2018 10th International Conference on Electrical and Computer Engineering (ICECE 2018)

Dhaka, Bangladesh
20-22 December 2018

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ICECE 2018 Program Details

19 December 2018, Wednesday (15:00-17:00) Registration and Kit Collection, Dept. of EEE, ECE Building, BUET

20 December 2018, Thursday

20 December, Thursday (8:30-14:00) Council Building, BUET	
08:30-09:15	Registration and Kit Collection
09:15-09:45	Video Presentation by Sponsors
09:45-10:30	Inauguration
10:30-11:00	Tea Break
11:00-13:00	Panel Session: Sustainable and Resilient Power System in Bangladesh
13:00-14:00	Lunch Break

20 December 2018, Thursday (14:00-15:45) Session A1:Wireless Communications-1 Room No.: ECE 625, ECE Building, BUET Session Chair: Raqibul Mostafa, Dept. of EEE, UIU		
38	Adaptation of Transmit Power and Bits/Subchannel in QoS Constrained Downlink Cognitive OFDMA Networks	Dibyangana Kar, Niranjan Chandra Roy and Lutfa Akter
39	Transmit Power and Bits Adaptation in QoS Constrained Multiple User Uplink Cognitive OFDM Networks	Niranjan Chandra Roy, Dibyangana Kar and Lutfa Akter
40	Cognitive Radio Enabled Biomedical and Non-medical Hospital Device Communication Protocols for CogMed	Ishtiak Al Mamoon, Asim Zeb, Abul Lais M.S. Haque, A.K.M. Muzahidul Islam and Ashir Ahmed
99	Improvement in RL Capacity and Handoff for a UAV in a CDMA Cellular Network using Directional Beampattern	Aan Nazmus Sakib and Raqibul Mostafa
107	Three-Layered Incentive Framework for Mobile Crowdsourcing	Linta Islam, Md. Amirul Islam and Mohammed Nasir Uddin
143	Specific Quality of Service Constrained Optimal Allocation of Transmit Power and Bits in NOMA Systems	Md. Didarul Islam and Lutfa Akter

	20 December 2018, Thursday (14:00-15:45) Session B1:Electromagnetics & Antennas Room No.: ECE 627, ECE Building, BUET Session Chair: Pran Kanai Saha, Dept. of EEE, BUET	
139	Ingestible Antenna at Inner-Wall of Capsule for Capsule Endoscopy	Raja Rashidul Hasan, Rohit Saraff, Pranta Dutta, Shumit Roy, Al-Mosabbir and Shantanu Nath
214	Miniaturized and Differentially Fed Implantable Antenna for Biomedical Telemetry Applications	Prosen Kirtonia, Md. Kamal Hosain and Tareq Rahman
220	Design and Analysis of a Miniaturized UWB Antenna for Wireless Capsule Endoscopy	Saiful Islam and Mst. Fateha Samad
261	Multiheaded starfish shaped multiband microstrip patch antenna for satellite communication	Md. Sazzad Hossain, Md. Towsif Abir, Md. Hadiur Rahman Khan and Mohammad Tariqul Islam
263	Design and Analysis of Double E-shaped Array Antennas for an Outdoor RFID System	Nayan Sarker and Md. Rubaiyat HossainMondal
264	A Compact Ultrawideband Planar Antenna for a Biomedical Application	Farhadur Arifin and Pran Kanai Saha
268	Microstrip-Line Fed Gap-Coupled Antennas for Different Patch Geometries	Sowmitra Das, Bejoy Sikder, Mohammad Hadiur Rahman Khan and Mohammad Tariqul Islam

	20 December 2018, Thursday (14:00-15:45) Session C1: Signal Processing-1 Room No.: ECE 629, ECE Building, BUET Session Chair: Shaikh Anowarul Fattah, Dept. of EEE, BUET	
32	Detection of drug-induced QT Syndrome from ECG using machine learning techniques	Fahmida Pervin Brishty and Shahin Akhter
91	Sentence-Level Semantic Textual Similarity using Word-Level Semantics	Md Shajalal and Masaki Aono
97	A New Reversible Data Hiding Scheme with Pixel-to-Block Mapping	Hussain Nyeem, Md Fazla Elahi and Md. Abdul Wahed
114	An Efficient Approach to Compensate Control Valve	Ahaduzzaman, Ashfaq

