2014 International Conference on Electrical and Computer Engineering

(ICECE 2014)

Dhaka, Bangladesh
20-22 December 2014

TABLE OF CONTENTS

ICECE 2014 TECHNICAL PROGRAM
VENUE: PAN PACIFIC SONARGAON, DHAKA

	Session ID: SunA1 Session: Biomedical Engineering Sunday, 09:00 AM - 10:30 AM, 21 December 2014, Room: Meghna Session Chair: Muhammad J. A. Shiddiky, University of Queensland, Australia	
P-ID	**TITLE**	**AUTHOR(S)**
231	A Technology Shift Towards Triangular Electrodes from Square Electrodes in Design of Digital Microfluidic Biochip 1	Piyali Datta, Amartya Dutta, Riya Majumder, Arpan Chakrabarty, Debasis Dhal and Rajat Pal
102	Diffusion Tensor Based Global Tractography of Human Brain Fiber Bundles 5	Fahmida Chowdhury, Eddie Jacobs, Jakir Hossen and Teddy Salan
123	3D Quantitative Brain Tumor Growth Model Based on Cell Proliferation and Diffusion 9	Sohana Tanzeem, Wilburn Reddick and Khan Iftekharuddin
274	LED's Optimum Duty Cycle in Heart Rate and Oxygen Saturation Level Combinedly Measurement Device for Low Power Consumption 13	Umme Salma, Md. Jannatul Ferdous, Mohammad Rafiqul Alam, Tilottoma Barua and Esrat Jahan
463	Methylsorb: A Simple Method for Quantifying DNA Methylation Using DNA-Gold Affinity Interactions 17	Muhammad Shiddiky, Abu Ali Ibn Sina, Laura G. Carrascosa, Ramkumar Palanisamy, Sakandar Rauf and Matt Trau
468	Finite Element Modeling and Analysis of Thrombosis in Middle Cerebral Artery 21	Md. Sarwar Jahan, Md. Faruque Hossain, Md. Maodudul Hasan and Abbas Z. Kouzani

	Session ID: SunB1 Session: Optical Communication – I Sunday, 09:00 AM - 10:30 AM, 21 December 2014, Room: Chitra Session Chair: Mohammad Faisal, BUET, Bangladesh	
P-ID	**TITLE**	**AUTHOR(S)**
198	Performance Analysis of BPPM and M-Ary PPM in Free-Space Optical Communication Systems Under Gamma-Gamma Distribution Using APD and PIN 25	Md. Athaharul Islam and Ashraful Bari Chowdhury
284	Long-Reach Gbit/s Visible Light Communication Exploiting White Hot-Spot 29	G Cossu, Pallab Choudhury, A.M. Khalid, R Corsini and E Ciaramella
285	Analysis of DCO-OFDM and FLIP-OFDM for IM/DD Optical-Wireless System 32	Rashed Islam, Pallab Choudhury and Muhammad Ashiqul Islam
317	PMD Tolerance of 107 Gb/s PM-QPSK System at Optimum Transmitting Power 36	Kazi Abu Taher, Satya P. Majumdar and Azizur Rahman
475	Unconstraint Adaptive Frequency-Domain Equalizer for Coherent Optical Receivers 40	Md. Saifuddin Faruk

004	An Enhanced Design of PAPR Reduction Technique 43	Md. Munjure Mowla, Zaki Muhammad Shahriar and S.M. Mahmud Hasan

Session ID: SunC1		
Session: Wireless Communication - I		
Sunday, 09:00 AM - 10:30 AM, 21 December 2014, Room: Titas		
Session Chair: Md. Saiful Islam, IICT, BUET, Bangladesh		
P-ID	**TITLE**	**AUTHOR(S)**
026	A Simple Wideband Microstrip Bandstop Filter for WLAN and WiMax Band Rejection Purpose 47	Lakhindar Murmu and Sushrut Das
042	A Novel DCSK Communication Scheme for PLCC Based DAS 50	Subhra J. Sarkar and Palash K. Kundu
097	Probabilistic Trust Management in Wireless Communication System 54	Swarnali Hazra and S.K. Setua
119	Three-Order Microstrip Bandpass Filter with Two Transmission Zeros for WLAN/WiMax Applications	Biswajit Pal and Santanu Dwari
181	Optimal Scheduling in MU-MIMO Uplink Cellular Networks 61	Md. Zobaarul Haque, Mirza Tahmid Islam and Md. Forkan Uddin
405	Automatic Transmission Power Control Management Scheme for Mitigating Co-Layer Interference in Femtocell Network N/A	Hossain Mohammad Mahbub, Chowdhury Ahad Ibne Alamgir and Atiqur Rahman

Session ID: SunD1		
Session: Sensors and Instrumentation		
Sunday, 09:00 AM - 10:30 AM, 21 December 2014, Room: Surma II & III		
Session Chair: S. M. Lutful Kabir, BUET, Bangladesh		
P-ID	**TITLE**	**AUTHOR(S)**
116	Braille Thermometer: Thermometer for Deaf-Blinds 69	Md Didarul Islam and Abdullah Saif Mondol
155	A Field-Referenced Surface Electrode for Biosignal Detection 73	Sazia Eliza, Alfred Paige and Mohammad Rafiqul Haider
293	Development of a Novel Prepaid Gas Metering System 77	Mohammad Imam Hasan Bin Asad, Md. Liakot Ali and Md. Saiful Islam
338	Matching of Artificial Limb with Residual Human Limb by Capacitance Measurement Technique 81	Ashraful Haque, Sheikh Jawad Ilham and Q. Ahsan
420	On Site Oil Test for a Transformer Using Sweep Frequency Response Analysis 85	Al-Amin Ahmed Simon, Md. Mahbubul Huq Riad, Erfan Ahmed and S. Shahnawaz Ahmed
508	Detection of Impurities in Water by Measuring Capacitance 88	Jamil Wahid and Md. Quamrul Ahsan

	Session ID: SunE1 Session: Nanoelctronic Devices – I Sunday, 09:00 AM - 10:30 AM, 21 December 2014, Room: Surma I Session Chair: Md. Shafiqul Islam, BUET, Bangladesh	
P-ID	**TITLE**	**AUTHOR(S)**
282	A Two Dimensional Analytical Model of Drain to Source Current and Subthreshold Slope of a Triple Material Double Gate MOSFET 92	Md Arafat Mahmud and Samia Subrina
288	Effect of Stone-Wales Defects and Edge Roughness on The Switching And Frequency Performance of Graphene Nanoribbon-FET 96	Atanu Kumar Saha, Gobinda Saha and A. B. M. Harun-Ur Rashid
371	Uncoupled Mode Space Approach Towards Transport Modeling of Gate-All-Around $In_xGa_{1-x}As$ Nanowire MOSFET 100	Saeed-Uz-Zaman Khan, Md. Shafayat Hossain, Fahim Ur Rahman, Rifat Zaman, Md. Obaidul Hossen and Quazi D. M. Khosru
514	Thermal Management of FET Devices Using Graphene Heat Spreader 104	S.M. Rafi-Ul-Islam, Nazmus Saquib and Samia Subrina
392	Surface Potential Modeling of Junctionless Double Gate MOSFETs Using Gradual Depletion Approximation 108	Shuvro Chowdhury and Md. Ziaur Rahman Khan

