Pankaj K Jain

List of Publications by Year
in descending order

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175	8,729	38742 50	62596 80
papers	citations	h-index	g-index

178	178	178	5276
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Shape recovery algorithms using level sets in 2-D/3-D medical imagery: a state-of-the-art review. IEEE Transactions on Information Technology in Biomedicine, 2002, 6, 8-28.	3.2	266
2	A Review on a Deep Learning Perspective in Brain Cancer Classification. Cancers, 2019, 11, 111.	3.7	253
3	The present and future of deep learning in radiology. European Journal of Radiology, 2019, 114, 14-24.	2.6	229
4	A state of the art review on intimaâ€“media thickness (IMT) measurement and wall segmentation techniques for carotid ultrasound. Computer Methods and Programs in Biomedicine, 2010, 100, 201-221.	4.7	195
5	Comparative approaches for classification of diabetes mellitus data: Machine learning paradigm. Computer Methods and Programs in Biomedicine, 2017, 152, 23-34.	4.7	182
6	Cerebral Small Vessel Disease: A Review Focusing on Pathophysiology, Biomarkers, and Machine Learning Strategies. Journal of Stroke, 2018, 20, 302-320.	3.2	182
7	Plaque Echolucency and Stroke Risk in Asymptomatic Carotid Stenosis. Stroke, 2015, 46, 91-97.	2.0	174
8	Atherosclerotic Risk Stratification Strategy for Carotid Arteries Using Texture-Based Features. Ultrasound in Medicine and Biology, 2012, 38, 899-915.	1.5	168
9	Accurate Diabetes Risk Stratification Using Machine Learning: Role of Missing Value and Outliers. Journal of Medical Systems, 2018, 42, 92.	3.6	166
10	Linear and nonlinear analysis of normal and CAD-affected heart rate signals. Computer Methods and Programs in Biomedicine, 2014, 113, 55-68.	4.7	145
11	Characterization of a Completely User-Independent Algorithm for Carotid Artery Segmentation in 2-D Ultrasound Images. IEEE Transactions on Instrumentation and Measurement, 2007, 56, 1265-1274.	4.7	136
12	Symtosis: A liver ultrasound tissue characterization and risk stratification in optimized deep learning paradigm. Computer Methods and Programs in Biomedicine, 2018, 155, 165-177.	4.7	136
13	Multiclass magnetic resonance imaging brain tumor classification using artificial intelligence paradigm. Computers in Biology and Medicine, 2020, 122, 103804.	7.0	134
14	State-of-the-art review on deep learning in medical imaging. Frontiers in Bioscience - Landmark, 2019, 24, 392-426.	3.0	122
15	Automated stratification of liver disease in ultrasound: An online accurate feature classification paradigm. Computer Methods and Programs in Biomedicine, 2016, 130, 118-134.	4.7	121
16	Intima-media thickness: setting a standard for a completely automated method of ultrasound measurement. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2010, 57, 1112-1124.	3.0	119
17	A State-of-the-Art Review on Segmentation Algorithms in Intravascular Ultrasound (IVUS) Images. IEEE Transactions on Information Technology in Biomedicine, 2012, 16, 823-834.	3.2	114
18	Computer-aided diagnosis of psoriasis skin images with HOS, texture and color features: A first comparative study of its kind. Computer Methods and Programs in Biomedicine, 2016, 126, 98-109.	4.7	110

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19	Symptomatic vs. Asymptomatic Plaque Classification in Carotid Ultrasound. Journal of Medical Systems, 2012, 36, 1861-1871.	3.6	105
20	Application of higher order statistics for atrial arrhythmia classification. Biomedical Signal Processing and Control, 2013, 8, 888-900.	5.7	102
21	Human activity recognition in artificial intelligence framework: a narrative review. Artificial Intelligence Review, 2022, 55, 4755-4808.	15.7	102
22	Completely Automated Multiresolution Edge Snapperâ€"A New Technique for an Accurate Carotid Ultrasound IMT Measurement: Clinical Validation and Benchmarking on a Multi-Institutional Database. IEEE Transactions on Image Processing, 2012, 21, 1211-1222.	9.8	101
