

List of Registered Papers as on 25-March-2023

Track 1: Regular Session

Track 2: Special Session on "Emerging Semiconductor devices and their applications"

Track 3: Special Session On "Emerging Trends in Intelligent Communication and Wireless Technologies"

Track 4: Special Session On "Integrated Device And Circuit, Architecture Design For Biomedical Application"

Sl No.	Paper ID	Paper Title	Track
1	5	Impact of Metal Silicides on the Performance of Electrostatically Doped based Double-POLO PERC Solar Cell	1
2	7	Design of Low power and High-Performance Decoder Using Carbon Nanotube Field Effect Transistor (CNTFET)	1
3	8	1-bit Magnitude Comparator based on Reversible Logic using QCA Technology	1
4	12	Gate Engineered IGBT with Improved Device Performance	1
5	13	Performance analysis of Low power Multiplexer for Communication System	1
6	16	Input Variable Bypass or IVB Technique for Logic Functions Simplification	1
7	17	Implementation of the Quantum BCD-to-Excess-3 Code Converter using New Quantum Reversible Circuit Block	1
8	19	Comparative Analysis of EEPL and PPL Techniques in 18nm FinFET Technology	1
9	20	Design and Simulation of Cascode Current reuse low power Operational transconductance amplifier	1
10	21	Optimizing Photovoltaic Performance of MASnPbI3 Perovskite Solar Cells through Layer Thickness Variations	1
11	22	Studies on Slotted Waveguide Antenna for Polarization Sensitive Microwave Measurements	1
12	23	One Dimensional Chaotic map Implementation in FPGA board for Image Encryption	1
13	27	Impact of Doping Variation on the Performance of Sb2S3 based Solar Cell using Device Simulations	1
14	29	Towards Energy-Efficient Cost-Effective Toffoli Gate Design using Quantum Cellular Automata	1
15	31	Analysis of FDSOI-Negative Capacitance MOSFET with respect to Different Oxide Thickness and Temperatures	1
16	32	Study on the impact of CuI as Hole Transport Layer (HTL) for CZTS-based Solar Cell	1
17	33	Threshold Voltage Analysis of E-mode Recessed p-GaN Gate HEMT-A Simulation Based Study	1

18	34	Design and Modeling of a Label-free JLTFT-Based Biosensor for Enhanced Sensitivity	1
19	37	A Deep Learning Aided Intelligent Framework for Condition Monitoring of Electrical Machinery	1
20	38	Novel 32nm CMOS Ternary 3's Complement Generator	1
21	39	Augmenting CIGS Solar Cell Efficiency through Optimization of Layer Thickness and Front Electrode Transparency	1
22	40	Gate Modulated Graphene Channel TFT with Enhanced Switching Current Ratio	1
23	42	Dielectric-Pocket based Multi-channel Nanowire Field Effect Transistor for High-speed Operations	1
24	43	Improvement of Electron Transport in Pseudomorphic In _{0.52} Al _{0.48} As/In _y Ga _{1-y} As Double Quantum Well Structure	1
25	44	Low Lead All-Inorganic Hybrid Perovskite: A Study of Interface Defects using SCAPS-1D	1
26	47	Sensitivity Optimization of MEMS-based Piezoresistive Pressure Sensor using Silicon Nitride Diaphragm	1
27	52	Device Performance Analysis for Different Gate Locations in AlGaIn/GaN HEMT by Silvaco Simulation	1
28	54	Characterization and Thermal Steadiness of Trenched stepped gate SON MOSFET for future CMOS devices	1
29	55	Truncated Corner and Slotted Wearable Textile Multiband Antenna for Wireless Applications	1
30	56	Implementation of Retiming Technique for Clock Period Optimization by Brute-Force Approach	1
31	58	Performance Analysis of Double Gate MOSFET with High-k Dielectric	1
32	61	Highly sensitive surface plasmon-based refractive index sensor in the optical communication band using ZnS-PVP layers	1
33	65	Effect of Electron Transport Layer on Tin based Perovskite Solar Cells	1
34	67	Dibit-based Frequency encoded Fredkin gate	1
35	70	High Gain Farming and Data Analytics using IoT	1
36	71	A Review on Emerging Tunnel FET Structures for High-speed and Low-power Circuit Applications	1
37	77	Investigation of 2D nanomaterials on Indium Phosphide-based plasmonic devices for sensing in the optical communication band	1
38	78	RESONANT METHOD FOR DETERMINING THE DIELECTRIC CHARACTERISTICS OF A MIXTURE OF SMALL DISPERSED BULK MATERIALS	3
39	80	Performance Investigation of Inverted T-shaped Heterojunction FinFET along with Oxide Stacking	1

