U Rajendra Acharya

List of Publications by Citations

653 papers	**33,186** citations
92 h-index	**155** g-index
688 ext. papers	**43,387** ext. citations
4.6 avg, IF	**8.2** L-index

#	Paper	IF	Citations
653	Heart rate variability: a review. *Medical and Biological Engineering and Computing*, **2006**, 44, 1031-51	3.1	1439
652	Automated detection of COVID-19 cases using deep neural networks with X-ray images. *Computers in Biology and Medicine*, **2020**, 121, 103792	7	991
651	Deep convolutional neural network for the automated detection and diagnosis of seizure using EEG signals. *Computers in Biology and Medicine*, **2018**, 100, 270-278	7	711
650	A deep convolutional neural network model to classify heartbeats. *Computers in Biology and Medicine*, **2017**, 89, 389-396	7	541
649	Entropies for detection of epilepsy in EEG. *Computer Methods and Programs in Biomedicine*, **2005**, 80, 187-94	6.9	541
648	Deep learning for healthcare applications based on physiological signals: A review. *Computer Methods and Programs in Biomedicine*, **2018**, 161, 1-13	6.9	442
647	Automated diagnosis of epileptic EEG using entropies. *Biomedical Signal Processing and Control*, **2012**, 7, 401-408	4.9	411
646	Application of deep convolutional neural network for automated detection of myocardial infarction using ECG signals. *Information Sciences*, **2017**, 415-416, 190-198	7.7	402
645	Automated EEG analysis of epilepsy: A review. *Knowledge-Based Systems*, **2013**, 45, 147-165	7.3	402
644	ECG beat classification using PCA, LDA, ICA and Discrete Wavelet Transform. *Biomedical Signal Processing and Control*, **2013**, 8, 437-448	4.9	399
643	Automated detection of arrhythmias using different intervals of tachycardia ECG segments with convolutional neural network. *Information Sciences*, **2017**, 405, 81-90	7.7	353
642	Application of deep learning technique to manage COVID-19 in routine clinical practice using CT images: Results of 10 convolutional neural networks. *Computers in Biology and Medicine*, **2020**, 121, 103795	7	333
641	Arrhythmia detection using deep convolutional neural network with long duration ECG signals. *Computers in Biology and Medicine*, **2018**, 102, 411-420	7	322
640	Wavelet-based EEG processing for computer-aided seizure detection and epilepsy diagnosis. *Seizure: the Journal of the British Epilepsy Association*, **2015**, 26, 56-64	3.2	303
639	Automated diagnosis of arrhythmia using combination of CNN and LSTM techniques with variable length heart beats. *Computers in Biology and Medicine*, **2018**, 102, 278-287	7	296
638	EEG signal analysis: a survey. *Journal of Medical Systems*, **2010**, 34, 195-212	5.1	273
637	Application of entropies for automated diagnosis of epilepsy using EEG signals: A review. *Knowledge-Based Systems*, **2015**, 88, 85-96	7.3	269

618	A review of uncertainty quantification in deep learning: Techniques, applications and challenges. *Information Fusion*, **2021**, 76, 243-297	16.7	174
617	Algorithms for the automated detection of diabetic retinopathy using digital fundus images: a review. *Journal of Medical Systems*, **2012**, 36, 145-57	5.1	165
616	Wavelet-based energy features for glaucomatous image classification. *IEEE Transactions on Information Technology in Biomedicine*, **2012**, 16, 80-7		161
615	Application of higher order statistics/spectra in biomedical signals--a review. *Medical Engineering and Physics*, **2010**, 32, 679-89	2.4	158
614	Classification of heart rate data using artificial neural network and fuzzy equivalence relation. *Pattern Recognition*, **2003**, 36, 61-68	7.7	156
613	A deep learning approach for Parkinson's disease diagnosis from EEG signals. *Neural Computing and Applications*, **2020**, 32, 10927-10933	4.8	156
612	Automated diagnosis of Coronary Artery Disease affected patients using LDA, PCA, ICA and Discrete Wavelet Transform. *Knowledge-Based Systems*, **2013**, 37, 274-282	7.3	155
