

WEDNESDAY, AUGUST 15: DAY 1

8:00 AM	Light Breakfast		
	Opening Session	Chair: Kelson Chabak	Blackwell Ballroom, Sections BC
8:30 AM	Opening Remarks — <i>Kelson Chabak, AFRL</i>		
8:45 AM	Masataka Higashiwaki, NICT (<i>invited</i>) — <i>Recent progress in Ga₂O₃ MOSFETs</i>		
9:05 AM	James Speck, UC Santa Barbara (<i>invited</i>) — <i>Ge-doped Ga₂O₃ by MBE</i>		
9:25 AM	Siddharth Rajan, Ohio State (<i>invited</i>) — <i>Ga₂O₃ Field Effect Transistors: MBE Growth and Device Engineering</i>		
9:45 AM	Steve Ringel, Ohio State (<i>invited</i>) — <i>Ga₂O₃ Electronic Defect Characterization</i>		
10:05 AM	Coffee Break		
	Technical Session 1: Defects and Characterization	Chair: Sriram Krishnamoorthy	Blackwell Ballroom, Sections BC
10:20 AM	Leonard Brillson, Ohio State — <i>Optical Signatures of Deep Level Defects in Ga₂O₃</i>		
10:30 AM	Dmitry Skachkov, Case Western Reserve Univ. — <i>Gallium Vacancy Defects in β-Ga₂O₃: combined Electron Paramagnetic Resonance and Theory Study</i>		
10:40 AM	Jinwoo Hwang, Ohio State — <i>Atomic Scale Characterization of Structure and Defects in Ga₂O₃</i>		
10:50 AM	Farida Selim, Bowling Green — <i>Trapping defects in Ga₂O₃</i>		
11:00 AM	Adam Neal, AFRL — <i>Transport Studies of Unintentionally Doped MOCVD grown β-Ga₂O₃</i>		
11:10 AM	Mary Zvanut, Univ Alabama Birmingham — <i>Charge transfer observed for the Mg and Fe dopants in Ga₂O₃</i>		
11:20 AM	Ribhu Sharma, Florida — <i>Simulating Deuterium diffusion and the extraction of migration energies in Ga₂O₃</i>		
11:30 AM	Box Lunch		
	Technical Session 2: Modeling	Chair: Andrew Green	Blackwell Ballroom, Sections BC
1:00 PM	H. Peelaers, UC Santa Barbara (<i>invited</i>) — <i>Density functional theory calculations of Ga₂O₃ alloys</i>		
1:20 PM	John Lyons, NRL — <i>Self-trapped holes and acceptor doping in Ga₂O₃</i>		
1:30 PM	Satish Kumar, Georgia Tech — <i>Phonon Mode Contributions to Thermal Conductivity of Pristine and Defective β-Ga₂O₃</i>		
1:40 PM	Marco Santia, Michigan State — <i>Strain-dependent Optical Properties in Monoclinic Ga₂O₃</i>		
1:50 PM	Stefan Badescu, AFRL — <i>Electronic Bandstructures of Ga₂O₃ and Its Alloys with Al and In</i>		
2:00 PM	Rohan Mishra, Wash U. St. Louis — <i>Epitaxial engineering of polar ε-Ga₂O₃ for tunable two-dimensional electron gas</i>		
2:10 PM	Coffee Break		
	Technical Session 3: Materials and Characterization I	Chair: Uttam Singiseti	Blackwell Ballroom, Sections BC
2:25 PM	A.Popp, IKZ-Berlin (<i>invited</i>) — <i>Influence of the substrate orientation on structural and electrical properties of homoepitaxial β-Ga₂O₃ layers grown by MOVPE</i>		
2:45 PM	Neeraj Nepal, NRL — <i>Homo- and Hetero-epitaxial Growth of β-Ga₂O₃ Thin Films by Molecular Beam Epitaxy</i>		
2:55 PM	S. Pacley, AFRL — <i>High-quality β-(Al_xGa_{1-x})₂O₃/Ga₂O₃ (010) and Si-doped β-(Al_xGa_{1-x})₂O₃/Ga₂O₃ (010) heterostructures grown by pulsed laser epitaxy for MODFET devices</i>		
3:05 PM	Jaime Freitas, NRL — <i>Properties of N-implanted Monoclinic Ga₂O₃</i>		
3:15 PM	Darren Thomson, AFRL — <i>Czochralski growth of β-Ga₂O₃ crystals</i>		
3:25 PM	Coffee Break		
	Technical Session 4: Materials and Characterization II	Chair: Brandon Howe	Blackwell Ballroom, Sections BC
3:40 PM	H. Zhao, Ohio State (<i>invited</i>) — <i>LPCVD Growth of β-Ga₂O₃</i>		
4:00 PM	Sriram Krishnamoorthy, Utah — <i>Ge-doped LPCVD-grown β-Ga₂O₃ thin films</i>		
4:10 PM	Virginia Wheeler, NRL — <i>Advances in Atomic Layer Epitaxy of Ga₂O₃ Films</i>		
4:20 PM	Hannah Masten, Michigan — <i>Ga₂O₃ MOSCAPs with low Dit using yttrium-scandium oxide high-k dielectric</i>		
4:30 PM	Berardi Sensale Rodriguez, Utah — <i>Incident wavelength and polarization dependence of spectral shifts in β-Ga₂O₃ UV photoluminescence</i>		
4:40 PM	Luke Lyle, Carnegie Mellon Univ. — <i>Growth and characterization of (Al_xGa_{1-x})₂O₃, Ga₂O₃ and (In_xGa_{1-x})₂O₃ epitaxial films for UV photodetectors</i>		
4:50 PM	Closing Remarks — <i>Gregg Jessen, AFRL</i>		
6:00 PM	Social Event		

