Kenneth Sundaraj

List of Publications by Year
in descending order

		331670	243625
119 papers	2,288 citations	21 h-index	44 g-index
123 all docs	123 docs citations	123 times ranked	2334 citing authors

#	ARTICLE	IF	CITATIONS
1	Assessment of muscle activity using electrical stimulation and mechanomyography: a systematic review. BioMedical Engineering OnLine, 2021, 20, 1.	2.7	32
2	A Novel Design of Robotic hand Based on Bird Claw Model. Journal of Physics: Conference Series, 2021, 1997, 012034.	0.4	1
3	Introduction of Static and Dynamic Features to Facial Nerve Paralysis Evaluation. Lecture Notes in Electrical Engineering, 2021, , 947-963.	0.4	0
4	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
5	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
6	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
7	Analysis of wheeze sounds during tidal breathing according to severity levels in asthma patients. Journal of Asthma, 2020, 57, 353-365.	1.7	6
8	Mechanomyography: An Insight to Muscle Physiology. Lecture Notes in Mechanical Engineering, 2020, , 129-137.	0.4	3
9	Computerized acoustical techniques for respiratory flow-sound analysis: a systematic review. Artificial Intelligence Review, 2020, 53, 3501-3574.	15.7	13
10	Muscle Fatigue in the Three Heads of Triceps Brachii During Intensity and Speed Variations of Triceps Push-Down Exercise. Frontiers in Physiology, 2020, 11, 112.	2.8	5
11	Cognitive stress changes the attributes of the three heads of the triceps brachii during muscle fatigue. PLoS ONE, 2020, 15, e0228089.	2.5	4
12	Machine Learning Techniques for Predicting Surface EMG Activities on Upper Limb Muscle: A Systematic Review. Lecture Notes of the Institute for Computer Sciences, Social-Informatics and Telecommunications Engineering, 2020, , 330-339.	0.3	5
13	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
14	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
15	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
16	Identification of Asthma Severity Using Wavelet Transform and K-nearest-neighbour Classifier. , 2020, , .		0
17	Forehead Lesion Score for Facial Nerve Paralysis Evaluation. , 2019, , .		4
18	Identification of asthma severity levels through wheeze sound characterization and classification using integrated power features. Biomedical Signal Processing and Control, 2019, 52, 302-311.	5.7	20

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19	Cross-Talk Level of Mechanomyography Signal on Compartmental Forearm Muscle. Lecture Notes in Electrical Engineering, 2019, , 575-581.	0.4	0
20	Analysis of upper limb rehabilitation using muscle mechanics: current and future perspectives using Mechanomyography signals. , 2019, , .		1
21	An Overview of Respiratory Airflow Estimation Techniques: Acoustic vs Non-Acoustic. , 2019, , .		2
22	Development of Simulator for Robot Assisted Surgical Platform for Cholecystectomy Training. , 2019, , .		0
23	Association of anthropometric parameters with amplitude and crosstalk of mechanomyographic signals during forearm flexion, pronation and supination torque tasks. Scientific Reports, 2019, 9, 16166.	3.3	4
24	SIGNIFICANCE OF ELECTROMYOGRAPHY IN THE ASSESSMENT OF DIABETIC NEUROPATHY. Journal of Mechanics in Medicine and Biology, 2019, 19, 1930001.	0.7	6
25	Characterization and classification of asthmatic wheeze sounds according to severity level using spectral integrated features. Computers in Biology and Medicine, 2019, 104, 52-61.	7.0	30
26	A review on crosstalk in myographic signals. European Journal of Applied Physiology, 2019, 119, 9-28.	2.5	45
27	Analysis of fatigue in the three heads of the triceps brachii during isometric contractions at various effort levels. Journal of Musculoskeletal Neuronal Interactions, 2019, 19, 276-285.	0.1	4
28	Classification of pulmonary pathology from breath sounds using the wavelet packet transform and an extreme learning machine. Biomedizinische Technik, 2018, 63, 383-394.	0.8	8
29	A systematic review on fatigue analysis in triceps brachii using surface electromyography. Biomedical Signal Processing and Control, 2018, 40, 396-414.	5.7	23
30	Analysis and Classification of Muscle Activity During Biceps Exercise Using MMG Signals. , 2018, , .		2
31	A literature review on NoSQL database for big data processing. International Journal of Engineering and Technology(UAE), 2018, 7, 902.	0.3	15
32	A Performance Comparison of Wheeze Feature Extraction Methods for Asthma Severity Levels Classification. , 2018, , .		0
33	A systematic review of muscle activity assessment of the biceps brachii muscle using mechanomyography. Journal of Musculoskeletal Neuronal Interactions, 2018, 18, 446-462.	0.1	8
34	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
35	Wheeze sound analysis using computer-based techniques: a systematic review. Biomedizinische Technik, 2017, 64, 1-28.	0.8	6
36	Artificial Intelligence Techniques Used for Wheeze Sounds Analysis: Review. IFMBE Proceedings, 2017, , 37-40.	0.3	1

