

Kenneth Sundaraj

List of Publications by Year in descending order

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Version: 2024-02-01

119
papers

2,288
citations

331670

21
h-index

243625

44
g-index

123
all docs

123
docs citations

123
times ranked

2334
citing authors

#	ARTICLE	IF	CITATIONS
1	Detecting Driver Drowsiness Based on Sensors: A Review. <i>Sensors</i> , 2012, 12, 16937-16953.	3.8	545
2	Machine learning in lung sound analysis: A systematic review. <i>Biocybernetics and Biomedical Engineering</i> , 2013, 33, 129-135.	5.9	136
3	A comparative study of the svm and k-nn machine learning algorithms for the diagnosis of respiratory pathologies using pulmonary acoustic signals. <i>BMC Bioinformatics</i> , 2014, 15, 223.	2.6	124
4	Mechanomyogram for Muscle Function Assessment: A Review. <i>PLoS ONE</i> , 2013, 8, e58902.	2.5	84
5	Review of Emotion Recognition in Stroke Patients. <i>Dementia and Geriatric Cognitive Disorders</i> , 2013, 36, 179-196.	1.5	77
6	On the analysis of EEG power, frequency and asymmetry in Parkinson's disease during emotion processing. <i>Behavioral and Brain Functions</i> , 2014, 10, 12.	3.3	73
7	Detection of emotions in Parkinson's disease using higher order spectral features from brain's electrical activity. <i>Biomedical Signal Processing and Control</i> , 2014, 14, 108-116.	5.7	65
8	Computer-based Respiratory Sound Analysis: A Systematic Review. <i>IETE Technical Review (Institution of)</i> Tj ETQq0 0,0 rgBT /Overlock 10	3.2	54
9	Optimal set of EEG features for emotional state classification and trajectory visualization in Parkinson's disease. <i>International Journal of Psychophysiology</i> , 2014, 94, 482-495.	1.0	53
10	Mechanomyography Sensor Development, Related Signal Processing, and Applications: A Systematic Review. <i>IEEE Sensors Journal</i> , 2013, 13, 2499-2516.	4.7	52
11	A review on crosstalk in myographic signals. <i>European Journal of Applied Physiology</i> , 2019, 119, 9-28.	2.5	45
12	Drowsiness detection during different times of day using multiple features. <i>Australasian Physical and Engineering Sciences in Medicine</i> , 2013, 36, 243-250.	1.3	44
13	Physiological signal based detection of driver hypovigilance using higher order spectra. <i>Expert Systems With Applications</i> , 2015, 42, 8669-8677.	7.6	35
14	Emotion classification in Parkinson's disease by higher-order spectra and power spectrum features using EEG signals: A comparative study. <i>Journal of Integrative Neuroscience</i> , 2014, 13, 89-120.	1.7	32
15	Assessment of muscle activity using electrical stimulation and mechanomyography: a systematic review. <i>BioMedical Engineering OnLine</i> , 2021, 20, 1.	2.7	32
16	Characterization and classification of asthmatic wheeze sounds according to severity level using spectral integrated features. <i>Computers in Biology and Medicine</i> , 2019, 104, 52-61.	7.0	30
17	Cross-Talk in Mechanomyographic Signals from the Forearm Muscles during Sub-Maximal to Maximal Isometric Grip Force. <i>PLoS ONE</i> , 2014, 9, e96628.	2.5	26
18	Artificial intelligence techniques used in respiratory sound analysis – a systematic review. <i>Biomedizinische Technik</i> , 2014, 59, 7-18.	0.8	26

