

# Umapathy Snehalatha

## List of Publications by Year in descending order

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Version: 2024-02-01

66  
papers

774  
citations

687363

13  
h-index

580821

25  
g-index

68  
all docs

68  
docs citations

68  
times ranked

712  
citing authors

#	ARTICLE	IF	CITATIONS
1	Evaluation of complete Freund's adjuvant-induced arthritis in a Wistar rat model. <i>Zeitschrift Fur Rheumatologie</i> , 2013, 72, 375-382.	1.0	106
2	Comparative Study on the Preparation and Gas Sensing Properties of Reduced Graphene Oxide/SnO <sub>2</sub> Binary Nanocomposite for Detection of Acetone in Exhaled Breath. <i>Analytical Chemistry</i> , 2019, 91, 5116-5124.	6.5	75
3	Automated heart sound classification system from unsegmented phonocardiogram (PCC) using deep neural network. <i>Physical and Engineering Sciences in Medicine</i> , 2020, 43, 505-515.	2.4	67
4	An investigation of GO-SnO <sub>2</sub> -TiO <sub>2</sub> ternary nanocomposite for the detection of acetone in diabetes mellitus patient's breath. <i>Applied Surface Science</i> , 2018, 449, 677-684.	6.1	62
5	Automated hand thermal image segmentation and feature extraction in the evaluation of rheumatoid arthritis. <i>Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine</i> , 2015, 229, 319-331.	1.8	38
6	An overview on the exponential growth of non-invasive diagnosis of diabetes mellitus from exhaled breath by nanostructured metal oxide Chemi-resistive gas sensors and 1/4-preconcentrator. <i>Biomedical Microdevices</i> , 2020, 22, 2.	2.8	35
7	Adsorption kinetics feature extraction from breathprint obtained by graphene based sensors for diabetes diagnosis. <i>Journal of Breath Research</i> , 2021, 15, 016005.	3.0	30
8	A comparison of online and offline measurement of exhaled breath for diabetes pre-screening by graphene-based sensor; from powder processing to clinical monitoring prototype. <i>Journal of Breath Research</i> , 2019, 13, 036008.	3.0	26
9	Computer Aided Diagnosis Based Hand Thermal Image Analysis: A Potential Tool for the Evaluation of Rheumatoid Arthritis. <i>Journal of Medical and Biological Engineering</i> , 2018, 38, 666-677.	1.8	24
10	Thermal image analysis and segmentation of hand in evaluation of rheumatoid arthritis. , 2012, , .		21
11	Human Tongue Thermography Could Be a Prognostic Tool for Prescreening the Type II Diabetes Mellitus. <i>Evidence-based Complementary and Alternative Medicine</i> , 2020, 2020, 1-16.	1.2	21
12	Computer-based automated analysis of X-ray and thermal imaging of knee region in evaluation of rheumatoid arthritis. <i>Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine</i> , 2017, 231, 1178-1187.	1.8	16
13	Deep learning techniques for automated detection of autism spectrum disorder based on thermal imaging. <i>Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine</i> , 2021, 235, 1113-1127.	1.8	16
14	Automated skin disease segmentation and classification using multi-class SVM classifier. , 2016, , .		13
15	Design and development of portable prototype for human breath analysis: a comparative study between haemodialysis patients and healthy subjects. <i>Biomedical Physics and Engineering Express</i> , 2019, 5, 025045.	1.2	13
16	A computer aided diagnostic method for the evaluation of type II diabetes mellitus in facial thermograms. <i>Physical and Engineering Sciences in Medicine</i> , 2020, 43, 871-888.	2.4	12
17	Computer aided diagnosis of obesity based on thermal imaging using various convolutional neural networks. <i>Biomedical Signal Processing and Control</i> , 2021, 63, 102233.	5.7	12
18	Automated evaluation of rheumatoid arthritis from hand radiographs using Machine Learning and deep learning techniques. <i>Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine</i> , 2022, 236, 1238-1249.	1.8	11

