



**FINAL SHORT SCHEDULE**  
**Technical Program**

Topic/Code/Time	Presenter	Title/Authors
<b>SUNDAY, OCTOBER 4</b>		
Plenary 16:30-17:15	<b>Pallab Bhattacharya</b> University of Michigan, USA	<b>InGaN/GaN Quantum Dot and Dot-in-Nanowire Heterostructures for Advanced Light Sources and Quantum Emitters</b> <i>Pallab Bhattacharya, University of Michigan</i>
Oxides Su-01 17:15-17:30	<b>Susmita Ghose</b> Texas State University, USA	<b>Structural and Optical Properties of <math>\beta</math>-Ga<sub>2</sub>O<sub>3</sub> Thin Films Grown by Plasma-assisted Molecular Beam Epitaxy</b> <i>S. Ghose, Texas State University; A. Arias, Autonomous University of Baja California; Md. Shafiqur Rahman, J. Rojas-Ramirez, M. Perez-Caro, Texas State University; N. Nedev, Autonomous University of Baja California; R. Droopad, Texas State University</i>
Oxides Su-02 17:30-17:45	<b>Ryan Haislmaier</b> Penn State University, USA	<b>Precise Stoichiometry Control as Key to Room Temperature Ferroelectricity in Strain-Enabled CaTiO<sub>3</sub> Thin Films Grown by Hybrid Molecular Beam Epitaxy</b> <i>R. Haislmaier, Penn State University; E. Grimley, North Carolina State University; M. Biegalski, Oak Ridge National Laboratory; J. LeBeau, North Carolina State University; S. Trolier-McKinstry, V. Gopalan, R. Engel-Herbert, Penn State University</i>
Oxides Su-03 17:45-18:00	<b>Abhinav Prakash</b> University of Minnesota, USA	<b>MBE Growth, Heterostructure Engineering and Electronic Transport Properties of Complex Oxides</b> <i>P. Xu, T. Wang, A. Prakash, Bharat Jalan, University of Minnesota</i>
Fundamentals of MBE Growth Su-04 18:30-18:45	<b>Geoffrey Gardner</b> Purdue University, USA	<b>MBE system Preparation and Growth Conditions Necessary to Achieve Two Dimensional Electron Gas Mobility in Excess of <math>3.5 \times 10^7</math> cm<sup>2</sup>/Vs in GaAs/Al<sub>x</sub>Ga<sub>1-x</sub>As Modulation Doped Quantum Wells</b> <i>G. Gardner, S. Fallahi, M. J. Manfra, Purdue University</i>
Fundamentals of MBE Growth Su-05 18:45-19:00	<b>P. J. Simmonds</b> Boise State University, USA	<b>Growth Optimization of Lattice-matched InAlAs and InGaAs Layers on InP (111)A, (111)B, and (110)</b> <i>C.D. Yerino, Yale Univ.; P.J. Simmonds, Boise State Univ.; B. Liang, D. Huffaker, Univ. of California, Los Angeles; M.L. Lee, Yale Univ.</i>
Fundamentals of MBE Growth Su-06 19:00-19:15	<b>Elias Towe</b> Carnegie Mellon University, USA	<b>Gallium Liquid Film Enabled Growth of Aluminum-containing III-Nitrides by Plasma-Assisted Molecular Beam Epitaxy</b> <i>Y-H. Liang, E. Towe, Carnegie Mellon University</i>
Fundamentals of MBE Growth Su-07 19:15-19:30	<b>William Calley</b> Staib Instruments, USA	<b>In Situ Growth Profiling by Auger Electron Spectroscopy Using the Auger Probe</b> <i>W.L. Calley, P.G. Staib, Staib Instruments; W.L. Sarney, S.P. Svensson, US Army Research Laboratory</i>
<b>MONDAY, OCTOBER 5</b>		
Invited "MBE Innovator Award" 08:45-09:15	<b>Chris J. Palmstrøm</b> University of California - SB, USA	<b>MBE Growth of Dissimilar Materials</b> <i>Chris J. Palmstrøm, University of California - SB</i>
VDW Epitaxy Mo-01 09:15-09:30	<b>Sergei Novikov</b> University of Nottingham, United Kingdom	<b>High Temperature MBE of Graphene on Sapphire and h-BN Flakes on Sapphire</b> <i>T.S. Cheng, A. Davies, A. Summerfield, Y.J. Cho, C.J. Mellor, A.N. Khlobystov, University of Nottingham; T. Taniguchi, K. Watanabe, The National Institute for Materials Science; P.H. Beton, C.T. Foxon, L. Eaves, S.V. Novikov, University of Nottingham</i>

VDW Epitaxy <b>Mo-02</b> 09:30-09:45	<b>Zhiyi Chen</b> CUNY, USA	<b>Charge Transfer at MBE Grown Bi<sub>2</sub>Se<sub>3</sub>/ZnCdSe Interfaces</b> <i>Z. Chen, L. Zhao, CUNY; K. Park, Virginia Tech; T. Axtmann Garcia, L. Krusin-Elbaum, M.C. Tamargo, The City College of New York</i>
VDW Epitaxy <b>Mo-03</b> 09:45-10:00	<b>Lee Walsh</b> University of Texas at Dallas, USA	<b>Van Der Waals Epitaxy for Novel Low-power Electronics</b> <i>L.A. Walsh, R. Yue, A.T. Barton, H. Zhu, L. Cheng, N. Lu, R. Addou, J. W. P. Hsu, S. McDonnell, J. Kim, M.J. Kim, University of Texas at Dallas; L. Colombo, Texas Instruments; R.M. Wallace, C. L. Hinkle, University of Texas at Dallas</i>
Spintronics <b>Mo-04</b> 10:00-10:15	<b>Franck Natali</b> MacDiarmid Institute, New Zealand	<b>Combining Rare Earth Nitrides and Group-III Nitrides for Semiconductor-based Spintronics</b> <i>F. Natali, MacDiarmid Institute; S. Veizan, CRHEA-CNRS; H. Warring, J. Chan, C. Lee, MacDiarmid Institute; M. Al Khalfioui, CRHEA-CNRS; B. Ruck, MacDiarmid Institute; B. Damilano, CRHEA-CNRS; J. Trodahl, MacDiarmid Institute</i>
Spintronics <b>Mo-05</b> 10:15-10:30	<b>Mihir Pendharkar</b> University of California Santa Barbara, USA	<b>Growth of Ultra High Mobility Inverted GaAs/AlGaAs Quantum Well Structures for Lateral Spin Transport</b> <i>M. Pendharkar, University of California Santa Barbara; T. Peterson, University of Minnesota; A. McFadden, S. Patel, University of California Santa Barbara; P. Crowell, University of Minnesota; C. Palmstrom, University of California Santa Barbara</i>
Low dimensional heterostructures <b>Mo-06</b> 11:00-11:15	<b>Daehwan Jung</b> Yale University, USA	<b>Growth and Strain Engineering of Ge Nanowires in an InAlAs Host by Spontaneous Phase Separation</b> <i>D. Jung, J. Faucher, Yale University; A. Akey, Massachusetts Institute of Technology; S. Mukherjee, Polytechnique Montreal; M. Cabral, J. Lebeau, North Carolina State University; O. Moutanabbir, Polytechnique Montreal; T. Buonassisi, Massachusetts Institute of Technology; M.L. Lee, Yale University</i>
Low dimensional heterostructures <b>Mo-07</b> 11:15-11:30	<b>Takeo Kageyama</b> The University of Tokyo, Japan	<b>Suppression of Vertical Alignment in Multilayer Quantum Dot Structures: The Roles of Dot Density and Spacer Thickness</b> <i>T. Kageyama, Q.H. Vo, K. Watanabe, S. Iwamoto, Y. Arakawa, The University of Tokyo</i>
Low dimensional heterostructures <b>Mo-08</b> 11:30-11:45	<b>Itaru Kamiya</b> Toyota Technological Institute, Japan	<b>Strain Control of InAs Quantum Dots on GaAs(001) by Molecular Beam Epitaxy</b> <i>K. Shimomura, I. Kamiya, Toyota Technological Institute</i>
Low dimensional heterostructures <b>Mo-09</b> 11:45-12:00	<b>Basilio Javier García</b> Universidad Autónoma de Madrid, Spain	<b>On the Dielectrophoretic Assembly of GaAs Nanowires in Electronic Devices</b> <i>C. García Núñez, A.F. Braña, N. López, J.L. Pau, B.J. García, Universidad Autónoma de Madrid</i>
Low dimensional heterostructures <b>Mo-10</b> 12:00-12:15	<b>Michael Yakes</b> Naval Research Laboratory, USA	<b>Deterministic Growth of InAs Lateral Quantum Dot Molecules with Narrow Optical Linewidths</b> <i>M.K. Yakes, L. Yang, A.S. Bracker, T.M. Sweeney, P.G. Brereton, Naval Research Laboratory; M. Kim, Sotera Defense Solutions; C.S. Kim, P.M. Vora, D. Park, S.G. Carter, D. Gammon, Naval Research Laboratory</i>
Low dimensional heterostructures <b>Mo-11</b> 12:15-12:30	<b>Sadhvikas Addamane</b> University of New Mexico, USA	<b>Study of Temperature-dependent Carrier Dynamics and Emission Wavelength Extension Techniques on InAs Dashes-in-a-well (DWELL) Structures</b> <i>S.J. Addamane, N. Dawson, A. Mansoori, T.J. Rotter, C.P. Hains, L.R. Dawson, G. Balakrishnan, University of New Mexico</i>
Low dimensional heterostructures <b>Mo-12</b> 12:30-12:45	<b>Paul Simmonds</b> Boise State University, USA	<b>Strain-driven Growth of GaAs(111) Quantum Dots with Low Fine Structure Splitting</b> <i>C.D. Yerino, Yale University; P.J. Simmonds, Boise State University; B. Liang, University of California, Los Angeles; D. Jung, Yale University; C. Schneider, S. Unsleber, M. Vo, University of Würzburg; D.L. Huffaker, University of California, Los Angeles; S. Höfling, M. Kamp, University of Würzburg; M.L. Lee, Yale University</i>
Low dimensional heterostructures <b>Mo-13</b> 12:45-13:00	<b>SM Islam</b> University of Notre Dame, USA	<b>Optimization of Growth Parameters for Realization of Ultra-thin GaN/AlN Quantum Structures for Deep UV Photonics</b> <i>S.M. Islam, V. Protasenko, S. Rouvimov, University of Notre Dame; H.G. Xing, D. Jena, Cornell University</i>
III-Arsenides, Antimonides, Phosphides <b>Mo-14</b> 17:00-17:15	<b>Aymeric Maros</b> Arizona State University, USA	<b>Critical Thickness Investigation of MBE-grown InGaAs/GaAs and GaAsSb/GaAs Heterostructures</b> <i>A. Maros, H. Xie, N. Faleev, F. Ponce, C. Honsberg, Arizona State University</i>