611	Application of empirical mode decomposition (emd) for automated detection of epilepsy using EEG signals. *International Journal of Neural Systems*, **2012**, 22, 1250027	6.2	154
610	Use of principal component analysis for automatic classification of epileptic EEG activities in wavelet framework. *Expert Systems With Applications*, **2012**, 39, 9072-9078	7.8	152
609	Classification of myocardial infarction with multi-lead ECG signals and deep CNN. *Pattern Recognition Letters*, **2019**, 122, 23-30	4.7	150
608	Data mining technique for automated diagnosis of glaucoma using higher order spectra and wavelet energy features. *Knowledge-Based Systems*, **2012**, 33, 73-82	7.3	149
607	Tunable-Q Wavelet Transform Based Multiscale Entropy Measure for Automated Classification of Epileptic EEG Signals. *Applied Sciences (Switzerland)*, **2017**, 7, 385	2.6	147
606	Current methods in electrocardiogram characterization. *Computers in Biology and Medicine*, **2014**, 48, 133-49	7	146
605	Computer-aided breast cancer detection using mammograms: a review. *IEEE Reviews in Biomedical Engineering*, **2013**, 6, 77-98	6.4	146
604	Automatic detection of epileptic EEG signals using higher order cumulant features. *International Journal of Neural Systems*, **2011**, 21, 403-14	6.2	142
603	A new approach for arrhythmia classification using deep coded features and LSTM networks. *Computer Methods and Programs in Biomedicine*, **2019**, 176, 121-133	6.9	141
602	Automated identification of shockable and non-shockable life-threatening ventricular arrhythmias using convolutional neural network. *Future Generation Computer Systems*, **2018**, 79, 952-959	7.5	139
601	Automated Diagnosis of Glaucoma Using Empirical Wavelet Transform and Correntropy Features Extracted From Fundus Images. *IEEE Journal of Biomedical and Health Informatics*, **2017**, 21, 803-813	7.2	138

600	Automated characterization and classification of coronary artery disease and myocardial infarction by decomposition of ECG signals: A comparative study. *Information Sciences*, **2017**, 377, 17-29	7.7	138
599	Segmentation of optic disc, fovea and retinal vasculature using a single convolutional neural network. *Journal of Computational Science*, **2017**, 20, 70-79	3.4	136
598	Cardiac decision making using higher order spectra. *Biomedical Signal Processing and Control*, **2013**, 8, 193-203	4.9	135
597	Cascaded LSTM recurrent neural network for automated sleep stage classification using single-channel EEG signals. *Computers in Biology and Medicine*, **2019**, 106, 71-81	7	134
596	Nonlinear analysis of EEG signals at different mental states. *BioMedical Engineering OnLine*, **2004**, 3, 7	4.1	134
595	Automated segmentation of exudates, haemorrhages, microaneurysms using single convolutional neural network. *Information Sciences*, **2017**, 420, 66-76	7.7	133
594	Characterization of focal EEG signals: A review. *Future Generation Computer Systems*, **2019**, 91, 290-299	7.5	132
593	Automated detection and localization of myocardial infarction using electrocardiogram: a comparative study of different leads. *Knowledge-Based Systems*, **2016**, 99, 146-156	7.3	130
592	An Integrated Index for the Identification of Focal Electroencephalogram Signals Using Discrete Wavelet Transform and Entropy Measures. *Entropy*, **2015**, 17, 5218-5240	2.8	130
591	Analysis and automatic identification of sleep stages using higher order spectra. *International Journal of Neural Systems*, **2010**, 20, 509-21	6.2	130
590	A Novel Depression Diagnosis Index Using Nonlinear Features in EEG Signals. *European Neurology*, **2015**, 74, 79-83	2.1	128
589	Infrared thermography on ocular surface temperature: A review. *Infrared Physics and Technology*, **2009**, 52, 97-108	2.7	127