#	ARTICLE	IF	CITATIONS
19	Gait disorder rehabilitation using vision and non-vision based sensors: A systematic review. <i>Bosnian Journal of Basic Medical Sciences</i> , 2012, 12, 193.	1.0	25
20	A systematic review on fatigue analysis in triceps brachii using surface electromyography. <i>Biomedical Signal Processing and Control</i> , 2018, 40, 396-414.	5.7	23
21	A physiological measures-based method for detecting inattention in drivers using machine learning approach. <i>Biocybernetics and Biomedical Engineering</i> , 2015, 35, 198-205.	5.9	22
22	Virtual Reality Simulator for Phacoemulsification Cataract Surgery Education and Training. <i>Procedia Computer Science</i> , 2013, 18, 742-748.	2.0	21
23	A telemedicine tool to detect pulmonary pathology using computerized pulmonary acoustic signal analysis. <i>Applied Soft Computing Journal</i> , 2015, 37, 952-959.	7.2	21
24	Evaluation and Grading Systems of Facial Paralysis for Facial Rehabilitation. <i>Journal of Physical Therapy Science</i> , 2013, 25, 515-519.	0.6	20
25	Identification of asthma severity levels through wheeze sound characterization and classification using integrated power features. <i>Biomedical Signal Processing and Control</i> , 2019, 52, 302-311.	5.7	20
26	Respiratory sound classification using cepstral features and support vector machine. , 2013, , .		19
27	Inter-hemispheric EEG coherence analysis in Parkinson's disease: Assessing brain activity during emotion processing. <i>Journal of Neural Transmission</i> , 2015, 122, 237-252.	2.8	19
28	A Systematic Review of Phacoemulsification Cataract Surgery in Virtual Reality Simulators. <i>Medicina (Lithuania)</i> , 2013, 49, 1.	2.0	18
29	Recent Survey of Automated Rehabilitation Systems Using EMG Biosensors. <i>Journal of Physical Therapy Science</i> , 2011, 23, 945-948.	0.6	16
30	An approach to LEM modeling: construction, collision detection and dynamic simulation. , 0, , .		15
31	A literature review on NoSQL database for big data processing. <i>International Journal of Engineering and Technology(UAE)</i> , 2018, 7, 902.	0.3	15
32	Longitudinal, Lateral and Transverse Axes of Forearm Muscles Influence the Crosstalk in the Mechanomyographic Signals during Isometric Wrist Postures. <i>PLoS ONE</i> , 2014, 9, e104280.	2.5	15
33	Mechanomyography Sensors for Muscle Assessment: a Brief Review. <i>Journal of Physical Therapy Science</i> , 2012, 24, 1359-1365.	0.6	14
34	Analysis of Right Arm Biceps Brachii Muscle Activity with Varying the Electrode Placement on Three Male Age Groups During Isometric Contractions Using a Wireless EMG Sensor. <i>Procedia Engineering</i> , 2012, 41, 61-67.	1.2	14
35	A survey on automated wheeze detection systems for asthmatic patients. <i>Bosnian Journal of Basic Medical Sciences</i> , 2012, 12, 242.	1.0	14
36	EMG-force relationship during static contraction: Effects on sensor placement locations on biceps brachii muscle. <i>Technology and Health Care</i> , 2014, 22, 505-513.	1.2	14

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37	Design and development of a low cost EMG signal acquisition system using surface EMG electrode. , 2010, , .		13
38	Clinical and non-clinical initial assessment of facial nerve paralysis: A qualitative review. Biocybernetics and Biomedical Engineering, 2014, 34, 71-78.	5.9	13
39	Muscle Fatigue in the Three Heads of the Triceps Brachii During a Controlled Forceful Hand Grip Task with Full Elbow Extension Using Surface Electromyography. Journal of Human Kinetics, 2015, 46, 69-76.	1.5	13
40	Computerized acoustical techniques for respiratory flow-sound analysis: a systematic review. Artificial Intelligence Review, 2020, 53, 3501-3574.	15.7	13
41	A Review of Computer-Generated Simulation in the Pedagogy of Cataract Surgery Training and Assessment. International Journal of Human-Computer Interaction, 2013, 29, 661-669.	4.8	12
42	Emotion processing in Parkinson's disease: an EEG spectral power study. International Journal of Neuroscience, 2014, 124, 491-502.	1.6	12
43	Evaluation of repetitive isometric contractions on the heads of triceps brachii muscle during grip force exercise. Technology and Health Care, 2014, 22, 617-625.	1.2	12
44	Adaptive neuro-fuzzy inference system for breath phase detection and breath cycle segmentation. Computer Methods and Programs in Biomedicine, 2017, 145, 67-72.	4.7	12
45	A survey on team strategies in robot soccer: team strategies and role description. Artificial Intelligence Review, 2013, 40, 271-304.	15.7	11
46	Computer-based virtual reality simulator for phacoemulsification cataract surgery training. Virtual Reality, 2014, 18, 281-293.	6.1	11
47	Vision in robot soccer: a review. Artificial Intelligence Review, 2015, 44, 289-310.	15.7	11
48	Virtual phacoemulsification surgical simulation using visual guidance and performance parameters as a feasible proficiency assessment tool. BMC Ophthalmology, 2016, 16, 88.	1.4	11
49	Depth Estimation for a Mobile Platform Using Monocular Vision. Procedia Engineering, 2012, 41, 945-950.	1.2	10
50	Surface electromyography for assessing triceps brachii muscle activities: A literature review. Biocybernetics and Biomedical Engineering, 2013, 33, 187-195.	5.9	10
51	Initial assessment of facial nerve paralysis based on motion analysis using an optical flow method. Technology and Health Care, 2016, 24, 287-294.	1.2	10
52	Analysis of the Effect on Electrode Placement on an Adolescent's Biceps Brachii during Muscle Contractions Using a Wireless EMG Sensor. Journal of Physical Therapy Science, 2012, 24, 609-611.	0.6	9
53	Surface electromyographic analysis of the biceps brachii muscle of cricket bowlers during bowling. Australasian Physical and Engineering Sciences in Medicine, 2014, 37, 83-95.	1.3	9
54	Analysis of crosstalk in the mechanomyographic signals generated by forearm muscles during different wrist postures. Muscle and Nerve, 2015, 51, 899-906.	2.2	9