III-Arsenides, Antimonides, Phosphides <b>Mo-15</b> <b>17:15-17:30</b>	<b>Stephanie Tomasulo</b> U.S. Naval Research Laboratory, USA	<b>MBE of InAlAsSb for Multi-junction Solar Cell Applications</b> <i>S. Tomasulo, NRC Postdoctoral Fellow at NRL; M. Gonzalez, Sotera Defense Solutions; J. Tischler, J. Abell, U.S. Naval Research Laboratory; M. P. Lumb, George Washington University; M. K. Yakes, I. Vurgaftman, J.R. Meyer, R.J. Walters, U.S. Naval Research Laboratory</i>
III-Arsenides, Antimonides, Phosphides <b>Mo-16</b> <b>17:30-17:45</b>	<b>Stephen Bremner</b> University of New South Wales, Australia	<b>Surface Coverage Model for the Incorporation of Sb in GaAsSb Layers Grown on GaAs (100) Substrates</b> <i>S. P. Bremner, Z. Zhang, University of New South Wales; N. Faleev, Arizona State University</i>
II-VI materials <b>Mo-17</b> <b>17:45-18:00</b>	<b>Shi Liu</b> Arizona State University, USA	<b>Ultra-long Carrier Lifetimes and Recombination Mechanisms in CdTe/MgCdTe Double Heterostructures</b> <i>S. Liu, X-H. Zhao, C.M. Campbell, M.B. Lassise, Y. Zhao, Y-H. Zhang, Arizona State University</i>
II-VI materials <b>Mo-18</b> <b>18:00-18:15</b>	<b>Guopeng Chen</b> City College of New York, USA	<b>Optimization of MgSe Barrier Thickness in MgSe/CdSe Quantum Wells</b> <i>G. Chen, M.C. Tamargo, A. Shen, City College of New York</i>
II-VI materials <b>Mo-19</b> <b>18:15-18:30</b>	<b>Maddison Coke</b> University College London, United Kingdom	<b>Controlling Electron Confinement with Mg Doping Profile at ZnO/ZnMgO Interfaces</b> <i>M.L. Coke, J.T. Sagar, O.W. Kennedy, P.A. Warburton, University College London</i>
<b>TUESDAY, OCTOBER 6</b>		
Invited "Young Investigator Award" <b>08:30-09:00</b>	<b>Ganesh Balakrishnan</b> University of New Mexico, USA	<b>MBE growth of High Power Optically Pumped Vertical External Cavity Surface Emitting Lasers (VECSELs).</b> <i>Ganesh Balakrishnan, University of New Mexico</i>
Photonic Devices <b>Tu-01</b> <b>09:00-09:15</b>	<b>Chadwick Canedy</b> Naval Research Laboratory, USA	<b>Broad-Area Interband Cascade Lasers with &gt;40% CW Wallplug Efficiency at Cryogenic Temperatures</b> <i>C.L. Canedy, C.D. Merritt, W.W. Bewley, C.S. Kim, Naval Research Laboratory; M. Kim, Sotera Defense Solutions; I. Vurgaftman, J.R. Meyer, Naval Research Laboratory</i>
Photonic Devices <b>Tu-02</b> <b>09:15-09:30</b>	<b>Feng-Qi Liu</b> Chinese Academy of Sciences, China	<b>Quantum Dot Cascade Laser</b> <i>F-Q. Liu, J. Zhang, N. Zhuo, S. Zhai, Y. Liu, S. Liu, J. Liu, L. Wang, Z. Wang, Chinese Academy of Sciences</i>
Photonic Devices <b>Tu-03</b> <b>09:30-09:45</b>	<b>Wei Guo</b> University of Massachusetts Lowell, USA	<b>Integration of InAs Quantum Dot Comb Lasers with Silicon Photonics Components</b> <i>Z. Wang, Rochester Institute of Technology; R. Yao, University of Massachusetts Lowell; S. Preble, Rochester Institute of Technology; C-S. Lee, W. Guo, University of Massachusetts Lowell</i>
Photonic Devices <b>Tu-04</b> <b>09:45-10:00</b>	<b>SM Islam</b> University of Notre Dame, USA	<b>GaN/AlN Heterostructure Grown on Bulk AlN Using Plasma Assisted Molecular Beam Epitaxy for Deep UV Photonics</b> <i>S.M. Islam, V. Protasenko, S. Rouvimov, University of Notre Dame; H.G. Xing, D. Jena, Cornell University</i>
Photonic Devices <b>Tu-05</b> <b>10:00-10:15</b>	<b>James Gupta</b> National Research Council of Canada, Canada	<b>MBE Growth of Type-I Interband Cascade Lasers Near 3.2 <math>\mu\text{m}</math></b> <i>J. Gupta, G. Aers, E. Dupont, J-M. Baribeau, X. Wu, National Research Council of Canada; Y. Jiang, L. Li, R. Yang, M. B. Johnson, University of Oklahoma</i>
Photonic Devices <b>Tu-06</b> <b>10:15-10:30</b>	<b>Joel De Jesus</b> City College of New York, USA	<b>II-VI Semiconductor Based Broadband Quantum Cascade Detectors</b> <i>J. De Jesus, T.A. Garcia, The Graduate Center and The City College of New York (CUNY); A.P. Ravikumar, C.F. Gmachl, Princeton University; M.C. Tamargo, The Graduate Center and The City College of New York (CUNY)</i>
Solar cells <b>Tu-07</b> <b>11:00-11.15</b>	<b>Joseph Faucher</b> Yale University, USA	<b>Wide-bandgap AlGaInP Solar Cells on GaAs with High Internal Quantum Efficiency</b> <i>J. Faucher, T. Masuda, Y. Sun, M.L. Lee, Yale University</i>
Solar cells <b>Tu-08</b> <b>11:15-11:30</b>	<b>Taizo Masuda</b> Yale University, USA	<b>Material and Device Characteristics of Epitaxial Ge Solar Cells Grown by MBE</b> <i>T. Masuda, J. Faucher, M.L. Lee, Yale University</i>
Solar cells <b>Tu-09</b> <b>11:30-11.45</b>	<b>Alex Freundlich</b> University of Houston, USA	<b>MBE-Grown Dilute Nitride Solar Cells with Record Performance</b> <i>G-K. Vijaya, W. Wang, A. Mehrotra, University of Houston; D. Tang, Arizona State University; K. Shervin, University of Houston; D.J. Smith, Arizona State University; A. Freundlich, University of Houston</i>

