

(09) Nitride Electronics

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DETAILED PROGRAMME**Wednesday, 18-12-2013****Session I : 16.00 – 18.00**

16.00 - 16.30 Invited Talk (1)	Che-Hao Liao Charng-Gan Tu Horng-Shyang Chen Chia-Ying Su Yu-Feng Yao Wen-Ming Chang, Yean-Woei Kiang and <u>C. C. Yang</u>	ABS - Email - ICA Regularly Patterned InGaN/GaN Quantum Well Nanorod LED Array
16.30 - 17.00 Invited Talk (2)	<u>Andres Cantarero</u>	ABS - Email1 - ICA Raman spectroscopy of nitride nanowires
17.00 - 17.15 Oral (1)	<u>Malleswararao Tangi</u> Arpan De and S. M. Shivaprasad	ABS - Email - ICA The role of native point defects and dislocations in limiting the mobility of InN
17.15 - 17.30 Oral (2)	<u>Carina B. Maliakkal</u> A. Azizur Rahman Abhilash T.S. John P. Mathew, Nirupam Hatui, Priti Gupta, Mandar M. Deshmukh and Arnab Bhattacharya	ABS - 1362 - ICA Synthesis and characterization of Ni-catalyzed VLS grown GaN nanowires
17.30 - 17.45 Oral (3)	<u>Amit K.S. Chauhan</u> Mukesh Kumar S K. Pasha Bipin K. Gupta, and Govind	ABS - 1576 - ICA Low temperature catalyst free growth of InN & GaN nanostructures on stepped Si (553) surface
17.45 - 18.00 Oral (4)	<u>H. P. Bhasker</u> Varun Thakurb Manoj Kesariab and S. M. Shivaprasad S. Dhara	ABS - Email1 - ICA Transport and optical properties of c-axis oriented wedge shaped GaN nanowall network grown by Molecular Beam Epitaxy

Thursday, 19-12-2013**Session II : 10.15 – 11.15**

10.15 - 10.45 Invited Talk (3)	<u>Arnab Bhattacharya</u>	ABS - Email2 - ICA Non-polar and Semi-polar Group-III Nitride Semiconductors: MOVPE growth, characterization, and devices
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10.45 - 11.15 Invited Talk (4)	<u>S. F. Chichibu</u> H. Miyake, K. Hazu Y. Ishikawa M. Tashiro, T. Ohtomo K. Furusawa K. Hiramatsu and A. Uedono	ABS - 723 - ICA Effects of Si-doping on the near-band-edge emission dynamics of Al _{0.6} Ga _{0.4} N epilayers grown on AlN templates by metalorganic vapor phase epitaxy
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Session III : 11.45 – 13.15

11.45 - 12.15 Invited Talk (5)	<u>Yong-Hoon Cho</u>	ABS - Email3 - ICA Group III-Nitride Semiconductor Nanostructures for Novel Light Emitting Devices
12.15 - 12.30 Oral (5)	<u>S. Vijayalakshmi</u> A. Azizur Rahman Nirupam Hatui Arnab Bhattacharya A. K. Bhatnagar and D. Das	ABS - Email2 - ICA Surface preparation of non-polar and semi-polar GaN epilayers by chemical mechanical planarization (CMP) process
12.30 - 12.45 Oral (6)	<u>Mahesh Kumar</u> Basanta Roul Mohana K Rajpalke Thirumaleshwara N Bhat and S B Krupanidhi	ABS - 64 - ICA Electrical transport studies of InN quantum dots grown by droplet epitaxy
12.45 - 13.15 Invited Talk (6)	<u>Subhabrata Dhar,</u>	ABS - Email4 - ICA The quest for ferromagnetic GaN