Tea Break, Sunday, 10:30 AM - 11:00 AM, 21 December 2014
Surma Foyer

	Session ID: SunA2 Session: Biometrics and Pattern Recognition Sunday, 11:00 AM - 01:00 PM, 21 December 2014, Room: Chitra Session Chair: Md. Kamrul Hasan, BUET, Bangladesh	
P-ID	**TITLE**	**AUTHOR(S)**
324	Design of an Improved Algorithm for Blind Digital Image watermarking Using Both Gray Scale and Binary Watermark in DFWHT Domain 112	Sudip Ghosh, Arijit Biswas, Santi P. Maity and Hafizur Rahaman
018	Reduced Feature Sets for Vowel Recognition 116	Shantanu Sharma and Pradip Das
032	Video-Based Affinity Group Detection Using Trajectories of Multiple Subjects 120	Abdullah Al Masum, Mahady Hasan Rafy and S. M. Mahbubur Rahman
033	Discriminative Masking for Non-Cooperative Iris Code Recognition 124	Bashirul Azam Biswas, Shams Shad Islam Khan and S. M. Mahbubur Rahman
369	Significance of Acoustic Features for Designing an Emotion Classification System 128	Sudhakar Kumar, Tushar Kanti Das and Rabul Laskar
426	SVD and Chaotic System Based Watermarking Approach for Recovering Crime Scene Image 132	Md. Moniruzzaman, Md. Abul Kayum Hawlader, Md. Foisal Hossain and M. A. Rashid
483	A Blind Audio Watermarking Method Based on 136 Lifting Wavelet Transform and QR Decomposition	Pranab Kumar Dhar

Session ID: SunB2
Session: VLSI and Digital Circuits
Sunday, 11:00 AM - 01:00 PM, 21 December 2014, Room: Meghna
Session Chair: Mozammel Huq Azad Khan, East West University, Bangladesh

P-ID	TITLE	AUTHOR(S)
003	Design of Ternary Reversible Sequential Circuits 140	MozammelH A Khan
044	SET Based Low Power Consuming Digital Circuits 144	Ahmed Shariful Alam, Md. Abdur Rahman, Abu Hena Md. Mustafa Kamal and Md Salek Mahmud
347	Design of DDR4 SDRAM Controller 148	Md. Ashraful Islam, Md. Yeasin Arafath and Md. Jahid Hasan
365	A Graph Rewriting Approach to Replace Asynchronous Rams in Circuits with Cycles for FPGAs 152	Md. Nazrul Islam Mondal, Md. Shahid Uz Zaman and Biprodip Pal
013	Resonant Frequency Analysis of Graphene Nanoribbon Based Interconnect System 156	Asif Hassan, Turja Nandy, Minhaz Ibne Abedin, Md. Akramul Islam and Arin Dutta
287	Low Power Dissipation Logic Inverter Design Using Atomic-Level Width Controlled GNR-FETs 160	Gobinda Saha, Atanu Kumar Saha and A. B. M. Harun-Ur Rashid
525	An Efficient Design of FSM Based 32-Bit Unsigned High-Speed Pipelined Multiplier Using Verilog HDL 164	Abdullah-Al Kafi, Atul Rahman, Bushra Mahjabeen and Mahmudur Rahman
429	Low Power High Speed Ternary Content Addressable Memory Design Using 8 MOSFETs and 4 Memristors – Hybrid Structure 168	Shawana Tabassum, Farhana Parveen and A.B.M. Harun-Ur Rashid

Session ID: SunC2
Session: Electromagnetics, Microwave and RF Engineering – I
Sunday, 11:00 AM - 01:00 PM, 21 December 2014, Room: Surma I
Session Chair: Saiful Islam, EEE, BUET, Bangladesh

P-ID	TITLE	AUTHOR(S)
067	Achieving Tetra Band Performance in Simple Dielectric and in Metamaterial Filled Patch Antennas 172	Abdullah Al Noman Ovi, Mahdy Rahman Chowdhury Mahdy, Md. Rashedul Alam Zuboraj, Ayed Al Sayem, Md. Ababil Hossain and Md. Abdul Matin
152	Design and Evaluation of a Novel Octagonal UWB Wearable Textile Antenna Under Different Bending Conditions 176	Shahriar Hasan Shehab, Shahreen Hassan and Farhadur Arifin
156	A Miniaturized Spiral Antenna for Energy Harvesting of Implantable Medical Devices 180	Qingyun Ma, Laxmi Ray and Mohammad Rafiqul Haider
186	Design of an X-Band Microstrip Array Antenna for Circular Polarization 184	Muhammad Asad Rahman, Quazi Delwar Hossain, Md. Azad Hossain, Eisuke Nishiyama and Ichihiko Toyoda
315	Design and Development of a Patch Antenna for ISM Band Passive RFID Tag 188	Avijit Hira, Nayan Sarker and Md. Osman Goni
478	Soil Moisture Measurement Using Smart Antennas 192	Muhsiul Hassan and Nemai C. Karmakar

Session ID: SunD2 Session: Nanoelectronic Devices – II Sunday, 11.00 AM - 01:00 PM, 21 December 2014, Room: Titas Session Chair: Anisul Haque, East West University, Bangladesh		
P-ID	**TITLE**	**AUTHOR(S)**
077	Quantum Mechanical Equivalent of Electromagnetic Band Gap and Perfect Tunneling in Multilayer Semiconductor Hetero-Structures 196	Jubayer Shawon, Arif Shahriar, Mahdy Mahdy, Ayed Sayem, Dastegir Al-Quaderi and Saifur Rahman
124	Effect of Surface Wettability Controlled by Ultraviolet-Ozone Treatment on Spin-Coated ZnO Seed Layer and ZnO Nanowires Grown by Hydrothermal Method 200	Imtiaz Mahmud, Ji-Sub Park, Han Jae Shin, Min-Kyu Park, Do Kyung Lee and Hak-Rin Kim
185	Effect of Addition of Ni Particles on the N/A Microstructural, Mechanical and Electrical Properties of Zn-Based High Temperature Solders	Md. Mehedi Hasan, Ahmed Sharif and Sanjoy Mallick
457	Sensitivity in Polycrystalline HgI_2 X-Ray Imagers for Mammography 208	Farzana Kabir, Dewan Fahim Noor, Zubayer Ibne Ferdous and Shaikh Asif Mahmood
499	Barrier Height Control of Metal/n-$In_{0.2}Ga_{0.8}N$ with an Ultrathin Interfacial Layer 212	Sudipta Paul, Soyaeb Hasan and Md. Rafiqul Islam
516	Low Activation Energy of Mg-Doped $In_xGa_{1-x}N$ (x~0.4) and Self-Compensation Modelling 216	Nazmul Hasan, Soyaeb Hasan and Md. Rafiqul Islam
419	Analytical Modeling of Accumulation Layer Thickness in SOI G4FET: Introducing Geometric Factor 220	Mehedy Hasan and M. Ziaur Rahman Khan