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55	Reliable system for respiratory pathology classification from breath sound signals. , 2016, , .		9
56	A novel approach to detect respiratory phases from pulmonary acoustic signals using normalised power spectral density and fuzzy inference system. <i>Clinical Respiratory Journal</i> , 2016, 10, 486-494.	1.6	9
57	EEG dynamics in neurological disorders: Parkinson's disease and stroke. , 2012, , .		8
58	A Framework for the Development of Measurement and Quality Assurance in Software-Based Medical Rehabilitation Systems. <i>Procedia Engineering</i> , 2012, 41, 53-60.	1.2	8
59	Image processing on facial paralysis for facial rehabilitation system: A review. , 2012, , .		8
60	Pulmonary Acoustic Signal Classification Using Autoregressive Coefficients and k-Nearest Neighbor. <i>Applied Mechanics and Materials</i> , 0, 591, 211-214.	0.2	8
61	Classification of pulmonary pathology from breath sounds using the wavelet packet transform and an extreme learning machine. <i>Biomedizinische Technik</i> , 2018, 63, 383-394.	0.8	8
62	A systematic review of muscle activity assessment of the biceps brachii muscle using mechanomyography. <i>Journal of Musculoskeletal Neuronal Interactions</i> , 2018, 18, 446-462.	0.1	8
63	Effects of anthropometric variables and electrode placement on the SEMG activity of the biceps brachii muscle during submaximal isometric contraction in arm wrestling. <i>Biomedizinische Technik</i> , 2013, 58, 475-88.	0.8	7
64	Hybrid markerless tracking of complex articulated motion in golf swings. <i>Journal of Bodywork and Movement Therapies</i> , 2014, 18, 220-227.	1.2	7
65	Classification of asthma severity levels by wheeze sound analysis. , 2016, , .		7
66	Virtual Simulation of Eyeball and Extraocular Muscle Reaction during Cataract Surgery. <i>Procedia Engineering</i> , 2012, 41, 150-155.	1.2	6
67	Gender Effects in Surface Electromyographic Activity of the Biceps Brachii Muscle During Prolonged Isometric Contraction. <i>Procedia Computer Science</i> , 2015, 61, 448-453.	2.0	6
68	Wheeze sound analysis using computer-based techniques: a systematic review. <i>Biomedizinische Technik</i> , 2017, 64, 1-28.	0.8	6
69	SIGNIFICANCE OF ELECTROMYOGRAPHY IN THE ASSESSMENT OF DIABETIC NEUROPATHY. <i>Journal of Mechanics in Medicine and Biology</i> , 2019, 19, 1930001.	0.7	6
70	Analysis of wheeze sounds during tidal breathing according to severity levels in asthma patients. <i>Journal of Asthma</i> , 2020, 57, 353-365.	1.7	6
71	Design and development of an automated, portable and handheld tablet personal computer-based data acquisition system for monitoring electromyography signals during rehabilitation. <i>Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine</i> , 2013, 227, 262-274.	1.8	5
72	sEMG ACTIVITIES OF THE THREE HEADS OF THE TRICEPS BRACHII MUSCLE DURING CRICKET BOWLING. <i>Journal of Mechanics in Medicine and Biology</i> , 2016, 16, 1650075.	0.7	5