Solar cells <b>Tu-10</b> 11:45-12:00	<b>Shizhao Fan</b> McGill University, Canada	<b>Full-solar-spectrum InGaN/Si Nanowire Photoelectrochemical Water Splitting</b> <i>S. Fan, B. Alotaibi, Z. Mi, McGill University</i>
Solar cells <b>Tu-11</b> 12:00-12:15	<b>Joseph Faucher</b> Yale University, USA	<b>Initiation Strategies for Simultaneous Control of Antiphase Domains and Stacking Faults in GaAs Solar Cells on Ge</b> <i>J. Faucher, T. Masuda, M.L. Lee, Yale University</i>
Solar cells <b>Tu-12</b> 12:15-12:30	<b>Supanee Sukritanon</b> University of California, San Diego, USA	<b>Dilute Nitride GaNP Wide Bandgap Solar Cells</b> <i>S. Sukritanon, R. Liu, Y.G. Ro, J.L. Pan, S.A. Dayeh, C. W. Tu, University of California, San Diego</i>
Solar cells <b>Tu-13</b> 12:30-12:45	<b>Chaomin Zhang</b> Arizona State University, USA	<b>Investigation of Si Bulk Lifetime in GaP/Si Structures</b> <i>C. Zhang, Y. Kim, N. Faleev, J. Choi, C. Honsberg, Arizona State University</i>
<b>WEDNESDAY, OCTOBER 7</b>		
III-Nitrides and dilute-nitrides <b>We-01</b> 08:30-08:45	<b>Sergei Novikov</b> University of Nottingham, United Kingdom	<b>Growth of Free-standing Wurtzite AlGaIn by MBE Using a Highly Efficient RF Plasma Source</b> <i>S.V. Novikov, C.R. Staddon, J. Whale, A.J. Kent, C.T. Foxon, University of Nottingham</i>
III-Nitrides and dilute-nitrides <b>We-02</b> 08:45-09:00	<b>Binh Le</b> McGill University, Canada	<b>Electrically Injected GaN/AlGaIn Nanowire Ultraviolet Lasers by Selective Area Growth</b> <i>B.H. Le, S. Zhao, X. Liu, Y.H. Ra, M. Djavid, Z. Mi, McGill University</i>
III-Nitrides and dilute-nitrides <b>We-03</b> 09:00-09:15	<b>Matthew Hardy</b> Naval Research Laboratory, USA	<b>Morphological and Microstructural Stability of N-polar InAlN Thin Films Grown on Free-standing GaN Substrates</b> <i>M.T. Hardy, National Research Council Postdoctoral Fellow residing at the Naval Research Laboratory; T. McConkie, Arizona State University; D.F. Storm, B.P. Downey, Naval Research Laboratory; N. Nepal, Sotera Defense Solutions; D.S. Katzer, D.J. Meyer, Naval Research Laboratory; D.J. Smith, Arizona State University</i>
III-Nitrides and dilute-nitrides <b>We-04</b> 09:15-09:30	<b>Aymeric Maros</b> Arizona State University, USA	<b>Growth Optimization of GaAsSb(N)/GaAs Heterostructures for Multi-Junction Solar Cell Applications</b> <i>A. Maros, H. Xie, Arizona State University; S.H. Lee, J.S. Kim, Yeungnam University; N. Faleev, F. Ponce, C. Honsberg, Arizona State University</i>
III-Nitrides and dilute-nitrides <b>We-05</b> 09:30-09:45	<b>Suresh Vishwanath</b> University of Notre Dame, USA	<b>MBE Growth of BGaN</b> <i>S. Vishwanath, University of Notre Dame / Cornell University; J. Verma, University of Notre Dame / Intel Corporation; N. Lu, University of Texas at Dallas; M. Qi, University of Notre Dame; M. Kim, University of Texas at Dallas; H.G. Xing, D. Jena, University of Notre Dame / Cornell University</i>
III-Nitrides and dilute-nitrides <b>We-06</b> 09:45-10:00	<b>Tomohiro Yamaguchi</b> Kogakuin University, Japan	<b>In-situ X-ray Reciprocal Space Mapping Measurements in GaInN Growth on GaN by RF-MBE</b> <i>T. Yamaguchi, Kogakuin University; T. Sasaki, Japan Atomic Energy Agency; K. Narutani, M. Sawada, Kogakuin University; R. Deki, University of Hyogo; T. Onuma, T. Honda, Kogakuin University; M. Takahashi, Japan Atomic Energy Agency / University of Hyogo; Y. Nanishi, Ritsumeikan University</i>
Electronic Devices <b>We-07</b> 10:00-10:15	<b>Grzegorz Cywinski</b> Institute of High Pressure Physics PAS, Poland	<b>MBE Grown GaN/AlGaIn Lateral Schottky Barrier Diodes for High Frequency Applications</b> <i>G. Cywinski, K. Szkudlarek, P. Kruszewski, G. Muziol, M. Siekacz, C. Skierbiszewski, Institute of High Pressure Physics PAS; S. Romyantsev, Ioffe Institute; W. Knap, Institute of High Pressure Physics PAS / Laboratory Charles Coulomb CNRS</i>
Electronic Devices <b>We-08</b> 10:15-10:30	<b>Robert Richards</b> University of Sheffield, United Kingdom	<b>Electrical Characterization of GaAsBi/GaAs Multiple Quantum Well P-I-N Diodes</b> <i>R.D. Richards, F. Harun, F. Bastiman, J.S. Roberts, J.P.R. David, University of Sheffield</i>
Materials Characterization <b>We-09</b> 11:00-11:15	<b>Brianna Klein</b> University of New Mexico, USA	<b>InAs/GaSb Type-II Superlattice Membrane Transfer for Doping Density Determination</b> <i>B. Klein, M. Zamiri, F. Anwar, V. Dahiya, F. Cavallo, S. Krishna, University of New Mexico</i>

Materials Characterization <b>We-10</b> 11:15-11:30	<b>Xiao-Meng Shen</b> Arizona State University, USA	<b>Determination of Heterointerface Band Alignments in nBn Photodetectors Using Off-Axis Electron Holography</b> <i>X-M. Shen, Z-Y. He, S. Liu, Y-H. Zhang, D.J. Smith, M.R. McCartney, Arizona State University</i>
Materials Characterization <b>We-11</b> 11:30-11:45	<b>Cory J. Hill</b> Jet Propulsion Lab, USA	<b>Interferometric Characterization of Defects in Antimonide-based Laser and Detector Structures Grown by Molecular Beam Epitaxy</b> <i>C.J. Hill, L. Hoglund, A. Khoshakhlagh, A. Soibel, D.Z.Y. Ting, and S.D. Gunapala, Jet Propulsion Lab</i>
Materials Characterization <b>We-12</b> 11:45-12:00	<b>Preston Webster</b> Arizona State University, USA	<b>Optical Properties of InAsBi/InAs Quantum Wells</b> <i>P.T. Webster, A.J. Shalindar, B. J. Wilkens, Y.-H. Zhang, S.R. Johnson, Arizona State University</i>
Other Materials <b>We-13</b> 12:00-12:15	<b>Chad Stephenson</b> University of Notre Dame, USA	<b>Band Structure and Extraction of Bowing Parameters from MBE Grown Ge:C</b> <i>C. Stephenson, W. O'Brien, M. Penninger, W. Schneider, M. Gillett-Kunnath, J. Zajicek, University of Notre Dame; R. Kudrawiec, Wroclaw University of Technology; M. Wistey, University of Notre Dame</i>
Other Materials <b>We-14</b> 12:15-12:30	<b>Sean Harrington</b> University of California Santa Barbara, USA	<b>Growth and Electronic Structure of Half Heusler <math>\text{Co}_{1-x}\text{Ni}_x\text{TiSb}</math> Grown by MBE</b> <i>S. Harrington, J. Logan, S. Patel, J. Kawasaki, University of California Santa Barbara; T. Balasubramanian, MAX-Lab, Lund University; A. Mikkelsen, Lund University; C. J. Palmstrøm, University of California Santa Barbara</i>
Other Materials <b>We-15</b> 12:30-12:45	<b>Anthony Rice</b> University of California Santa Barbara, USA	<b>Epitaxial Growth and Electronic Properties of NiTiSn: Stoichiometry and Doping Effects</b> <i>A.D. Rice, J.K. Kawasaki, N. Verma, B.D. Schultz, C.J. Palmstrøm, University of California Santa Barbara</i>
Late News <b>We-16</b> 16:30-16:45	<b>Daniel Bahena</b> CINVESTAV, Mexico	<b>Aberration Corrected Scanning Transmission Electron Microscopy (STEM) Study of Nearly Lattice-Matched <math>\text{Zn}_{1-z}\text{Cd}_z\text{Se}/\text{Zn}_{1-x}\text{Cd}_x\text{Se}/\text{Zn}_{1-y}\text{Mg}_y\text{Se}</math> Quantum Well Heterostructures</b> <i>D. Bahena, G. Villa-Martínez, F. Sutara, I. Hernández-Calderón, Cinvestav-IPN</i>
Late News <b>We-17</b> 16:45-17:00	<b>Stephanie Law</b> University of Delaware, USA	<b>Growth of high-quality topological insulator films using a selenium cracker source</b> <i>T. Ginley, S. Law, University of Delaware</i>
Late News <b>We-18</b> 17:00-17:15	<b>Javad Shabani</b> University of California, Santa Barbara, USA	<b>Epitaxial Al-InAs two-dimensional systems: a platform for gate-able topological superconductivity</b> <i>J. Shabani, University of California-SB; M. Kjaergaard, H. J. Suominen, University of Copenhagen; Y. Kim, University of California-SB; F. Nichele, University of Copenhagen; K. Pakrouski, T. Stankevici, ETH-Zurich; R. Lutchny, University of California-SB; P. Krogstrup, University of Copenhagen, S. Kraemer, ETH-Zurich; C. Nayak, University of California-SB; M. Troyer, ETH-Zurich; C. M. Marcus, University of Copenhagen; C. J. Palmstrøm, University of California-SB/ETH-Zurich/Microsoft Station Q</i>