	Stiction	Iftakher and M. A. A Shoukat Choudhury
156	A Modified Canny Edge Detection Algorithm for Fruit Detection & Classification Using Image Processing	Md Khurram Monir Rabby, Brinta Chowdhury and Jung H. Kim
193	An Ensemble SVM-based Approach for Voice Activity Detection	Jayanta Dey, Md Sanzid Bin Hossain and Mohammad Ariful Haque
228	Social media bullying detection using machine learning on Bangla text	Abdhullah-Al- Mamun and Shahin Akhter

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20 December 2018, Thursday (14:00-15:45) **Session D1: Electronics-1** **Room No.: ECE 632, ECE Building, BUET** **Session Chair: S M Mominuzzaman, Dept. of EEE, BUET**		
144	Physical understanding on the interface states and grain boundary defects of polysilicon nanowires	Abdullah-Bin Siddique, Kazi Aousafur Rahman, Mohammad Nur Alam, Kamrul Hasan and Mohammad Al Hakim
180	Temperature Induced Localization Dynamics of Exciton in ZnO/MgZnO and CdZnO/MgZnO Quantum Well	Farial Mahamud, Md. Soyaeb Hasan, Md. Rafiqul Islam, Md. Sherajul Islam and Md. Tanvir Hasan
197	Effects of Edge Termination on the Electronic Properties of Zig-Zag Boron Nitride Nanoribbons	Hossain Mansur Resalat Faruque, Atonu Mukherjee, Md. Sherajul Islam, Ashraful Ghani Bhuiyan and Akihiro Hashimoto
201	Uniaxial Strain on Monolayer SiGe: Strain Tunable Electronic Properties	Hasibul Sakib, Touhid Ahmed and Samia Subrina
209	Phonon-Dephasing in Armchair Graphene Nanoribbon	Nazmul Amin, Mushita Masud Munia, Abu Mohammad Saffat-EeHuq and Mahbub Alam
219	Fabrication and Performance Test of Dye-Sensized Solar Cell Using Natural Dye Extracted from Basella Alba seeds	Md. Al Emran, Al Amin and Md. Faruk Hossain
235	Elastic Phonon Dephasing in Zigzag Graphene	Shaid Hasan, Nashmin

	Nanoribbon	Alam, Nazmul Amin and Mahbub Alam

	20 December 2018, Thursday (14:00-15:45) **Session E1: Power Electronics-1** **Room No.: ECE 634, ECE Building, BUET** **Session Chair: Enamul Basher, Dept. of EEE, BUET**	
251	Advanced Control Scheme for Bidirectional Grid-Connected Inverter	Fatama-Tuz-Zahura and Md. Ziaur Rahman Khan
272	Flyback AC-DC Rectifier with Active Power Factor Correction	Md. Didarul Alam, Md. Ziaur Rahman Khan and Mohammad Ali Choudhury
105	Space Vector Modulated PWM Generation for Motor Control Systems	Zarzisur Rahman Rony, Shuvangkar Chandra Das and Md. Ziaur Rahman Khan
163	Asynchronous Induction Motor Speed Control Using Takagi-Sugeno Fuzzy Logic	Md Ismail Hossain, Md Shafiul Alam, Md Shafiullah and Md Al Emran
170	Simplified Model Predictive Control of Four-Leg Inverters for Stand-alone Power Systems	Farzana Akter, Kazi Alam and Md Parvez Akter

Tea Break(15:45-16:15)
20 December 2018, Thursday (16:15-17:15) **Plenary Session I** **Wideband Arrays With Beamforming** **Speaker: Prof. John. L. Volakis, Florida International University, USA** **Room No.: 625, ECE Building, BUET** **Session Chair: Md Saifur Rahman, Dean, Faculty of EEE, BUET**

