Monday, August 11: Oral Presentations - Malachowsky Hall, NVIDIA Autitorium (Rm 1000)

Session	Start Time	Author	Affiliation	Title
	7:00	Breakfast - Malachowsky Hall, Rm 7200		
Session 1 Chairs: Travis Anderson Rongming Chu	8:00	David Meyer	DARPA	Plenary - UWBG Semiconductors: The Next Revolution in High Performance Electronics
	8:40	Zetian Mi	University of Michigan	Invited - Ultrawide Bandgap Ferroelectric Nitride Semiconductors for High Temperature Electronics
	9:05	Xuiling Li	University of Texas - Austin	Invited - Enabling High-Performance (U)WBG Devices through Innovative Growth and Fabrication Approaches
	9:30	Srabanti Chowdhury	Stanford	Invited - CAVET at 20: Lessons from Two Decades of Power Switching Innovation
	9:55	Coffee Break - Malachowsky Hall, Rm 1030		
Session 2 Chairs: Shubhra Pasayat Yu Cao	10:15	Leland Nordin	University of Central Florida	Invited - High-Performance, Low-Cost Mid-Infrared Optoelectronic Devices
	10:40	Surjava Sanyal	University of Wisconsin, Madison	(Student) Influence of Electron Blocking Layer on the Optical Properties of Red InGaN MicroLEDs on Porous Substrates
	10:55	Zachary Hargus	University of Florida	(Student) Characterization of n-type doping efficiency in Si-doped Al-polar and N-polar epitaxially grown AlN films
	11:10	Daniel Francis	Akash Systems	Invited - GaN in and on diamond, 3D diamond, and interface engineering for low thermal resistance and deployment of GaN-on-diamond in space
	11:35	Hsiao-Hsuan Wan	University of Florida	(Student) kV-class Vertical p-n Heterojunction Rectifier Based on ITO/Diamond
	11:50	Surjava Sanyal	University of Wisconsin, Madison	(Student) Effect of TMIn surfactant on the sheet resistivity of Si-doped n++-GaN regrowth using MOCVD
	12:05	Lunch - Malachowsky Hall, Rm 7200		
Session 3 Chairs: Chirag Gupta Jennifer Hite	13:00	David Storm	Army Research Laboratory	Invited - Ultrawide Bandgap High Al-Fraction AlGaN for High Power Devices
	13:25	Asif Khan	University of South Carolina	Plenary - Electronic Devices using Extreme Bandgap AlxGa1-xN heterojunctions over bulk AlN
	14:05	Maher Tahhan	Raytheon	Invited - Hetero-Bonding Approach to Realize Ultra-Wide Bandgap p-i-n Diodes
	14:30	Khush Gohel	University of Wisconsin, Madison	(Student) High BFOM (> 350 MW/cm2) Al0.65Ga0.35N Channel MISHEMT with > 2kV breakdown voltage
	14:45	Katharina Loske	University of Florida	(Student) Electrical and Spectroscopic Analysis of High Aluminum-Content AlGaN Schottky Diodes and Photodetectors
	15:00	Bingcheng Da	Arizona State University	(Student) High Current Density AlN Quasi-vertical Schottky Barrier Diodes
	15:15	Coffee Break - Malachowsky Hall, Rm 1030		
Session 4 Chairs: Ahmad Islam Bob Kaplar	15:35	James Spencer Lundh	U.S. Naval Research Laboratory	Invited - The Next Frontier: Extreme Temperature (1000 °C) Operation of Wide and Ultrawide Bandgap Semiconductor Devices
	16:00	Mark Sheplak	University of Florida	Invited - Towards a High-Frequency Dynamic Pressure Sensor for High-Enthalpy Hypersonic Flows
	16:15	Ruixin Bai	University of Wisconsin, Madison	(Student) Improved Gate Stability in Scaled RF GaN HEMTs Using ALD TiN with Potential for High-Temperature Applications
	16:30	Yixin Xiong	Pennsylvania State University	(Student) GaN Bootstrapping Amplifier IC Operating at up to 800 °C Temperature
	16:45	Ajay Visvkarma	Pennsylvania State University	Robustness of GaN HEMT at 800 ºC in N2 and Air Ambient
	17:00	Yuxin Du	Pennsylvania State University	(Student) Study of GaN JFET gate leakage induced by heavy ion irradiation
	17:15	Break		
	18:00	Poster Session (Malachowsky Hall, Rm 7200)		
	20:00	Student Game Night (Nanoscale Research Facility, Rm 115)		

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Monday, August 11: Poster Session - Malachowsky Hall, Rm 7200