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73	Muscle Fatigue in the Three Heads of Triceps Brachii During Intensity and Speed Variations of Triceps Push-Down Exercise. <i>Frontiers in Physiology</i> , 2020, 11, 112.	2.8	5
74	Towards a Realistic Medical Simulator using Virtual Environments and Haptic Interaction. , 2003, , 289-306.		5
75	Machine Learning Techniques for Predicting Surface EMG Activities on Upper Limb Muscle: A Systematic Review. <i>Lecture Notes of the Institute for Computer Sciences, Social-Informatics and Telecommunications Engineering</i> , 2020, , 330-339.	0.3	5
76	Complex background subtraction for biometric identification. , 2007, , .		4
77	A study of back-propagation and radial basis neural network on EMG signal classification. , 2009, , .		4
78	Methods and approaches on emotions recognition in neurodegenerative disorders: A review. , 2012, , .		4
79	Recent Observations in Surface Electromyography Recording of Triceps Brachii Muscle in Patients and Athletes. <i>Applied Bionics and Biomechanics</i> , 2014, 11, 105-118.	1.1	4
80	Forehead Lesion Score for Facial Nerve Paralysis Evaluation. , 2019, , .		4
81	Association of anthropometric parameters with amplitude and crosstalk of mechanomyographic signals during forearm flexion, pronation and supination torque tasks. <i>Scientific Reports</i> , 2019, 9, 16166.	3.3	4
82	Cognitive stress changes the attributes of the three heads of the triceps brachii during muscle fatigue. <i>PLoS ONE</i> , 2020, 15, e0228089.	2.5	4
83	Analysis of fatigue in the three heads of the triceps brachii during isometric contractions at various effort levels. <i>Journal of Musculoskeletal Neuronal Interactions</i> , 2019, 19, 276-285.	0.1	4
84	Non-invasive electromyography-based fatigue detection and performance analysis on m. biceps brachii muscle. , 2012, , .		3
85	Wireless communication in robot soccer: A case study of existing technologies. , 2012, , .		3
86	Tracheal sound reliability for wheeze data collection method: A review. , 2012, , .		3
87	Surface Electromyography Assessment of the <i>Biceps Brachii</i> Muscle between the Endplate Region and Distal Tendon Insertion: Comparison in Terms of Gender, Dominant Arm and Contraction. <i>Journal of Physical Therapy Science</i> , 2013, 25, 3-6.	0.6	3
88	SIGNIFICANCE OF THE ELECTROMYOGRAPHIC ANALYSIS OF THE UPPER LIMB MUSCLES OF CRICKET BOWLERS: RECOMMENDATIONS FROM STUDIES OF OVERHEAD-THROWING ATHLETES. <i>Journal of Mechanics in Medicine and Biology</i> , 2014, 14, 1430005.	0.7	3
89	Investigation of the EMG-time relationship of the biceps Brachii muscle during contractions. <i>Journal of Physical Therapy Science</i> , 2015, 27, 39-40.	0.6	3
90	PERFORMANCE ANALYSIS OF FEATURE SELECTION METHOD USING ANOVA FOR AUTOMATIC WHEEZE DETECTION. <i>Jurnal Teknologi (Sciences and Engineering)</i> , 2015, 77, .	0.4	3

