



POSTER SESSION

Monday, June 26, 6:00 pm – 9:00 pm | Lagoon Plaza

Paper	Title (Presenter)
P.1	Investigation of Gate Dielectric Composition Effect on AlTiO/AIGaN/GaN MIS-HEMTs performance (Zhama)
P.2	Energy Efficient Ternary Device in 28-nm CMOS Technology with Excellent Short-Channel Effect Immunity and Variation Tolerance Characteristics (Kim)
P.3	Exploration and Exploitation of Strain Engineering in 2D-FETs (Kumar)
P.4	IsoHEMTs: Boosting Transistor Performance by Isotope Engineering (Ganguly)
P.5	A Noise-robust Optoelectronic Synaptic Array with 2D Materials (Rahman)
P.6	Exploring Physically-formed Edge Contacts for Carbon Nanotube Transistors (Doherty)
P.7	Ferroelectric Induced Multidirectional Polarization in MoS2 for Memory Applications (Sahoo)
P.8	High Breakdown Electric Field in Ba _x Sr _{1-x} TiO ₃ /SiO ₂ Dielectric Stack Formed on (010) β-Ga ₂ O ₃ substrates (Miesle)
P.9	Small Signal Analysis of GaN IMPATT Diodes for W-band and Sub-THz Wave Generation (Li)
P.10	Dual-Layer Ferroelectric MOSFETs for Multi-Level Non-Volatile Memories (Liao)
P.11	The $R_{on}-V_{bk}$ Relationship in β-Ga ₂ O ₃ Lateral MESFETs Determined Using Physics-Based TCAD Simulation (Ahmed)
P.12	Natural Organic Fructose-based Nonvolatile Resistive Switching Memory for Environmental Sustainability in Computing (Zhao)
P.13	III-nitride Optical Thyristor Enabled by the Built-in Piezoelectric Field (Hajdel)
P.14	β-Ga ₂ O ₃ /Diamond Heterojunction PN Diode: Device Fabrication and TCAD Modelling (Herrera-Rodriguez)
P.15	Normally-off Quasi-vertical GaN FinFET on SiC Substrate with Record Small-signal Current Gain of $f_t = 10.2$ GHz (Sinnwell)
P.16	Demonstration of the β-Ga ₂ O ₃ Schottky Barrier Diode with a BV over 10 kV and V_{on} of 1 V (Yan)
P.17	Permittivity Characterization of Ferroelectric Thin-Film Hafnium Zirconium Oxide Varactors up to 170 GHz (Abdulzhanov)
P.18	1.7-kV Vertical GaN p-n Diodes with Step-Graded Ion-Implanted Edge Termination (Duan)
P.19	A Fin-p-GaN HEMT for High Threshold Voltage with Enhanced Stability (Shen)
P.20	Ni/TiO ₂ /β-Ga ₂ O ₃ Heterojunction Diodes with NiO Guard Ring Simultaneously Increasing Breakdown Voltage and Reducing Turn-on Voltage (Williams)
P.21	Demonstration of Tunnel Junction Based Cascaded P-down Green LED with High Quantum Efficiency (Rahman)
P.22	High-Speed InGaN/GaN Superluminescent Diodes for Visible Light Communication Applications (Shen)
P.23	Ionic-Electronic Dynamics in an Electrochemical Gate Stack Towards High Speed Artificial Synapses (Levit)
P.24	Modeling of Variability-aware Memristive Neural Networks (Sasikumar)
P.25	Graphene-based Artificial Dendrites for Expressive Learning in Spiking Neural Networks (Liu)
P.26	Low Power and High Density Ternary-SRAM for Always-on Applications (Choi)
P.27	Controllability of Relaxation Behavior in Ag-based Diffusive Memristors (Chekol)
P.28	Amorphous GaO _x based Non-Filamentary Memristive Device with Highly Repeatable Multiple Resistance States (Toprak)
P.29	RRAM Based On-Sensor Visual Data Preprocessing for Efficient Image Classification (Kumar)
P.30	Precise V_{TH} Control of MFSFET with 5 nm-thick FeND-HfO ₂ Realized by Kr-Plasma Sputtering for Pt Gate Electrode Deposition (Ohmi)
P.31	Reconfigurable Superconducting Logic Using Multi-Gate Switching of a Nano-Cryotron (Alam)
P.32	Evaluation of Schottky Barrier Height at Silicide/Silicon Interface of a Silicon Nanowire with Modulation Acceptor Doped Dielectric Shell (Nagarajan)
P.33	Reducing the Tunneling Barrier Thickness of Bilayer Ferroelectric Tunnel Junctions with Metallic Electrodes (Lancaster)
P.34	Analysis of Polarization Switching in HZO/ZrO ₂ (HZZ) Nanolaminates based on Sub-lattice Phase-field Model (Kim)
P.35	Overcoming the Low Cell Current Bottleneck of 3D NAND Flash Memory Array with Novel Device Design (Huang)
P.36	5nm FinFET Cryogenic SRAM Evaluation for Quantum Computing (Parihar)
P.37	Freely Suspended Platinum Diselenide Membranes without Polymer Support for Piezoresistive Pressure Sensing (Lukas)
P.38	Ga ₂ O ₃ Heterojunction PN Diodes with Suppressed Background Carrier Concentration for Improved Breakdown Voltage (Dong)
P.39	ScAlN Based Ferroelectric Field Effect Transistors with ITO Channel (Mondal)
P.40	Large-Signal Modeling of GaN HEMTs using Fermi Kinetics and Commercial Hydrodynamics Transport (White)