

Unique Papers/Journals											
SL.	Title	Type of Publication	Quartile	Authors							Research Cell
		Conference = 69 Journal = 16 Book Chapter = 2	Q1 = 8 Q2 = 1	1	2	3	4	5	6	7	
1	An Asymmetric Fuzzy-Based Self-Tuned PSO-Optimized MPPT Controller for Grid-Connected Solar Photovoltaic System	Journal	Q1	Mr. Md. Naimur Rahman							Renewable and Sustainable Energy
2	Superposition-Assisted Structure (SAS) for Crosstalk Reduction in 14-core Homogeneous MCF with Optimal Cladding Diameter	Conference		Shaharior Anik				Monjila Afrin Dorothi			Communication System
3	A Comprehensive Evaluation of Photovoltaic Simulation Softwares: A Decision-Making Approach Using Analytic Hierarchy Process and Performance Analysis	Journal	Q1	Md Ashrafur Islam	Mr. M M Naushad Ali						Renewable and Sustainable Energy
4	Solar-Powered UWSV to Maintain Lake Water pH and Surface Cleanliness with Fish Feeding Attribute	Conference		Mr. Sourav Barua							Renewable and Sustainable Energy
5	Size Optimization and Performance Analysis of Hybrid Biogas-Solar System for Energy-Efficient Dairy Farming	Conference		Md. Ashaduzzaman Niloy	Mr. M M Naushad Ali	Md Ashrafur Islam	Mr. Mohammad Asif Ul Haq	Dr. Molla Shahadat Hossain Lipu	Dr. Ahmed Al Mansur		Renewable and Sustainable Energy
6	Sustainable renewable energy integration on expressways in Bangladesh: A techno-economic, environmental, and sensitivity analysis of a grid-connected hybrid system	Journal	Q1		Dr. Molla Shahadat Hossain Lipu		Mr. Sourav Barua				Renewable and Sustainable Energy
7	Exploring CMOS Technology Impact on Static Random-Access Memory (SRAM): A Performance Assessment	Conference			Dr. Md. Hasan Maruf			Mr. M M Naushad Ali			Electronics & VLSI
8	Optimization and Economic Viability of a PV-Hydrogen Fuel Cell Hybrid System for Remote Areas: A Case Study	Conference		Md Ashrafur Islam	Mr. M M Naushad Ali	Md. Mohi Uddin Mohin	#REF!				Renewable and Sustainable Energy
9	Optimized Cascode LNA Design for Low Noise and High Gain at 5 GHz	Journal					Md. Mohi Uddin Mohin	Md. Sabbir Alam			Electronics & VLSI
10	Hollow-Core Anti-Resonant Fiber with Dual-Geometry Cladding for Mid-IR Transmission	Conference		Shaharior Anik	Monjila Afrin Dorothi	Md. Ashaduzzaman Niloy					Communication System
11	A Double Vector Sliding Mode Control Method for Improved Third Harmonic Distortion	Conference			Md. Shahnewaz	Shaharior Anik					Power Electronics & Control System
12	Design of a Compact Transparent Antenna for 5G Communication Systems	Conference		Dr. Mohammed Nazmus Shakib							Communication System
13	High-Performance Bootstrapped Sample & Hold Circuit for ADCs: Achieving Low Power and Enhanced SNR/SNDR in 45nm CMOS Technology	Journal		Dr. Md. Hasan Maruf				Prof. Dr. ASM. Shihavuddin			Electronics & VLSI
14	Design and Performance Analysis of a Novel 8-bit Reversible ALU Using 16nm CMOS Technology	Conference		Dr. Md. Hasan Maruf							Electronics & VLSI
15	Comparative Analysis of ST-Based SRAM Cell Design in CMOS and CNFET Technologies	Conference							Dr. Md. Hasan Maruf		Electronics & VLSI
16	Design and Performance Analysis of CMOS, GDI, and PTL Logic Gates at 90nm Technology	Conference			Dr. Md. Hasan Maruf		Md Ashrafur Islam	Md. Mohi Uddin Mohin	Md Istiaq Ahmed		Electronics & VLSI
17	Time-Series Forecasting Approaches for Energy Transition Planning in Bangladesh: A Comparative Study of Statistical and AI Models	Conference		Md. Ashaduzzaman Niloy	Ms. Shahela Akter			Md Ashrafur Islam	Mr. M M Naushad Ali		Image Processing & Machine Learning