THURSDAY, AUGUST 16: DAY 2

8:00 AM	Light Breakfast
8:30 AM	Opening Remarks — <i>Kelson Chabak, AFRL</i>
Technical Session 5: Industry Chair: Andreas Popp Scott Laboratory, Room E100	
8:40 AM	A. Kuramata, Tamura Corp. (<i>invited</i>) — <i>Progress on Edge-defined Film-fed Growth of Ga₂O₃</i>
9:00 AM	Kevin Stevens, NGC Synoptics — <i>Czochralski growth of bulk Ga₂O₃</i>
9:15 AM	Jacob Leach, Kyma — <i>Development of homoepitaxial Ga₂O₃ Films by HVPE</i>
9:30 AM	Fikadu Alema, Agnitron — <i>Device quality β-(Al_xGa_{1-x})₂O₃/β-Ga₂O₃ heterostructures grown by MOCVD</i>
9:45 AM	Andrea Arias, Teledyne — <i>Ga₂O₃ MOSFETs for Next-Generation, High Efficiency and Low Size and Weight Power Converters</i>
10:00 AM	Coffee Break
Technical Session 6: Devices Chair: Virginia Wheeler Scott Laboratory, Room E100	
10:15 AM	G. Xing, Cornell (<i>invited</i>) — <i>Ga₂O₃ vertical high voltage diodes and transistors</i>
10:35 AM	Uttam Singisetti, Univ. of Buffalo — <i>Lateral Ga₂O₃ MOSFETs with 1.85 kV breakdown</i>
10:45 AM	Ribhu Sharma, Florida — <i>Radiation effects on electrical performance of Nickel β-Ga₂O₃ schottky rectifiers</i>
10:55 AM	Andy Green, AFRL — <i>RF Performance of Thin-Channel Ga₂O₃ MOSFETs</i>
11:05 AM	Hsien-Chih Huang, UIUC — <i>Metal-assisted chemical etching of β-Ga₂O₃ for device applications</i>
11:15 AM	Sukwon Choi, Penn State Univ. — <i>Electro-Thermal Analysis of β-Ga₂O₃ Electronic Devices</i>
11:25 AM	Chadwin Young, UT-Dallas — <i>Degradation Modeling of MOS β-Ga₂O₃ Capacitors with an Al₂O₃ Gate Dielectric</i>
11:35 AM	Anamika Pratiyush, IIS-Bangalore — <i>MBE-grown Self-Powered β-Ga₂O₃ Schottky Solar Blind UV Detector with rectification > 10⁷</i>
11:45 AM	Xu-Qian Zheng, Case Western Reserve Univ. — <i>β-Ga₂O₃ Nanoelectromechanical Systems (NEMS): from Mechanical Properties to Resonant Sensing</i>
11:55 AM	Closing Remarks — <i>Gregg Jessen, AFRL</i>
12:10 PM	Depart with Optional Box Lunch