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91	Mechanomyography: An Insight to Muscle Physiology. Lecture Notes in Mechanical Engineering, 2020, , 129-137.	0.4	3
92	Faithful Haptic Feedback in Medical Simulators. , 0, , 414-423.		3
93	Crosstalk in Mechanomyographic Signals From Elbow Flexor Muscles During Submaximal to Maximal Isometric Flexion, Pronation, and Supination Torque Tasks. Journal of Biomechanical Engineering, 2021, 143, .	1.3	3
94	Analysis and Classification of Muscle Activity During Biceps Exercise Using MMG Signals. , 2018, , .		2
95	An Overview of Respiratory Airflow Estimation Techniques: Acoustic vs Non-Acoustic. , 2019, , .		2
96	The Effects of Rest Interval on Electromyographic Signal on Upper Limb Muscle during Contraction. IFMBE Proceedings, 2017, , 10-13.	0.3	2
97	Analysis and Classification of Forearm Muscles Activities during Gripping using EMG Signals. IFMBE Proceedings, 2017, , 88-92.	0.3	2
98	Analysis of the crosstalk in mechanomyographic signals along the longitudinal, lateral and transverse axes of elbow flexor muscles during sustained isometric forearm flexion, supination and pronation exercises. Journal of Musculoskeletal Neuronal Interactions, 2020, 20, 194-205.	0.1	2
99	Variability in surface electromyography of right arm biceps brachii muscles between male adolescent, vicenarian and tricenarian with distinct electrode placement. , 2012, , .		1
100	Classification of respiratory pathology in pulmonary acoustic signals using parametric features and artificial neural network. , 2014, , .		1
101	Time and Frequency Domain Performance Comparison for Wheeze Detection Using K-Nearest Neighbor. Applied Mechanics and Materials, 0, 591, 163-166.	0.2	1
102	Relation between EMG signal activation and time lags using feature analysis during dynamic contraction. , 2015, , .		1
103	Analysis of upper limb rehabilitation using muscle mechanics: current and future perspectives using Mechanomyography signals. , 2019, , .		1
104	A Novel Design of Robotic hand Based on Bird Claw Model. Journal of Physics: Conference Series, 2021, 1997, 012034.	0.4	1
105	Artificial Intelligence Techniques Used for Wheeze Sounds Analysis: Review. IFMBE Proceedings, 2017, , 37-40.	0.3	1
106	Towards a Complete Intra-operative CT-Free Navigation System for Anterior Cruciate Ligament Reconstruction. Lecture Notes in Computer Science, 2004, , 277-286.	1.3	1
107	Correlation of Objective Assessment of Facial Paralysis with House-Brackmann Score. Telkomnika (Telecommunication Computing Electronics and Control), 2017, 15, 829.	0.8	1
108	Fatigue effect on cross-talk in mechanomyography signals of extensor and flexor forearm muscles during maximal voluntary isometric contractions. Journal of Musculoskeletal Neuronal Interactions, 2021, 21, 481-494.	0.1	1

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109	Vision-based motion tracking rehabilitation system for gait disorder. , 2012, , .		0
110	Multi Camera Image Capturing for Robot Soccer. Applied Mechanics and Materials, 2014, 591, 202-205.	0.2	0
111	A Performance Comparison of Wheeze Feature Extraction Methods for Asthma Severity Levels Classification. , 2018, , .		0
112	Cross-Talk Level of Mechanomyography Signal on Compartmental Forearm Muscle. Lecture Notes in Electrical Engineering, 2019, , 575-581.	0.4	0
113	Development of Simulator for Robot Assisted Surgical Platform for Cholecystectomy Training. , 2019, , .		0
114	Classification of Respiratory Sounds in Smokers and Non-smokers using k-NN Classifier. IFMBE Proceedings, 2017, , 73-78.	0.3	0
115	Introduction of Static and Dynamic Features to Facial Nerve Paralysis Evaluation. Lecture Notes in Electrical Engineering, 2021, , 947-963.	0.4	0
116	Introduction of Forehead Lesion Assessment with House-Brackmann Score for Facial Nerve Paralysis Evaluation. Proceedings of International Conference on Artificial Life and Robotics, 2020, 25, 348-352.	0.1	0
117	Classification of Facial Nerve Paralysis Based on Regional Evaluation. Proceedings of International Conference on Artificial Life and Robotics, 2020, 25, 343-347.	0.1	0
118	Identification of Asthma Severity Using Wavelet Transform and K-nearest-neighbour Classifier. , 2020, , .		0
119	Asthma severity identification from pulmonary acoustic signal for computerized decision support system. JPMA the Journal of the Pakistan Medical Association, 2021, 71, 1-18.	0.2	0