### POSTER SESSION MONDAY, OCTOBER 5

Late News <b>Mo-P01</b> 18:30-20:00	<b>Xuejun Lu</b> University of Massachusetts Lowell, USA	<b>Optical remote chemical and biological (CB) wireless sensor network</b> <i>J. Vaillancourt, Applied NanoFemto Technologies; X. Lu, Univ. of Massachusetts Lowell</i>
Late News <b>Mo-P02</b> 18:30-20:00	<b>Brelon J. May</b> The Ohio State University, USA	<b>III-N Nanowires on Metal Foils</b> <i>B. J. May, A.T.M. G. Sarwar, R. C. Myers, The Ohio State University</i>
Electronic Devices <b>Mo-P03</b> 18:30-20:00	<b>April Jewell</b> Jet Propulsion Laboratory, USA	<b>Low Temperature Silicon MBE for Wafer Scale Production of High Performance UV Detectors</b> <i>A.D. Jewell, A.G. Carver, M.E. Hoenk, S. Nikzad, Jet Propulsion Laboratory</i>
Electronic Devices <b>Mo-P04</b> 18:30-20:00	<b>Grzegorz Cywinski</b> Institute of High Pressure Physics PAS, Poland	<b>MBE Grown GaN/AlGaIn Based Transistors for Terahertz Emitter and Detectors</b> <i>G. Cywinski, K. Szkudlarek, P. Wolny, Institute of High Pressure Physics PAS; W. Knap, Institute of High Pressure Physics PAS / Laboratory Charles Coulomb; D. Yavorskiy, K. Karpierz, J. Lusakowski, University of Warsaw; D. Coquillat, N. Dyakonova, Laboratory Charles Coulomb; K. Dybko, Institute of Physics PAS; M. Siekacz, C. Skierbiszewski, Institute of High Pressure Physics PAS</i>



Electronic Devices <b>Mo-P05</b> 18:30-20:00	<b>I. E. Cortés-Mestizo</b> Universidad Autónoma de San Luis Potosí, Mexico	<b>Thermal Energy Harvesting with MBE-grown High-mobility Assymmetric Nanochannels</b> <i>I.E. Cortes-Mestizo, E. Briones, V.H. Méndez García, Universidad Autónoma de San Luis Potosí</i>
Electronic Devices <b>Mo-P06</b> 18:30-20:00	<b>Wei Guo</b> University of Massachusetts Lowell, USA	<b>Characterization of Dip-free Broadband InAs Quantum Dot Superluminescence Light Emitting Diodes</b> <i>R. Yao, C-S. Lee, W. Guo, University of Massachusetts Lowell</i>
Fundamentals of MBE Growth <b>Mo-P07</b> 18:30-20:00	<b>Ugur Serincan</b> Anadolu University, Turkey	<b>Comparison of GaSb Epilayers Grown on Si and GaAs Substrates by Molecular Beam Epitaxy</b> <i>U. Serincan, B. Arpapay, B. Arikan, Anadolu University</i>
Fundamentals of MBE Growth <b>Mo-P08</b> 18:30-20:00	<b>Zbig Wasilewski</b> University of Waterloo, Canada	<b>Growth of Single-crystal Al Layers on GaAs and Si Substrates for Microwave Superconducting Resonators</b> <i>J. Tournet, D. Gosselink, G-X. Miao, D. Langenberg, M. Mariantoni, Z. Wasilewski, University of Waterloo</i>
Fundamentals of MBE Growth <b>Mo-P09</b> 18:30-20:00	<b>Burcu Arpapay</b> Anadolu University, Turkey	<b>Optimization of GaSb Epilayers Grown on Si (100) Substrates by Molecular Beam Epitaxy</b> <i>B. Arpapay, U. Serincan, Anadolu University</i>
Fundamentals of MBE Growth <b>Mo-P10</b> 18:30-20:00	<b>Maxim S. Solodovnik</b> Southern Federal University, Russia	<b>Kinetic Monte Carlo Simulation of the Initial Stage of GaAs(001) Homoepitaxial Growth</b> <i>O.A. Ageev, M.S. Solodovnik, S.V. Balakirev, I.A. Mikhaylin, Southern Federal University</i>
Fundamentals of MBE Growth <b>Mo-P11</b> 18:30-20:00	<b>Maxim S. Solodovnik</b> Southern Federal University, Russia	<b>The Study of GaAs Native Oxide Influence on the GaAs Epitaxial Growth</b> <i>O.A. Ageev, M.S. Solodovnik, S.V. Balakirev, M. Eremenko, Southern Federal University</i>
Heteroepitaxy <b>Mo-P12</b> 18:30-20:00	<b>Calli Campbell</b> Arizona State University, USA	<b>Interface and Vertical Transport Study of CdTe/InSb Grown by MBE</b> <i>Y-S. Kuo, Z-Y. He, J. Becker, X-H. Zhao, M. B. Lassise, C. M. Campbell, S. Liu, Y-H. Zhang, Arizona State University</i>
Heteroepitaxy <b>Mo-P13</b> 18:30-20:00	<b>Abderraouf Boucherif</b> Université de Sherbrooke, Canada	<b>Releasable Ge Seed Films for III-V Materials Epitaxy</b> <i>A. Boucherif, G. Beaudin, S. Fafard, V. Aimez, R. Arés, Université de Sherbrooke</i>
Heteroepitaxy <b>Mo-P14</b> 18:30-20:00	<b>Chaomin Zhang</b> Arizona State University, USA	<b>Carrier Lifetime Degradation in Silicon Induced by Epitaxial III-V Growth Procedures</b> <i>S.P. Bremner, University of New South Wales; N.N. Faleev, L. Ding, C. Zhang, M. Bertoni, C.B. Honsberg, Arizona State University</i>
Heteroepitaxy <b>Mo-P15</b> 18:30-20:00	<b>Thor Garcia</b> The City College of New York, USA	<b>Molecular Beam Epitaxial Growth of Bi<sub>2</sub>Se<sub>3</sub>/CdTe Multilayers</b> <i>T. Axtmann Garcia, Z. Chen, L. Krusin, M. C. Tamargo, The City College of New York</i>
Heteroepitaxy <b>Mo-P16</b> 18:30-20:00	<b>Leticia Ithsmel Espinosa-Vega</b> Universidad Autónoma de San Luis Potosí, Mexico	<b>Structural Characterization of AlGaAs:Si/GaAs(631) Heterostructures Grown as a Function of the As-Pressure</b> <i>L.I. Espinosa-Vega, Universidad Autónoma de San Luis Potosí; S. Shimomura, Ehime University; E. Cruz-Hernandez, Universidad Autónoma de San Luis Potosí; D. Vázquez-Cortés, Ehime University; V.H. Méndez-García, Universidad Autónoma de San Luis Potosí</i>
Heteroepitaxy <b>Mo-P17</b> 18:30-20:00	<b>J. A. Espinoza-Figueroa</b> Universidad Autónoma de San Luis Potosí, Mexico	<b>Study of the Nitrogen Incorporation in GaNAs Layers as a Function of Growth Temperature</b> <i>J.A. Espinoza-Figueroa, Universidad Autónoma de San Luis Potosí; M. López-López, S. Gallardo-Hernandez, Centro de Investigación y de Estudios Avanzados del IPN; E. García-Ramírez, M.A. Vidal-Borbolla, E. Cruz-Hernandez, V.H. Méndez-García, Universidad Autónoma de San Luis Potosí</i>
Heteroepitaxy <b>Mo-P18</b> 18:30-20:00	<b>Víctor Hugo Méndez-García</b> Universidad Autónoma de San Luis Potosí, Mexico	<b>Depletion Layer Width Effects on AlGaAs/GaAs Single and Double 2DEG Heterostructures</b> <i>I.E. Cortes-Mestizo, L.I. Espinosa-Vega, Universidad Autónoma de San Luis Potosí; J. Briones, Instituto de Estudios Superiores de Occidente; R. Droopad, M. Perez-Caro, Texas State University; C.M. Yee-Rendón, Universidad Autónoma de Sinaloa; E. Briones, V.H. Méndez-García, Universidad Autónoma de San Luis Potosí</i>