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37	The Effects of Rest Interval on Electromyographic Signal on Upper Limb Muscle during Contraction. IFMBE Proceedings, 2017, , 10-13.	0.3	2
38	Analysis and Classification of Forearm Muscles Activities during Gripping using EMG Signals. IFMBE Proceedings, 2017, , 88-92.	0.3	2
39	Classification of Respiratory Sounds in Smokers and Non-smokers using k-NN Classifier. IFMBE Proceedings, 2017, , 73-78.	0.3	0
40	Correlation of Objective Assessment of Facial Paralysis with House-Brackmann Score. Telkomnika (Telecommunication Computing Electronics and Control), 2017, 15, 829.	0.8	1
41	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
42	Virtual phacoemulsification surgical simulation using visual guidance and performance parameters as a feasible proficiency assessment tool. BMC Ophthalmology, 2016, 16, 88.	1.4	11
43	Classification of asthma severity levels by wheeze sound analysis. , 2016, , .		7
44	sEMG ACTIVITIES OF THE THREE HEADS OF THE TRICEPS BRACHII MUSCLE DURING CRICKET BOWLING. Journal of Mechanics in Medicine and Biology, 2016, 16, 1650075.	0.7	5
45	Reliable system for respiratory pathology classification from breath sound signals. , 2016, , .		9
46	A novel approach to detect respiratory phases from pulmonary acoustic signals using normalised power spectral density and fuzzy inference system. Clinical Respiratory Journal, 2016, 10, 486-494.	1.6	9
47	Gender Effects in Surface Electromyographic Activity of the Biceps Brachii Muscle During Prolonged Isometric Contraction. Procedia Computer Science, 2015, 61, 448-453.	2.0	6
48	Investigation of the EMG-time relationship of the biceps Brachii muscle during contractions. Journal of Physical Therapy Science, 2015, 27, 39-40.	0.6	3
49	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
50	PERFORMANCE ANALYSIS OF FEATURE SELECTION METHOD USING ANOVA FOR AUTOMATIC WHEEZE DETECTION. Jurnal Teknologi (Sciences and Engineering), 2015, 77, .	0.4	3
51	Relation between EMG signal activation and time lags using feature analysis during dynamic contraction. , 2015, , .		1
52	Physiological signal based detection of driver hypovigilance using higher order spectra. Expert Systems With Applications, 2015, 42, 8669-8677.	7.6	35
53	A telemedicine tool to detect pulmonary pathology using computerized pulmonary acoustic signal analysis. Applied Soft Computing Journal, 2015, 37, 952-959.	7.2	21
54	A physiological measures-based method for detecting inattention in drivers using machine learning approach. Biocybernetics and Biomedical Engineering, 2015, 35, 198-205.	5.9	22