23	Data mining framework for fatty liver disease classification in ultrasound: A hybrid feature extraction paradigm. Medical Physics, 2012, 39, 4255-4264.	3.0	100
24	Extreme Learning Machine Framework for Risk Stratification of Fatty Liver Disease Using Ultrasound Tissue Characterization. Journal of Medical Systems, 2017, 41, 152.	3.6	95
25	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, 513-523.	2.8	94
26	An Integrated Approach to Computer-Based Automated Tracing and Its Validation for 200 Common Carotid Arterial Wall Ultrasound Images. Journal of Ultrasound in Medicine, 2010, 29, 399-418.	1.7	86
27	Speckle reduction in medical ultrasound images using an unbiased non-local means method. Biomedical Signal Processing and Control, 2016, 28, 1-8.	5.7	86
28	A Review on Ultrasound-Based Thyroid Cancer Tissue Characterization and Automated Classification. Technology in Cancer Research and Treatment, 2014, 13, 289-301.	1.9	85
29	Artificial intelligence-based hybrid deep learning models for image classification: The first narrative review. Computers in Biology and Medicine, 2021, 137, 104803.	7.0	81
30	Statistical characterization and classification of colon microarray gene expression data using multiple machine learning paradigms. Computer Methods and Programs in Biomedicine, 2019, 176, 173-193.	4.7	80
31	COVID-19 pathways for brain and heart injury in comorbidity patients: A role of medical imaging and artificial intelligence-based COVID severity classification: A review. Computers in Biology and Medicine, 2020, 124, 103960.	7.0	79
32	Automated classification of patients with coronary artery disease using grayscale features from left ventricle echocardiographic images. Computer Methods and Programs in Biomedicine, 2013, 112, 624-632.	4.7	76
33	AUTOMATIC COMPUTER-BASED TRACINGS (ACT) IN LONGITUDINAL 2-D ULTRASOUND IMAGES USING DIFFERENT SCANNERS. Journal of Mechanics in Medicine and Biology, 2009, 09, 481-505.	0.7	74
34	Hybrid deep learning segmentation models for atherosclerotic plaque in internal carotid artery B-mode ultrasound. Computers in Biology and Medicine, 2021, 136, 104721.	7.0	73
35	An Accurate and Generalized Approach to Plaque Characterization in 346 Carotid Ultrasound Scans. IEEE Transactions on Instrumentation and Measurement, 2012, 61, 1045-1053.	4.7	71
36	Reliable and accurate psoriasis disease classification in dermatology images using comprehensive feature space in machine learning paradigm. Expert Systems With Applications, 2015, 42, 6184-6195.	7.6	71

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37	Characterization of Single Thyroid Nodules by Contrast-Enhanced 3-D Ultrasound. Ultrasound in Medicine and Biology, 2010, 36, 1616-1625.	1.5	70
38	Understanding symptomatology of atherosclerotic plaque by image-based tissue characterization. Computer Methods and Programs in Biomedicine, 2013, 110, 66-75.	4.7	70
39	Improved Correlation between Carotid and Coronary Atherosclerosis SYNTAX Score Using Automated Ultrasound Carotid Bulb Plaque IMT Measurement. Ultrasound in Medicine and Biology, 2015, 41, 1247-1262.	1.5	69
40	Deep learning strategy for accurate carotid intima-media thickness measurement: An ultrasound study on Japanese diabetic cohort. Computers in Biology and Medicine, 2018, 98, 100-117.	7.0	68
41	PCA-based polling strategy in machine learning framework for coronary artery disease risk assessment in intravascular ultrasound: A link between carotid and coronary grayscale plaque morphology. Computer Methods and Programs in Biomedicine, 2016, 128, 137-158.	4.7	67
42	Rheumatoid Arthritis: Atherosclerosis Imaging and Cardiovascular Risk Assessment Using Machine and Deep Learningâ€“Based Tissue Characterization. Current Atherosclerosis Reports, 2019, 21, 7.	4.8	64