Poster ID	Author	Affiliation	Title
P1	Andrew Koehler	U.S. Naval Research Laboratory	III-Nitride Devices for Extreme Temperature Operation
P2	Withdrawn		
P3	Daqi Han	Georgia Institute of Technology	(Student) Finite Element Analysis of Static Mechanical Force to Control Piezo-Acoustic Transistors
P4	Xiang Miao	Georgia Institute of Technology	(Student) Evaluation of Amplifier Topologies for Driving Piezo-Acoustic Transistors
P5	Jiarui Gong	Texas A&M University	Towards Flat Surface Energy Band on M-Plane GaN and Its Implication for M-Plane GaN Heterojunction Bipolar Transistor Applications
P6	Owen Meilander	Vanderbilt University	(Student) Gate Leakage Suppression of Enhancement Mode GaN HEMTs on Engineered Substrate
P7	Eldridge Surianto	Georgia Institute of Technology	(Student) Finite Element Analysis of Inhomogeneity in Varistors with Monte Carlo Method
P8	Sihang Hui	University of Florida	(Student) Ex-situ surface cleaning of native oxide on N-polar AlN substrates
P9	Withdrawn		
P10	Yashas Statapathy	North Carolina State University	(Student) Performance of Proton Irradiated 4H-SiC Low Gain Avalanche Detectors (LGADs)
P11	Abdulfatai Faro	University of Florida	Late News: (Student) Simulation-Driven Threshold Voltage Engineering in AlGaN/GaN HEMTs via Gate Recess Depth Modulation
P12	Ruixin Bai	University of Wisconsin, Madison	Late News: (Student) Demonstration of high Johnson's Figure of Merit (ft x VBR > 20 THz·V) for Ultra-Wide-Bandgap Al0.66Ga0.34N Channel HEMT
P13	Takuya Maeda	University of Tokyo	Late News: Electrical Characterization of AlN Schottky Barrier Diodes at High Temperature

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Tuesday, August 12: Oral Presentations - Malachowsky Hall, NVIDIA Autitorium (Rm 1000)

Session	Start Time	Author	Affiliation	Title
	7:00	Breakfast - Malachowsky Hall, Rm 1030		
Session 5 Chairs: Rongming Chu Travis Anderson	8:00	Reza Ghandi	GE Aerospace	Plenary - Development of Medium Voltage SiC Superjunction Devices
	8:40	Akin Akturk	CoolCad	Invited - Silicon Carbide Electronics in Extreme Environments: High-Voltage Devices and General-Purpose CMOS for High-Radiation and High-Temperature Environments
	9:05	Richard Floyd	Sandia National Labs	Static Electrothermal Study of > 3 kV Co-Packaged MOSFETs and Monolithic BiDFETs
	9:20	Justin Hill	Mainstream Engineering Corporation	Invited - Supply Chain Development of 150 mm Thick-SiC Epiwafers and Improved Transistor Performance through Advanced Gate Oxides
	9:45	Raj Markondeya	Florida International University	Invited - 3D Heterogeneous Integration with Panel-Scale Passive and Active Embedding
	10:10	Coffee Break - Malachowsky Hall, Rm 1030		
Session 6 Chairs: Mona Ebrish Jacob Leach	10:30	Keisuke Shinohara	Teledyne	Invited - Normally-Off GaN Super-Heterojunction HEMTs with p+GaN Gate
	10:55	Tyler Growden	Air Force Research Laboratory	Invited - High Temperature Performance of Scaled AlGaN/GaN HEMTs
	11:20	Jae-Hyun Ryou	University of Houston	Invited - Ultrawide-Bandgap AlN Thin-Film Piezoelectric Physical Sensors for High-Temperature and Harsh-Environment Applications
	11:45	Mansura Sadek	Pennsylvania State University	Field-dependent Carrier Transport in Implanted Isolation Region of GaN Lateral Power Devices
	12:00	Lunch - Arredondo Café (Reitz Union, 4th floor)		
Session 7 Chairs: Jennifer Hite Chirag Gupta	13:00	Moinnuddin Ahmed	Argonne National Lab	Invited - Machine Learning Based Prediction of Neutron-induced Failure Time of 1200V and 1700V SiC Power Devices
	13:25	Kasey Hogan	Crystal IS	Sponsor - Development and Characterization of 100 mm Bulk AlN Substrates for Next Generation UWBG Electronics
	13:45	Soyeon Kim	Nextron	Sponsor - Compact Micro Probe System for In-Situ Electrical Testing in Various Environments
	14:05	Yuya Yamaoka	Taiyo Nippon Sanso	Sponsor - Taiyo Nippon Sanso compound semiconductor equipment technology
	14:25	Travis Anderson	The Electrochemical Society	Sponsor - Solid State Electronics Research Engagement With ECS
	14:45	Coffee Break - Malachowsky Hall, Rm 1030		
Session 8 Chairs: Takuya Maeda Andrew Koehler	15:05	Jim Speck	University of California, Santa Barbara	Invited - Progress in β-Ga2O3 Materials, Physical Properties, and Device Physics for High Voltage Power Electronics
	15:30	Daniel Dryden	Air Force Research Laboratory	Invited - Gallium Oxide at AFRL: Prototyping in the Valley of Death
	15:55	Sriram Krishnamoor	University of California, Santa Barbara	Invited - High performance Gallium Oxide Power Devices Towards Grid-scale Electronics
	16:20	Jacob Leach	Kyma	Single Event Breakdown in NiOx/β-Ga2O3 Heterojunction diodes with Plasma Etch edge termination
	16:35	Will Brand	Agnitron	β-Ga$_2$O$_3$ MOSFETs grown by MOCVD on 2-inch (010) β-Ga$_2$O$_3$ Substrates
	16:50	Mark Goorsky	University of California, Los Angeles	Invited - The path of heterogeneous integration for wide bandgap thermal management
	17:15	Award Presentations & Wrap-Up Discussion		
	17:40	Break		
	18:00	Joint Reception with SiC+X Workshop (Malachowsky Hall, Rm 7200)		

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