21 December 2018, Friday

	21 December 2018, Friday (9:00-10:45) Session A2: Electronics-2 Room No.: ECE 625, ECE Building, BUET Session Chair: M. M. Shahidul Hassan, Professor and Vice Chancellor, East West University		
17	Effect of Halide Compositions on the Performance of Perovskite Solar Cells	Sumaiya Wahid and Md. Kawsar Alam
66	Effect of pH Variation on Structural, Optical and Shape Morphology of BiVO4 Photocatalysts	Manifa Noor, Md Abdullah Al Mamun, M A Matin, Md Fakhrul Islam, Saima Haque, Farabi Rahman, Nazmul Hossaim and M A Hakim
95	Silvaco Based Simulation of Unequal Double Gate Junctionless TFET with GaAs-GaSb Heterostructure	Md Shafiqul Islam, Rishad Raiyan and Arnob Saha
203	Design and Performance Analysis of Multijunction Organic Solar Cell Exceeding 14% Efficiency	Ramisha Rabeya and Faysal Hakim
205	Changing of Dielectric Properties Through Light Matter Interaction Assisted by External Voltage	Md Mozammal Kamal Raju and M. Shah Alam
236	Comparative Performance Analysis Between CIGS Single-Junction and CIGS Tandem Multi-Junction Solar Cell	Mohammed Abdullah Faruque, Rezwan Ahmed, Mofazzel Hossain Rahat and Khairul Alam
265	Characterization of Multiwall Carbon Nanotube Thin Films Electrodeposited on Indium Tin Oxide Substrates	Muhammad Athar Uddin, Tetsuo Soga and Sharif Mohammad Mominuzzaman

	21 December 2018, Friday (9:00-10:45) **Session B2: Signal Processing-2** **Room No.: ECE 627, ECE Building, BUET** **Session Chair: Md. Aynal Haque, Dept. of EEE, BUET**	
21	RF Pilot Tone Based Photonic Pattern Recognition	Puja Rani Saha, Azharul Islam and Jibesh Kanti Saha
28	High Performance Facial Expression Recognition System Using Facial Region Segmentation, Fusion of HOG & LBP Features and Multiclass SVM	Bayezid Islam, Firoz Mahmud and Arfat Hossain
81	A Variational Step for Reduction of Mixed Gaussian-Impulse Noise from Images	Mohammad Tariqul Islam, Dipayan Saha, S. M. Mahbubur Rahman, M. Omair Ahmad and M. N. S. Swamy
125	Feature Extraction from Dermoscopy Images for an Effective Diagnosis of Melanoma Skin Cancer	Sharmin Majumder and Muhammad Ahsan Ullah
128	Prediction of Speech Intelligibility using Neural Responses for Normal Hearing People	Taieba Taher and Nursadul Mamun
137	IMPACT : Image processing based Maze solver, Persistent Autonomous object Carrying boT	Nabil Ibtehaz, Md Saad Ul Haque, Mahtab Noor Shaan, AKM Hasibul Haque, Ashish Shorma Dipta, Atiqur Rahman, Shadab Mahbub and Arnab Bhattacharjee
145	Classification of Microscopic Images of Bacteria Using Deep Convolutional Neural Network	Md. Ferdous Wahid, Tasnim Ahmed and Md. Ahsan Habib

	21 December 2018, Friday (9:00-10:45) **Session C2: Engineering Applications-1** **Room No.: ECE 629, ECE Building, BUET** **Session Chair: A. B. M. Harun-Ur-Rashid, Dept. of EEE, BUET**	
47	Design and Development of an Online Bus Monitoring System	Owana Marzia Moushi, Mostofa Kamal, Mahmuda Haque and Md. Shamim Ahsan
76	Non-invasive Blood Glucose Determination using Near Infrared LED in Diffused Reflectance Method	Mohammed Shahriar Arefin, Adnan Hossain Khan and Rabiul Islam
121	Design and Implementation of Non-invasive Continuous Blood Pressure Measurement and Monitoring System Using Photoplethysmography	Md. Aminul Islam and Mohiuddin Ahmad
200	Design and Implementation of a Low-Cost Blood Pressure Measuring Device	Md. Suman Ali and Muhibul Haque Bhuyan
221	Technologically Enhanced Bicycle: Anti-Theft Security, Automated Gear System and Rear Protection	Nazmul Amin, Touhid Ahmed, Shakil

		Mahmud Olee, Md. Tahmidul Alam and Tahmid Kaisar
234	BREATHE SAFE: A Smart Garbage Collection System for Dhaka City	Md Junayed Siddique, Mohammad Aynul Islam, Fernaz Narin Nur, Nazmun Nessa Moon and Mohd. Saifuzzaman
270	Arsenic Removal Using Multiwall Carbon Nanotube	Mohammad Shamimul Haque Choudhury, Tetsuo Soga and Sharif Mohammad Mominuzzaman

