

Contents

Development of an intelligent pillow with multiple flexible actuators.	1
<i>Akisue Kuramoto, Wataru Inoue, Yasuhito Otake, Hitoshi Kimura, Norio Inou, Sacha Krivokuca, Tomu Ichikawa, Hiroyuki Ono, and Naoto Sekiyama</i>	
Objective Evaluation of Skin Texture Condition by Image Analysis	7
<i>Toshiyuki Tanaka and Haruna Suzuta</i>	
Effects of Photofrin-mediated photodynamic treatment on sensitivity to cisplatin in HeLa cells and the resistant subline.	13
<i>Yuichi Miyamoto, Yuri Yamaguchi, and Hatsuki Tajima</i>	
Novel spectral approach for pulse waves contour analysis	16
<i>A.A. Fedotov, A.S. Akulova, S.A. Akulov, and M.A. Reshetnikova</i>	
A Comprehensive Analysis on Breast Cancer Classification with Radial Basis Function and Gaussian Mixture Model	21
<i>Harikumar Rajaguru and Sunil Kumar Prabhakar</i>	
Heart Sounds Features Usage for Classification of Ventricular Septal Defect Size in Children.	28
<i>Kamran Hassani, Kamal Jafarian, and D. John Doyle</i>	
Multiclass Classification of APG Signals using ELM for CVD Risk Identification: A Real-Time Application	32
<i>B. Niranjana Krupa, Kunal Bharathi, Manjunath Gaonkar, Sai Karun, Suhan Nath, and M.A.M. Ali</i>	
Development of an EMG-based Human-Machine Interface on Open-source Linux Platform for Evaluating the Motor Skill Acquisition Process.	38
<i>Guanghao Sun and Wenwei Yu</i>	
Measuring Neural, Physiological and Behavioral Effects of Frustration	43
<i>Babu Ram Naidu Ramachandran, Sandra Alejandra Romero Pinto, Jannis Born, Stefan Winkler, and Rama Ratnam</i>	
Estimating Correlation between Arterial Blood Pressure and Photoplethysmograph	47
<i>Theertha Abhay, Kayalvizhi N., and Rolant Gini J.</i>	
Flow visualization for Nasal Cavity Flow in Aerosol Exhalation Through Nose Treatment.	53
<i>Takahisa Yamamoto, Yoshiki Kobayashi, Shunpei Shikano, Masahiro Takeyama, Mikiya Asako, and Koichi Tomoda</i>	
Multi physiological signs model to enhance accuracy of ECG peaks detection	58
<i>A. Delrieu, M. Hoël, C.T. Phua, and G. Lissorgues</i>	
PSO based Density Classifier for Mammograms	62
<i>Sneha Simon, Lavanya R., and Devi Vijayan</i>	
Development And Evaluation of WEEG: A Wearable 8-Channel System for Brain Computer Interfaces	67
<i>Tri Thong Vo</i>	
Performance Analysis of GMM Classifier for Classification of Normal and Abnormal Segments in PPG Signals . . .	73
<i>Sunil Kumar Prabhakar and Harikumar Rajaguru</i>	

Development of Patient Remote Monitoring System for Epilepsy Classification	80
<i>Sunil Kumar Prabhakar and Harikumar Rajaguru</i>	
Discrete Wavelet Transform based statistical features for the Drowsiness detection from EEG	88
<i>Reddy Vamsi, Dabhu Suman, Nikhil CH, and M. Malini</i>	
State space modeling of bioimpedance for haematocrit measurement	95
<i>S.A. Akulov, A.A. Fedotov, A.S. Akulova, and M.A. Reshetnikova</i>	
A Hybrid Classifier for the Detection of Microaneurysms in Diabetic Retinal Images	99
<i>Aishwarya R., Vasundhara T., and Ramachandran K.I.</i>	
Approach To Extract Twin fECG For Different Cardiac Conditions During Prenatal	106
<i>Rolant Gini J., Ramachandran K.I., and Ceerthibala U.K.</i>	
Reception Performance Enhancement of Capacitive Micromachined Ultrasonic Transducers Via Modified Membrane Structures	111
<i>Xiao Jiang, Yuanyu Yu, Jiujiang Wang, Xin Liu, U. Kin Che, Sio Hang Pun, Mang I. Vai, and Peng Un Mak</i>	
Design of a Silent Speech Interface using Facial Gesture Recognition and Electromyography	117
<i>Aishwarya Nair, Niranjana Shashikumar, S. Vidhya, and S.K. Kirthika</i>	
Performance Comparison of Oral Cancer Classification with Gaussian Mixture Measures and Multi Layer Perceptron	123
<i>Harikumar Rajaguru and Sunil Kumar Prabhakar</i>	
Measurement of Pulse Transit Time (PTT) Using Photoplethysmography	130
<i>Lokharan M., Lokesh Kumar K.C., Harish Kumar V., Kayalvizhi N., and Aryalekshmi R.</i>	
Erratum to: The 16th International Conference on Biomedical Engineering.	E1
<i>James Goh, Chwee Teck Lim, and Hwa Liang Leo</i>	
Author Index	135

The 16th International Conference on Biomedical
Engineering

ICBME 2016, 7th to 10th December 2016, Singapore

Goh, J.; Lim, C.T.; Leo, H.L. (Eds.)

2017, XVIII, 135 p. 108 illus., Softcover

ISBN: 978-981-10-4219-5