III-Arsenides, Antimonides, Phosphides <b>Mo-P19</b> <b>18:30-20:00</b>	<b>S. Iyer</b> North Carolina A&T State University, USA	<b>Effects of Sb Variation in GaAsSb Segments in Ga Assisted Axial GaAs/GaAsSb/GaAs Heterostructure Nanowires</b> <i>S.K. Ojha, P.K. Kasanaboina, North Carolina A&amp;T State Univ.; C.L. Reynolds Jr., Y. Liu, North Carolina State Univ.; S. Iyer, North Carolina A&amp;T State Univ.</i>
III-Arsenides, Antimonides, Phosphides <b>Mo-P20</b> <b>18:30-20:00</b>	<b>Zhiyuan Lin</b> Arizona State University, USA	<b>Influence of Carrier Localization on Minority Carrier Lifetime of InAs/InAsSb Type-II Superlattices Grown by Molecular Beam Epitaxy</b> <i>Z-Y. Lin, S. Liu, Y-H. Zhang, Arizona State University</i>
III-Arsenides, Antimonides, Phosphides <b>Mo-P21</b> <b>18:30-20:00</b>	<b>Wenquan Ma</b> Institute of Semiconductors, Chinese Academy of Sciences, China	<b>Intermixing Effect of Using Type II InAs/GaSb Superlattice Structure to Reach Detection Wavelength Shorter than 3 <math>\mu\text{m}</math></b> <i>J. Huang, W. Ma, Y. Wei, Y. Zhang, K. Cui, Y. Cao, Institute of Semiconductors, Chinese Academy of Sciences; J. Shao, Shanghai Institute of Technical Physics, Chinese Academy of Sciences</i>
III-Arsenides, Antimonides, Phosphides <b>Mo-P22</b> <b>18:30-20:00</b>	<b>Shiyong Zhang</b> University of Sheffield, United Kingdom	<b>InSb/AlInSb Quantum Wells with Electron Mobility Greater than <math>220,000\text{cm}^2\text{V}^{-1}\text{s}^{-1}</math> at Low Temperature</b> <i>S. Zhang, University of Sheffield; D.G. Hayes, Cardiff University; E. Clarke, University of Sheffield; P.D. Buckle, Cardiff University</i>
III-Arsenides, Antimonides, Phosphides <b>Mo-P23</b> <b>18:30-20:00</b>	<b>Dingding Ren</b> Norwegian University of Science and Technology, Norway	<b>Growth Optimization for Self-catalyzed GaAs Nanowires on Metal Induced Crystallized Amorphous Substrate</b> <i>D. Ren, I.M. Høiaas, J.F. Reinertsen, Norwegian University of Science and Technology; D.L. Dheeraj, A. M. Munshi, CrayoNano AS; D-C. Kim, H. Weman, B-O. Fimland, Norwegian University of Science and Technology / CrayoNano AS</i>
III-Arsenides, Antimonides, Phosphides <b>Mo-P24</b> <b>18:30-20:00</b>	<b>Bjørn-Ove Fimland</b> Norwegian University of Science and Technology, Norway	<b>On the Growth of Self-catalyzed GaAs Nanowires on Si Substrates: Opportunities and Limitations</b> <i>A.M. Munshi, CrayoNano AS; D. Ren, Norwegian University of Science and Technology; D.L. Dheeraj, CrayoNano AS; V.T. Fauske, L.M.S. Aas, A.T.J. van Helvoort, Norwegian University of Science and Technology; H. Weman, B-O. Fimland, Norwegian University of Science and Technology / CrayoNano AS</i>
III-Nitrides and dilute-nitrides <b>Mo-P25</b> <b>18:30-20:00</b>	<b>Nhung Hong Tran</b> McGill University, Canada	<b>Impurity-Band Conduction in Mg-doped AlN Nanowires</b> <i>N.H. Tran, S. Zhao, B.H. Le, Z. Mi, McGill University</i>
III-Nitrides and dilute-nitrides <b>Mo-P26</b> <b>18:30-20:00</b>	<b>Pavan Kasanaboina</b> North Carolina A&T State University, USA	<b>Effects of Annealing on GaAs/GaAsSbN/GaAs Core/Multi-shell Nanowires</b> <i>P. Kasanaboina, P. Deshmukh, North Carolina A&amp;T State University; C.L. Reynolds Jr., Y. Liu, North Carolina State University; S. Iyer, North Carolina A&amp;T State University</i>
III-Nitrides and dilute-nitrides <b>Mo-P27</b> <b>18:30-20:00</b>	<b>Apurba Chakraborty</b> Indian Institute Of Technology, India	<b>Anomaly Behaviour of Indium Incorporation in InGaN by Metal Modulation Growth Technique</b> <i>A. Chakraborty, P. Mukhopadhyay, S. Ghosh, A. Bag, S.K. Jana, S.M. Dinara, M.K. Mahata, R. Kumar, S. Das, S. Majumdar, D. Biswas, Indian Institute of Technology Kharagpur</i>
III-Nitrides and dilute-nitrides <b>Mo-P28</b> <b>18:30-20:00</b>	<b>Abderrahim Boucherif</b> Université de Sherbrooke, Canada	<b>Focalized Chemical Beam Injection for Efficient CBE Growth of III-Nitrides</b> <i>A. Boucherif, M. Rondeau, Université de Sherbrooke; H. Pelletier, OSEMI Canada Inc; P-O. Provost, Université de Sherbrooke / OSEMI Canada Inc; C. Dubucc, OSEMI Canada Inc; H. Mahera, R. Arès, Université de Sherbrooke</i>
II-VI materials <b>Mo-P29</b> <b>18:30-20:00</b>	<b>Guopeng Chen</b> City College of New York, USA	<b>Effect of MgSe Coupling Layer Thickness on Intersubband Absorption in MgSe/CdSe Coupled Quantum Wells</b> <i>G. Chen, M.C. Tamargo, A. Shen, City College of City University of New York</i>
II-VI materials <b>Mo-P30</b> <b>18:30-20:00</b>	<b>Gerardo Villa-Martínez</b> CINVESTAV, Mexico	<b>Tuning the Yellow-green Excitonic Emission of Nearly Lattice-matched <math>\text{Zn}_{1-z}\text{Cd}_z\text{Se}/\text{Zn}_{1-x}\text{Cd}_x\text{Se}/\text{Zn}_{1-y}\text{Mg}_y\text{Se}</math> (<math>z&gt;x</math>) Quantum Wells by the Control of <math>\text{Zn}_{1-z}\text{Cd}_z\text{Se}</math> Monolayers</b> <i>G. Villa-Martinez, J.C. Bantli-Bárceñas, F. Sutara, I. Hernández-Calderón, Cinvestav-IPN</i>
II-VI materials <b>Mo-P31</b> <b>18:30-20:00</b>	<b>Miguel García-Rocha</b> CINVESTAV, Mexico	<b>Photoluminescence Study of a Double <math>\text{Zn}_{1-x}\text{Cd}_x\text{Se}</math> QW Structure Grown at Low Temperature by Atomic Layer Epitaxy</b> <i>J.J. Saroj, I. Hernández-Calderón, A. Alfaro-Martínez, M. García-Rocha, Cinvestav - IPN</i>