18	Techno-Economic and Environmental Analysis of a PV-Wind Hybrid System Integrated with Smart Infrastructure: A Case Study	Conference		Md Ashrafur Islam	Mr. M M Naushad Ali			Md. Ashaduzzaman Niloy			Renewable and Sustainable Energy
19	A Reduced Component Triple-Gain Seven-Level Inverter for Fuel Cells: Design and Implementation	Conference				Dr. Md. Ahsanul Alam					Power Electronics & Control System
20	An Optimized Long Short-Term Memory-Based Model for One Hour Ahead Wind Speed Prediction	Conference				Dr. Md. Ahsanul Alam					Renewable and Sustainable Energy
21	A Novel Reduced Component Seven Level Inverter with Triple-Boosting Capability	Conference		Dr. Md. Ahsanul Alam							Power Electronics & Control System
22	CWC-MP-MC Image-based Breast Tumor Classification Using an Optimized Vision Transformer (ViT)	Journal	Q1	Mr. Shahriar Mahmud Kabir							Image Processing & Machine Learning
23	Ensemble Learning Approaches for Solar Irradiance Prediction in Bangladesh	Conference				Md Ashrafur Islam			Ms. Shahela Akter	Mr. M M Naushad Ali	Renewable and Sustainable Energy
24	First-Principles Study of Pressure-Induced Multifunctional Response in RbYO2: Structural-Mechanical Stability, Optoelectronic Tunability, and Photocatalytic Performance Enhancement	Journal	Q1					Md. Saiful Islam			"Photonics, Optoelectronics & Plasmonics"
25	Grid-Connected Solar-Powered DC Fast Charging Station with Low Voltage Ride-Through Capability	Conference					Mr. Ridwan Abrar				Power System Analysis

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		Conference = 69 Journal = 16 Book Chapter = 2	Q1 = 8 Q2 = 1	1	2	3	4	5	6	7		
26	Application of Nature-Inspired Algorithms to Enhance MLP-Based Water Level Prediction	Conference					Mr. M M Naushad Ali	Md Ashraful Islam				Renewable and Sustainable Energy
27	DDRL-AqP MSPP: Deep Reinforcement Learning based Energy Hole Prediction for Mobile Sink Path Planning	Journal	Q3				Mr. Sourav Barua					Communication System
28	Multi-Objective Optimization and Feasibility Analysis of Integrated Biogas-Solar Energy Systems for Rural Electrification	Journal	Q1		Md Ashraful Islam	Mr. M M Naushad Ali						Renewable and Sustainable Energy
29	Recent advancement of AC-DC SEPIC converter: A state-of-the-art review on topologies, technical aspects and applications	Journal	Q1		Md. Ashaduzzaman Niloy							Power Electronics & Control System
30	A Spectral-Spatial Dual Encoder With Bio-Inspired Swarm Adaptation for Cognitive Spectrum Sensing Using Real-World RF Signal Data	Journal	Q3				Mr. Sourav Barua					Communication System
31	Machine Learning Approach to Predict the Optical Properties of Superposition Assisted Structure of Homogeneous Multi-Core Fiber	Journal	Q3	Shaharior Anik					Md. Ashaduzzaman Niloy			"Photonics, Optoelectronics & Plasmonics"
32	Data-Driven Decarbonization: Machine Learning Insights into GHG Trends and Informed Policy Actions for a Sustainable Bangladesh	Journal	Q2			Dr. Md. Ahsanul Alam						Power System Analysis
33	Reduced THD Seven Level Switched Capacitor inverter with Self Capacitor Balancing Capability	Conference			Dr. Md. Ahsanul Alam							Power Electronics & Control System
34	Isolated Totem-Pole PFC Integrated Buck Converter for Low-Voltage Energy Storage Applications	Conference			Dr. Md. Ahsanul Alam							Power Electronics & Control System
