Pornchai Phukpattaranont

List of Publications by Citations

68 papers	1,878 citations	18 h-index	42 g-index
91 ext. papers	2,388 ext. citations	2.6 avg, IF	5.21 L-index

#	Paper	IF	Citations
68	Feature reduction and selection for EMG signal classification. *Expert Systems With Applications*, **2012**, 39, 7420-7431	7.8	734
67	A self-calibration water level measurement using an interdigital capacitive sensor. *Sensors and Actuators A: Physical*, **2014**, 209, 175-182	3.9	92
66	The Usefulness of Mean and Median Frequencies in Electromyography Analysis **2012**,		89
65	QRS detection algorithm based on the quadratic filter. *Expert Systems With Applications*, **2015**, 42, 4867-4877	2.7	77
64	Feature Extraction and Reduction of Wavelet Transform Coefficients for EMG Pattern Classification. *Elektronika Ir Elektrotechnika*, **2012**, 122,	1.7	68
63	Fractal analysis features for weak and single-channel upper-limb EMG signals. *Expert Systems With Applications*, **2012**, 39, 11156-11163	7.8	62
62	Mean and Median Frequency of EMG Signal to Determine Muscle Force based on Time-Dependent Power Spectrum. *Elektronika Ir Elektrotechnika*, **2013**, 19,	1.7	48
61	A Review of Control Methods for Electric Power Wheelchairs Based on Electromyography Signals with Special Emphasis on Pattern Recognition. *IETE Technical Review (Institution of Electronics and Telecommunication Engineers, India)*, **2011**, 28, 316	1.5	38
60	. *IEEE Transactions on Instrumentation and Measurement*, **2016**, 65, 1547-1557	5.2	35
59	Post-beamforming second-order Volterra filter for pulse-echo ultrasonic imaging. *IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control*, **2003**, 50, 987-1001	3.2	29
58	ELECTROMYOGRAPHY (EMG) SIGNAL CLASSIFICATION BASED ON DETRENDED FLUCTUATION ANALYSIS. *Fluctuation and Noise Letters*, **2011**, 10, 281-301	1.2	27
57	INVESTIGATING LONG-TERM EFFECTS OF FEATURE EXTRACTION METHODS FOR CONTINUOUS EMG PATTERN CLASSIFICATION. *Fluctuation and Noise Letters*, **2012**, 11, 1250028	1.2	25
56	A preliminary study assessing time-domain EMG features of classifying exercises in preventing falls in the elderly **2012**,		24
55	WAVELET-BASED DENOISING ALGORITHM FOR ROBUST EMG PATTERN RECOGNITION. *Fluctuation and Noise Letters*, **2011**, 10, 157-167	1.2	22
54	Evaluation of feature extraction techniques and classifiers for finger movement recognition using surface electromyography signal. *Medical and Biological Engineering and Computing*, **2018**, 56, 2259-2271	3.1	21
53	Evaluating Feature Extraction Methods of Electrooculography (EOG) Signal for Human-Computer Interface. *Procedia Engineering*, **2012**, 32, 246-252		19
52	Reduced viral burden in paralytic compared to furious canine rabies is associated with prominent inflammation at the brainstem level. *BMC Veterinary Research*, **2013**, 9, 31	2.7	18

51	A Comparative Study of Wavelet Denoising for Multifunction Myoelectric Control **2009**,		18
50	Robust Eye Movement Recognition Using EOG Signal for Human-Computer Interface. *Communications in Computer and Information Science*, **2011**, 714-723	0.3	17
49	Canine furious and paralytic rabies: studies of neural tract integrity, blood brain barrier, virus and inflammatory distribution patterns. *International Journal of Infectious Diseases*, **2012**, 16, e110-e111	10.5	15
48	FPGA implementations of an ADALINE adaptive filter for power-line noise cancellation in surface electromyography signals. *Measurement: Journal of the International Measurement Confederation*, **2012**, 45, 405-414	4.6	14
47	EMG AMPLITUDE ESTIMATORS BASED ON PROBABILITY DISTRIBUTION FOR MUSCLE–COMPUTER INTERFACE. *Fluctuation and Noise Letters*, **2013**, 12, 1350016	1.2	13
46	Cell type classifiers for breast cancer microscopic images based on fractal dimension texture analysis of image color layers. *Scanning*, **2015**, 37, 145-51	1.6	11
45	A speech recognition system based on electromyography for the rehabilitation of dysarthric patients: A Thai syllable study. *Biocybernetics and Biomedical Engineering*, **2019**, 39, 234-245	5.7	11
44	Comparison of feature evaluation criteria for speech recognition based on electromyography. *Medical and Biological Engineering and Computing*, **2018**, 56, 1041-1051	3.1	10
43	APPLICATIONS OF VARIANCE FRACTAL DIMENSION: A SURVEY. *Fractals*, **2014**, 22, 1450003	3.2	10
42	Critical Exponent Analysis Applied to Surface EMG Signals for Gesture Recognition. *Metrology and Measurement Systems*, **2011**, 18,		10
41	Segmentation of Cancer Cells in Microscopic Images using Neural Network and Mathematical Morphology **2006**,		10
40	Intracellular Spread of Rabies Virus Is Reduced in the Paralytic Form of Canine Rabies Compared to the Furious Form. *PLoS Neglected Tropical Diseases*, **2016**, 10, e0004748	4.8	10
39	Feature selection for Thai tone classification based on surface EMG. *Procedia Engineering*, **2012**, 32, 253-259		9
38	Evaluation of fall detection for the elderly on a variety of subject groups **2009**,		9
37	Texture Analysis of Breast Cancer Cells in Microscopic Images Using Critical Exponent Analysis Method. *Procedia Engineering*, **2012**, 32, 232-238		8
36	A Feasibility Study of Fatigue and Muscle Contraction Indices Based on EMG Time-dependent Spectral Analysis. *Procedia Engineering*, **2012**, 32, 239-245		8
35	EMG denoising estimation based on adaptive wavelet thresholding for multifunction myoelectric control **2009**,		8
34	Force classification using surface electromyography from various object lengths and wrist postures. *Signal, Image and Video Processing*, **2019**, 13, 1183-1190	1.6	7