588	Automated diagnosis of coronary artery disease using tunable-Q wavelet transform applied on heart rate signals. *Knowledge-Based Systems*, **2015**, 82, 1-10	7.3	126
587	Automatic identification of epileptic and background EEG signals using frequency domain parameters. *International Journal of Neural Systems*, **2010**, 20, 159-76	6.2	122
586	Identification of different stages of diabetic retinopathy using retinal optical images. *Information Sciences*, **2008**, 178, 106-121	7.7	122
585	Linear and nonlinear analysis of normal and CAD-affected heart rate signals. *Computer Methods and Programs in Biomedicine*, **2014**, 113, 55-68	6.9	119
584	Atherosclerotic risk stratification strategy for carotid arteries using texture-based features. *Ultrasound in Medicine and Biology*, **2012**, 38, 899-915	3.5	118
583	Automated Detection of Alzheimer's Disease Using Brain MRI Images- A Study with Various Feature Extraction Techniques. *Journal of Medical Systems*, **2019**, 43, 302	5.1	116

582	Evolutionary algorithm based classifier parameter tuning for automatic diabetic retinopathy grading: A hybrid feature extraction approach. *Knowledge-Based Systems*, **2013**, 39, 9-22	7.3	116
581	Application of higher order spectra for the identification of diabetes retinopathy stages. *Journal of Medical Systems*, **2008**, 32, 481-8	5.1	116
580	Automated detection of atrial fibrillation using long short-term memory network with RR interval signals. *Computers in Biology and Medicine*, **2018**, 102, 327-335	7	115
579	Deep convolutional neural network for the automated diagnosis of congestive heart failure using ECG signals. *Applied Intelligence*, **2019**, 49, 16-27	4.9	115
578	An automatic detection of focal EEG signals using new class of time-frequency localized orthogonal wavelet filter banks. *Knowledge-Based Systems*, **2017**, 118, 217-227	7.3	113
577	A novel approach for automated detection of focal EEG signals using empirical wavelet transform. *Neural Computing and Applications*, **2018**, 29, 47-57	4.8	113
576	Heart rate analysis in normal subjects of various age groups. *BioMedical Engineering OnLine*, **2004**, 3, 24	4.1	113
575	Computer-based detection of diabetes retinopathy stages using digital fundus images. *Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine*, **2009**, 223, 545-53	1.7	106
574	Automated arrhythmia detection using novel hexadecimal local pattern and multilevel wavelet transform with ECG signals. *Knowledge-Based Systems*, **2019**, 186, 104923	7.3	105
573	Application of higher order cumulant features for cardiac health diagnosis using ECG signals. *International Journal of Neural Systems*, **2013**, 23, 1350014	6.2	104
572	Classification of cardiac abnormalities using heart rate signals. *Medical and Biological Engineering and Computing*, **2004**, 42, 288-93	3.1	104
571	SleepEEGNet: Automated sleep stage scoring with sequence to sequence deep learning approach. *PLoS ONE*, **2019**, 14, e0216456	3.7	103
570	Cardiac state diagnosis using higher order spectra of heart rate variability. *Journal of Medical Engineering and Technology*, **2008**, 32, 145-55	1.8	101
569	A new machine learning technique for an accurate diagnosis of coronary artery disease. *Computer Methods and Programs in Biomedicine*, **2019**, 179, 104992	6.9	100
568	Application of higher order spectra to identify epileptic EEG. *Journal of Medical Systems*, **2011**, 35, 1563-71	5.1	100
567	Automated identification of normal and diabetes heart rate signals using nonlinear measures. *Computers in Biology and Medicine*, **2013**, 43, 1523-9	7	99
566	Automated diagnosis of normal and alcoholic EEG signals. *International Journal of Neural Systems*, **2012**, 22, 1250011	6.2	99
565	Automated diagnosis of epilepsy using CWT, HOS and texture parameters. *International Journal of Neural Systems*, **2013**, 23, 1350009	6.2	95