35	Efficiency Optimization of CH3NH3SnI3-Based Perovskite Solar Cells and Investigating Electron Transport Layers Using SCAPS-1D Simulation	Conference			Dr. Md. Ahsanul Alam							Power System Analysis
36	A Novel 23-Level Inverter Topology with Symmetric-Asymmetric Hybrid Modules and Cross-Switching	Conference				Dr. Md. Ahsanul Alam						Power Electronics & Control System
37	Comparative Analysis of Siamese Networks and ResNet Embeddings for One Shot Learning	Conference		Md. Ashaduzzaman Niloy		Md Istiaq Ahmed	Dr. Md. Hasan Maruf	Mr. M M Naushad Ali	Md Ashraful Islam	Md. Sabbir Alam		Electronics & VLSI
38	Design Exploration of 10T SRAM Architectures for Stability in Error-Sensitive Applications at 22 nm CMOS Technology	Conference						Mr. AKM Shahabuddin	Dr. Md. Hasan Maruf			Electronics & VLSI
39	Central Control Automation System of Grid Substation Using High-Speed Communication	Conference							Md. Ashaduzzaman Niloy			Communication System, Power System Analysis
40	Harvesting Energy Using Coastal Padma: A Techno-Economic Analysis of Solar-Wind Hybrid Power Generation on Bangladesh's Largest Infrastructure Bridge	Conference							Md. Ashaduzzaman Niloy			Renewable and Sustainable Energy
41	Feasibility and Socio-Economic Impact of Rooftop Solar for Grid Load Mitigation: A Case Study in North Dhaka	Conference		Dr. Md. Hasan Maruf								Renewable and Sustainable Energy
42	Optimization of Electric Vehicle (EV) Charging Station Design for Urban Mobility	Conference				Md Ashraful Islam	Ms. Shahela Akter			Mr. M M Naushad Ali		Renewable and Sustainable Energy
43	Multi-Step Solar Irradiance Forecasting Using Deep Learning Models	Conference							Md Ashraful Islam		Mr. M M Naushad Ali	Image Processing & Machine Learning
44	Intelligent Optimization of Predictive and State Feedback Controllers Using Ant Colony Algorithm for Microgrid Application	Conference		Mr. Md. Takvir Anam		Md Ashraful Islam	Mr. M M Naushad Ali	Nayem Sharker				Electronics & VLSI
45	The Rising Energy Footprint of Data Centers: A Review of Global Trends, Challenges, and Opportunities	Conference						Mr. Md. Naiemur Rahman	Mr. M M Naushad Ali			Renewable and Sustainable Energy
46	Global Solar: Insolation Forecasting Using Artificial Hummingbird Algorithm-Enhanced LSTM Model	Conference							Md Ashraful Islam	Mr. M M Naushad Ali		Renewable and Sustainable Energy, Image Processing & Machine Learning
47	A Novel Auxiliary-Assisted Reduced Component Switched-Capacitor Seven Level Inverter for Standalone Applications	Conference		Dr. Md. Ahsanul Alam								Power Electronics & Control System
48	Estimate of Economical Benefits for 450 kW On grid Agrivoltaics System A Case Study Jessore Bangladesh	Conference			Dr. Md. Ahsanul Alam							Renewable and Sustainable Energy
49	THD Improvement in Seven Level Switched Capacitor inverter with Self Capacitor Balancing Capability	Conference			Dr. Md. Ahsanul Alam							Power Electronics & Control System
50	Optimization and Performance Evaluation of Semi-Transparent Photovoltaic Panels for Sustainable Urban Energy Solutions	Conference			Mr. Mohammad Asif Ul Haq							Renewable and Sustainable Energy

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		Conference = 69 Journal = 16 Book Chapter = 2	Q1 = 8 Q2 = 1	1	2	3	4	5	6	7		
