

List of Accepted Papers as on 18-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 | 32 | Study on the impact of CuI as Hole Transport Layer (HTL) for CZTS-based Solar Cell | 1 |
| 15 | 33 | Threshold Voltage Analysis of E-mode Recessed p-GaN Gate HEMT-A Simulation Based Study | 1 |

| | | | |
|----|-----|---|---|
| 16 | 34 | Design and Modeling of a Label-free JLTFT-Based Biosensor for Enhanced Sensitivity | 1 |
| 17 | 37 | A Deep Learning Aided Intelligent Framework for Condition Monitoring of Electrical Machinery | 1 |
| 18 | 38 | Novel 32nm CMOS Ternary 3's Complement Generator | 1 |
| 19 | 39 | Augmenting CIGS Solar Cell Efficiency through Optimization of Layer Thickness and Front Electrode Transparency | 1 |
| 20 | 40 | Gate Modulated Graphene Channel TFET with Enhanced Switching Current Ratio | 1 |
| 21 | 42 | Dielectric-Pocket based Multi-channel Nanowire Field Effect Transistor for High-speed Operations | 1 |
| 22 | 43 | Improvement of Electron Transport in Pseudomorphic In _{0.52} Al _{0.48} As/InyGa _{1-y} As Double Quantum Well Structure | 1 |
| 23 | 44 | Low Lead All-Inorganic Hybrid Perovskite: A Study of Interface Defects using SCAPS-1D | 1 |
| 24 | 47 | Sensitivity Optimization of MEMS-based Piezoresistive Pressure Sensor using Silicon Nitride Diaphragm | 1 |
| 25 | 52 | Device Performance Analysis for Different Gate Locations in AlGa _N /Ga _N HEMT by Silvaco Simulation | 1 |
| 26 | 58 | Performance Analysis of Double Gate MOSFET with High-k Dielectric | 1 |
| 27 | 67 | Dibit-based Frequency encoded Fredkin gate | 1 |
| 28 | 71 | A Review on Emerging Tunnel FET Structures for High-speed and Low-power Circuit Applications | 1 |
| 29 | 77 | Investigation of 2D nanomaterials on Indium Phosphide-based plasmonic devices for sensing in the optical communication band | 1 |
| 30 | 81 | Single Layer Design of Dual Banyan Network Using Quantum-Dot Cellular Automata | 1 |
| 31 | 95 | Investigation of Quantum Ballistic Transport in Single Strand DNA with Silicon Carbide Nanotube : A High performance Embedded System | 1 |
| 32 | 100 | Design of Secure Reversible Select, Cross and Variation (RSCV) Architecture in Quantum Computing | 1 |
| 33 | 102 | AlGa _N /Ga _N based HEMT with AlN spacer and Nucleation layer for high power application | 1 |
| 34 | 105 | Phase Transition Material modulated Hyper-FET for Digital Applications | 1 |

| | | | |
|----|-----|---|---|
| 35 | 107 | Minimally Coupled E-Shaped Dual-band Antenna for Wireless Applications | 1 |
| 36 | 109 | An Offset-Fed T-Shaped Two-Port MIMO Antenna for 38 GHz 5G Millimeter-Wave band Applications | 1 |
| 37 | 112 | Analysis of SiGe, InGaAs and GaN on 5nm MOSFET Modelling with Applications | 1 |
| 38 | 113 | A Temperature Compensated Beta-Multiplier Based Sub-1 Volt Voltage Reference Circuit for Low-Voltage Application | 1 |
| 39 | 114 | Design a self-charging electric vehicle with multiple natural energy sources | 1 |
| 40 | 115 | Adaptable Terahertz absorber using circular shaped Graphene Metamaterial for LO Technology | 1 |
| 41 | 116 | An Exploration of Photovoltaic Performance of the Rb ₂ SnI ₆ using DFT and SCAPS-1D | 1 |
| 42 | 117 | Efficiency Enhancement GaAs Ultra-Thin Solar Cell Using Anti-Reflection Coating | 1 |
| 43 | 120 | An on-demand charging schedule utilising multiple mobile charging vehicles for WRSNs | 1 |
| 44 | 122 | Mechanical and Electrical Performance of Stretchable Honeycomb Interconnect With Aspect Ratio Variation | 1 |
| 45 | 124 | Configurable 8T SRAM-based Computing In-Memory Architecture for Enabling Shift Operation and Multibit Dot-Product Engines | 1 |
| 46 | 125 | Design of a Catenary Shaped Multiband-MIMO Antenna for Ultra-Wideband Applications | 1 |
| 47 | 128 | Study on Effect of Si-SiO ₂ and SiGe-HfO ₂ to Design 8nm Double Gate FinFET with Applications | 1 |
| 48 | 130 | Design and Analysis of High-Efficiency Eco-friendly Lead-free Perovskite Solar Cell with TiO ₂ and C60 Electron Transport Layers | 1 |
| 49 | 138 | Schottky barrier height modulation of Metal-WS ₂ contact by molecular doping technique | 1 |
| 50 | 140 | Graphene Nanoribbon based Tripple Barrier Double Quantum Well Resonant Tunnelling Diode | 1 |
| 51 | 145 | Design of DC-DC Boost Converter Using PFM Switching Technique | 1 |
| 52 | 158 | A DC-DC Boost Converter using PWM with 65% efficiency | 1 |
| 53 | 164 | Ultra-low-power 4th order quasi-floating gate class- AB flipped source follower filter for biomedical Applications | 1 |