II-VI materials <b>Mo-P32</b> 18:30-20:00	<b>Shengkun Zhang</b> Borough of Manhattan Community College, USA	<b>Interface-state-phonon-assisted Energy Relaxation of Hot Electrons in CdSe Quantum Dots</b> <i>S.K. Zhang, Borough of Manhattan Community College; I. Zeylikovich, Bronx Community College; T.K. Gayen, B. Das, R.R. Alfano, M.C. Tamargo, A. Shen, City College of New York</i>
II-VI materials <b>Mo-P33</b> 18:30-20:00	<b>Adrián Alfaro-Martínez</b> CINVESTAV, Mexico	<b>Study of the Influence of ZnSe Monolayer Insertions in the Growth of CdSe/ZnCdMgSe Self-Assembled Quantum Dots</b> <i>A.D. Alfaro-Martínez, I. Hernández-Calderón, Centro de Investigación y de Estudios Avanzados (Cinvestav); M.C. Tamargo, City College of New York</i>
II-VI materials <b>Mo-P34</b> 18:30-20:00	<b>Miguel U. Salazar-Tovar</b> CINVESTAV, Mexico	<b>Study of Potential Fluctuations After Thermal Treatment of Layer-by-layer Grown ZnCdSe/ZnSe Quantum Wells</b> <i>M.U. Salazar-Tovar, I. Hernández-Calderón, Cinvestav - IPN</i>
MBE Technology <b>Mo-P35</b> 18:30-20:00	<b>Manoj Kesaira</b> Lancaster University, United Kingdom	<b>Extended Wavelength Mid-infrared Photoluminescence from Type-I InAsN and InGaAsN Quantum Wells Grown on InP</b> <i>M. Kesaria, R. Wheatley, Lancaster University; L.J. Mawst, J.D. Kirch, T.F. Kuech, University of Wisconsin; Q.D. Zhuang, A. Krier, Lancaster University</i>
Other Materials <b>Mo-P36</b> 18:30-20:00	<b>Suresh Vishwanath</b> Cornell University, USA	<b>MBE SnSe<sub>2</sub> Grains - Circular or Triangular?</b> <i>S. Vishwanath, Cornell University / University de Notre Dame; X. Liu, University of Notre Dame; Y. Nie, University of Texas at Dallas; S.M. Eichfeld, J.A. Robinson, Pennsylvania State University; J.K. Furdyna, University of Notre Dame; K.J. Cho, University of Texas at Dallas; D. Jena, H.G. Xing, Cornell University / University of Notre Dame</i>
Other Materials <b>Mo-P37</b> 18:30-20:00	<b>Yusuke Miyata</b> Osaka Prefecture University, Japan	<b>Anomalous Magnetoresistance in Rare Earth, Ce, Doped Single Crystalline Si Epitaxial Films</b> <i>M. Yusuke, K. Ueno, T. Yoshimura, A. Ashida, Y. Togawa, N. Fujimura, Osaka Pref. Univ.</i>
Other Materials <b>Mo-P38</b> 18:30-20:00	<b>Ricky Gibson</b> University of Arizona, USA	<b>Epitaxial Growth Dynamics of Self-Assembled Plasmonic and Superconducting Indium Islands</b> <i>R. Gibson, M. Gehl, S. Zandbergen, J. Sears, University of Arizona; N. Nader, University of Arizona / Air Force Research Laboratory / Solid State Scientific Corporation; P. Keiffer, University of Arizona; J. Hendrickson, Air Force Research Laboratory; A. Arnoult, LAAS-CNRS / Univ. du Toulouse; G. Khitrova, University of Arizona</i>

### POSTER SESSION WEDNESDAY, OCTOBER 7

III-Arsenides, Antimonides, Phosphides <b>We-P01</b> 17:15-18:45	<b>Sachie Fujikawa</b> Tokyo University of Science, Japan	<b>Dependence of InSb/GaSb Films Grown on Flat and Vicinal GaAs (100) Substrates</b> <i>S. Fujikawa, H. Suzuki, H. Fujishiro, Tokyo University of Science</i>
III-Arsenides, Antimonides, Phosphides <b>We-P02</b> 17:15-18:45	<b>N. N. Faleev</b> Arizona State University, USA	<b>Structural Investigation of GaSb Epitaxial Layer Grown on GaAs (001) Substrate</b> <i>E. Vadiie, N. Faleev, C. Honsberg, Arizona State University</i>
III-Arsenides, Antimonides, Phosphides <b>We-P03</b> 17:15-18:45	<b>Juan Rojas-Ramirez</b> Texas State University, USA	<b>Ternary and Quaternary Alloys Lattice Matched to InAs and GaSb Studied by Ellipsometry</b> <i>J.S. Rojas-Ramirez, Md. S. Rahman, M. Perez-Caro, S. Ghose, K. Bhatnagar, R. Droopad, Texas State University</i>
III-Arsenides, Antimonides, Phosphides <b>We-P04</b> 17:15-18:45	<b>Luis Zamora Peredo</b> Universidad Veracruzana, Mexico	<b>Optical Characterization of Si-ML Passivated AlGaAs/GaAs Heterostructures</b> <i>L. Zamora Peredo, L. García González, J. Hernández Torres, Universidad Veracruzana; M. Peres Caro, M. Ramirez López, Y. Casallas Moreno, Z. Rivera Alvaraz, M. López López, CINVESTAV; I. Cortes Mestizo, V. H. Méndez García, UASLP</i>
III-Arsenides, Antimonides, Phosphides <b>We-P05</b> 17:15-18:45	<b>Rui La</b> University of California, San Diego, USA	<b>Self-Catalyzed GaNAsP Nanowires Grown on Si (111) by Gas-source Molecular Beam Epitaxy</b> <i>R. La, C. W. Tu, University of California, San Diego</i>



III-Arsenides, Antimonides, Phosphides <b>We-P06</b> 17:15-18:45	<b>Jose Alberto Piedra-Lorenzana</b> CINVESTAV, Mexico	<b>Mg-induced Pyramidal Structures Formation During the MBE Growth of GaAs</b> <i>J.A. Piedra-Lorenzana, Y.L. Casallas-Moreno, Dagoberto Cardona, S. Gallardo-Hernández, G.G. Díaz-Monroy, C.A. Hernández-Gutierrez, M. López-López, Centro de Investigación y Estudios Avanzados</i>
III-Arsenides, Antimonides, Phosphides <b>We-P07</b> 17:15-18:45	<b>Heather Haugan</b> Air Force Research Laboratory, USA	<b>Demonstration of Long Minority Carrier Lifetimes in Very Narrow Bandgap Ternary InAs/GaSb Superlattices</b> <i>H.J. Haugan, G.J. Brown, Air Force Research Laboratory; B.V. Olson, E.A. Kadlec, J.K. Kim, E.A. Shaner, Sandia National Laboratory</i>
III-Nitrides and dilute-nitrides <b>We-P08</b> 17:15-18:45	<b>Katsuhiko Uesugi</b> Muroran Institute of Technology, Japan	<b>Low Temperature Growth of GaAsNSe Films on Si(110) Substrates by RF-MOMBE with Ga Migration</b> <i>Y. Igarashi, Y. Shimomura, S. Kimura, K. Obara, K. Uesugi, Muroran Institute of Technology</i>
III-Nitrides and dilute-nitrides <b>We-P09</b> 17:15-18:45	<b>Ignacio Orozco</b> Instituto Potosino de Investigación Científica y Tecnológica, Mexico	<b>Tuning Emission in Violet, Blue, Green and Red in Cubic GaN/InGaN/GaN Quantum Wells</b> <i>I.E. Orozco Hinostraza, Instituto Potosino de Investigacion Cientifica y Tecnologica; V.D. Compean Garcia, E. Lopez Luna, M. Vidal, Universidad Autonoma de San Luis Potosi</i>
III-Nitrides and dilute-nitrides <b>We-P10</b> 17:15-18:45	<b>Joshua Williams</b> Arizona State University, USA	<b>Exploring Crystal Quality and Defect Formation of GaN and InGaN Epilayers Grown On AlN Buffer</b> <i>J. Williams, N. Faleev, C. Honsberg, Arizona State University</i>
III-Nitrides and dilute-nitrides <b>We-P11</b> 17:15-18:45	<b>Chun-Hung Wu</b> National Tsing Hua University, Republic of China	<b>Site-controlled Growth of GaN Nanorod Arrays Embedded with Ga(In)N Quantum Boxes on Si(111) Substrates</b> <i>C-H. Wu, P-Y. Lee, Y-L. Wang, K-Y. Chen, Y-T. Tseng, K-Y. Cheng, National Tsing Hua University</i>
III-Nitrides and dilute-nitrides <b>We-P12</b> 17:15-18:45	<b>V. D. Compeán-García</b> Universidad Autónoma de San Luis Potosí, Mexico	<b>PAMBE Growth of c-In<sub>x</sub>Ga<sub>1-x</sub>N Films on c-GaN/MgO (100) Substrates</b> <i>V.D. Compean Garcia, Universidad Atonoma de San Luis Potosi; I.E. Orozco Hinostraza, Instituto Potosino de Investigacion Cientifica y Tecnologica; E. Lopez Luna, M. A. Vidal, Universidad Atonoma de San Luis Potosi</i>
III-Nitrides and dilute-nitrides <b>We-P13</b> 17:15-18:45	<b>María Sánchez</b> Universidad de la Habana, Cuba	<b>GaN and InGaN Columnar Nanostructures Grown on Si(111) Substrates by Molecular Beam Epitaxy</b> <i>M. Sánchez, Universidad de La Habana; S. Gallardo Hernández, Y. Casallas Moreno, CINVESTAV; O de Melo, J. Ortega, Universidad de la Habana; G. Santana, UNAM; M. López López, CINVESTAV</i>
III-Nitrides and dilute-nitrides <b>We-P14</b> 17:15-18:45	<b>Yenny Casallas-Moreno</b> CINVESTAV, Mexico	<b>Characterization of Cubic Phase GaN and InN Layers Grown by RF-MBE</b> <i>Y.L. Casallas-Moreno, S. Gallardo-Hernández, Centro de Investigación y de Estudios Avanzados del IPN; F. Ruiz-Zepeda, University of Texas at San Antonio; B. M. Monroy, Universidad Nacional Autónoma de México; A. Escobosa-Echavarría, Centro de Investigación y de Estudios Avanzados del IPN; A. Ponce, University of Texas at San Antonio; G. Santana, Universidad Nacional Autónoma de México; M. López-López, Centro de Investigación y de Estudios Avanzados del IPN</i>
III-Nitrides and dilute-nitrides <b>We-P15</b> 17:15-18:45	<b>Luis Zamora Peredo</b> Universidad Veracruzana, Mexico	<b>Raman and PL Study of Si-doped GaN/Si Films</b> <i>L. Zamora-Peredo, I. Martínez-Velis, J. Hernández-Torres, L. García-González, Universidad Veracruzana; G. Santana-Rodríguez, UNAM; M. Ramírez-López, M. López-López, CINVESTAV-IPN</i>
III-Nitrides and dilute-nitrides <b>We-P16</b> 17:15-18:45	<b>Edgar López-Luna</b> Universidad Autónoma de San Luis Potosí, Mexico	<b>Refractive Index Changes in Cubic In<sub>x</sub>Ga<sub>1-x</sub>N Thin Films</b> <i>H. Vilchis, A.G. Rodriguez, E. López-Luna, M.A. Vidal, Universidad Autónoma de San Luis Potosí</i>
III-Nitrides and dilute-nitrides <b>We-P17</b> 17:15-18:45	<b>Heber Vilchis</b> Universidad Autónoma de San Luis Potosí, Mexico	<b>Cubic GaN Thin Films Synthesized on GaAs at Low Temperature by MBE</b> <i>H. Vilchis, J.A. Alanis, E. García-Ramirez, E. López-Luna, M. Vidal, Universidad Autonoma de san Luis Potosí</i>