51	Performance Evaluation of Leaded and Lead-Free Perovskite Solar Cells Under Temperature Variations: A Comparative Study	Conference			Mr. Mohammad Asif UI Haq							Renewable and Sustainable Energy
52	Social Distance Monitoring and Disinfection Service-based Robotic Solution in Corporate Organizations: Design and Performance Assessment	Conference		Mr. Sourav Barua								Power Electronics & Control System
53	Applied Op-Amp DAQ System-Based Single-Phase Customized Energy Meter for Server Integration	Conference			Mr. Sourav Barua							Power Electronics & Control System
54	Circular PCF SPR Sensor Design with External Sensing and Extended RI Range	Conference		Monjila Afrin Dorothi		Mr. Sourav Chandra Das						"Photonics, Optoelectronics & Plasmonics"
55	FPA-Based Weighted Ensemble of Vision Transformer Models for Lung Cancer Classification Using Chest CT Scan Images	Conference			Mr. Shahriar Mahmud Kabir				Mr. Sakib Abdul Ahad			Image Processing & Machine Learning
56	FPA-Based Weighted Ensemble of Vision Transformer Models for Lung Cancer Classification Using Chest CT Scan Images	Conference								Mr. Md Abdullah Al Oafi Himon		Image Processing & Machine Learning
57	Integrated Techno-Economic Analysis of PV-Biogas Hybrid Systems for Sustainable Rural Electrification	Conference					Ms. Umma Syda Akther	Mr. Md Abdullah Al Oafi Himon	Mr. Shahriar Mahmud Kabir	Md Ashraful Islam		Renewable and Sustainable Energy, Image Processing & Machine Learning
58	Adaptive Duty Cycle Calculation for SEPIC Converter Using Bisection Method Under Fluctuating Solar Input Conditions	Conference						Mr. Shahriar Mahmud Kabir				Image Processing & Machine Learning
59	An Efficient and Explainable Hybrid CNN-Transformer Model for Retinal Image Classification	Conference			Mr. Shahriar Mahmud Kabir							Image Processing & Machine Learning
60	An Explainable Dual-Branch Hybrid Deep Learning Framework for Microscopic Malaria Cell Classification	Conference			Mr. Shahriar Mahmud Kabir							Image Processing & Machine Learning
61	Influence of Pt, W, and Ru Electrodes on Switching Dynamics of TiO ₂ -Based RRAM	Conference					Mr. AKM Shahabuddin			Dr. Md. Hasan Maruf		Electronics & VLSI
62	A Real-Time Open Switch Fault Detection of Nine-Level Inverter and Component Detection Approach	Conference			Kamran Ahmmed							Power Electronics & Control System
63	Stability Enhancement and Harmonic Suppression of a Five-Level Cascaded H-Bridge Inverter for Microgrid Systems using Optimized PI Control	Conference					Kamran Ahmmed					Power Electronics & Control System
64	Unveiling the Impact of Urban Dust Accumulation on Solar Module Efficiency: A Case Study from Dhaka,	Book Chapter						Ms. Umma Syda Akther				Renewable and Sustainable Energy
65	Mitigating Partial Shading Loss in Rooftop Solar PV Systems: Case Study and Optimization Strategies in Dhaka	Conference			Md. Sabbir Alam							Renewable and Sustainable Energy
66	Electrical Performance Analysis of Old Photovoltaic Modules under Outdoor Condition in Dhaka: Thermal Image-Based Investigation	Conference		Md. Sabbir Alam					Md. Mohi Uddin Mohin			Renewable and Sustainable Energy
67	Performance Evaluation of a Reduced Switch Five-level Inverter: Modelling and Simulation	Conference							Md. Sabbir Alam			Power Electronics & Control System
68	Performance Investigation of a Reduced Switch Five-Level Inverter: Modelling and Simulation	Conference		Md. Mohi Uddin Mohin							Md. Sabbir Alam	Power Electronics & Control System