43	Stroke Risk Stratification and its Validation using Ultrasonic Echolucent Carotid Wall Plaque Morphology: A Machine Learning Paradigm. Computers in Biology and Medicine, 2017, 80, 77-96.	7.0	63
44	Plaque Tissue Morphology-Based Stroke Risk Stratification Using Carotid Ultrasound: A Polling-Based PCA Learning Paradigm. Journal of Medical Systems, 2017, 41, 98.	3.6	61
45	An artificial intelligence framework and its bias for brain tumor segmentation: A narrative review. Computers in Biology and Medicine, 2022, 143, 105273.	7.0	57
46	Automatic Lung Segmentation Using Control Feedback System: Morphology and Texture Paradigm. Journal of Medical Systems, 2015, 39, 22.	3.6	56
47	GyneScan: An Improved Online Paradigm for Screening of Ovarian Cancer via Tissue Characterization. Technology in Cancer Research and Treatment, 2014, 13, 529-539.	1.9	54
48	A Survey on Coronary Atherosclerotic Plaque Tissue Characterization in Intravascular Optical Coherence Tomography. Current Atherosclerosis Reports, 2018, 20, 33.	4.8	54
49	A low-cost machine learning-based cardiovascular/stroke risk assessment system: integration of conventional factors with image phenotypes. Cardiovascular Diagnosis and Therapy, 2019, 9, 420-430.	1.7	54
50	Deep learning fully convolution network for lumen characterization in diabetic patients using carotid ultrasound: a tool for stroke risk. Medical and Biological Engineering and Computing, 2019, 57, 543-564.	2.8	54
51	A Novel Block Imaging Technique Using Nine Artificial Intelligence Models for COVID-19 Disease Classification, Characterization and Severity Measurement in Lung Computed Tomography Scans on an Italian Cohort. Journal of Medical Systems, 2021, 45, 28.	3.6	53
52	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, 946-960.	4.7	52
53	Exploring the color feature power for psoriasis risk stratification and classification: A data mining paradigm. Computers in Biology and Medicine, 2015, 65, 54-68.	7.0	52
54	3-D optimized classification and characterization artificial intelligence paradigm for cardiovascular/stroke risk stratification using carotid ultrasound-based delineated plaque: Atheromaticâ„¢ 2.0. Computers in Biology and Medicine, 2020, 125, 103958.	7.0	52

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55	Stochastic Modeling for Medical Image Analysis. , 0, , .		52
56	A comparative approach of four different image registration techniques for quantitative assessment of coronary artery calcium lesions using intravascular ultrasound. Computer Methods and Programs in Biomedicine, 2015, 118, 158-172.	4.7	51
57	Cardiovascular/stroke risk predictive calculators: a comparison between statistical and machine learning models. Cardiovascular Diagnosis and Therapy, 2020, 10, 919-938.	1.7	46
58	Six artificial intelligence paradigms for tissue characterisation and classification of non-COVID-19 pneumonia against COVID-19 pneumonia in computed tomography lungs. International Journal of Computer Assisted Radiology and Surgery, 2021, 16, 423-434.	2.8	45
59	Systematic Review of Artificial Intelligence in Acute Respiratory Distress Syndrome for COVID-19 Lung Patients: A Biomedical Imaging Perspective. IEEE Journal of Biomedical and Health Informatics, 2021, 25, 4128-4139.	6.3	45
60	Prostate Tissue Characterization/Classification in 144 Patient Population Using Wavelet and Higher Order Spectra Features from Transrectal Ultrasound Images. Technology in Cancer Research and Treatment, 2013, 12, 545-557.	1.9	44
61	A new method for IVUS-based coronary artery disease risk stratification: A link between coronary & carotid ultrasound plaque burdens. Computer Methods and Programs in Biomedicine, 2016, 124, 161-179.	4.7	43
62	Hypothesis Validation of Far-Wall Brightness in Carotid-Artery Ultrasound for Feature-Based IMT Measurement Using a Combination of Level-Set Segmentation and Registration. IEEE Transactions on Instrumentation and Measurement, 2012, 61, 1054-1063.	4.7	42