21 December 2018, Friday (9:00-10:45) Session D2: Photonics Room No.: ECE 632, ECE Building, BUET Session Chair: B M Azizur Rahman, City, University of London, UK		
56	Dual Polarized Plasmonic Refractive Index Sensor based on Photonic Crystal Fiber	Md. Aslam Mollah, Alok Kumar Paul and S. M. Abdur Razzak
169	Heptagonal Photonic Crystal Fiber for Dispersion Compensation with a Very Low Confinement Loss	Mohammad Faisal, Md Borhan Mia, Kanan Roy Chowdhury, Animesh Bala Ani, Shuvankar Ghosh and Syeda Iffat Naz
192	Reduction of Excitation Volume in Fluorescence Spectroscopy with Localized Surface Plasmon	Md Mahadi Masnad, M. Shah Alam and Sharif Mohammad Mominuzzaman
196	Hybrid Plasmon Waveguide for Capacitor Like Energy Localization in Dielectric Gap	K. B. M. Rakib Hasan and M. Shah Alam
215	Design Optimization of Biochemical Sensor Using Multiple Cross-Slot Waveguide	Mahdi Zulfikar and M. Shah Alam
239	Over Two Octave Spanning Visible and Near-IR Supercontinuum Generation in Dual-Core PCF	Zahidur Rahman, Md. Ashfaqur Rahman, Md. Asiful Islam and M. Shah Alam
267	GeO_2 Doped Polarization Maintaining Fiber for Residual Dispersion Compensation	Sk Nayemuzzaman, Pranjol Sen Gupta, Apu Das and Mohammad Faisal

	21 December 2018, Friday (9:00-10:45) **Session E2: Power Systems-1** **Room No.: ECE 634, ECE Building, BUET** **Session Chair: Abdul Hasib Chowdhury, Dept. of EEE, BUET**	
89	Development of Combined Differential Binary Encoding Algorithm for Power System Operational Data Compression	Subhra J. Sarkar, Palash Kundu and Gautam Sarkar
117	Determining Optimum Generator for South-East Coast of Bangladesh: Hybrid, Solar-Only or Wind-Only?	Anjan Debnath, M. Nazmul Huda, Chitta Saha and Sukanta Roy
134	Power Sharing between Solar Home Systems by Smart Control of Power Flow	Nayeemur Rahman, Maria Islam and Md. Ziaur Rahman Khan
179	Online Monitoring of Inter-Area Oscillations and damping of Power systems employing Prony Analysis	Md Ismail Hossain, Md Shafiullah, Mohammad Abido and Md Al Emran
269	Stabilization Improvement of Load Frequency Deviation for Multi-Area Interconnected Smart Grid Using Integral Linear Quadratic Gaussian Control Approach	Mizanur Rahman, Subrata K. Sarkar and Sajal K. Das

Tea Break (10:45-11:15)

21 December 2018, Friday (11:15-12:15)   **Plenary Session II**   **Design and Optimization of Emerging Photonic Sensors**   **Speaker: Prof. B M Azizur Rahman, City, University of London, UK**   **Room No.: 625, ECE Building, BUET**   **Session Chair: Satya Prasad Majumder, Dept. of EEE, BUET**

Lunch Break, ECE Building, BUET(12:15-14:30)

	21 December 2018, Friday (14:30-16:00) **Session A3: Power Systems -2** **Room No.: ECE 625, ECE Building, BUET** **Session Chair: Tapan Saha, The University of Queensland, Australia**	
INVITED	Resurrection of DC : An exposition for Future Power System	M. Rezwan Khan, S.M. Lutful Kabir, Md. Ali Choudhury
72	FGMO Trial for frequency regulation in Bangladesh Power System	Md. Arifur Kabir and Abdullah Al Hadi
88	Realization of a Cloud Server Based Power System	Subhra J. Sarkar,

	Operational Data Management System	Palash Kundu and Gautam Sarkar
93	Application of Battery Energy Storage System to Improve Damping of a Simple Power System	A K M Kamrul Hasan, Mohammed H. Haque and Syed Mahfuzul Aziz
152	Role of HVDC Interconnection for Improving Frequency Response in a Low Inertia Power System	Nahid Al Masood, Shohana Rahman Deeba, Hasin Mussayab Ahmed, Md. Nahid Haque Shazon, Zarin Tasnim and Md. Ashikur Rahman