Session ID: SunE2 Session: Photonics Sunday, 11:00 AM - 01:00 PM, 21 December 2014, Room: Surma II & III Session Chair: Muhammad Anisuzzaman Talukder, BUET, Bangladesh		
P-ID	**TITLE**	**AUTHOR(S)**
Invited Talk-1	Imaging Beyond Human Vision 224	**A**chyut K. Dutta Banpil Photonics, Inc. Santa Clara, CA, USA
075	Tunable Slow Light With Graphene Based Hyperbolic Metamaterial 230	Ayed Al Sayem, Mahdy Rahman Chowdhury Mahdy, Nuruddin Hasan Dihan and Md. Abdul Matin
311	Quantum Mechanical Modelling of Steady State Photoconductive Behaviour of AlGaAs/GaAs QWIP at Varying Bias and Optical Density 234	Soumitra Roy Joy and Farseem Mannan Mohammedy
316	Extraction of Lorentz Model Parameters for Dielectrics and Their Application in Nanoplasmonics 238	KH. Arif Shahriar, Ikramul Hasan Sohel, Md. Mahamudun Arif Joy, Rakibul Hasan Sagor and Md. Ghulam Saber
361	Semi-Analytical Model for Enhanced Surface Plasmon Polaritons in a Corrugated Interface 242	M A Awal, Zabir Ahmed and Muhammad Anisuzzaman Talukder

268	Miniaturized VCSEL Modules for Optical Manipulation of Microparticles 246	Niazul Islam Khan, Anna Bergmann and Rainer Michalzik
427	Design and Simulation of Three Wavelength Terahertz GaN Quantum Cascade Laser 250	Md. Shahadat Hasan Sohel, A. F. M. Saniul Haq and Muhammad Anisuzzaman Talukder

Prayer and Lunch Break , Sunday, 01:00 PM - 02:30 PM, 21 December 2014
Balcony and CIAO

Session ID: SunA3
Session: Signal, Image and Video Processing
Sunday, 02:30 PM - 04:30 PM, 21 December 2014, Room: Surma II & III
Session Chair: Mohammed Imamul Hassan Bhuiyan, BUET, Bangladesh

P-ID	TITLE	AUTHOR(S)
081	Improved Texture Retrieval By Combining Different Variants of Local Binary Patterns 254	Nabeel Mohammed and Sohel Rana
087	A Novel Adaptive Volterra Filter to Compensate for Speaker Non-Linearity 258	Tonmoy Roy, Parvez Ahmmed, Md. Shafiur Rahman, Abdullah Ash Saki and A. B. M. Harun-Ur Rashid
062	Stereo Facial Image Clustering Using Double Spectral Analysis 262	Georgios Orfanidis, Nikos Nikolaidis, Anastasios Tefas and Ioannis Pitas
150	Video Characterization Based on Activity Clustering 266	Nikolaos Kourous, Alexandros Iosifidis, Anastasios Tefas, Nikos Nikolaidis and Ioannis Pitas
233	Optimal Multichannel Equalization for Robust Speech Dereverberation 270	Abdullah-Al- Maruf and Mohammed Ariful Haque
412	Utterance-Based Speech Dereverberation Using Blind Channel Estimation and Multichannel Equalization 274	Mohammad Ariful Haque
504	A New Fast Inter Mode Decision Algorithm in H.264/AVC Video Coding N/A	Md. Salah Uddin Yusuf, Md. Imtiaz Hossain and Mohiuddin Ahmad

Session ID: SunB3
Session: High Voltage Engineering and Power Systems – I
Sunday, 02:30 PM - 04:30 PM, 21 December 2014, Room: Surma I
Session Chair: Abdul Hasib Chowdhury, BUET, Bangladesh

P-ID	TITLE	AUTHOR(S)
203	Inclusion of Slack Bus in Newton Raphson Load Flow Study 282	S.M. Lutful Kabir, A. Hasib Chowdhury, Mosaddequr Rahman and Jahangir Alam
328	Analytical Approach to Investigate the Loadability of a Long Transmission Line for Simultaneous AC-DC Power Flow 285	Mohammad Tawhidul Alam and Quamrul Ahsan

479	A Study on Low Grid Voltage Problem Near Rooppur Nuclear Power Plant 289	Abdul Hasib Chowdhury and Md Khurram Monir Rabby
358	Determination of Affordable Production Cost and Nuclear Based Electricity Generation in Bangladesh 293	Sk. Samiul Reza, Tasin Nawaz, Abid Yamin, Debabrata Das Tutul and T. A. Chowdhury
531	Optimizing Economical Dispatch of a Microgrid in Islanding Mode 297	Amirhossein Ghods, Fahmid Al Farid, Shohag Barman, Ebrahim Sheikhi and Umme Salma
258	Extending Methods to Determine the Life Remaining of Transformer Paper Insulation 301	Daniel Martin, Tapan Saha, David Allan and Kerry Williams

Session ID: SunC3 **Session: Photovoltaics – I** **Sunday, 02:30 PM - 04:30 PM, 21 December 2014, Room: Meghna** **Session Chair: Shahidul Islam Khan, BUET, Bangladesh**		
P-ID	**TITLE**	**AUTHOR(S)**
Invited Talk-2	Mitigation of Rapid Voltage Variations Caused by Passing Clouds in Distribution Networks with Solar PV Using Energy Storage 305	M. J. E. Alam, **K. M. Muttaqi**, and Danny Sutanto School of Electrical, Computer and Telecommunications Engineering University of Wollongong NSW, Australia
208	Energy Storage for Rooftop Solar Photovoltaic Systems to Reduce Peak Demand 309	Benjamin Teitzel, Mohammed Haque and Richard Inwood
277	Testing and Performance Analysis of Charge Controllers for Solar Home System 313	Manik Dautta, Syed Mohammad Sifat Morshed Chowdhury, Md. Rashed Hassan Bipu, Md. Zulkar Nain and Shahidul Islam Khan
376	Study and Analysis of Existing Solar PV System in Urban Area of Bangladesh 317	Shammya Shananda Saha, Mohammad Noor Bin Shaheed, M. Mahmudul Hasan Sajeeb, Tasnuva Hamid and Shahidul Islam Khan
453	Solar Radiation Approximation Using Sunshine Hour at Patenga, Bangladesh 321	Shuvankar Podder, Raihan Sayeed Khan, Shah Md. Ashraful Alam Mohon, Md. Jubair Hussain and Enamul Basher
161	Study and Protection of Lightning Overvoltage on DC Cables of Solar Power Generation 325	Md. Alamgir Hossain and Md. Raju Ahmed
320	Implementation of Maximum Power Point Tracking in a Photovoltaic Inverter Using Incremental Conductance Technique 329	Nawrin Islam Natasha, Wahida Taskin Bhuiyan and M.A. Razzak