63	Plaque Tissue Characterization and Classification in Ultrasound Carotid Scans: A Paradigm for Vascular Feature Amalgamation. IEEE Transactions on Instrumentation and Measurement, 2013, 62, 392-400.	4.7	42
64	Two-stage artificial intelligence model for jointly measurement of atherosclerotic wall thickness and plaque burden in carotid ultrasound: A screening tool for cardiovascular/stroke risk assessment. Computers in Biology and Medicine, 2020, 123, 103847.	7.0	42
65	Multiclass machine learning vs. conventional calculators for stroke/CVD risk assessment using carotid plaque predictors with coronary angiography scores as gold standard: a 500 participants study. International Journal of Cardiovascular Imaging, 2021, 37, 1171-1187.	1.5	41
66	Wilson disease tissue classification and characterization using seven artificial intelligence models embedded with 3D optimization paradigm on a weak training brain magnetic resonance imaging datasets: a supercomputer application. Medical and Biological Engineering and Computing, 2021, 59, 511-533.	2.8	41
67	Shapeâ€Based Approach for Coronary Calcium Lesion Volume Measurement on Intravascular Ultrasound Imaging and Its Association With Carotid Intimaâ€Media Thickness. Journal of Ultrasound in Medicine, 2015, 34, 469-482.	1.7	40
68	A Review on Atherosclerotic Biology, Wall Stiffness, Physics of Elasticity, and Its Ultrasound-Based Measurement. Current Atherosclerosis Reports, 2016, 18, 83.	4.8	40
69	Accurate cloud-based smart IMT measurement, its validation and stroke risk stratification in carotid ultrasound: A web-based point-of-care tool for multicenter clinical trial. Computers in Biology and Medicine, 2016, 75, 217-234.	7.0	39
70	Imaging in COVID-19-related myocardial injury. International Journal of Cardiovascular Imaging, 2021, 37, 1349-1360.	1.5	39
71	Multimodality carotid plaque tissue characterization and classification in the artificial intelligence paradigm: a narrative review for stroke application. Annals of Translational Medicine, 2021, 9, 1206-1206.	1.7	39
72	Global perspective on carotid intima-media thickness and plaque: should the current measurement guidelines be revisited?. International Angiology, 2020, 38, 451-465.	0.9	39

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73	Constrained snake vs. conventional snake for carotid ultrasound automated IMT measurements on multi-center data sets. Ultrasonics, 2012, 52, 949-961.	3.9	38
74	First review on psoriasis severity risk stratification: An engineering perspective. Computers in Biology and Medicine, 2015, 63, 52-63.	7.0	38
75	Wall-based measurement features provides an improved IVUS coronary artery risk assessment when fused with plaque texture-based features during machine learning paradigm. Computers in Biology and Medicine, 2017, 91, 198-212.	7.0	38
76	Performance evaluation of 10-year ultrasound image-based stroke/cardiovascular (CV) risk calculator by comparing against ten conventional CV risk calculators: A diabetic study. Computers in Biology and Medicine, 2019, 105, 125-143.	7.0	38
77	COVLIAS 1.0: Lung Segmentation in COVID-19 Computed Tomography Scans Using Hybrid Deep Learning Artificial Intelligence Models. Diagnostics, 2021, 11, 1405.	2.6	38
78	Role of Artificial Intelligence in Radiogenomics for Cancers in the Era of Precision Medicine. Cancers, 2022, 14, 2860.	3.7	38
79	Fully Automated Dual-Snake Formulation for Carotid Intima-Media Thickness Measurement. Journal of Ultrasound in Medicine, 2012, 31, 1123-1136.	1.7	37
80	A Review on Carotid Ultrasound Atherosclerotic Tissue Characterization and Stroke Risk Stratification in Machine Learning Framework. Current Atherosclerosis Reports, 2015, 17, 55.	4.8	36
81	Nonlinear model for the carotid artery disease 10â€year risk prediction by fusing conventional cardiovascular factors to carotid ultrasound image phenotypes: A Japanese diabetes cohort study. Echocardiography, 2019, 36, 345-361.	0.9	36