21 December 2018, Friday (14:30-16:00) SessionB3: Electronics-3 Room No.: ECE 627, ECE Building, BUET Session Chair: Md Shafiqul Islam, Dept. of EEE, BUET		
57	Fabrication and Characterization of NiO-doped $BaTiO_3$ for Multilayer Ceramic Capacitor	T. M. S. A. Hossain, M. A. Matin, M. A. Hakim and M. F. Islam
85	Extraction of Equivalent Circuit Parameters for CNT incorporated Perovskite Solar Cells Using Newton–Raphson Method	M. Nahid Reza and Sharif Mohammad Mominuzzaman
104	Cost Effective Perovskite Solar Cell with Inorganic Hole-Transporting Material	Iqbal Kabir, Farhan Sadik and Shaikh Asif Mahmood
122	Influence of Sintering Temperature on Magnetic Characteristics of Li-Cu-Ni-Zn Ferrite	Mithun Kumar Das, Abdulla Al- Momin and AKM Akther Hossain
238	First-principles study on strain engineered SnS monolayer	Towsif Taher, Rajat Chakraborty, Shahnewaz Ahmed and Samia Subrina
242	Thermal Transport in Armchair Graphene Nanoribbon Using Equilibrium Molecular Dynamics Simulation	Sadman Sakib Ahbab, Shakib Mahmood, Anika Tabassum and Samia Subrina

21 December 2018, Friday (14:30-16:00) Session C3: Power Electronics-2 Room No.: ECE 629, ECE Building, BUET Session Chair: Kazi Mujibur Rahman, Dept. of EEE, BUET		
204	Performance Analysis of AC-DC Converter Based Self Excited DC Shunt Motor Using Single Tuned Passive Filter	Muhammad Ridwanul Hoque, Kaberi Islam, Rakibul Islam and Mohammad Jahangir

		Alam
217	Comparative Assessment of Non-Isolated DC-DC Converters Combined with Passive Ripple Cancelling Circuit	Sharmin Sobhan
218	Bidirectional Isolated DC-DC Converter with Unity Gain for Low Power Applications	Md. Nazmul Hasan, Ramon Rodrguez, Luis Salamero and Carlos Olalla
225	Development of Simulation Model of a Controlled Rectifier for Reactive Power Compensation	Baishakhi Rani Biswas, Ratul Das, Md. Anwarul Abedin and A. B. M. Harun-Ur-Rashid
232	Close Loop Analysis of a Single Phase High- Efficiency AC-DC CUK Converter with Low Input Current THD and Improved Power Factor	Khadiza Akter, Golam Sarowar and Sheikh Farhana
245	Inrush Current Limiting of a Bridgeless AC-DC Converter	Abdul Kium Hridoy and Md. Ziaur Rahman Khan

	21 December 2018, Friday (14:30-16:00) **Session D3: Computer Science and Engineering** **Room No.: ECE 632, ECE Building, BUET** **Session Chair: Muhammad Masroor Ali, Dept. of CSE, BUET**	
41	Words to Meaningful Sentence: Analytics through Game Interface	Faruk Ahmed, Md Sultan Mahmud and Mohammed Yeasin
100	Design and Implementation of a Non-invasive Jaundice Detection and Total Serum Bilirubin Measurement System	Md. Redwan Sammir, Kazi Md. Towhidul Alam, Pradipta Saha, Md. Mushfiqur Rahaman and Quazi Delwar Hossain
184	Content-based File Type Identification	Kireet Bhat, Jason Lam and Farhana Zulkernine
202	A Data erasing Writing technique based 1T1M Quaternary Memory Circuit Design	Baishakhi Rani Biswas and A. B. M Harun-Ur-Rashid
212	Ontology Based Log Analysis of Web Servers Using Process Mining Techniques	Dipto Barua, Nishat Tasnim, Sakhawat Hossen and Muhammad Masroor Ali
223	Design of Quadruple Decimal Logarithmic Converter	Md. Liakot Ali and Moshiul Islam