69	Low-Power and Robust SRAM Design: Comparative Evaluation of 6T, 5T-9T, and SB-9T Architectures	Conference							Dr. Md. Hasan Maruf			Electronics & VLSI
70	Optimization of Dynamic Comparator Architectures for High-Speed 4-Bit Flash ADCs in Deep-Submicron CMOS	Conference								Dr. Md. Hasan Maruf		Electronics & VLSI
71	A Sustainable IoT-Based Atmospheric Water Generator for Portable Clean Water Harvesting	Conference		Mr. Sourav Chandra Das								Renewable and Sustainable Energy
72	mTOR controls ependymal cell differentiation by targeting the alternative cell cycle and centrosomal proteins	Journal	Q1			Prof. Dr. ASM. Shihavuddin						Image Processing & Machine Learning
73	Exploring CMOS Technology Impact on Static Random Access Memory (SRAM): A Performance Assessment	Conference										Electronics & VLSI
74	Design and Analysis of a Symmetric Seven-Level Inverter for THD Minimization with Reduced Component Count	Conference		Md. Mohi Uddin Mohin						Md. Sabbir Alam		Renewable and Sustainable Energy
75	A Novel Eleven-Level Quintuple Boost Switched-Capacitor Inverter with Self-Balancing Capability	Conference		Md. Mohi Uddin Mohin								Renewable and Sustainable Energy

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76	Optimization of Mismatch Power Loss in Photovoltaic Arrays: Impacts and Mitigation Strategies	Conference		Md. Sabbir Alam					Md. Mohi Uddin Mohin		Renewable and Sustainable Energy
77	Optimized Cascode LNA design for low noise and high gain at 5 GHz	Journal						Md. Mohi Uddin Mohin	Md. Sabbir Alam		Electronics & VLSI
78	Unveiling the Impact of Urban Dust Accumulation on Solar Module Efficiency: A Case Study from Dhaka, Bangladesh	Book Chapter						Md. Mohi Uddin Mohin			Renewable and Sustainable Energy
79	Design and Analysis of a Symmetric Thirteen-Level Inverter for THD Minimization with Reduced Component Count	Conference			Md. Mohi Uddin Mohin						Renewable and Sustainable Energy
80	Performance Degradation of Monocrystalline PV Modules under Progressive Uniform Shading Conditions: An Experimental Study	Conference						Md. Mohi Uddin Mohin			Renewable and Sustainable Energy
81	Stability-Oriented Bi-Directional EV Charger with PLL-Based Synchronization and PI Control	Conference			Ms. Lusain Nima						Power Electronics & Control System
82	Impact of Natural Bird Droppings on the Output Performance of Photovoltaic Modules: An Experimental Data Analysis	Conference		Md. Sabbir Alam							Renewable and Sustainable Energy
83	Assessing the Role of Photovoltaic Energy in Mitigating Emissions: A Comparative Analysis of Fossil Fuels and Solar PV	Conference			Md. Sabbir Alam						Renewable and Sustainable Energy
84	Site Suitability Assessment for Solar PV Installation in Bangladesh: Analyzing Long-Term PM10 Dust and Solar Irradiance Data	Conference				Md. Sabbir Alam					Renewable and Sustainable Energy
85	Optimized cascode lna design for low noise and high gain at 5 ghz	Journal						Md. Mohi Uddin Mohin	Md. Sabbir Alam		Electronics & VLSI
86	Reduced THD Seven Level Switched Capacitor Inverter with Self Capacitor Balancing Capability.	Conference						Ms. Meherun Nesa			Power Electronics & Control System
87	Estimate of Economical Benefits for 450 kW On grid Agrivoltaics System A Case Study Jessore Bangladesh.	Conference						Ms. Meherun Nesa			Renewable and Sustainable Energy