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55	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
56	Vision in robot soccer: a review. Artificial Intelligence Review, 2015, 44, 289-310.	15.7	11
57	Inter-hemispheric EEG coherence analysis in Parkinson's disease: Assessing brain activity during emotion processing. Journal of Neural Transmission, 2015, 122, 237-252.	2.8	19
58	Cross-Talk in Mechanomyographic Signals from the Forearm Muscles during Sub-Maximal to Maximal Isometric Grip Force. PLoS ONE, 2014, 9, e96628.	2.5	26
59	Recent Observations in Surface Electromyography Recording of Triceps Brachii Muscle in Patients and Athletes. Applied Bionics and Biomechanics, 2014, 11, 105-118.	1.1	4
60	SIGNIFICANCE OF THE ELECTROMYOGRAPHIC ANALYSIS OF THE UPPER LIMB MUSCLES OF CRICKET BOWLERS: RECOMMENDATIONS FROM STUDIES OF OVERHEAD-THROWING ATHLETES. Journal of Mechanics in Medicine and Biology, 2014, 14, 1430005.	0.7	3
61	Emotion classification in Parkinson's disease by higher-order spectra and power spectrum features using EEG signals: A comparative study. Journal of Integrative Neuroscience, 2014, 13, 89-120.	1.7	32
62	Emotion processing in Parkinson's disease: an EEG spectral power study. International Journal of Neuroscience, 2014, 124, 491-502.	1.6	12
63	Multi Camera Image Capturing for Robot Soccer. Applied Mechanics and Materials, 2014, 591, 202-205.	0.2	0
64	EMG-force relationship during static contraction: Effects on sensor placement locations on biceps brachii muscle. Technology and Health Care, 2014, 22, 505-513.	1.2	14
65	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
66	Classification of respiratory pathology in pulmonary acoustic signals using parametric features and artificial neural network. , 2014, , .		1
67	On the analysis of EEG power, frequency and asymmetry in Parkinson's disease during emotion processing. Behavioral and Brain Functions, 2014, 10, 12.	3.3	73
68	Optimal set of EEG features for emotional state classification and trajectory visualization in Parkinson's disease. International Journal of Psychophysiology, 2014, 94, 482-495.	1.0	53
69	Computer-based virtual reality simulator for phacoemulsification cataract surgery training. Virtual Reality, 2014, 18, 281-293.	6.1	11
70	Artificial intelligence techniques used in respiratory sound analysis – a systematic review. Biomedizinische Technik, 2014, 59, 7-18.	0.8	26
71	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
72	Hybrid markerless tracking of complex articulated motion in golf swings. Journal of Bodywork and Movement Therapies, 2014, 18, 220-227.	1.2	7

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73	Detection of emotions in Parkinson's disease using higher order spectral features from brain's electrical activity. Biomedical Signal Processing and Control, 2014, 14, 108-116.	5.7	65
74	A comparative study of the svm and k-nn machine learning algorithms for the diagnosis of respiratory pathologies using pulmonary acoustic signals. BMC Bioinformatics, 2014, 15, 223.	2.6	124
75	Clinical and non-clinical initial assessment of facial nerve paralysis: A qualitative review. Biocybernetics and Biomedical Engineering, 2014, 34, 71-78.	5.9	13
76	Longitudinal, Lateral and Transverse Axes of Forearm Muscles Influence the Crosstalk in the Mechanomyographic Signals during Isometric Wrist Postures. PLoS ONE, 2014, 9, e104280.	2.5	15
77	Review of Emotion Recognition in Stroke Patients. Dementia and Geriatric Cognitive Disorders, 2013, 36, 179-196.	1.5	77
78	Drowsiness detection during different times of day using multiple features. Australasian Physical and Engineering Sciences in Medicine, 2013, 36, 243-250.	1.3	44
79	Surface electromyography for assessing triceps brachii muscle activities: A literature review. Biocybernetics and Biomedical Engineering, 2013, 33, 187-195.	5.9	10
80	A survey on team strategies in robot soccer: team strategies and role description. Artificial Intelligence Review, 2013, 40, 271-304.	15.7	11
81	Respiratory sound classification using cepstral features and support vector machine. , 2013, , .		19
82	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
83	Machine learning in lung sound analysis: A systematic review. Biocybernetics and Biomedical Engineering, 2013, 33, 129-135.	5.9	136
84	Virtual Reality Simulator for Phacoemulsification Cataract Surgery Education and Training. Procedia Computer Science, 2013, 18, 742-748.	2.0	21
85	Mechanomyogram for Muscle Function Assessment: A Review. PLoS ONE, 2013, 8, e58902.	2.5	84
86	Mechanomyography Sensor Development, Related Signal Processing, and Applications: A Systematic Review. IEEE Sensors Journal, 2013, 13, 2499-2516.	4.7	52
87	Computer-based Respiratory Sound Analysis: A Systematic Review. IETE Technical Review (Institution of)	3.2	54
88	Design and development of an automated, portable and handheld tablet personal computer-based data acquisition system for monitoring electromyography signals during rehabilitation. Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine, 2013, 227, 262-274.	1.8	5
89	Effects of anthropometric variables and electrode placement on the SEMG activity of the biceps brachii muscle during submaximal isometric contraction in arm wrestling. Biomedizinische Technik, 2013, 58, 475-88.	0.8	7
90	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. Journal of Physical Therapy Science, 2013, 25, 3-6.	0.6	3