	Session ID: SunD3 Session: Algorithms and Computations – I Sunday, 02:30 PM - 04:30 PM, 21 December 2014, Room: Chitra Session Chair: Md. Saidur Rahman, BUET, Bangladesh	
P-ID	**TITLE**	**AUTHOR(S)**
110	An Endeavour to Find Two Unequal False Coins 333	Joydeb Ghosh, Piyali Datta, Arpan Chakrabarty, Ankita Nandy, Lagnashree Dey, Rajat Kumar Pal and Ranjit Kumar Samanta
143	The First Algorithm for Solving Two Coins Counterfeiting with $\Omega(\Delta H) = \Omega(\Delta L)$ 337	Joydeb Ghosh, Arpan Chakrabarty, Piyali Datta, Lagnashree Dey, Ankita Nandy, Rajat Kumar Pal and Ranjit Kumar Samanta
165	Evaluating the Performance of the Practical Lattice Reduction Algorithms 341	Md. Mokammel Haque and Josef Pieprzyk
191	Application of Association Rule Mining for Replication in Scientific Data Grid 345	Md. S.Q. Zulkar Nine, Md. Abul Kalam Azad, Saad Abdullah, Mohammad Alaul Haque Monil, Ibna Zahan, Abdulla Bin Kader and Mohammad Rashedur Rahman
447	Effectiveness of Minimization and Measurement of Schema Complexity Based on Weighted Graph 349	Golam Md. Muradul Bashir, Arpita Howlader, Ishrat Shemu and Esrat Ety
449	A Comprehensive Approach Towards Guard Zone Computation Detecting and Excluding the Overlapped Regions 353	Ranjan Mehera, Piyali Datta, Arpan Chakraborty and Rajat Kumar Pal
474	GreMuTRRR: A Novel Genetic Algorithm to Solve 357 Distance Geometry Problem for Protein Structures	Md. Lisul Islam, Swakkhar Shatabda and M Sohel Rahman

	Session ID: SunE3 Session: 2D and Emerging Materials Sunday, 02:30 PM - 04:30 PM, 21 December 2014, Room: Titas Session Chair: M. Saif Islam, University of California Davis, USA	
P-ID	**TITLE**	**AUTHOR(S)**
215	Empirical Prediction of Optical Transitions in Metallic Armchair SWCNTs 361	Ahmed Jamal and Sharif M Mominuzzaman
228	Dynamics of Fullerene Self-insertion into Carbon Nanotubes in Water 365	Md. Mushfiqur Rahman, Mokter Mahmud Chowdhury and Md. Kawsar Alam
297	Low Temperature Synthesis of Carbon Nanotubes and Carbon Nanospheres 369	Md. Golam Kibria and A. K. M. Bazlur Rashid
464	Characterization of Electrodeposited Multiwall Carbon Nanotube Films on Silicon Substrates 373	Mohammad Wahidur Rahman, Muhammad Athar Uddin, Ahmedullah Aziz, Tanvir Mustofa, Zahid Hasan Mahmood, T. Soga and Sharif M Mominuzzaman
349	Humidity Sensor Using Surface Adsorbed Channel Modulated Graphene Nanoribbon: NEGF Approach 377	Shifur Rahman Shakil, Fatema Tuz Zohra, Parna Pramanik,

		Raihanul Islam Tushar, Atanu Kumar Saha and Md. Belal Hossain Bhuian
522	Effect of Biaxial Strain on Structural and Electronic Properties of Graphene / Boron Nitride Hetero Bi-Layer Structure 381	Md. Hasibul Alam, Khalid Ibne Masood and Quazi D.M. Khosru

Prayer and Tea Break, Sunday, 04:30 PM - 05:30 PM, 21 December 2014
Surma Foyer

Plenary Session Sunday, 05:30 PM - 07:30 PM, 21 December 2014, Room: Surma I, II & III Session Chair: A.B.M. Harun-ur Rashid, BUET, Bangladesh		
P-ID	**TITLE**	**SPEAKER**
Plenary Talk-1	Human-Centered 2D/3D Video Content Analysis and Description 385	**Ioannis Pitas** University of Thessaloniki Thessaloniki, Greece Fellow IEEE Fellow EURASIP IEEE Distinguished Lecturer
Plenary Talk-2	Emergence of THz Technologies and Design and Optimisation Low-Loss Waveguides and Devices 389	**B. M. Azizur Rahman** City University London London, UK Fellow Optical Society of America, Fellow SPIE

Conference Banquet, Sunday, 07:30 PM - 09:30 PM, 21 December 2014

Session ID: MonA1 Session: Wireless Communication – II Monday, 09:00 AM – 10:30 AM, 22 December 2014, Room: Chitra Session Chair: Khawza Iftekhar Uddin Ahmed, United International University, Bangladesh		
P-ID	**TITLE**	**AUTHOR(S)**
180	On the Optimal Contention Window Size in IEEE 802.11 Based WLANs under Co-channel Interference 394	Tasnova Nasrin Munni, Nazia Mahbub, Kaim Iftahaj Nirjhor and Md. Forkan Uddin
188	Performance Analysis of CSMA/CA Based MU-MIMO WLANs 398	Md. Moin Uddin Chowdhury, Md. Asif Tanveer and Md. Forkan Uddin
276	HETNET Neighbour Handover Cell List Optimization Based on Cognitive Programmed Threshold Response 402	Sanyat Hoque, Shovon Pal and Atiqur Rahman
308	Determination of Energy Efficiency of a Multi-user Wireless Network Based on Limited User Traffic Model 406	Md. Nurul Islam, Shamim Ahmed, Ummy Habiba, Md. Imdadul Islam and M. R. Amin

| 506 | Effect of Timing Jitter on the BER Performance of a M-PPM FSO Link over Atmospheric Turbulence Channel   409 | K. M. Nazrul Islam and S. P. Majumder |
| 194 | Effect of Bandwidth in Cross-correlation Based Underwater Network Size Estimation   413 | Md. Shamim Anower, Shah Ariful Hoque Chowdhury, Jishan-E-Giti and Md. Ismail Haque |

Session ID: MonB1
Session: Optical Communication – II
Monday, 09:00 AM – 10:30 AM, 22 December 2014, Room: Surma I
Session Chair: Satya Prasad Majumder, BUET, Bangladesh