Low dimensional heterostructures <b>We-P18</b> 17:15-18:45	<b>Stephen Bremner</b> University of New South Wales, Australia	<b>Effect of Sb and As Spray on Emission Characteristics of InAs Quantum Dots with AlAs Capping Layer</b> <i>S. P. Bremner, Z. Zhang, P.J. Reece, University of New South Wales; N.N. Faleev, Arizona State University</i>
Low dimensional heterostructures <b>We-P19</b> 17:15-18:45	<b>Brelon May</b> The Ohio State University, USA	<b>Three-dimensional Lattice Matching for Epitaxially Embedded Nanoparticles</b> <i>B.J. May, P. Anderson, R.C. Myers, The Ohio State University</i>
Low dimensional heterostructures <b>We-P20</b> 17:15-18:45	<b>Davide Del Gaudio</b> University of Michigan, USA	<b>Selective Nucleation of Quantum Dots on Spontaneously Nanopatterned Surfaces</b> <i>D. Del Gaudio, S. Huang, L. Aagesen, K. Thornton, R. Goldman, University of Michigan</i>
Low dimensional heterostructures <b>We-P21</b> 17:15-18:45	<b>Konstantin Moiseev</b> Ioffe Institute, Russia	<b>Heterostructures With Single <math>\delta</math>-layer of Manganese For High-Temperature Magnetic Performance</b> <i>Y. Casallas, S. Gallardo, A. Conde, M. Lopez-Lopez, Yu. Koudriavtsev, A. Escobosa, CINVESTAV-IPN; V. Nevedomsky, K. Moiseev, Ioffe Institute</i>
Low dimensional heterostructures <b>We-P22</b> 17:15-18:45	<b>Henrique Limborço</b> Universidade Federal de Minas Gerais, Brasil	<b>Growth of Self-catalytic CuInSe<sub>2</sub> Nanowires</b> <i>H. Limborço, Universidade Federal de Minas Gerais / International Iberian Nanotechnology Laboratory; J.C. Gonzalez, Universidade Federal de Minas Gerais; J.P. Teixeira, J.P. Leitão, Universidade de Aveiro; D. Stroppa, P.M.P. Salomé, N. Nicoara, V. Iglesias, K. Abderrafi, S. Sadewasser, International Iberian Nanotechnology Laboratory</i>
Low dimensional heterostructures <b>We-P23</b> 17:15-18:45	<b>R. Méndez-Camacho</b> Universidad Autónoma de San Luis Potosí, Mexico	<b>Study Of The Self-assembling of Nanofacets in GaAs(631) High Index Substrates</b> <i>R. Méndez-Camacho, V.H. Méndez-García, CIACYT-UASLP; D. Valdez-Pérez, UPALM-IPN; E. Cruz-Hernández, CIACYT-UASLP</i>
Low dimensional heterostructures <b>We-P24</b> 17:15-18:45	<b>E. Eugenio-López</b> Universidad Autónoma de San Luis Potosí, Mexico	<b>As Flux Dependence on the Growth of QDs on Anisotropic High Index Substrates</b> <i>E. Eugenio-López, Universidad Autónoma de San Luis Potosí; S. Shimomura, Ehime University; V.H. Méndez-García, Universidad Autónoma de San Luis Potosí</i>
Low dimensional heterostructures <b>We-P25</b> 17:15-18:45	<b>Juan Antonio Alanís</b> Universidad Autónoma de San Luis Potosí, Mexico	<b>InGaN Nanostructures Synthesized Using a Gallium Native Source</b> <i>J.A. Alanis, E. García-Ramírez, J.M. Gutierrez-Hernández, H. Vilchis, E. López-Luna, M.A. Vidal, Universidad Autónoma de San Luis Potosí</i>
Low dimensional heterostructures <b>We-P26</b> 17:15-18:45	<b>Sai Krishna Ojha</b> North Carolina A&T State University, USA	<b>Study of Be Doping in GaAs Nanowires Using Photoluminescence and Raman Spectroscopy</b> <i>S.K. Ojha, P.K. Kasanaboina, North Carolina A&amp;T State University; C.L. Reynolds Jr., T.A. Rawdanowicz, Y. Liu, R.M. White, North Carolina State University; S. Iyer, North Carolina A&amp;T State University</i>
Low dimensional heterostructures <b>We-P27</b> 17:15-18:45	<b>Esteban Cruz-Hernandez</b> Universidad Autónoma de San Luis Potosí, Mexico	<b>SIMS Study of the Mn Incorporation into GaAs Grown at High Temperature by MBE</b> <i>E. Cruz-Hernández, A. Del Rio-De Santiago, V.H. Méndez-García, CIACYT-UASLP; S. Gallardo-Hernández, CINVESTAV; M. A. Vidal, J.A. Espinoza-Figueroa, J.M. Gutiérrez-Hernandez, CIACYT-UASLP; M. López-López, CINVESTAV</i>
Materials Characterization <b>We-P28</b> 17:15-18:45	<b>Nikolai Faleev</b> Arizona State University, USA	<b>Two Modes of Strain Accommodation and Defect Creation in Heteroepitaxial Structures</b> <i>N. Faleev, D. Smith, C. Honsberg, Arizona State University</i>
Materials Characterization <b>We-P29</b> 17:15-18:45	<b>I. E. Cortés-Mestizo</b> Universidad Autónoma de San Luis Potosí, Mexico	<b>Photoreflectance Analysis of AlGaAs/GaAs Heterostructures with Double 2DEG</b> <i>I.E. Cortes-Mestizo, Universidad Autónoma de San Luis Potosí; J. Briones, Instituto Tecnológico de Estudios Superiores de Occidente; R. Droopad, M. Perez-Caro, Texas State University; C.M. Yee-Rendón, Universidad Autónoma de Sinaloa; E. Briones, V.H. Méndez-García, Universidad Autónoma de San Luis Potosí</i>
Materials Characterization <b>We-P30</b> 17:15-18:45	<b>Kento Narutani</b> Kogakuin University, Japan	<b>Comprehensive Study on Inductively Coupled Plasma Reactive Ion Etching of GaN and InN</b> <i>K. Narutani, T. Yamaguchi, Kogakuin University; T. Araki, Y. Nanishi, Ritsumeikan University; T. Onuma, T. Honda, Kogakuin University.</i>

