

DHAKA UNIVERSITY

JOURNAL OF APPLIED SCIENCE & ENGINEERING

Vol. 4, No. 1

January 2017

Editor

Prof. Dr. A.H.M. Asadul Huq

Dept. of Electrical and Electronic Engineering
University of Dhaka
Dhaka-1000, Bangladesh

Convener of the Editorial Council

Prof. Dr. Md. Hasanuzzaman

Dean, Faculty of Engineering and Technology
University of Dhaka
Dhaka-1000, Bangladesh

Members of the Editorial Council

Prof. Dr. Zahid Hasan Mahmood

Dept. of Electrical and Electronic Engineering
University of Dhaka
Dhaka-1000, Bangladesh

Prof. Dr. Anis Ahmed

Dept. of Electrical and Electronic Engineering
University of Dhaka
Dhaka-1000, Bangladesh

Prof. Dr. Sayed Md. Shamsuddin

Dept. of Applied Chemistry and Chemical
Engineering
University of Dhaka
Dhaka-1000, Bangladesh

Prof. Dr. Md. Nurul Amin

Dept. of Applied Chemistry and Chemical
Engineering
University of Dhaka
Dhaka-1000, Bangladesh

Prof. Dr. Shabbir Ahmed

Dept. of Computer Science and Engineering
University of Dhaka
Dhaka-1000, Bangladesh

Prof. Dr. Md. Mustafizur Rahman

Dept. of Computer Science and Engineering
University of Dhaka
Dhaka-1000, Bangladesh

Dr. Md. Shafiqul Islam

Dept. of Nuclear Engineering
University of Dhaka
Dhaka-1000, Bangladesh

Dr. Lafifa Jamal

Dept. of Robotics and Mechatronics Engineering
University of Dhaka
Dhaka-1000, Bangladesh

DHAKA UNIVERSITY
JOURNAL OF APPLIED SCIENCE & ENGINEERING

Vol. 4, No. 1

January 2017

CONTENTS

01.	Calculation of the Neutron Shielding Properties of Locally Developed Ilmenite-Magnetite (I-M) Concrete	1
	<i>Md. Hossain Sahadath, Ripan Biswas, Md. Fazlul Huq and Abdus Sattar Mollah</i>	
02.	Effectiveness of using Polyethylene and 5% Borated Polyethylene for Radiation Shielding in Spacecraft	7
	<i>Md. Akhlak Bin Aziz, Md. Fazlul Huq, Zahid Hassan Mahmood and Khorshed Ahmad Kabir</i>	
03.	Feature Based No-Reference Perceptual Depth Assessment Model for Mobile 3D Video Applications	11
	<i>Iffat Alam and Z.M. Parvez Sazzad</i>	
04.	A Real-Time Appearance-Based Bengali Alphabet And Numeral Signs Recognition System	19
	<i>Muhammad Aminur Rahman, Mahmood Jasim, Md. Haider Ali and Md. Hasanuzzaman</i>	
05.	Problem Analysis of Fabricated Monocrystalline Silicon Solar Cell in Bangladesh	27
	<i>Galib Hashmi, Md. Shahriar Basher, Mahbulul Hoq and Md. Habibur Rahman</i>	
06.	Utilization of low cost metals as back contact with Perovskite Solar Cell	35
	<i>Najmin Ara Sultana, Md. Obidul Islam and Zahid Hasan Mahmood</i>	
07.	Systematic Optimization for the Design of Si-NW Biosensor	39
	<i>Md. Obidul Islam, Najmin Ara Sultana, Md. Salim Raza and Zahid Hasan Mahmood</i>	
08.	Classification of Electromyography Signals Using Support Vector Machine	45
	<i>Ariful Islam and M.S Alam</i>	
09.	Design, Construction and Performance Study of a Low Cost Solar Dryer for Food Preservation in Bangladesh	53
	<i>Pias Kumar Biswas, Md. Milon Uddin, Saiful Huque and S.M. Nasif Shams</i>	