P-ID	TITLE	AUTHOR(S)
008	Dispersion Optimization of 160-Gb/s 2000-km Transmission by Appropriate Orientation of Chirped Fiber Bragg Grating 417	Shariful Islam, Farzana Zaki and Mohammad Faisal
031	Channel Capacity and Bit Error Rate Analysis of Non-uniform Type M-ary Optical CDMA in Presence of Self Phase Modulation and Dispersion 421	Rashad Kabir, Md. Maruful Haque and Moshiour Rahaman
133	Design of a High Speed OFDM Transmitter and Receiver 425	Foisal Ahmed, Md. Liakot Ali and Mohammad Imam Hasan Bin Asad
391	Maximum PEP And ICI over Coset Representatives for 32 Subcarriers Reed-Muller Coded OFDM 429	M Maksud Alam, Nusrat J. Disha, Md. Ataur Rahman and Besma Smida
397	Post Mitigation Performance Comparison of RZ-DPSK And CSRZ-DPSK DWDM Systems 433	Mohammad Faisal, Tahsin Faruque and M. Arafat Rahman Khan

Session ID: MonC1
Session: Software and Data Analysis
Monday, 09:00 AM – 10:30 AM, 22 December 2014, Room: Titas
Session Chair: Muhammad Masroor Ali, BUET, Bangladesh

P-ID	TITLE	AUTHOR(S)
100	Architectural Model for Next Generation Content Management System 437	Ankita Saha and S.K. Setua
145	ChaScript: Breaking Language Barrier Using a Bengali Programming System 441	Arman Kamal, Md. Nuruddin Monsur, Syed Tanveer Jishan and Nova Ahmed
241	Ontology Matching by Applying Parallelization and Distribution of Matching Task within Clustering Environment 445	Tanni Mittra and Muhammad Masroor Ali
273	Towards Privacy-aware Photo Sharing using Mobile Phones 449	Sadia Shamma and Md. Yusuf Sarwar Uddin
307	Community Recommendation in Social Network Using Strong Friends and Quasi-Clique Approach 453	Anjum Ibna Matin, Sawgath Jahan and Mohammad Rezwanul Huq

Session ID: MonD1 Session: Electrical Machines and Servo Systems Monday, 09:00 AM – 10:30 AM, 22 December 2014, Room: Surma II & III Session Chair: Enamul Basher, BUET, Bangladesh		
P-ID	**TITLE**	**AUTHOR(S)**
020	Novel Approach for Detection of Inter-Turn Short Circuit of Induction Motor's Stator Winding through Envelope Analysis 457	Syed Kamruddin Ahamed, Arghya Sarkar, Madhuchhanda Mitra and Samarjit Sengupta
169	State Space Least Mean Square for State Estimation of Synchronous Motor 461	Arif Ahmed, Muhammad Moinuddin and Ubaid Al-Saggaf
389	Maximum Power Delivery Capability of a Three-Phase Self-Excited Induction Generator 465	Mohammed Haque
417	Development and Performance Analysis of a Two-Phase Induction Motor in the Frame and Core of a Single-Phase Induction Motor 469	Md Ayubur Rahman Khan and Md Quamrul Ahsan
433	Design and Analysis of Isolated Integrated Charger for PHEV 473	Rajib Baran Roy, Md. Enamul Basher and Joshua Mithil Biswas
041	Design of Resonant Controller for Hard Disk Drive Servo System Using a Mixed Passivity and Small-Gain Approach 477	Md. Arifur Rahman, Abdullah Al Mamun and Kui Yao

Session ID: MonE1 Session: Optical Waveguides Monday, 09:00 AM – 10:30 AM, 22 December 2014, Room: Meghna Session Chair: Md. Shah Alam, BUET, Bangladesh		
P-ID	**TITLE**	**AUTHOR(S)**
256	Analysis of Bending Effects on Hexagonal and Rectangular Photonic Crystal Fiber 481	Tamal Sarkar, Mofijur Rahman and Anamika Dey
295	Highly Birefringent Modified Circular Photonic Crystal Fiber for Dispersion Management over E+S+C+L Wavelength Bands 485	M. Mejbaul Haque, M. Shaifur Rahman, M. Selim Habib and M. Samiul Habib
214	Formation of Micro/Nano-metric Holes/voids in Al_2O_3-coated Boro-aluminosilicate Glass by Single Pulse Femtosecond Laser Irradiation 489	Md. Shamim Ahsan, Man Seop Lee and Ragib Shakil Rafi
461	A Novel Approach to Design Photonic Crystal Based Optical Power Splitter with a Flow Control Mechanism. 493	Arif Ahmed, Md. Rokibul Hasan Robin and Md. Osman Goni
465	Characteristics of Stress-Birefringence in Polymer Optical Strip Waveguides with Air Cladding 496	Md. Faruque Hossain, Md. Mamunur Rahman and Hau Ping Chan
410	Dispersion and Nonlinear Characteristics of a Photonic Crystal Fiber (PCF) with Defected Core and Various Doping Concentration 500	Md. Sajjad Hossain, Kishan Neupane, Md. Shihab Bin Hafiz, and Satya Prasad Majumder

Tea Break, Monday, 10:30AM - 11:00AM, 22 December 2014 **Surma Foyer**

	Session ID: MonA2 Session: Photovoltaics – II Monday, 11:00AM – 01:00PM, 22 December 2014, Room: Surma II & III Session Chair: Sharif Mohammad Mominuzzaman, BUET, Bangladesh	
P-ID	**TITLE**	**AUTHOR(S)**
082	Prospects of Zinc Sulphide as an Alternative Buffer Layer for CZTS Solar Cells from Numerical Analysis 504	Faiazul Haque, Naveed Aziz Khan, Kazi Sajedur Rahman, Mohammad Aminul Islam, Mohammad Mezbaul Alam, Kamaruzzaman Sopian and Nowshad Amin
106	Design Optimization of CdTe Thin Film Solar Cells from Numerical Analysis 508	Naveed Aziz Khan, Kazi Sajedur Rahman, Faiazul Haque, Nripen Dhar, Mohammad Aminul Islam, Mohammad Akhtaruzzaman, Kamaruzzaman Sopian and Nowshad Amin
192	Modeling Combined Effect of Temperature and Irradiance on Solar Cell Parameters by MATLAB/ Simulink 512	Partha Sarathi Paul, Sudipta Mondal, Nasrin Akter and Sharif Mohammad Mominuzzaman
248	Design and Analysis the Characteristics of A Cost-Effective Polymer Based Bulk Heterojunction Tandem Solar Cell 516	Md. Jubaer Hossain Pantho, Noor A Junnat and Mohammad Jahangir Alam
251	Modeling and Analysis of Inorganic, Organic and Hybrid Solar Cells 520	Nasrin Akter, Partha Sarathi Paul, Sudipta Mondal and Sharfi Mohammad Mominuzzaman
355	Thickness Optimization and Composition Grading Effect in Heterojunction CIGS Solar Cell 524	Ayed Al Sayem, Yeasir Arafat and Md. Mushfiqur Rahman
363	The Effect of the Variation of the Concentration Factor and Interdot Distance of $In_xGa_{1-x}N$/GaN QD–IBSC 528	Nezam Uddin, Kazi Nymul Haque, Atiqul Islam, Niloy Chandra Saha and Sushanta Paul