Oxides <b>We-P31</b> 17:15-18:45	<b>Jason Kawasaki</b> Cornell University, USA	<b>Metallic Quantum Well States in IrO<sub>2</sub> Thin Films and IrO<sub>2</sub>/TiO<sub>2</sub> Superlattices</b> <i>J.K. Kawasaki, D. Baek, C. H. Kim, Cornell University; Y.-F. Nie, Nanjing University; M. Uchida, University of Tokyo; J.T. Heron, J. Nelson, C. Fennie, L.F. Kourkoutis, D.G. Schlom, K.M. Shen, Cornell University</i>
Oxides <b>We-P32</b> 17:15-18:45	<b>Mikio Takahashi</b> Kogakuin University, Japan	<b>Thermal Stability of <math>\alpha</math>-(AlGa)<sub>2</sub>O<sub>3</sub> Grown by Mist CVD</b> <i>M. Takahashi, T. Hatakeyama, T. Onuma, T. Yamaguchi, T. Honda, Kogakuin University</i>
Oxides <b>We-P33</b> 17:15-18:45	<b>Abraham Arias</b> Autonomous University of Baja California, Mexico	<b>Optical and Electrical Properties of MBE Grown <math>\beta</math>-Ga<sub>2</sub>O<sub>3</sub> Thin Films Suitable for Deep Ultraviolet Detection</b> <i>A. Arias, Autonomous University of Baja California; S. Ghose, Texas State University; O. Pérez, Autonomous University of Baja California; J. Rojas-Ramírez, Texas State University; M. Curiel, Autonomous University of Baja California; M. Caro, Texas State University; B. Valdez, N. Nedev, Autonomous University of Baja California; R. Droopad, Texas State University</i>
Oxides <b>We-P34</b> 17:15-18:45	<b>Negar Golshan</b> Northeastern University, USA	<b>Epitaxial Growth and Atomic Characterization of Fe<sub>3</sub>O<sub>4</sub> (111) on SiC (0001) Using MgO Template Layer</b> <i>N.H. Golshan, K.S. Ziemer, Northeastern University</i>
Solar cells <b>We-P35</b> 17:15-18:45	<b>Shawn Mack</b> Naval Research Laboratory, USA	<b>Growth Challenges for GaSb Photovoltaics</b> <i>S. Mack, Naval Research Laboratory; M.P. Lumb, Naval Research Laboratory / The George Washington University; M. Gonzalez, Naval Research Laboratory / Sotera Defense Solutions; K.J. Schmieder, NRC Research Associate residing at NRL; R.J. Walters, Naval Research Laboratory</i>
Solar cells <b>We-P36</b> 17:15-18:45	<b>Basilio Javier García</b> Universidad Autónoma de Madrid, Spain	<b>Chemical Beam Epitaxy of Dilute Nitrides for Intermediate Band Solar Cells</b> <i>N. López, A. F. Braña, C. García Nuñez, M.J. Hernández, M. Cervera, M. Martínez, Universidad Autónoma de Madrid; K.M. Yu, City University of Hong Kong; W. Walukiewicz, Lawrence Berkeley National Laboratory; B.J. García, Universidad Autónoma de Madrid</i>

All technical sessions will take place in the Iberostar Convention Center, very close to the hotel lobby.



**31<sup>st</sup>. North American MBE Conference**  
**October 2015**  
**Mayan Riviera - Mexico**

Hour	Sunday 4	Monday 5	Tuesday 6	Wednesday 7	Hour
08:00 – 08:30		Registration	Registration	Registration	08:00 – 08:30
08:30 – 08:45		Opening	INVITED TALK	We01	08:30 – 08:45
08:45 – 09:00		INVITED TALK		We02	08:45 – 09:00
09:00 – 09:15			Tu01	We03	09:00 – 09:15
09:15 – 09:30		Mo01	Tu02	We04	09:15 – 09:30
09:30 – 09:45		Mo02	Tu03	We05	09:30 – 09:45
09:45 – 10:00		Mo03	Tu04	We06	09:45 – 10:00
10:00 – 10:15		Mo04	Tu05	We07	10:00 – 10:15
10:15 – 10:30		Mo05	Tu06	We08	10:15 – 10:30
10:30 – 11:00		Coffee Break	Coffee Break	Coffee Break	10:30 – 11:00
11:00 – 11:15		Mo06	Tu07	We09	11:00 – 11:15
11:15 – 11:30		Mo07	Tu08	We10	11:15 – 11:30
11:30 – 11:45		Mo08	Tu09	We11	11:30 – 11:45
11:45 – 12:00		Mo09	Tu10	We12	11:45 – 12:00
12:00 – 12:15		Mo10	Tu11	We13	12:00 – 12:15
12:15 – 12:30		Mo11	Tu12	We14	12:15 – 12:30
12:30 – 12:45		Mo12	Tu13	We15	12:30 – 12:45
12:45 – 13:00		Mo13			12:45 – 13:00
13:00 – 14:00					13:00 – 14:00
14:00 – 16:30	Registration	Lunch and Beach	Conference Excursion (Tulum)	Lunch and Beach	14:00 – 16:30
16:30 – 16:45	PLENARY TALK			We16	16:30 – 16:45
16:45 – 17:00				We17	16:45 – 17:00
17:00 – 17:15		Mo14		We18	17:00 – 17:15
17:15 – 17:30	Su01	Mo15		Poster Session	17:15 – 17:30
17:30 – 17:45	Su02	Mo16			17:30 – 17:45
17:45 – 18:00	Su03	Mo17			17:45 – 18:00
18:00 – 18:15	Coffee Break	Mo18			Snacks and Drinks
18:15 – 18:30		Mo 19		18:15 – 18:30	
18:30 – 18:45	Su04	Poster Session			18:30 – 18:45
18:45 – 19:00	Su05			Closing Remarks	18:45 – 19:00
19:00 – 19:15	Su06				19:00 – 19:15
19:15 – 19:30	Su07		Snacks and drinks		19:15 – 19:30
19:30 – 19:45	Welcome Reception			19:30 – 19:45	
19:45 – 20:00				19:45 – 20:00	
20:00 – 21:00					20:00 – 21:00
21:00 – 23:00	RIBER User's Meeting	Veeco User's Meeting	Conference Banquet		21:00 – 23:00

## SESSION CHAIRS

Chair	Session	Day	Time
Maria C. Tamargo, <i>City University of New York</i>	Plenary Talk	Sunday	16:30-17:15
James Gupta, <i>National Research Council</i>	Oxides	Sunday	17:15-18:00
Amy Liu, <i>IQE</i>	Fundamentals of MBE Growth	Sunday	18:30-19:30
	Opening	Monday	08:30-08:45
Charles Tu, <i>University of California, San Diego</i>	Invited talk "MBE Innovator Award" Van Der Waals Epitaxy Spintronics	Monday	08:45-09:15 09:15-10:00 10:00-10:30
Sanjay Krishna, <i>University of New Mexico</i>	Low Dimensional Heterostructures	Monday	11:00-13:00
Minjoo Lary Lee, <i>Yale University</i>	III-Arsenides, Antimonides, Phosphides II-VI Materials	Monday	17:00-17:45 17:45-18:30
	Poster Session Monday	Monday	18:30-20:00
Charles Tu, <i>University of California, San Diego</i>	Invited talk "Young Investigator Award"	Tuesday	08:30-09:00
Yong-Hang Zhang, <i>Arizona State University</i>	Photonic Devices	Tuesday	09:00-10:30
Chris Palmstrom, <i>University of California (UCSB)</i>	Solar Cells	Tuesday	11:00-12:45
Ravi Droopad, <i>Texas State University</i>	III-Nitrides and Dilute-Nitrides Electronic Devices	Wednesday	08:30-10:00 10:00-10:30
Zbig Wasilewski, <i>University of Waterloo</i>	Materials Characterization Other Materials	Wednesday	11:00-12:00 12:00-12:45
Alex Freundlich, <i>University of Houston</i>	Late News Session	Wednesday	16:30-17:15
	Poster Session Wednesday	Wednesday	17:15-18:45
	Closing Remarks		18:45-19:15

### EXHIBITORS

- American GMG Inc.
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