| | | | |
|----|-----|---|---|
| 54 | 167 | Sensitivity Enhancement of Capacitive MEMS Accelerometer by Design of the Device Geometry | 1 |
| 55 | 168 | Impact of Doping and Temperature on Mobility in Single and Dual Core S/D GAA FinFETs | 1 |
| 56 | 172 | Nano porous Structure formation on Multicrystalline Silicon Surface by using Chemical Etching method. | 1 |
| 57 | 173 | FPGA Implementation Area Efficient of 16-Bit Vedic Multiplier Using Higher Order Compressors | 1 |
| 58 | 179 | Statistical Analysis of Integration of renewable DGs in IEEE-9 Bus System using ETAP Simulation | 1 |
| 59 | 229 | Analysis of FLC technique with P&O Algorithm under variable weather condition | 1 |
| 60 | 308 | Comparative Performance between V/F and Rotor Flux-Oriented Controls of Induction Motor Drive | 1 |
| 61 | 484 | An approach for modeling propagation delay of a subthreshold inverter incorporating DIBL effect | 1 |
| 62 | 495 | CNTFET-based design of low power charge pump technique-based voltage multiplier | 1 |
| 63 | 496 | Early Prediction of Cataract using Convolutional Neural Network | 1 |
| 64 | 498 | Design and Implementation of Hybrid Full Adder Based 16-bit Multiplication Using FPGA | 1 |
| 65 | 500 | Versatile Biomolecules Sensing of Trench Double Gate Junctionless Field Effect Transistor | 1 |
| 66 | 501 | Performance Evaluation of Buried Gate Oxide based Negative Capacitance FinFETs | 1 |
| 67 | 502 | Analytical Model of Dual Cavity Nanowire Tunnel FET-based Dielectric Modulated Biosensor | 1 |
| 68 | 503 | Applications of MOSFET-Based High-frequency Signal Processing Memristor | 1 |
| 69 | 504 | Sub-threshold swing analysis for NC-TFET in Low-Power Biomedical Applications | 1 |
| 70 | 505 | Noise Analysis in FinFET-based Analog Circuit with Technology Scaling | 1 |
| 71 | 506 | Memory Compiler Performance Prediction using RNN | 1 |
| 72 | 507 | FPGA-based Design of a Fault Injector for Binarized Convolutional Neural Network | 1 |

| | | | |
|----|-----|--|---|
| 73 | 510 | Design and Analysis of 8x8 SRAM Memory Array using 45nm Technology at 100MHz | 1 |
| 74 | 511 | Design and Analysis of Dielectrically Modulated Tunnel FET Embedded Nanocavity for breast cancer cells | 1 |
| 75 | 512 | Design of Low Power, Low Noise with High Output Swing Preamplifier for Cochlear Implants | 1 |
| 76 | 513 | Analytical Modeling of Asymmetric Junctionless Dual Material Double Gate MOSFET with Underlap for Enhanced Hot Carrier Reliability | 1 |
| 77 | 514 | Gate-to-Source Leakage Current Computation in Symmetric Double Gate MOSFET incorporating Short Channel Effects | 1 |
| 78 | 515 | Analysis of Source, Drain and Gate Field Plated AlGaIn/GaN Based HEMT for High Breakdown Voltage | 1 |
| 79 | 516 | Semi-empirical modeling of rectangular triple gate FinFET incorporating the effect of 2D quantum confinement | 1 |
| 80 | 517 | Temperature-based Numerical Simulation investigation of the analog performance of AlGaIn/GaN MOS-HEMT | 1 |
| 81 | 518 | DFT Modeling of a MoS ₂ Monolayer for C ₆ H ₁₂ and C ₄ H ₈ O Detection in Lung Cancer | 1 |
| 82 | 519 | Ensemble Learning strategy in modeling of future generation nanoscale devices using Machine Learning | 1 |
| 83 | 29 | Towards Energy-Efficient Cost-Effective Toffoli Gate Design using Quantum Cellular Automata | 2 |
| 84 | 31 | Analysis of FDSOI-Negative Capacitance MOSFET with respect to Different Oxide Thickness and Temperatures | 2 |
| 85 | 54 | Characterization and Thermal Steadiness of Trenched stepped gate SON MOSFET for future CMOS devices | 2 |
| 86 | 56 | Implementation of Retiming Technique for Clock Period Optimization by Brute-Force Approach | 2 |
| 87 | 61 | Highly sensitive surface plasmon-based refractive index sensor in the optical communication band using ZnS-PVP layers | 2 |
| 88 | 65 | Effect of Electron Transport Layer on Tin based Perovskite Solar Cells | 2 |
| 89 | 101 | The Ground Switcher | 2 |
| 90 | 108 | Intersubband effects on electron mobility in GaAs/ In _x Ga _{1-x} As Quantum well FET with asymmetric doping profiles | 2 |