40	81	Single Layer Design of Dual Banyan Network Using Quantum-Dot Cellular Automata	1
41	82	A Different Approach for Traffic Management System for Emergency Vehicles During Heavy Traffic for Biomedical Applications	1
42	83	Global horizontal irradiance and wind speed prediction using ANN : Comprehensive Study	1
43	86	Technical Intercession of Artificial Intelligence in Solving Online Dispute Resolution	1
44	87	Design of a Reliable Copyright Management System Based on Blockchain	1
45	88	Cyber Physical System Role in Stock Market	1
46	89	Artificial Intelligence and Internet of Things Based Technological Advancement in Domain of Horticulture 4.0	1
47	90	Digitalization Transformation: Essence of Virtual Reality Indulging in the Mental Health of People	1
48	91	Enabling Technologies for Wildlife Conservation	1
49	93	Significance of Emerging Technological Advancements in Transition of Green Economy	1
50	95	Investigation of Quantum Ballistic Transport in Single Strand DNA with Silicon Carbide Nanotube : A High performance Embedded System	1
51	96	Subsuming AI, IoT and Big Data in Smart Farm Practices	1
52	97	Role of Technology Under Advancement of Industrialisation in Intellectual Property Rights	1
53	99	High Gain Multistage CMOS Amplifier Design at 45nm technology node	1
54	100	Design of Secure Reversible Select, Cross and Variation (RSCV) Architecture in Quantum Computing	1
55	101	The Ground Switcher	1
56	102	AlGaN/GaN based HEMT with AlN spacer and Nucleation layer for high power application	1
57	104	IoT Based Monitoring of Environment in a Smart Hydroponic System	1
58	105	Phase Transition Material modulated Hyper-FET for Digital Applications	1
59	107	Minimally Coupled E-Shaped Dual-band Antenna for Wireless Applications	1
60	108	Intersubband effects on electron mobility in GaAs/ In _x Ga _{1-x} As Quantum well FET with asymmetric doping profiles	1
61	109	An Offset-Fed T-Shaped Two-Port MIMO Antenna for 38 GHz 5G Millimeter-Wave band Applications	1

62	111	9T SRAM Cell for Computation-In-Memory Architectures: Proposal & Investigation	1
63	112	Analysis of SiGe, InGaAs and GaN on 5nm MOSFET Modelling with Applications	1
64	113	A Temperature Compensated Beta-Multiplier Based Sub-1 Volt Voltage Reference Circuit for Low-Voltage Application	1
65	114	Design a self-charging electric vehicle with multiple natural energy sources	1
66	115	Adaptable Terahertz absorber using circular shaped Graphene Metamaterial for LO Technology	1
67	116	An Exploration of Photovoltaic Performance of the Rb ₂ SnI ₆ using DFT and SCAPS-1D	1
68	117	Efficiency Enhancement GaAs Ultra-Thin Solar Cell Using Anti-Reflection Coating	1
69	120	An on-demand charging schedule utilising multiple mobile charging vehicles for WRSNs	1
70	121	IOT Based Precision Agri-Bot	1
71	122	Mechanical and Electrical Performance of Stretchable Honeycomb Interconnect With Aspect Ratio Variation	1
72	124	Configurable 8T SRAM-based Computing In-Memory Architecture for Enabling Shift Operation and Multibit Dot-Product Engines	1
73	125	Design of a Catenary Shaped Multiband-MIMO Antenna for Ultra-Wideband Applications	1
74	126	Low Power Bio-Amplifier Using Charge Distribution Technique at CMOS 45nm Technology:A Review	1
75	127	DESIGN OF AN IOT BASED SMART MEDICINE BOX	1
76	128	Study on Effect of Si-SiO ₂ and SiGe-HfO ₂ to Design 8nm Double Gate FinFET with Applications	1
77	130	Design and Analysis of High-Efficiency Eco-friendly Lead-free Perovskite Solar Cell with TiO ₂ and C60 Electron Transport Layers	1
78	138	Schottky barrier height modulation of Metal-WS ₂ contact by molecular doping technique	1
79	140	Graphene Nanoribbon based Tripple Barrier Double Quantum Well Resonant Tunnelling Diode	1
80	145	Design of DC-DC Boost Converter Using PFM Switching Technique	1
81	152	Assessing the Impact of Defects on Energy Dissipation of QCA LT Gate using ML Models	1
82	158	A DC-DC Boost Converter using PWM with 65% efficiency	2
83	164	Ultra-low-power 4th order quasi-floating gate class- AB flipped source follower filter for biomedical Applications	2
84	167	Sensitivity Enhancement of Capacitive MEMS Accelerometer by Design of the Device Geometry	2