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91	Evaluation and Grading Systems of Facial Paralysis for Facial Rehabilitation. Journal of Physical Therapy Science, 2013, 25, 515-519.	0.6	20
92	A Systematic Review of Phacoemulsification Cataract Surgery in Virtual Reality Simulators. Medicina (Lithuania), 2013, 49, 1.	2.0	18
93	EEG dynamics in neurological disorders: Parkinson's disease and stroke. , 2012, , .		8
94	Methods and approaches on emotions recognition in neurodegenerative disorders: A review. , 2012, , .		4
95	Analysis of the Effect on Electrode Placement on an Adolescentâ€™s Biceps Brachii during Muscle Contractions Using a Wireless EMG Sensor. Journal of Physical Therapy Science, 2012, 24, 609-611.	0.6	9
96	Mechanomyography Sensors for Muscle Assessment: a Brief Review. Journal of Physical Therapy Science, 2012, 24, 1359-1365.	0.6	14
97	A Framework for the Development of Measurement and Quality Assurance in Software-Based Medical Rehabilitation Systems. Procedia Engineering, 2012, 41, 53-60.	1.2	8
98	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. Procedia Engineering, 2012, 41, 61-67.	1.2	14
99	Virtual Simulation of Eyeball and Extraocular Muscle Reaction during Cataract Surgery. Procedia Engineering, 2012, 41, 150-155.	1.2	6
100	Depth Estimation for a Mobile Platform Using Monocular Vision. Procedia Engineering, 2012, 41, 945-950.	1.2	10
101	Non-invasive electromyography-based fatigue detection and performance analysis on m. biceps brachii muscle. , 2012, , .		3
102	Variability in surface electromyography of right arm biceps brachii muscles between male adolescent, vicenarian and tricenarian with distinct electrode placement. , 2012, , .		1
103	Wireless communication in robot soccer: A case study of existing technologies. , 2012, , .		3
104	Vision-based motion tracking rehabilitation system for gait disorder. , 2012, , .		0
105	Tracheal sound reliability for wheeze data collection method: A review. , 2012, , .		3
106	Detecting Driver Drowsiness Based on Sensors: A Review. Sensors, 2012, 12, 16937-16953.	3.8	545
107	Image processing on facial paralysis for facial rehabilitation system: A review. , 2012, , .		8
108	Gait disorder rehabilitation using vision and non-vision based sensors: A systematic review. Bosnian Journal of Basic Medical Sciences, 2012, 12, 193.	1.0	25

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109	A survey on automated wheeze detection systems for asthmatic patients. Bosnian Journal of Basic Medical Sciences, 2012, 12, 242.	1.0	14
110	Recent Survey of Automated Rehabilitation Systems Using EMG Biosensors. Journal of Physical Therapy Science, 2011, 23, 945-948.	0.6	16
111	Design and development of a low cost EMG signal acquisition system using surface EMG electrode. , 2010, , .		13
112	A study of back-propagation and radial basis neural network on EMG signal classification. , 2009, , .		4
113	Complex background subtraction for biometric identification. , 2007, , .		4
114	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
115	Towards a Realistic Medical Simulator using Virtual Environments and Haptic Interaction. , 2003, , 289-306.		5
116	An approach to LEM modeling: construction, collision detection and dynamic simulation. , 0, , .		15
117	Pulmonary Acoustic Signal Classification Using Autoregressive Coefficients and k-Nearest Neighbor. Applied Mechanics and Materials, 0, 591, 211-214.	0.2	8
118	Time and Frequency Domain Performance Comparison for Wheeze Detection Using K-Nearest Neighbor. Applied Mechanics and Materials, 0, 591, 163-166.	0.2	1
119	Faithful Haptic Feedback in Medical Simulators. , 0, , 414-423.		3