82	Completely automated robust edge snapper for carotid ultrasound IMT measurement on a multi-institutional database of 300 images. Medical and Biological Engineering and Computing, 2011, 49, 935-945.	2.8	35
83	Automated segmental-IMT measurement in thin/thick plaque with bulb presence in carotid ultrasound from multiple scanners: Stroke risk assessment. Computer Methods and Programs in Biomedicine, 2017, 141, 73-81.	4.7	35
84	Ultrasound-based carotid stenosis measurement and risk stratification in diabetic cohort: a deep learning paradigm. Cardiovascular Diagnosis and Therapy, 2019, 9, 439-461.	1.7	35
85	Ovarian Tumor Characterization using 3D Ultrasound. Technology in Cancer Research and Treatment, 2012, 11, 543-552.	1.9	34
86	Comparison between manual and automated analysis for the quantification of carotid wall by using sonography. A validation study with CT. European Journal of Radiology, 2012, 81, 911-918.	2.6	34
87	Calcium detection, its quantification, and grayscale morphology-based risk stratification using machine learning in multimodality big data coronary and carotid scans: A review. Computers in Biology and Medicine, 2018, 101, 184-198.	7.0	34
88	Artificial intelligence framework for predictive cardiovascular and stroke risk assessment models: A narrative review of integrated approaches using carotid ultrasound. Computers in Biology and Medicine, 2020, 126, 104043.	7.0	34
89	Ultrasound-based internal carotid artery plaque characterization using deep learning paradigm on a supercomputer: a cardiovascular disease/stroke risk assessment system. International Journal of Cardiovascular Imaging, 2021, 37, 1511-1528.	1.5	34
90	Bidirectional link between diabetes mellitus and coronavirus disease 2019 leading to cardiovascular disease: A narrative review. World Journal of Diabetes, 2021, 12, 215-237.	3.5	34

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91	Understanding the bias in machine learning systems for cardiovascular disease risk assessment: The first of its kind review. Computers in Biology and Medicine, 2022, 142, 105204.	7.0	34
92	A Special Report on Changing Trends in Preventive Stroke/Cardiovascular Risk Assessment Via B-Mode Ultrasonography. Current Atherosclerosis Reports, 2019, 21, 25.	4.8	33
93	Effect of carotid image-based phenotypes on cardiovascular risk calculator: AECRS1.0. Medical and Biological Engineering and Computing, 2019, 57, 1553-1566.	2.8	33
94	Unseen Artificial Intelligenceâ€"Deep Learning Paradigm for Segmentation of Low Atherosclerotic Plaque in Carotid Ultrasound: A Multicenter Cardiovascular Study. Diagnostics, 2021, 11, 2257.	2.6	33
95	Intra- and inter-operator reproducibility of automated cloud-based carotid lumen diameter ultrasound measurement. Indian Heart Journal, 2018, 70, 649-664.	0.5	32
96	Cardiovascular/stroke risk prevention: A new machine learning framework integrating carotid ultrasound image-based phenotypes and its harmonics with conventional risk factors. Indian Heart Journal, 2020, 72, 258-264.	0.5	31
97	Inter-observer Variability Analysis of Automatic Lung Delineation in Normal and Disease Patients. Journal of Medical Systems, 2016, 40, 142.	3.6	30
98	Risk stratification of 2D ultrasound-based breast lesions using hybrid feature selection in machine learning paradigm. Measurement: Journal of the International Measurement Confederation, 2017, 105, 146-157.	5.0	30
99	Ranking of stroke and cardiovascular risk factors for an optimal risk calculator design: Logistic regression approach. Computers in Biology and Medicine, 2019, 108, 182-195.	7.0	30
100	Ten Fast Transfer Learning Models for Carotid Ultrasound Plaque Tissue Characterization in Augmentation Framework Embedded with Heatmaps for Stroke Risk Stratification. Diagnostics, 2021, 11, 2109.	2.6	30