	Session ID: MonB2 Session: High Voltage Engineering and Power Systems –II Monday, 11:00AM – 01:00PM, 22 December 2014, Room: Surma I Session Chair: Md. Quamrul Ahsan, BUET, Bangladesh	
P-ID	**TITLE**	**AUTHOR(S)**
104	Voltage Stability Management with the Help of Optimization Techniques 532	Md. Imran Azim, Md. Masud Rana and Jawad Tahmeed Bin Taufik
283	Power System Stabilizer Tuning Based on Frequency Response Method 536	Asif Ferdoush and M. G. Rabbani

332	Transient Performance Improvement of Power System by Optimal Design of SVC Controller Employing Genetic Algorithm 540	Md. Shafiullah, Md. Shafiul Alam, Md. Ismail Hossain and Md. Nazmul Hasan
333	Analytical Approach to Investigate the Stability of a System with Simultaneous AC-DC Power Flow through Existing AC Transmission Line 544	Mohammad Tawhidul Alam and Quamrul Ahsan
407	Load Frequency Control of Multi-Microgrid Using Energy Storage System 548	A. Hasib Chowdhury and Md. Asaduz-Zaman
408	Parameterization of Active Disturbance Rejection Controller for Load Frequency Control 552	Md. Mijanur Rahman and A. Hasib Chowdhury

Session ID: MonC2 Session: Electromagnetics, Microwave and RF Engineering – II Monday, 11:00 AM – 01:00PM, 22 December 2014, Room: Chitra Session Chair: Pran Kanai Saha, BUET, Bangladesh		
P-ID	**TITLE**	**AUTHOR(S)**
196	A Fully Integrated Low Power UWB LNA Using Self-Body-Bias Technique for 6.2–10.6 GHz Applications 556	Mohammad Nahidul Karim, Shahadat Hossain, Simul Barua, Koushik Barua and Kazi Raisul Islam
280	An Ultra Wide Band Low Noise Amplifier for 10.8 to 20.1 GHz Applications 560	Md. Saiful Arefin Mojumder, Md. Sariful Islam and M. Ziaur Rahman Khan
425	ELC Resonator Based Narrow Band Metamaterial Absorber 564	Md. Washim Zayed, Md. Shafuzzaman and Md. Osman Goni
451	A New Approach to Design Microstrip Low Pass Filter Using Novel Defected Ground Structure 568	G. M. Rafiquzzaman, Abu Talha Sadi and Md. Nurunnabi Mollah
079	Design of a Compact Dual-Band Band-Pass Filter for Global Positioning System and Fixed Satellite Applications 572	Md. Rokunuzzaman, Mohammad Tariqul Islam, Md. Samsuzzaman, Md. Rasheduzzaman, Rezaul Azim and Afaz Uddin Ahmed
395	Electromagnetic Wave Propagation Characteristics in Single Walled Metallic Carbon Nanotube 575	Md Shantanu Islam, M A Matin and M. Mofazzal Hossain

Session ID: MonD2 Session: Renewable Energy – I Monday, 11:00 AM – 01:00PM, 22 December 2014, Room: Meghna Session Chair: Tapan Saha, University of Queensland, Australia		
P-ID	**TITLE**	**AUTHOR(S)**
030	Minimization of Output Fluctuation of a Fixed Speed IG Based Wind Farm without Capacitor by using PMSG 579	Md. Rafiqul Islam Sheikh and Zinat Tasneem
035	A Probabilistic Index for Estimating Frequency Response of a Power System with High Wind Power Penetration 583	Nahid-Al-Masood, Ruifeng Yan and Tapan Kumar Saha
036	Estimation of Maximum Wind Power Penetration Level to Maintain an Adequate Frequency Response in a Power System 587	Nahid-Al-Masood, Ruifeng Yan and Tapan Kumar Saha

261	Voltage Stability Augmentation of IG Based Wind Farm Using Capacitor with Exciter Control System 591	Dristi Datta and Md. Rafiqul Islam Sheikh
357	A Competitive Framework to Regulate Day-Ahead Wind Power Predictions for Operational Planning in Electricity Markets 595	Lazaros Exizidis, Zacharie De Greve, Francois Vallee and Jacques Lobry
141	Lightning Surge Response of Wind Turbine Grounding at Low Resistivity Soil 599	Md. Raju Ahmed and Utpal Kumar Das

Session ID: MonE2 **Session: Power Electronics – I** **Monday, 11:00 AM – 01:00PM, 22 December 2014, Room: Titas** **Session Chair: Kazi Mujibur Rahman, BUET, Bangladesh**		
P-ID	**TITLE**	**AUTHOR(S)**
093	Wide Speed Range Operation of PMSM Drives Using Nonlinear Flux Control Techniques 603	Garin M. Schoonhoven and Mohammad Nasir Uddin
151	Modeling and Transient Performance Analysis of a Hysteresis IPM Motor 607	S. F. Rabbi and M. A. Rahman
409	Development of a Microcontroller-Based AC Voltage Controller with Soft Start Capability **N/A**	Arifur Rahman, Nayeem Ansari, Nazneen Ahmed, Kazi Mujibur Rahman and Md. Zahurul Islam
416	Comparative Analysis of Control Schemes with Harmonic Characteristics for Fuel Cell System 615	Md. Ashifur Rahman, Mohammad Hasanuzzaman Shawon and Md. Ikramul Hasan Sohel
424	Study of Vienna Rectifier and a Highly Efficient Single Phase Two Stage Inverter with low THD 619	Srabanty Ahmed Shaon and K. M. A. Salam
519	Split Inductor Based Neutral Point Clamped Inverter Using Improved Modulation Technique to Reduce Common Mode Voltage 623	Md. Jannatul Ferdous, Shariar Kabir, Md. Rifat Alam Siddique and Umme Salma

Prayer and Lunch Break, Monday, 01:00 PM - 02:30 PM, 22 December 2014 **Balcony and CIAO**

Session ID: MonA3 **Session: High Voltage Engineering and Power Systems – III** **Monday, 02:30PM – 04:30PM, 22 December 2014, Room: Titas** **Session Chair: S. Shahnawaz Ahmed, BUET, Bangladesh**		
P-ID	**TITLE**	**AUTHOR(S)**
393	Simulation of Lightning Surge Characteristics on Reduced Scale Tower Model N/A	Md. Salah Uddin Yusuf and Mohiuddin Ahmad
399	Aberrant Amplification of Torsional Oscillating Torques in Turbine-Generator Shaft Due to Multiple EAF Operation 631	Md. Minarul Islam and A. Hasib Chowdhury
400	Vulnerable Operation of Turbine-Generator Due to EAF Loads in Bangladesh Power System 635	A. Hasib Chowdhury and Md. Minarul Islam