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19	Evaluation of body composition parameters using various diagnostic methods: A meta analysis study. <i>Obesity Medicine</i> , 2019, 16, 100150.	0.9	10
20	Thermography and colour Doppler ultrasound: a potential complementary diagnostic tool in evaluation of rheumatoid arthritis in the knee region. <i>Biomedizinische Technik</i> , 2020, 65, 289-299.	0.8	10
21	Diagnosis of rheumatoid arthritis in knee using fuzzy C means segmentation technique. , 2016, , .		9
22	A breathalyzer for the assessment of chronic kidney disease patientsâ€™ breathprint: Breath flow dynamic simulation on the measurement chamber and experimental investigation. <i>Biomedical Signal Processing and Control</i> , 2021, 70, 103060.	5.7	8
23	Evaluation of rheumatoid arthritis in small animal model using Thermal imaging. , 2011, , .		7
24	Automated thermal image segmentation of knee rheumatoid arthritis. , 2016, , .		7
25	Computerâ€based measurements of joint space analysis using metacarpal morphometry in hand radiograph for evaluation of rheumatoid arthritis. <i>International Journal of Rheumatic Diseases</i> , 2017, 20, 1120-1131.	1.9	7
26	Spectral Analysis of Speech Signal Characteristics: A Comparison Between Healthy Controls and Laryngeal Disorder. <i>Advances in Intelligent Systems and Computing</i> , 2018, , 333-341.	0.6	7
27	Evaluation of low bone mass and prediction of fracture risk using metacarpal radiogrammetry method: a comparative study with <scp>DXA</scp> and Xâ€ray phantom. <i>International Journal of Rheumatic Diseases</i> , 2018, 21, 1350-1371.	1.9	7
28	Wearable Cardiorespiratory Monitoring Device for Heart Attack Prediction. , 2019, , .		7
29	Dual tree wavelet transform based watershed algorithm for image segmentation in hand radiographs of arthritis patients and classification using BPN neural network. , 2012, , .		6
30	Automated speech signal analysis based on feature extraction and classification of spasmodic dysphonia: a performance comparison of different classifiers. <i>International Journal of Speech Technology</i> , 2018, 21, 9-18.	2.2	6
31	Design and Development of Wearable Device for Continuous Monitoring of Sleep APNEA Disorder. , 2019, , .		6
32	Automated detection of orofacial pain from thermograms using machine learning and deep learning approaches. <i>Expert Systems</i> , 2021, 38, e12747.	4.5	6
33	Ultrasound Thyroid Image Segmentation, Feature Extraction, and Classification of Disease Using Feed Forward Back Propagation Network. <i>Advances in Intelligent Systems and Computing</i> , 2018, , 89-98.	0.6	6
34	Fat-based studies for computer-assisted screening of child obesity using thermal imaging based on deep learning techniques: a comparison with quantum machine learning approach. <i>Soft Computing</i> , 2023, 27, 13093-13114.	3.6	6
35	Automated segmentation using PCA and area estimation of thyroid gland using ultrasound images. , 2015, , .		5
36	Ultrasound Color Doppler Image Segmentation and Feature Extraction in MCP and Wrist Region in Evaluation of Rheumatoid Arthritis. <i>Journal of Medical Systems</i> , 2016, 40, 197.	3.6	5