101	Eight pruning deep learning models for low storage and high-speed COVID-19 computed tomography lung segmentation and heatmap-based lesion localization: A multicenter study using COVLIAS 2.0. Computers in Biology and Medicine, 2022, 146, 105571.	7.0	30
102	Carotid artery recognition system: A comparison of three automated paradigms for ultrasound images. Medical Physics, 2011, 39, 378-391.	3.0	29
103	Complications in COVID-19 patients: Characteristics of pulmonary embolism. Clinical Imaging, 2021, 77, 244-249.	1.5	29
104	Low-cost preventive screening using carotid ultrasound in patients with diabetes. Frontiers in Bioscience - Landmark, 2020, 25, 1132-1171.	3.0	29
105	Localization of common carotid artery transverse section in B-mode ultrasound images using faster RCNN: a deep learning approach. Medical and Biological Engineering and Computing, 2020, 58, 471-482.	2.8	28
106	Review of imaging biomarkers for the vulnerable carotid plaque. JVS Vascular Science, 2021, 2, 149-158.	1.1	28
107	Carotid IMT Variability (IMTV) and Its Validation in Symptomatic versus Asymptomatic Italian Population: Can This Be a Useful Index for Studying Symptomaticity?. Echocardiography, 2012, 29, 1111-1119.	0.9	27
108	Lung disease stratification using amalgamation of Riesz and Gabor transforms in machine learning framework. Computers in Biology and Medicine, 2017, 89, 197-211.	7.0	27

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109	Web-based accurate measurements of carotid lumen diameter and stenosis severity: An ultrasound-based clinical tool for stroke risk assessment during multicenter clinical trials. Computers in Biology and Medicine, 2017, 91, 306-317.	7.0	27
110	Artificial intelligence in computed tomography plaque characterization: A review. European Journal of Radiology, 2021, 140, 109767.	2.6	27
111	A hybrid deep learning paradigm for carotid plaque tissue characterization and its validation in multicenter cohorts using a supercomputer framework. Computers in Biology and Medicine, 2022, 141, 105131.	7.0	27
112	Echolucency-based phenotype in carotid atherosclerosis disease for risk stratification of diabetes patients. Diabetes Research and Clinical Practice, 2018, 143, 322-331.	2.8	26
113	Greedy Technique and Its Validation for Fusion of Two Segmentation Paradigms Leads to an Accurate Intimaâ€“Media Thickness Measure in Plaque Carotid Arterial Ultrasound. Journal for Vascular Ultrasound, 2010, 34, 63-73.	0.1	25
114	Morphologic TPA (mTPA) and composite risk score for moderate carotid atherosclerotic plaque is strongly associated with HbA1c in diabetes cohort. Computers in Biology and Medicine, 2018, 101, 128-145.	7.0	25
115	Cardiovascular risk assessment in patients with rheumatoid arthritis using carotid ultrasound B-mode imaging. Rheumatology International, 2020, 40, 1921-1939.	3.0	25
116	Accurate lumen diameter measurement in curved vessels in carotid ultrasound: an iterative scale-space and spatial transformation approach. Medical and Biological Engineering and Computing, 2017, 55, 1415-1434.	2.8	24
117	Texture analysis imaging â€œwhat a clinical radiologist needs to knowâ€• European Journal of Radiology, 2022, 146, 110055.	2.6	24
118	Atheromatic™: Symptomatic vs. asymptomatic classification of carotid ultrasound plaque using a combination of HOS, DWT & texture. , 2011, 2011, 4489-92.		23
119	Automated carotid artery intima layer regional segmentation. Physics in Medicine and Biology, 2011, 56, 4073-4090.	3.0	23
120	Ovarian Tissue Characterization in Ultrasound. Technology in Cancer Research and Treatment, 2015, 14, 251-261.	1.9	23
121	Carotid interâ€adventitial diameter is more strongly related to plaque score than lumen diameter: An automated tool for stroke analysis. Journal of Clinical Ultrasound, 2016, 44, 210-220.	0.8	23
122	CT imaging features of carotid artery plaque vulnerability. Annals of Translational Medicine, 2020, 8, 1261-1261.	1.7	23
