 5, 025022	1.5	3
28	Evaluation of a morphological filter in mean cardiac output determination: application to left ventricular assist devices. *Medical and Biological Engineering and Computing*, **2013**, 51, 891-9	3.1	2
27	Expectation-Maximization with Image-Weighted Markov Random Fields to Handle Severe Pathology **2015**,		2
26	Multiple Instance Learning for Breast Cancer Magnetic Resonance Imaging **2014**,		2
25	A Comparison of Multiple Instance and Group Based Learning **2012**,		2
24	On the Estimation of Extrinsic and Intrinsic Parameters of Optical Microscope Calibration **2010**,		2
23	A new denoising method for dynamic contrast-enhanced MRI. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference*, **2008**, 2008, 847-50	0.9	2
22	Automatic Segmentation of Enhancing Breast Tissue in Dynamic Contrast-Enhanced MR Images **2007**,		2
21	A Comparison of DCT and DWT Block Based Watermarking on Medical Image Quality. *Lecture Notes in Computer Science*, **2008**, 454-466	0.9	2
20	Validation and algorithmic audit of a deep learning system for the detection of proximal femoral fractures in patients in the emergency department: a diagnostic accuracy study.. *The Lancet Digital Health*, **2022**,	14.4	2
19	A two-stage method to correct aberrations induced by slide slant in bright-field microscopy. *Micron*, **2016**, 87, 18-32	2.3	1
18	Ethics for Biomedical Engineers **2013**,		1
17	Effect of posterized naturalistic stimuli on SSVEP-based BCI. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference*, **2013**, 2013, 3105-8	0.9	1
16	Group-based meta-classification **2008**,		1
15	Over-complete discrete wavelet transformation of the normal auditory brainstem response improves prediction of outcome following severe acute closed head injury. *Audiology and Neuro-Otology*, **2006**, 11, 249-58	2.2	1
14	A system to generate patient-specific stimuli for use with the auditory brainstem response test. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society*, **2007**, 2007, 2452-5		1
13	Over-sampling for accurate masking thershold calculation wavelet packet audio coders		1
12	Taking the Confusion Out of Multinomial Confusion Matrices and Imbalanced Classes. *Communications in Computer and Information Science*, **2021**, 16-30	0.3	1

11	A Starling-like total work controller for rotary blood pumps: An in vitro evaluation. *Artificial Organs*, **2020**, 44, E40-E53	2.6	1
10	Investigation of the inherent left-right flow balancing of rotary total artificial hearts by means of a resistance box. *Artificial Organs*, **2020**, 44, 584-593	2.6	1
9	Deep Reinforcement Learning for Detecting Breast Lesions from DCE-MRI. *Advances in Computer Vision and Pattern Recognition*, **2019**, 163-178	1.1	0
8	Analysis of the non-Markov parameter in continuous-time signal processing. *Physical Review E*, **2014**, 89, 022109	2.4	
7	Characterization of movements during restless sleep in children: a pilot study. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference*, **2014**, 2014, 274-7	0.9	
6	Screening of obstructive and central apnoea/hypopnoea in children using variability: A preliminary study. *Acta Paediatrica, International Journal of Paediatrics*, **2007**, 95, 561-564	3.1	
5	The Effect of Domain Knowledge on Rule Extraction from Support Vector Machines. *Lecture Notes in Computer Science*, **2009**, 311-321	0.9	
4	Ethics and Data Mining in Biomedical Engineering **2013**, 77-97		
3	Illumination Effects in Quantitative Virtual Microscopy. *Lecture Notes in Computer Science*, **2013**, 449-456	0.9	
2	Extended Naïve Bayes for Group Based Classification. *Advances in Intelligent Systems and Computing*, **2014**, 497-505	0.4	
1	Towards data-driven quantification of skin ageing using reflectance confocal microscopy. *International Journal of Cosmetic Science*, **2021**, 43, 466-473	2.7	