564	Characterization of coronary artery disease using flexible analytic wavelet transform applied on ECG signals. *Biomedical Signal Processing and Control*, **2017**, 31, 301-308	4.9	94
563	Convolutional neural networks for multi-class brain disease detection using MRI images. *Computerized Medical Imaging and Graphics*, **2019**, 78, 101673	7.6	93
562	Decision support system for the glaucoma using Gabor transformation. *Biomedical Signal Processing and Control*, **2015**, 15, 18-26	4.9	92
561	Cost-effective and non-invasive automated benign and malignant thyroid lesion classification in 3D contrast-enhanced ultrasound using combination of wavelets and textures: a class of ThyroScan□ algorithms. *Technology in Cancer Research and Treatment*, **2011**, 10, 371-80	2.7	92
560	Computer-Aided Diagnosis of Depression Using EEG Signals. *European Neurology*, **2015**, 73, 329-36	2.1	91
559	ThyroScreen system: high resolution ultrasound thyroid image characterization into benign and malignant classes using novel combination of texture and discrete wavelet transform. *Computer Methods and Programs in Biomedicine*, **2012**, 107, 233-41	6.9	91
558	An integrated index for the identification of diabetic retinopathy stages using texture parameters. *Journal of Medical Systems*, **2012**, 36, 2011-20	5.1	91
557	Non-invasive automated 3D thyroid lesion classification in ultrasound: a class of ThyroScan□ systems. *Ultrasonics*, **2012**, 52, 508-20	3.5	90
556	Symptomatic vs. asymptomatic plaque classification in carotid ultrasound. *Journal of Medical Systems*, **2012**, 36, 1861-71	5.1	90
555	Brain functional connectivity patterns for emotional state classification in Parkinson's disease patients without dementia. *Behavioural Brain Research*, **2016**, 298, 248-60	3.4	89
554	Deep Convolutional Neural Network Model for Automated Diagnosis of Schizophrenia Using EEG Signals. *Applied Sciences (Switzerland)*, **2019**, 9, 2870	2.6	89
553	Analysis of epileptic EEG signals using higher order spectra. *Journal of Medical Engineering and Technology*, **2009**, 33, 42-50	1.8	89
552	Automated invasive ductal carcinoma detection based using deep transfer learning with whole-slide images. *Pattern Recognition Letters*, **2020**, 133, 232-239	4.7	88
551	An accurate sleep stages classification system using a new class of optimally time-frequency localized three-band wavelet filter bank. *Computers in Biology and Medicine*, **2018**, 98, 58-75	7	88
550	Analysis of myocardial infarction using discrete wavelet transform. *Journal of Medical Systems*, **2010**, 34, 985-92	5.1	88
549	Breast imaging: A survey. *World Journal of Clinical Oncology*, **2011**, 2, 171-8	2.5	87
548	Automated classification of glaucoma stages using higher order cumulant features. *Biomedical Signal Processing and Control*, **2014**, 10, 174-183	4.9	86
547	An integrated index for detection of Sudden Cardiac Death using Discrete Wavelet Transform and nonlinear features. *Knowledge-Based Systems*, **2015**, 83, 149-158	7.3	85

528	Computer-aided diagnosis of atrial fibrillation based on ECG Signals: A review. *Information Sciences*, **2018**, 467, 99-114	7.7	75
527	Automated detection of schizophrenia using nonlinear signal processing methods. *Artificial Intelligence in Medicine*, **2019**, 100, 101698	7.4	75
526	Atherosclerotic plaque tissue characterization in 2D ultrasound longitudinal carotid scans for automated classification: a paradigm for stroke risk assessment. *Medical and Biological Engineering and Computing*, **2013**, 51, 513-23	3.1	75
525	Application of new deep genetic cascade ensemble of SVM classifiers to predict the Australian credit scoring. *Applied Soft Computing Journal*, **2019**, 84, 105740	7.5	74
524	Computer aided diagnosis of atrial arrhythmia using dimensionality reduction methods on transform domain representation. *Biomedical Signal Processing and Control*, **2014**, 13, 295-305	4.9	72