	21 December 2018, Friday (14:30-16:00) **Session E3: Engineering Applications -2** **Room No.: ECE 634, ECE Building, BUET** **Session Chair: Md. Liakot Ali, IICT, BUET**	
109	Simulation and Performance Analysis of a Half-Adder operating at 30 GBPS using Highly Non-Linear Fibers	Ebad Zahir, Md. Mezanur Rahman and Kefayet Ullah
148	Spatio-Temporal Analysis of Large Air Pollution Data	Mirza Farhan Bin Tarek, Md Asaduzzaman and Mohammad Patwary
231	A Traffic Aware Intra-Cluster Communication Mechanism for Wireless Sensor Networks	Amit Karmaker, Mahedee Hasan and Mohammad Shah Alam
233	Cost-Effective Multichannel Wireless ECG Acquisition System	Md. Asif Ahamed and Mohiuddin Ahmad
257	Design and Implementation of 12 Channel Electrocardiogram Device	Md Farhanul Islam, Md Ragib Shaharear and Md. Saiful Islam

Tea Break (16:00-16:30)

21 December 2018, Friday (16:30-17:30) **Plenary Session III** **Challenges and Opportunities of Renewable Energy Integrations to National Grids** **Speaker: Prof. Tapan Saha, The University of Queensland, Australia** **Room No.: 625, ECE Building, BUET** **Session Chair: S. Shahnawaz Ahmed, Dept. of EEE, BUET**

CONFERENCE BANQUET, FARS HOTEL AND RESORTS (19:00)

22 December 2018, Saturday

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<tr><td>INVITED</td><td>Atomistic Simulation and Compact Modeling of Atomically Thin Transistors</td><td>Yogesh S. Chauhan, Chandan Yadav, Avirup Dasgupta, Priyank Rastogi</td><td>1</td></tr>
<tr><td>33</td><td>Effect of Gate Bias on Graphene Channel of G^4-FET and Gate-All-Around MOSFET</td><td>Md. Rakibul Alam and Hamidur Rahman</td><td>50</td></tr>
<tr><td>102</td><td>Comparative Study Between AlGaN/GaN and AlInN/GaN High Electron Mobility Transistors</td><td>Md. Shafiqul Islam, Hasan Ahmed, Sujjatul Islam and Abdul Ahad</td><td>141</td></tr>
<tr><td>120</td><td>Comparison Study of Scaling Effects of a Double Gate Silicon and $In_{0.47}Ga_{0.53}As$ MOSFET</td><td>Md. Manzurul Hasan and Khairul Alam</td><td>169</td></tr>
<tr><td>123</td><td>Threshold Voltage Improvement of Enhancement-Mode Al_2O_3/AlGaN/GaN MIS-HEMT with High Drain Current Density</td><td>Mansura Sadek and Md. Kawsar Alam</td><td>181</td></tr>
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<tr><td>INVITED</td><td>Performance of the Noise Subspace-Based Estimation Algorithm for Correlated Sources</td><td>Enrique A. Santiago, Jiawei Liu, and Mohammad Saquib</td><td>7</td></tr>
<tr><td>162</td><td>BER Performance Analysis of an OFDM FSO Communication System over Atmospheric Turbulent Channel with Coherent Heterodyne Optical Receiver</td><td>Bobby Barua and Satya Prasad Majumder</td><td>245</td></tr>
<tr><td>189</td><td>Reduction of Radiation Exposure from Cellular Base Stations by Joint Time Scheduling and Power Controlling</td><td>Molla Md. Zubaer and Md. Forkan Uddin</td><td>281</td></tr>
<tr><td>208</td><td>TDOA based Location Estimation Method for M2M Communications over Cellular Networks</td><td>Sree Krishna Das and Md. Farhad Hossain</td><td>333</td></tr>
<tr><td>68</td><td>Capacity Enhancement of Indoor 5G mm Wave Communication by Beam Steering and Narrowing</td><td>Md Navid Akbar, Sharif Atique, Mohammad Saquib and Mohammod Ali</td><td>85</td></tr>
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Session C4: Biomedical Engineering
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<tr><td>19</td><td>A Photoplethysmography Based Noninvasive Cardiac Activity Monitoring Device Offering a Customized</td><td>Dhiman Chowdhury, Mrinmoy Sarkar,</td><td>34</td></tr>
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	Android Application	Golam Rabbi and Mohammad Zakaria Haider
140	What brain connectivity patterns from EEG tell us about hearing loss: A graph theoretic approach	Md Sultan Mahmud, Mohammed Yeasin, Dawei Shen, Stephen R. Arnott, Claude Alain and Gavin M. Bidelman
190	Prediction of Origin of Replication in Genome Using DNA Sequence Based Features	Swakkhar Shatabda, Sristy Sangskriti, Dewan Farid and Mashiyat Alam Promi
191	Classification of Breast Tumour in Contourlet Transform Domain	Shahriar Mahmud Kabir and Mohammed Imamul Hassan Bhuiyan
213	A Classification Scheme for Predicting the Subcellular Localization of the Apoptosis Proteins Using Composition Features and Multiscale Entropy	Md Mosheyur Rahman and Mohammed Imamul Hassan Bhuiyan
266	Classification of Retinal Diseases from OCT scans using Convolutional Neural Networks	Suhail Najeeb, Nowshin Sharmile, Md. Sajid Khan, Ipsita Sahin, Mohammad Tariqul Islam and Mohammed Imamul Hassan Bhuiyan