#	ARTICLE	IF	CITATIONS
37	NON-INVASIVE BLOOD GLUCOSE ANALYSIS BASED ON GALVANIC SKIN RESPONSE FOR DIABETIC PATIENTS. Biomedical Engineering - Applications, Basis and Communications, 2018, 30, 1850009.	0.6	5
38	SEGMENTATION OF LIVER TUMOR USING FAST GREEDY SNAKE ALGORITHM. Biomedical Engineering - Applications, Basis and Communications, 2019, 31, 1950013.	0.6	5
39	Classification of Right Bundle Branch Block and Left Bundle Branch Block Cardiac Arrhythmias Based on ECG Analysis. Advances in Intelligent Systems and Computing, 2015, , 331-341.	0.6	4
40	Automated segmentation of knee thermal imaging and X-ray in evaluation of rheumatoid arthritis. International Journal of Engineering and Technology(UAE), 2018, 7, 326.	0.3	4
41	Thermal Imaging of Abdomen in Evaluation of Obesity: A Comparison with Body Composition Analyzerâ€”A Preliminary Study. Lecture Notes in Computational Vision and Biomechanics, 2019, , 79-87.	0.5	4
42	Thermal imaging method to evaluate childhood obesity based on machine learning techniques. International Journal of Imaging Systems and Technology, 2021, 31, 1752-1768.	4.1	4
43	Thermal imaging method in the evaluation of obesity in various body regionsâ€”A preliminary study. IOP Conference Series: Materials Science and Engineering, 2020, 912, 062022.	0.6	3
44	Classification of Prediabetes and Healthy Subjects in Plantar Infrared Thermal Imaging Using Various Machine Learning Algorithms. Lecture Notes in Networks and Systems, 2020, , 85-96.	0.7	3
45	Evaluation of functional ability of rheumatoid arthritis based on HAQ score and BMD among South Indian patients. Rheumatology International, 2012, 32, 1997-2004.	3.0	2
46	Facial thermography: a potential complimentary tool for evaluation of dental disorders. International Journal of Engineering and Technology(UAE), 2018, 7, 175.	0.3	2
47	Thermal Image Segmentation of Facial Thermograms Using K-Means Algorithm in Evaluation of Orofacial Pain. Lecture Notes in Computational Vision and Biomechanics, 2019, , 565-572.	0.5	2
48	Thermal imaging method in the evaluation of psoriasis in upper limb region. IOP Conference Series: Materials Science and Engineering, 2020, 912, 062026.	0.6	2
49	Non-invasive thyroid detection based on electroglottogram signal using machine learning classifiers. Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine, 2021, 235, 1128-1145.	1.8	2
50	AUTOMATED SEGMENTATION OF COVID-19 REGIONS FROM LUNG CT IMAGES USING WATERSHED ALGORITHM AND CLASSIFICATION USING MACHINE LEARNING CLASSIFIERS. Biomedical Engineering - Applications, Basis and Communications, 2022, 34, .	0.6	2
51	DESIGN AND IMPLEMENTATION OF A PORTABLE AUTOMATED AUDIOMETER FOR HEARING CLASSIFICATION USING MACHINE LEARNING APPROACHES. Biomedical Engineering - Applications, Basis and Communications, 2022, 34, .	0.6	2
52	Automated Hand Radiograph Segmentation, Feature Extraction and Classification Using Feed Forward BPN Network in Assessment of Rheumatoid Arthritis. Advances in Intelligent Systems and Computing, 2017, , 133-154.	0.6	1
53	Raman Monte Carlo Simulation of Tooth Model with Embedded Sphere for Different Launch Beam Configurations. , 2018, , .		1
54	Estimation of Glottal Function based on Electroglottography for Normal and Thyroid Subjects â€” Hardware Design. , 2020, , .		1

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55	SHAKOâ€™Smart Helmet Arduino Kindled Optimization. IOP Conference Series: Materials Science and Engineering, 2020, 912, 062023.	0.6	1
56	Design and Analysis of Customized Hip Implant Using Finite Element Method. Advances in Intelligent Systems and Computing, 2020, , 515-525.	0.6	1
57	ASSESSMENT OF LOW BONE MASS USING PERIPHERAL DUAL X-RAY ABSORPTIOMETRY (PDXA) IN DIFFERENT ETHNIC GROUPS. Asian Journal of Pharmaceutical and Clinical Research, 2017, 10, 74.	0.3	0
58	Estimation of low bone mass using forearm and calcaneum bone mineral density in young Indian population. , 2017, , .		0
59	Semi-automated approach in the evaluation of low bone mass using clavicle radiogrammetry technique. International Journal of Engineering and Technology(UAE), 2018, 7, 169.	0.3	0
60	Analysis of Heel Fissure Therapy using Thermal Imaging and Image Processing. , 2020, , .		0
61	A handheld device to monitor physiological changes using sweat. IOP Conference Series: Materials Science and Engineering, 2020, 912, 062036.	0.6	0
62	AUTOMATED SEGMENTATION OF HEEL FISSURES BASED ON THERMAL IMAGE PROCESSING AND CLASSIFICATION BASED ON MACHINE LEARNING ALGORITHMS. Biomedical Engineering - Applications, Basis and Communications, 2021, 33, 2150032.	0.6	0
63	Thermal Imaging Analysis in Detection of Childhood Obesity in Cervical Region Using Machine Learning Classifiers. Advances in Intelligent Systems and Computing, 2022, , 497-510.	0.6	0
64	Detection of Liver Tumor Using Gradient Vector Flow Algorithm. Lecture Notes in Computational Vision and Biomechanics, 2019, , 1055-1065.	0.5	0
65	A lung tumor detection technique using gradient vector flow algorithm. AIP Conference Proceedings, 2022, , .	0.4	0
66	Detection of face skin cancer using deep convoluted neural network. AIP Conference Proceedings, 2022, , .	0.4	0