523	Computer-aided diagnosis of diabetic subjects by heart rate variability signals using discrete wavelet transform method. *Knowledge-Based Systems*, **2015**, 81, 56-64	7.3	72
522	Parkinson's disease: Cause factors, measurable indicators, and early diagnosis. *Computers in Biology and Medicine*, **2018**, 102, 234-241	7	71
521	Automated Depression Detection Using Deep Representation and Sequence Learning with EEG Signals. *Journal of Medical Systems*, **2019**, 43, 205	5.1	70
520	Tunable-Q Wavelet Transform Based Multivariate Sub-Band Fuzzy Entropy with Application to Focal EEG Signal Analysis. *Entropy*, **2017**, 19, 99	2.8	70
519	Automated characterization of fatty liver disease and cirrhosis using curvelet transform and entropy features extracted from ultrasound images. *Computers in Biology and Medicine*, **2016**, 79, 250-258	7	69
518	An integrated alcoholic index using tunable-Q wavelet transform based features extracted from EEG signals for diagnosis of alcoholism. *Applied Soft Computing Journal*, **2017**, 50, 71-78	7.5	69
517	A review on ultrasound-based thyroid cancer tissue characterization and automated classification. *Technology in Cancer Research and Treatment*, **2014**, 13, 289-301	2.7	69
516	Transmission and storage of medical images with patient information. *Computers in Biology and Medicine*, **2003**, 33, 303-10	7	69
515	An automated diagnosis of depression using three-channel bandwidth-duration localized wavelet filter bank with EEG signals. *Cognitive Systems Research*, **2018**, 52, 508-520	4.8	68
514	Automated classification of patients with coronary artery disease using grayscale features from left ventricle echocardiographic images. *Computer Methods and Programs in Biomedicine*, **2013**, 112, 624-32	6.9	68
513	Application of deep learning techniques for heartbeats detection using ECG signals-analysis and review. *Computers in Biology and Medicine*, **2020**, 120, 103726	7	67
512	Automated beat-wise arrhythmia diagnosis using modified U-net on extended electrocardiographic recordings with heterogeneous arrhythmia types. *Computers in Biology and Medicine*, **2019**, 105, 92-101	7	67
511	Machine learning-based coronary artery disease diagnosis: A comprehensive review. *Computers in Biology and Medicine*, **2019**, 111, 103346	7	66

510	A novel algorithm to detect glaucoma risk using texton and local configuration pattern features extracted from fundus images. *Computers in Biology and Medicine*, **2017**, 88, 72-83	7	66
509	Analysis of EEG signals during epileptic and alcoholic states using AR modeling techniques. *Irbm*, **2008**, 29, 44-52	4.8	66
508	Sudden cardiac death (SCD) prediction based on nonlinear heart rate variability features and SCD index. *Applied Soft Computing Journal*, **2016**, 43, 510-519	7.5	65
507	Automated characterization of coronary artery disease, myocardial infarction, and congestive heart failure using contourlet and shearlet transforms of electrocardiogram signal. *Knowledge-Based Systems*, **2017**, 132, 156-166	7.3	64
506	Application of empirical mode decomposition for analysis of normal and diabetic RR-interval signals. *Expert Systems With Applications*, **2015**, 42, 4567-4581	7.8	64
505	Deep learning based liver cancer detection using watershed transform and Gaussian mixture model techniques. *Cognitive Systems Research*, **2019**, 54, 165-175	4.8	64
504	Age-related Macular Degeneration detection using deep convolutional neural network. *Future Generation Computer Systems*, **2018**, 87, 127-135	7.5	64
503	Automated detection of sleep apnea from electrocardiogram signals using nonlinear parameters. *Physiological Measurement*, **2011**, 32, 287-303	2.9	63
502	Study of normal ocular thermogram using textural parameters. *Infrared Physics and Technology*, **2010**, 53, 120-126	2.7	63