33	Optimal EMG amplitude detectors for muscle-computer interface **2013**,		7
32	Development of a computer system for strabismus screening **2013**,		7
31	Fractal Analysis of Surface Electromyography (EMG) Signal for Identify Hand Movements Using Critical Exponent Analysis. *Communications in Computer and Information Science*, **2011**, 703-713	0.3	7
30	The effects of the force of contraction and elbow joint angle on mean and median frequency analysis for muscle fatigue evaluation. *ScienceAsia*, **2015**, 41, 263	1.4	5
29	Application of wavelet transform and Shannon energy on R peak detection algorithm **2016**,		5
28	Analysis of Electromyography in Dynamic Hand Motions Using L-Kurtosis. *Applied Mechanics and Materials*, **2015**, 781, 604-607	0.3	4
27	Improvement of signal to noise ratio (SNR) in ECG signals based on dual-band continuous wavelet transform **2014**,		4
26	**2008**,		4
25	Sensor-assisted EMG data recording system **2018**,		4
24	A robust measure of probability density function of various noises in electromyography (EMG) signal acquisition **2015**,		3
23	Three steps of Neuron Network classification for EMG-based Thai tones speech recognition **2013**,		3
22	Probability density of electromyography signal for different levels of contraction of biceps brachii **2013**,		3
21	Separation of Nonlinear Ultrasound Signals Based on Second-Order Volterra System Identification. *Japanese Journal of Applied Physics*, **2009**, 48, 07GJ01	1.4	3
20	Dual-mode ultrasound phased arrays for noninvasive surgery: post-beamforming image compounding algorithms for enhanced visualization of thermal lesions		3
19	Efficient feature for classification of eye movements using electrooculography signals. *Thermal Science*, **2016**, 20, 563-572	1.2	3
18	Implementation of a real-time automatic onset time detection for surface electromyography measurement systems using NI myRIO. *Thermal Science*, **2016**, 20, 591-602	1.2	3
17	Effect of Electrode Skin Impedance on Electromyography Signal Quality **2018**,		3
16	The optimal electromyography feature for oral muscle movements **2013**,		2

List of Publications

15	Bootstrap Causal Feature Selection for irrelevant feature elimination **2013**,		2
14	Overlapping nuclei segmentation using direction-based flow tracking. *IEEJ Transactions on Electrical and Electronic Engineering*, **2013**, 8, 387-394	1	2
13	Optimum Quadratic Filters for Nonlinear Ultrasonic Imaging. *Japanese Journal of Applied Physics*, **2009**, 48, 07GJ02	1.4	2
12	Multimodal Data Fusion of Electromyography and Acoustic Signals for Thai Syllable Recognition. *IEEE Journal of Biomedical and Health Informatics*, **2021**, 25, 1997-2006	7.2	2
11	Signal-to-Noise Ratio Estimation in Electromyography Signals Contaminated with Electrocardiography Signals. *Fluctuation and Noise Letters*, **2020**, 19, 2050027	1.2	2
10	Upper limbs rehabilitation system for stroke patient with biofeedback and force **2013**,		1
9	Classifying breast cancer regions in microscopic image using texture analysis and neural network **2013**,		1
8	**2012**,		1
7	Noise removal in ECG signals using the quadratic filter **2012**,		1
6	Development of a bioimpedance-based human machine interface for wheelchair control **2009**,		1
5	P5B-7 Design of Quadratic Filters for Contrast-Assisted Ultrasonic Imaging. *Proceedings IEEE Ultrasonics Symposium*, **2007**,		1
4	Evaluation of feature projection techniques in object grasp classification using electromyogram signals from different limb positions. *PeerJ Computer Science*,8, e949	2.7	1
3	Accounting for SNR in an Algorithm Using Wavelet Transform to Remove ECG Interference from EMG Signals. *Fluctuation and Noise Letters*, **2020**, 19, 2050001	1.2	0
2	Quadratic B-mode (QB-Mode) Ultrasonic Imaging with Coded Transmit Waveforms. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society*, **2005**, 2005, 7417-20		
1	Two-stage classification of electromyogram signals from hand grasps in the transverse plane.. *Computer Methods in Biomechanics and Biomedical Engineering*, **2022**, 1-13	2.1	