415	Effect of Intermediate Substation Configurations on Reliability of Power Transmission Corridor 639	A. Hasib Chowdhury, Partha Sarathi Sarker, K.M. Rafiqul Islam and Syeda Tahsina Tanjil
454	A Voltage Flicker Severity Analysis Module for Multiple Electric Arc Furnace Operation 643	Abul Hasan Fahad, Pertha Protim Dutta and Abdul Hasib Chowdhury
480	A Comparative Study of Short Term Flicker Severity Due to Electric Arc Furnace Operation 647	Pertha Protim Dutta, Abul Hasan Fahad and Abdul Hasib Chowdhury
500	Reliability Evaluation of Grid Substations in Bangladesh Power System 651	Md Iqbal Hossain, Rumana Binte Faruque and A Hasib Chowdhury

Session ID: MonB3 Session: Nanoelectronic Devices – III Monday, 02:30PM – 04:30PM, 22 December 2014, Room: Surma II & III Session Chair: Md. Rafiqul Islam, KUET, Bangladesh		
P-ID	**TITLE**	**AUTHOR(S)**
Invited Talk-3	CMOS Compatible Generic Batch Process towards Flexible Memory on Bulk Monocrystalline Silicon (100) 655	Mohamed Ghoneim, Jhonathan Rojas, Arwa Kutbee, Amir Hanna, and **Muhammad Hussain** Integrated Nanotech. Lab Electrical Engineering, Mathematical Science and Engineering Division KAUST, Thuwal Saudi Arabia
045	Ballistic Performance Comparison of InGaSb and InAsSb XOI nFET 659	Md. Nur Kutubul Alam, Muhammad Shaffatul Islam and Md. Rafiqul Islam
173	Influence of Band Parameter of Gate Dielectrics on the Ballistic Performance at Same EOT 663	Md. Nur Kutubul Alam, Muhammad Shaffatul Islam and Md. Rafiqul Islam
259	Ballistic Transport Characteristic of InGaAs Quantum Well Surface Channel MOSFET Including Effects of Physical Device Parameter 667	Abir Shadman, Ehsanur Rahman, Sudipta Romen Biswas, Kanak Datta and Quazi D.M. Khosru
275	Quantum Ballistic Simulation Study of $In_{0.7}Ga_{0.3}As/InAs/In_{0.7}Ga_{0.3}As$ Quantum Well MOSFET 671	Sudipta Romen Biswas, Kanak Datta, Abir Shadman, Ehsanur Rahman and Quazi D. M. Khosru
356	Nano-bridge Enabled Three-Dimensional Gate-all-around Field Effect Transistors 675	Jin Yong Oh, Hyun-June Jang, Won-Ju Cho, Jong-Tae Park and M. Saif Islam
115	Study on Gate Dielectric for Ballistic III-V MOSFET: Influence of Band Parameter Keeping Same EOT N/A	Muhammad Shaffatul Islam, Md. Nur Kutubul Alam and Md. Rafiqul Islam

	Session ID: MonC3 Session: Biomedical Signal Processing Monday, 02:30PM – 04:30PM, 22 December 2014, Room: Meghna Session Chair: Md. Aynal Haque, BUET, Bangladesh	
P-ID	**TITLE**	**AUTHOR(S)**
157	A High Accuracy Continuous Wavelet Function 683 Approximation for Implantable Device Applications	Qingyun Ma and Mohammad Rafiqul Haider
271	Dermatological Disease Detection using Image Processing and Artificial Neural Network 687	Rahat Yasir, Md. Ashiqur Rahman and Nova Ahmed
286	Direct Strain Estimation for Ultrasound Elastography Using Peak Frequency Ratio of Radiofrequency Echo Signals 691	Abu Shahir Md. Khalid Hasan, Raziur Rahman and Mohammad Ariful Haque
375	Bessel K-Form Parameters in the Dual Tree Complex Wavelet Transform Domain for the Detection of Epilepsy and Seizure 695	Anindya Bijoy Das and Mohammed Imamul Hassan Bhuiyan
432	Connected Component Based ROI Selection to Improve Identification of Microcalcification from Mammogram Images N/A	Md. Enamul Haque, K.M Imtiaz-Ud-Din, Muntasir Rahman and Aminur Rahman
512	Motor Imagery EEG Signal Classification Scheme Based on Entropy of Intrinsic Mode Function 703	Md. Toky Foysal Talukdar, Shahnewaz Karim Sakib, Celia Shahnaz and Shaikh Anowarul Fattah
530	Efficient Event Related Oscillatory Pattern Classification for EEG Based BCI Utilizing Spatial Brain Dynamics 707	Simanto Saha and Khawza I. Ahmed

	Session ID: MonD3 Session: Renewable Energy – II Monday, 02:30PM – 04:30PM, 22 December 2014, Room: Surma I Session Chair: Aminul Hoque, BUET, Bangladesh	
P-ID	**TITLE**	**AUTHOR(S)**
223	Biomass Quality Analysis for Power Generation 711	A.H.M. Kamal, Md. Mahbubur Rahman, Md. Mohaiminul Haque, Salman Sadiq and Aminul Hoque
472	A New Technique to Improve the Linear Generator Designed for Oceanic Wave Energy Conversion 714	Omar Farrok and Md. Mortuza Ali
027	Power Generating Slabs: Lost Energy Conversion of Human Locomotive Force Into Electrical Energy 718	Rajesh Kumar Datta and Sazid Rahman
107	Minimization of Output Fluctuations of Hybrid Power System by Using Modified Pitch Controller 722	Md. Rafiqul Islam Sheikh, Dristi Datta and Md. Selim Reza Ashrafi
222	Hybrid Power System: Biomass and Diesel 726	A.H.M. Kamal, Md. Mahbubur Rahman, Md. Mohaiminul Haque, Salman Sadiq and Aminul Hoque

| 131 | Design and Optimal Cost Analysis of Hybrid Power System for Kutubdia Island of Bangladesh   729 | Amit Kumar Sikder, Nishat Anjum Khan and Aminul Hoque |

Session ID: MonE3
Session: Control and Robotics
Monday, 02:30PM – 04:30PM, 22 December 2014, Room: Chitra
Session Chair: Shaikh Anowarul Fattah, BUET, Bangladesh