123	Ct Findings of Covid-19 Pneumonia in Icu-Patients. Journal of Public Health Research, 2021, 10, jphr.2021.2270.	1.2	23
124	Automated Carotid IMT Measurement and Its Validation in Low Contrast Ultrasound Database of 885 Patient Indian Population Epidemiological Study: Results of AtheroEdgeÂ® Software. , 2014, , 209-219.		23
125	Automated deep learning-based paradigm for high-risk plaque detection in B-mode common carotid ultrasound scans: an asymptomatic Japanese cohort study. International Angiology, 2022, 41, .	0.9	23
126	Bias Investigation in Artificial Intelligence Systems for Early Detection of Parkinsonâ€™s Disease: A Narrative Review. Diagnostics, 2022, 12, 166.	2.6	23

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127	Four Types of Multiclass Frameworks for Pneumonia Classification and Its Validation in X-ray Scans Using Seven Types of Deep Learning Artificial Intelligence Models. Diagnostics, 2022, 12, 652.	2.6	23
128	COVLIAS 2.0-cXAI: Cloud-Based Explainable Deep Learning System for COVID-19 Lesion Localization in Computed Tomography Scans. Diagnostics, 2022, 12, 1482.	2.6	23
129	State-of-the-art review on automated lumen and adventitial border delineation and its measurements in carotid ultrasound. Computer Methods and Programs in Biomedicine, 2018, 163, 155-168.	4.7	22
130	International Union of Angiology (IUA) consensus paper on imaging strategies in atherosclerotic carotid artery imaging: From basic strategies to advanced approaches. Atherosclerosis, 2022, 354, 23-40.	0.8	22
131	Semiautomated analysis of carotid artery wall thickness in MRI. Journal of Magnetic Resonance Imaging, 2014, 39, 1457-1467.	3.4	21
132	Reliable and Accurate Calcium Volume Measurement in Coronary Artery Using Intravascular Ultrasound Videos. Journal of Medical Systems, 2016, 40, 51.	3.6	21
133	Cardiovascular/Stroke Risk Stratification in Parkinsonâ€™s Disease Patients Using Atherosclerosis Pathway and Artificial Intelligence Paradigm: A Systematic Review. Metabolites, 2022, 12, 312.	2.9	21
134	Relationship between leukoaraiosis, carotid intima-media thickness and intima-media thickness variability: Preliminary results. European Radiology, 2016, 26, 4423-4431.	4.5	20
135	Morphological Carotid Plaque Area Is Associated With Glomerular Filtration Rate: A Study of South Asian Indian Patients With Diabetes and Chronic Kidney Disease. Angiology, 2020, 71, 520-535.	1.8	20
136	Inter-Variability Study of COVLIAS 1.0: Hybrid Deep Learning Models for COVID-19 Lung Segmentation in Computed Tomography. Diagnostics, 2021, 11, 2025.	2.6	20
137	A Powerful Paradigm for Cardiovascular Risk Stratification Using Multiclass, Multi-Label, and Ensemble-Based Machine Learning Paradigms: A Narrative Review. Diagnostics, 2022, 12, 722.	2.6	20
138	Evaluation of Carotid Wall Thickness by using Computed Tomography and Semiautomated Ultrasonographic Software. Journal for Vascular Ultrasound, 2011, 35, 136-142.	0.1	19
139	Asymptomatic Carotid Diseaseâ€”A New Tool for Assessing Neurological Risk. Echocardiography, 2014, 31, 353-361.	0.9	19
140	An automated technique for carotid far wall classification using grayscale features and wall thickness variability. Journal of Clinical Ultrasound, 2015, 43, 302-311.	0.8	19
141	Five multiresolution-based calcium volume measurement techniques from coronary IVUS videos: A comparative approach. Computer Methods and Programs in Biomedicine, 2016, 134, 237-258.	4.7	19
142	Two Automated Techniques for Carotid Lumen Diameter Measurement: Regional versus Boundary Approaches. Journal of Medical Systems, 2016, 40, 182.	3.6	19
143	Low-Cost Office-Based Cardiovascular Risk Stratification Using Machine Learning and Focused Carotid Ultrasound in an Asian-Indian Cohort. Journal of Medical Systems, 2020, 44, 208.	3.6	18