501	A novel machine learning approach for early detection of hepatocellular carcinoma patients. *Cognitive Systems Research*, **2019**, 54, 116-127	4.8	63
500	Iterative variational mode decomposition based automated detection of glaucoma using fundus images. *Computers in Biology and Medicine*, **2017**, 88, 142-149	7	62
499	DGHNL: A new deep genetic hierarchical network of learners for prediction of credit scoring. *Information Sciences*, **2020**, 516, 401-418	7.7	62
498	Automatic identification of cardiac health using modeling techniques: A comparative study. *Information Sciences*, **2008**, 178, 4571-4582	7.7	61
497	Heart rate variability analysis using correlation dimension and detrended fluctuation analysis. *IRBM News*, **2002**, 23, 333-339		61
496	Application of an optimal class of antisymmetric wavelet filter banks for obstructive sleep apnea diagnosis using ECG signals. *Computers in Biology and Medicine*, **2018**, 100, 100-113	7	60
495	A novel automated diagnostic system for classification of myocardial infarction ECG signals using an optimal biorthogonal filter bank. *Computers in Biology and Medicine*, **2018**, 102, 341-356	7	60
494	Application of Gabor wavelet and Locality Sensitive Discriminant Analysis for automated identification of breast cancer using digitized mammogram images. *Applied Soft Computing Journal*, **2016**, 46, 151-161	7.5	60
493	Decision support system for focal EEG signals using tunable-Q wavelet transform. *Journal of Computational Science*, **2017**, 20, 52-60	3.4	59

492	An Accurate and Generalized Approach to Plaque Characterization in 346 Carotid Ultrasound Scans. *IEEE Transactions on Instrumentation and Measurement*, **2012**, 61, 1045-1053	5.2	59
491	Epileptic Seizures Detection Using Deep Learning Techniques: A Review. *International Journal of Environmental Research and Public Health*, **2021**, 18,	4.6	59
490	Computer-aided diagnosis of glaucoma using fundus images: A review. *Computer Methods and Programs in Biomedicine*, **2018**, 165, 1-12	6.9	58
489	MMSFL-OWFB: A novel class of orthogonal wavelet filters for epileptic seizure detection. *Knowledge-Based Systems*, **2018**, 160, 265-277	7.3	58
488	Simultaneous storage of patient information with medical images in the frequency domain. *Computer Methods and Programs in Biomedicine*, **2004**, 76, 13-9	6.9	58
487	Nonlinear Dynamics Measures for Automated EEG-Based Sleep Stage Detection. *European Neurology*, **2015**, 74, 268-87	2.1	57
486	Application of infrared thermography in computer aided diagnosis. *Infrared Physics and Technology*, **2014**, 66, 160-175	2.7	57
485	Advances in quantitative muscle ultrasonography using texture analysis of ultrasound images. *Ultrasound in Medicine and Biology*, **2015**, 41, 2520-32	3.5	57
484	Automated localization and segmentation techniques for B-mode ultrasound images: A review. *Computers in Biology and Medicine*, **2018**, 92, 210-235	7	57
483	Automated detection of diabetic subject using pre-trained 2D-CNN models with frequency spectrum images extracted from heart rate signals. *Computers in Biology and Medicine*, **2019**, 113, 103387	7	56
482	Analysis of cardiac signals using spatial filling index and time-frequency domain. *BioMedical Engineering OnLine*, **2004**, 3, 30	4.1	56
481	Comprehensive electrocardiographic diagnosis based on deep learning. *Artificial Intelligence in Medicine*, **2020**, 103, 101789	7.4	55
480	Automated oral cancer identification using histopathological images: a hybrid feature extraction paradigm. *Micron*, **2012**, 43, 352-64	2.3	55
479	Automated detection of premature delivery using empirical mode and wavelet packet decomposition techniques with uterine electromyogram signals. *Computers in Biology and Medicine*, **2017**, 85, 33-42	7	54