85	168	Impact of Doping and Temperature on Mobility in Single and Dual Core S/D GAA FinFETs	2
86	171	IOT BASED SMART WORK JACKET FOR COAL MINERS	2
87	172	Nano porous Structure formation on Multicrystalline Silicon Surface by using Chemical Etching method.	2
88	173	FPGA Implementation Area Efficient of 16-Bit Vedic Multiplier Using Higher Order Compressors	2
89	179	Statistical Analysis of Integration of renewable DGs in IEEE-9 Bus System using ETAP Simulation	2
90	182	An exhaustive review on recent advances in paper-based microfluidic device for malaria diagnosis	2
91	229	Analysis of FLC technique with P&O Algorithm under variable weather condition	2
92	233	Temperature Sensitive analysis of Junctionless Nanowire Ferroelectric Field Effect Transistor (JNFe- FET) for Enhanced Analog Performance	2
93	308	Comparative Performance between V/F and Rotor Flux-Oriented Controls of Induction Motor Drive	2
94	484	An approach for modeling propagation delay of a subthreshold inverter incorporating DIBL effect	3
95	495	CNTFET-based design of low power charge pump technique-based voltage multiplier	3
96	496	Early Prediction of Cataract using Convolutional Neural Network	3
97	498	Design and Implementation of Hybrid Full Adder Based 16-bit Multiplication Using FPGA	3
98	499	A Review of Low-Power Static Random Access Memory (SRAM) Designs	3
99	500	Versatile Biomolecules Sensing of Trench Double Gate Junctionless Field Effect Transistor	3
100	501	Performance Evaluation of Buried Gate Oxide based Negative Capacitance FinFETs	3
101	502	Analytical Model of Dual Cavity Nanowire Tunnel FET-based Dielectric Modulated Biosensor	3
102	503	Applications of MOSFET-Based High-frequency Signal Processing Memristor	3
103	504	Sub-threshold swing analysis for NC-TFET in Low-Power Biomedical Applications	3
104	505	Noise Analysis in FinFET-based Analog Circuit with Technology Scaling	3
105	506	Memory Compiler Performance Prediction using RNN	3
106	507	FPGA-based Design of a Fault Injector for Binarized Convolutional Neural Network	3
107	510	Design and Analysis of 8x8 SRAM Memory Array using 45nm Technology at 100MHz	3

108	511	Design and Analysis of Dielectrically Modulated Tunnel FET Embedded Nanocavity for breast cancer cells	3
109	512	Design of Low Power, Low Noise with High Output Swing Preamplifier for Cochlear Implants	3
110	513	Analytical Modeling of Asymmetric Junctionless Dual Material Double Gate MOSFET with Underlap for Enhanced Hot Carrier Reliability	4
111	514	Gate-to-Source Leakage Current Computation in Symmetric Double Gate MOSFET incorporating Short Channel Effects	4
112	515	Analysis of Source, Drain and Gate Field Plated AlGaIn/GaN Based HEMT for High Breakdown Voltage	4
113	516	Semi-empirical modeling of rectangular triple gate FinFET incorporating the effect of 2D quantum confinement	4
114	517	Temperature-based Numerical Simulation investigation of the analog performance of AlGaIn/GaN MOS-HEMT	4
115	518	DFT Modeling of a MoS ₂ Monolayer for C ₆ H ₁₂ and C ₄ H ₈ O Detection in Lung Cancer	1
116	519	Ensemble Learning strategy in modeling of future generation nanoscale devices using Machine Learning	1