| | | | |
|-----|-----|---|---|
| 91 | 111 | 9T SRAM Cell for Computation-In-Memory Architectures: Proposal & Investigation | 2 |
| 92 | 152 | Assessing the Impact of Defects on Energy Dissipation of QCA LT Gate using ML Models | 2 |
| 93 | 233 | Temperature Sensitive analysis of Junctionless Nanowire Ferroelectric Field Effect Transistor (JNFe- FET) for Enhanced Analog Performance | 2 |
| 94 | 315 | IMPLEMENTATION AND EXECUTION OF BLOCKCHAIN TECHNOLOGY IN THE FIELD OF EDUCATION FOR THE SPECIAL EDUCATION | 2 |
| 95 | 319 | Citizens' Trust towards the Government as a Platform (GaaP): An Empirical Evidence of Blockchain Usage | 2 |
| 96 | 320 | Ecosystem Implementations in Smart City Through Blockchain Technology | 2 |
| 97 | 321 | Blockchain Technology Implementation in Various Governance Domains: A Systematic Review Approach | 2 |
| 98 | 322 | Future Trends of Blockchain Technology in the Technological Fields | 2 |
| 99 | 324 | BLOCKCHAIN TECHNOLOGIES INTEGRATION WITH DATA SCIENCE | 2 |
| 100 | 327 | BLOCKCHAIN INTEGRATED WITH INDUSTRIAL IOT TOWARDS INDUSTRY | 2 |
| 101 | 329 | CONCEPT OF INTEGRATION OF BLOCKCHAIN AND ARTIFICIAL INTELLIGENCE | 2 |
| 102 | 330 | BLOCKCHAIN TECHNOLOGY INNOVATIONS IN RECENT YEARS | 2 |
| 103 | 331 | A detailed study analysis of Artificial intelligence implementation in social media applications | 2 |
| 104 | 353 | Construction of Trust Management using Blockchain Technology | 2 |
| 105 | 499 | A Review of Low-Power Static Random Access Memory (SRAM) Designs | 2 |
| 106 | 55 | Truncated Corner and Slotted Wearable Textile Multiband Antenna for Wireless Applications | 3 |
| 107 | 70 | High Gain Farming and Data Analytics using IoT | 3 |
| 108 | 78 | RESONANT METHOD FOR DETERMINING THE DIELECTRIC CHARACTERISTICS OF A MIXTURE OF SMALL DISPERSED BULK MATERIALS at Ka-BAND | 3 |
| 109 | 83 | Global horizontal irradiance and wind speed prediction using ANN : Comprehensive Study | 3 |
| 110 | 86 | Technical Intercession of Artificial Intelligence in Solving Online Dispute Resolution | 3 |

| | | | |
|-----|-----|--|---|
| 111 | 87 | Design of a Reliable Copyright Management System Based on Blockchain | 3 |
| 112 | 88 | Cyber Physical System Role in Stock Market | 3 |
| 113 | 89 | Artificial Intelligence and Internet of Things Based Technological Advancement in Domain of Horticulture 4.0 | 3 |
| 114 | 90 | Digitalization Transformation: Essence of Virtual Reality Indulging in the Mental Health of People | 3 |
| 115 | 91 | Enabling Technologies for Wildlife Conservation | 3 |
| 116 | 93 | Significance of Emerging Technological Advancements in Transition of Green Economy | 3 |
| 117 | 96 | Subsuming AI, IoT and Big Data in Smart Farm Practices | 3 |
| 118 | 97 | Role of Technology Under Advancement of Industrialisation in Intellectual Property Rights | 3 |
| 119 | 104 | IoT Based Monitoring of Environment in a Smart Hydroponic System | 3 |
| 120 | 121 | IOT Based Precision Agri-Bot | 3 |
| 121 | 127 | DESIGN OF AN IOT BASED SMART MEDICINE BOX | 3 |
| 122 | 171 | IOT BASED SMART WORK JACKET FOR COAL MINERS | 3 |
| 123 | 68 | Sensitivity Extraction of Step Shape Double Gate (SSDG) TFET Biosensor considering Non-ideal Scenario | 4 |
| 124 | 80 | Performance Investigation of Inverted T-shaped Heterojunction FinFET along with Oxide Stacking | 4 |
| 125 | 82 | A Different Approach for Traffic Management System for Emergency Vehicles During Heavy Traffic for Biomedical Applications | 4 |
| 126 | 99 | High Gain Multistage CMOS Amplifier Design at 45nm technology node | 4 |
| 127 | 126 | Low Power Bio-Amplifier Using Charge Distribution Technique at CMOS 45nm Technology:A Review | 4 |
| 128 | 182 | An exhaustive review on recent advances in paper-based microfluidic device for malaria diagnosis | 4 |