P-ID	TITLE	AUTHOR(S)
289	Fault Detection of Brahmanbaria Gas Plant using Neural Network 733	Md Tanvir Sowgath and Suman Ahmed
445	Interconnected Systems with "Mixed" Passivity and Negative-Imaginary Properties: A Stability Analysis in Discrete-time 737	Md. Arifur Rahman, Abdullah Al Mamun and Sajal K. Das
460	Evaluating the Performance of Optimal Control based Sensor Deployment Algorithms for Realistic Terrain Model 741	Taynan Sabri Helal, Pritom Mozumdar and Lutfa Akter
170	Robust Control of Robot Manipulator Based on Estimation of Upper Bounds on Parametric Uncertainty 745	Amol A. Khalate, Rajeeb Dey and Goshaidas Ray
364	Design of Non-fragile Controller for Motion Control of Robot Manipulator 749	K.J. Binoo, Sabyasachi Sengupta and Goshaidas Ray
019	Self-Localization of a Mobile Robot Using Monocular Vision of a Chessboard Pattern 753	Parvez Ahmmed, Zabir Ahmed, Mohammad Ishfaque Jahan Rafee, M A Awal and Sajid Muhaimin Choudhury
112	Control Input Converter for Robot's Leg Joint with Parallel Actuation Configuration 757	Addie Irawan, Hoe Lih Jiun and Md Moktadir Alam

Prayer and Tea Break, Monday, 04:30PM - 05:30PM, 22 December 2014
Surma Foyer

Session ID: MonA4
Session: Electromagnetics, Microwave and RF Engineering-III
Monday, 05:30PM – 07:00PM, 22 December 2014, Room: Meghna
Session Chair: Md. Saifur Rahman, BUET, Bangladesh

P-ID	TITLE	AUTHOR(S)
359	Improvement of the Detection Range of a Chipless RFID for UWB system Using Receiver Diversity with Maximal Ratio Combining 761	Khalid Mahmud and S.P Majumder
492	A Brief Overview of Chipless RFID Sensors with EM Transduction 765	Shuvashis Dey, Emran Md Amin, Jhantu Kumar Saha and Nemai Chandra Karmakar
533	A Local Phase Correction Method to Mitigate Mode Conversion in Coupled Transmission Line Bends 769	Mohammed Ershad Ali
048	Analysis of Improving the Detection Capability of RADAR in Presence of Jammer by Controlling Radar Effective Temperature 773	Md. Maynul Islam, Mubdiul Islam Rizu and Jerin Tasnim Himi

	Session ID: MonB4	
	Session: Algorithms and Computations-II	
	Monday, 05:30PM – 07:00PM, 22 December 2014, Room: Surma I	
	Session Chair: Md. Monirul Islam, BUET, Bangladesh	
P-ID	**TITLE**	**AUTHOR(S)**
281	Bangla License Plate Reader for Metropolitan Cities of Bangladesh Using Template Matching 776	Raiyan Abdul Baten, Zunaid Omair and Urmita Sikder
071	Complexity Measurement: A New Approach to Ensure Equal Distribution of Programming Problems for Evaluation 780	Golam Md. Muradul Bashir, Samrat Kumar Dey, S. S. M. Tariq and Md. Shariful Islam
049	State Space Least Mean Fourth Algorithm 784	Arif Ahmed, Muhammad Moinuddin and Ubaid Al-Saggaf
189	Particle Filter Based Attitude Matching Algorithm for in–Flight Transfer Alignment 788	Suvendu Chattaraj and Abhik Mukherjee

	Session ID: MonC4	
	Session: Nanoelectronic Devices – IV	
	Monday, 05:30PM – 07:00PM, 22 December 2014, Room: Surma II & III	
	Session Chair: Md. Ziaur Rahman Khan, BUET, Bangladesh	
P-ID	**TITLE**	**AUTHOR(S)**
513	p-i-n Solar Cell Modeling with Graphene as Electrode 792	Mohammad Wahiduzzaman Khan, Tanmoy Das Gupta and Samia Subrina
401	Effects of Physical Parameters on Subthreshold Characteristics of Nitride and Antimonide-Based Double Material Gate (DMG) HEMTs 796	Arman-Ur-Rashid, Md. Aynal Hossain, Tanvir Rahman and Farseem Mannan Mohammedy
520	Estimating the Transit Time of an $Al_yGa_{1-y}As$ HBT in the Gaussian Doped Base Region for Low to Moderately High Level of Injection 800	Nusrat Jahan, Rowshon Ara Mannan, Priyanka Biswas and Yeasir Arafat
327	An Analytical Model of Minority Carrier in Exponentially Doped Solar Cell under Illumination 804	Bishwajit Debnath, Topojit Debnath, Mokter Mahmud Chowdhury and M. Ziaur Rahman Khan
262	Capacitance-Voltage Characterization and Semi-classical Transport Analysis of $In_xGa_{1-x}As$ Surface Channel Quantum Well MOSFET 808	Ehsanur Rahman, Abir Shadman, Kanak Datta, Sudipta Romen Biswas and Quazi D.M. Khosru
076	Control of Reflection through Epsilon near Zero Graphene based Anisotropic Metamaterial 812	Ayed Al Sayem, Arif Shahriar Arif, Mahdy Rahman Chowdhury Mahdy and Md. Saifur Rahman

Session ID: MonD4		
Session: Power Electronics – II **Monday, 05:30PM – 07:00PM, 22 December 2014, Room: Titash** **Session Chair: Mohammad Jahangir Alam, BUET, Bangladesh**		
P-ID	**TITLE**	**AUTHOR(S)**
159	Data Logging and Energy Consumption Analysis of Two Houses in St. John's, Newfoundland 816	Tasnova Alam Jesha and M. Tariq Iqbal
043	Switched Capacitor Based Soft-Switching DC-DC Boost Converter for High Voltage Gain 820	Md. Rifat Alam Siddique, Md. Jannatul Ferdous and Istiaque Islam
459	Design of a Charge Controller Based on SEPIC and Buck Topology Using Modified Incremental Conductance MPPT 824	Taohid Latif and Syed R. Hussain
187	Reliable Fault Diagnosis of Induction Motors using 2D Signal Processing Techniques N/A	Jia Uddin, Md. Rashedul Islam and Jong-Myon Kim

Session ID: MonE4		
Session: Engineering Education **Monday, 05:30PM – 07:00PM, 22 December 2014, Room: Chitra** **Session Chair: M. M. Shahidul Hassan, BUET, Bangladesh**		
P-ID	**TITLE**	**AUTHOR(S)**
055	Laboratory-Based Project-Oriented Introductory Course for Electrical Engineering 832	Wayne Blanding and Kala Meah
074	Mobile Interactive Problem Solving for Active Teaching and Learning 836	Mohammad Muztaba Fuad, Debzani Deb and Shequi'lla Whitaker
360	University-Industry Research Collaboration 840	Nemai Chandra Karmakar

Best Paper Awards and Closing Ceremony   **Monday, 07:00PM - 07:30PM, 22 December 2014**
Room: Surma I, II & III