478	Study of heart rate variability signals at sitting and lying postures. *Journal of Bodywork and Movement Therapies*, **2005**, 9, 134-141	1.6	54
477	A deep convolutional neural network model for automated identification of abnormal EEG signals. *Neural Computing and Applications*, **2020**, 32, 15857-15868	4.8	54
476	A novel Parkinson's Disease Diagnosis Index using higher-order spectra features in EEG signals. *Neural Computing and Applications*, **2018**, 30, 1225-1235	4.8	53
475	Effect of Selenium Substitution on Intersystem Crossing in Conjugated Donor-Acceptor-Donor Chromophores: The LUMO Matters the Most. *Journal of Physical Chemistry Letters*, **2016**, 7, 693-7	6.4	53

474	Ultrasound-based tissue characterization and classification of fatty liver disease: A screening and diagnostic paradigm. *Knowledge-Based Systems*, **2015**, 75, 66-77	7.3	52
473	Application of wavelet techniques for cancer diagnosis using ultrasound images: A Review. *Computers in Biology and Medicine*, **2016**, 69, 97-111	7	51
472	Automated diagnosis of atrial fibrillation ECG signals using entropy features extracted from flexible analytic wavelet transform. *Biocybernetics and Biomedical Engineering*, **2018**, 38, 564-573	5.7	51
471	Understanding symptomatology of atherosclerotic plaque by image-based tissue characterization. *Computer Methods and Programs in Biomedicine*, **2013**, 110, 66-75	6.9	51
470	Formal design methods for reliable computer-aided diagnosis: a review. *IEEE Reviews in Biomedical Engineering*, **2012**, 5, 15-28	6.4	51
469	Decision support system for fatty liver disease using GIST descriptors extracted from ultrasound images. *Information Fusion*, **2016**, 29, 32-39	16.7	49
468	Entropies for automated detection of coronary artery disease using ECG signals: A review. *Biocybernetics and Biomedical Engineering*, **2018**, 38, 373-384	5.7	48
467	Application of multiresolution analysis for automated detection of brain abnormality using MR images: A comparative study. *Future Generation Computer Systems*, **2019**, 90, 359-367	7.5	48
466	Computer-aided diagnosis of Myocardial Infarction using ultrasound images with DWT, GLCM and HOS methods: A comparative study. *Computers in Biology and Medicine*, **2015**, 62, 86-93	7	48
465	Automatic identification of epileptic electroencephalography signals using higher-order spectra. *Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine*, **2009**, 223, 485-95	1.7	48
464	A review of automated sleep stage scoring based on physiological signals for the new millennia. *Computer Methods and Programs in Biomedicine*, **2019**, 176, 81-91	6.9	47
463	Automated diagnosis of autism: in search of a mathematical marker. *Reviews in the Neurosciences*, **2014**, 25, 851-61	4.7	47
462	An integrated diabetic index using heart rate variability signal features for diagnosis of diabetes. *Computer Methods in Biomechanics and Biomedical Engineering*, **2013**, 16, 222-34	2.1	47
461	Thyroid lesion classification in 242 patient population using Gabor transform features from high resolution ultrasound images. *Knowledge-Based Systems*, **2016**, 107, 235-245	7.3	46
460	Cardiac state diagnosis using adaptive neuro-fuzzy technique. *Medical Engineering and Physics*, **2006**, 28, 809-15	2.4	46
459	Analysis of cardiac health using fractal dimension and wavelet transformation. *IRBM News*, **2005**, 26, 133-139		46
458	DIAGNOSIS OF MULTICLASS TACHYCARDIA BEATS USING RECURRENCE QUANTIFICATION ANALYSIS AND ENSEMBLE CLASSIFIERS. *Journal of Mechanics in Medicine and Biology*, **2016**, 16, 1640005	0.7	46
457	Automated diabetic macular edema (DME) grading system using DWT, DCT Features and maculopathy index. *Computers in Biology and Medicine*, **2017**, 84, 59-68	7	45

456	Computer-aided diagnosis of alcoholism-related EEG signals. *Epilepsy and Behavior*, **2014**, 41, 257-63	3.2	45