144	Cardiovascular disease detection using machine learning and carotid/femoral arterial imaging frameworks in rheumatoid arthritis patients. Rheumatology International, 2022, 42, 215-239.	3.0	18

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145	A machine learning framework for risk prediction of multi-label cardiovascular events based on focused carotid plaque B-Mode ultrasound: A Canadian study. Computers in Biology and Medicine, 2022, 140, 105102.	7.0	18
146	Geometric Total Plaque Area Is an Equally Powerful Phenotype Compared With Carotid Intima-Media Thickness for Stroke Risk Assessment: A Deep Learning Approach. Journal for Vascular Ultrasound, 2018, 42, 162-188.	0.1	17
147	Does the Carotid Bulb Offer a Better 10-Year CVD/Stroke Risk Assessment Compared to the Common Carotid Artery? A 1516 Ultrasound Scan Study. Angiology, 2020, 71, 920-933.	1.8	16
148	Integration of estimated glomerular filtration rate biomarker in image-based cardiovascular disease/stroke risk calculator: a south Asian-Indian diabetes cohort with moderate chronic kidney disease. International Angiology, 2020, 39, 290-306.	0.9	16
149	Analysis of carotid artery plaque and wall boundaries on CT images by using a semi-automatic method based on level set model. Neuroradiology, 2012, 54, 1207-1214.	2.2	15
150	A novel approach to multiclass psoriasis disease risk stratification: Machine learning paradigm. Biomedical Signal Processing and Control, 2016, 28, 27-40.	5.7	15
151	Carotid artery stenosis and brain connectivity: the role of white matter hyperintensities. Neuroradiology, 2020, 62, 377-387.	2.2	15
152	Carotid plaque imaging profiling in subjects with risk factors (diabetes and hypertension). Cardiovascular Diagnosis and Therapy, 2020, 10, 1005-1018.	1.7	15
153	Ultrasound-based stroke/cardiovascular risk stratification using Framingham Risk Score and ASCVD Risk Score based on â€œIntegrated Vascular Ageâ€•instead of â€œChronological Ageâ€• a multi-ethnic study of Asian Indian, Caucasian, and Japanese cohorts. Cardiovascular Diagnosis and Therapy, 2020, 10, 939-954.	1.7	15
154	Cardiovascular disease and stroke risk assessment in patients with chronic kidney disease using integration of estimated glomerular filtration rate, ultrasonic image phenotypes, and artificial intelligence: a narrative review. International Angiology, 2021, 40, 150-164.	0.9	15
155	Role of artificial intelligence in cardiovascular risk prediction and outcomes: comparison of machine-learning and conventional statistical approaches for the analysis of carotid ultrasound features and intra-plaque neovascularization. International Journal of Cardiovascular Imaging, 2021, 37, 3145-3156.	1.5	15
156	COVLIAS 1.0 vs. MedSeg: Artificial Intelligence-Based Comparative Study for Automated COVID-19 Computed Tomography Lung Segmentation in Italian and Croatian Cohorts. Diagnostics, 2021, 11, 2367.	2.6	15
157	Cardiovascular Risk Stratification in Diabetic Retinopathy via Atherosclerotic Pathway in COVID-19/Non-COVID-19 Frameworks Using Artificial Intelligence Paradigm: A Narrative Review. Diagnostics, 2022, 12, 1234.	2.6	15
158	COVLIAS 1.0Lesion vs. MedSeg: An Artificial Intelligence Framework for Automated Lesion Segmentation in COVID-19 Lung Computed Tomography Scans. Diagnostics, 2022, 12, 1283.	2.6	15
159	Extracranial internal carotid artery calcium volume measurement using computer tomography. International Angiology, 2017, 36, 445-461.	0.9	14
160	Semiautomated and Automated Algorithms for Analysis of the Carotid Artery Wall on Computed Tomography and Sonography. Journal of Ultrasound in Medicine, 2013, 32, 665-674.	1.7	12
161	White and black blood volumetric angiographic filtering: ellipsoidal scale-space approach. IEEE Transactions on Information Technology in Biomedicine, 2002, 6, 142-158.	3.2	11
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#	Article	IF	Citations
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