22 December 2018, Saturday (9:00-10:30) Session D4: Power Electronics-3 Room No.: ECE 632, ECE Building, BUET Session Chair: Mohammad Jahangir Alam, Dept. of EEE, BUET		
6	Scalable DC Microgrid Architecture with Phase Shifted Full Bridge Converter Based Power Management Unit	Dhiman Chowdhury, Abu Shahir Md. Khalid Hasan and Md. Ziaur Rahman Khan
7	A Low Power LED Driver with a Soft-Switched Buck Converter and a Parallel-Loaded Series L-C Resonant Inverter	Dhiman Chowdhury, Mohammad Istiaque Hussain, Md. Gholam Zakaria and Md. Ziaur Rahman Khan
94	Analysis of Modular Multilevel Converter Based Solid State Transformer Implementing Hybrid Control	Rajesh Paul, Nazmuddoha Ansary, Abdur Rokib, Irrtisum Khan and Shamim Reza
150	A Novel Dual Mode CUK Converter with Multilevel Outputs	Sharmin Sobhan
157	Selective Voltage Vector Based Model Predictive Control for Three-Level Active-NPC Inverter	Farzana Akter, Md Parvez Akter and Kazi

		Saiful Alam
164	Protection of Inverter-based Distributed Generation with Series Dynamic Braking Resistor: A Variable Duty Control Approach	M. Shafiul Alam, Md Ismail Hossain, Md Alamgir Hossain, Muhammad Athar Uddin and Mohammad Shamimul Haque Choudhury

22 December 2018, Saturday (9:00-10:30) **Session E4: Renewable Energy** **Room No.: ECE 634, ECE Building, BUET** **Session Chair: Md Quamrul Ahsan, Dept. of EEE, Green University of Bangladesh**		
155	Performance Analysis of Floating Buoy Point Absorber and Oscillating Surge Wave Energy Converters in Onshore and Offshore Locations	Lamiya Rahman, Jannatul Adan, Nahid Al Masood and Shohana Rahman Deeba
172	Scalable DC Microgrid Architecture with a One-Way Communication Based Control Interface	Abu Shahir Md. Khalid Hasan, Dhiman Chowdhury and Mohammad Ziaur Rahman Khan
237	Model Predictive Based Energy Efficient Control of Grid-connected PV Systems	Amit Kumer Podder and Md. Habibullah
255	Solar Photovoltaic System Design for a Residential Hall in BUET	Khadiza Umme Tahera, Raisa Fabiha and Md. Ziaur Rahman Khan
260	End-of-Life Management of Photovoltaic Modules in Bangladesh	Kimia Tasnia, Shanaj Begum, Zarin Tasnim and Md. Ziaur Rahman Khan

Tea Break (10:30-11:00)

22 December 2018, Saturday (11:00-12:00)   **Plenary Session IV**   **Living Machines**   **Speaker: Prof. Taher Saif, University of Illinois at Urbana-Champaign, USA**   **Room No.: 625, ECE Building, BUET**   **Session Chair: Quazi Deen Mohd Khosru, Dept. of EEE, BUET**

Lunch Break, ECE Building, BUET, 12:00-14:00

22 December 2018, Saturday (14:00-16:00)   **Panel Session: Role of Telecommunications for National Development**