455	Evaluation of tear evaporation from ocular surface by functional infrared thermography. *Medical Physics*, **2010**, 37, 6022-34	4.4	45
454	Dual-Tree Complex Wavelet Transform-Based Features for Automated Alcoholism Identification. *International Journal of Fuzzy Systems*, **2018**, 20, 1297-1308	3.6	44
453	Ultrasound IMT measurement on a multi-ethnic and multi-institutional database: our review and experience using four fully automated and one semi-automated methods. *Computer Methods and Programs in Biomedicine*, **2012**, 108, 946-60	6.9	44
452	Automated Detection of Autism Spectrum Disorder Using a Convolutional Neural Network. *Frontiers in Neuroscience*, **2019**, 13, 1325	5.1	44
451	Automated screening system for retinal health using bi-dimensional empirical mode decomposition and integrated index. *Computers in Biology and Medicine*, **2016**, 75, 54-62	7	44
450	Automated technique for coronary artery disease characterization and classification using DD-DTDWT in ultrasound images. *Biomedical Signal Processing and Control*, **2018**, 40, 324-334	4.9	43
449	Automated detection of atrial fibrillation using Bayesian paradigm. *Knowledge-Based Systems*, **2013**, 54, 269-275	7.3	43
448	Artificial Intelligence Techniques for Automated Diagnosis of Neurological Disorders. *European Neurology*, **2019**, 82, 41-64	2.1	43
447	Computer aided diagnosis of diabetic foot using infrared thermography: A review. *Computers in Biology and Medicine*, **2017**, 91, 326-336	7	42
446	Pectoral muscle segmentation: a review. *Computer Methods and Programs in Biomedicine*, **2013**, 110, 48-57	6.9	42
445	Remote-sensing infrared thermography. *IEEE Engineering in Medicine and Biology Magazine*, **2009**, 28, 76-83		41
444	Automated heartbeat classification and detection of arrhythmia using optimal orthogonal wavelet filters. *Informatics in Medicine Unlocked*, **2019**, 16, 100221	5.3	40
443	Automated detection of abnormal EEG signals using localized wavelet filter banks. *Pattern Recognition Letters*, **2020**, 133, 188-194	4.7	40
442	Towards precision medicine: from quantitative imaging to radiomics. *Journal of Zhejiang University: Science B*, **2018**, 19, 6-24	4.5	40
441	Use of Accumulated Entropies for Automated Detection of Congestive Heart Failure in Flexible Analytic Wavelet Transform Framework Based on Short-Term HRV Signals. *Entropy*, **2017**, 19, 92	2.8	40
440	Risk factors prediction, clinical outcomes, and mortality in COVID-19 patients. *Journal of Medical Virology*, **2021**, 93, 2307-2320	19.7	40
439	Fusion of convolution neural network, support vector machine and Sobel filter for accurate detection of COVID-19 patients using X-ray images. *Biomedical Signal Processing and Control*, **2021**, 68, 102622	4.9	40

438	Computer-aided diagnosis of congestive heart failure using ECG signals - A review. *Physica Medica*, **2019**, 62, 95-104	2.7	39
437	ResNet-Attention model for human authentication using ECG signals. *Expert Systems*, **2020**, 38, e12547	2.1	39
436	Association between work-related features and coronary artery disease: A heterogeneous hybrid feature selection integrated with balancing approach. *Pattern Recognition Letters*, **2020**, 133, 33-40	4.7	39
435	Heart Rate Variability **2007**, 121-165		39
434	Novel risk index for the identification of age-related macular degeneration using radon transform and DWT features. *Computers in Biology and Medicine*, **2016**, 73, 131-40	7	39
433	A new approach to identify obstructive sleep apnea using an optimal orthogonal wavelet filter bank with ECG signals. *Informatics in Medicine Unlocked*, **2019**, 16, 100170	5.3	38
432	Applications of deep learning techniques for automated multiple sclerosis detection using magnetic resonance imaging: A review. *Computers in Biology and Medicine*, **2021**, 136, 104697	7	38
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