Session IV : 16.00 – 18.00

16.00 - 16.30 Invited Talk (7)	<u>Sudhiranjan Tripathy</u>	ABS - Email5 - ICA 200 mm Diameter GaN-on-Silicon Epiwafers for Power Electronics
16.30 - 17.00 Invited Talk (8)	<u>R. Muralidharan</u>	ABS - Email6 - ICA AlGaIn/GaN hetero-structures. Material growth, characterization and High electron mobility transistor fabrication
17.00 - 17.15 Oral (7)	<u>Bivas Saha</u> Sammy Saber Gururaj Naik Alexandra Boltasseva Eric Stach Eric Kvam Timothy D. Sands	ABS - 407 - ICA Pseudomorphic Stabilization of Cubic Al _x Sc _{1-x} N with High Al Concentration and Large Critical Thickness on (001) MgO Substrates with TiN as a Seed Layer
17.15 - 17.30 Oral (8)	<u>T. N. Bhat</u> S. B. Dolmanan and S. Tripathy	ABS - 1566 - ICA Correlation of structural and optical of properties of Al _x Ga _{1-x} N/GaN heterostructures grown on 150 and 200 mm diameter silicon substrates
17.30 - 17.45 Oral (9)	<u>M. Nagaboopathy</u> N. Ravishankar and Srinivasan Raghavan	ABS - Email3 - ICA Integration of 1 μm Crack Free and Low Dislocation Density GaN on Si with sub-200 nm Thin Buffer

Friday, 20-12-2013

Session V : 14.00 – 16.00

14.00 - 14.15 Oral (10)	<u>Hareesh Chandrasekar</u> Nagaboopathy Mohan Abheek Bardhan K N Bhat Navakanta Bhat N. Ravishanker and Srinivasan Raghavan	ABS - Email4 - ICA An Early In-Situ Stress Signature of the AlN-Si Pre growth Interface for Successful Integration of Nitrides with (111) Si
14.15 - 14.30 Oral (11)	<u>Rupesh K. Chaubey</u> Akhilesh Pandey S. Vinayak B.K.Sehgal and P.C. Srivastava	ABS - 390 - ICA Reliability of GaN HEMT materials and devices with Li ions irradiation
14.30 - 14.45 Oral (12)	<u>Basanta Rouf</u> Thirumaleshwara N. Bhat, Mahesh Kumar Mohana K., Rajpalke and S. B. Krupanidhi	ABS - Email5 - ICA Temperature dependent current-voltage characteristics of Au/GaN Schottky diodes
14.45 - 15.15 Invited Talk (9)	<u>Siddharth Rajana</u> Sriram Krishnamoorthya and Fatih Akyola	ABS - Email7 - ICA Tunnel Junctions for efficient III Nitride Optoelectronics
15.15 - 15.45 Invited Talk (10)	<u>Dipankar Saha,</u>	ABS - Email8 - ICA Double Channel High Electron Mobility Transistors

Poster Session :

Thursday, 19-12-2013, 14.100 – 15.30

including Poster Teaser Session : 14.00 - 14.30 (2 minutes each, 2 slides max. per poster)

09 - Poster - 01	Neha Bhardwaj and Sitharaman Uma	Synthesis and characterization of novel molybdenum containing oxynitrides	ABS - 649 - ICA
09 - Poster - 02	Satish Shetty and S.M. Shivaprasad	Role of AlN intermediate layer in the morphological evolution of GaN nanorods grown on c-plane sapphire	ABS - Email 3 - ICA
09 - Poster - 03	Varun Thakur S. M. Shivaprasad	Properties of GaN nanowall network	ABS - Email 4 - ICA
09 - Poster - 04	Guruprasad Sahoo S. R. Meher and Mahaveer K. Jain	RF Power Dependent Structural and Optical Properties of Copper Nitride Thin Films Prepared by Modified Activated Reactive Evaporation	ABS - 947 - ICA
09 - Poster - 05	V. Purushothaman and K. Jeganathan	Fabrication, gas sensing and photo-catalytic dye degradation properties of self-assembled GaN Nanowires by chemical vapor deposition	ABS - 1276 - ICA

09 - Poster - 06	Basanta Roul Shruti Mukundan Greeshma Chandan Lokesh Mohan and S. B. Krupanidhi	Suppression of phase separation in InGaN films grown by plasma-assisted molecular beam epitaxy	ABS - Email - ICA
09 - Poster - 07	Shivesh Yadav, S. Dhar	r-plane oriented GaN Nanowires grown by vapour-liquid-solid (VLS) technique	ABS - Email - ICA
09 - Poster - 08	A. P. Shah M. R. Laskar A. A. Rahman M. R. Gokhale and Arnab Bhattacharya	ICP-RIE etching of polar and non-polar AlN: Effect of BCl ₃ pre-treatment and comparison of Cl ₂ /Ar and Cl ₂ /BCl ₃ /Ar plasma chemistry	ABS - Email - ICA
09 - Poster - 09	A. K. Shukla P. Pal, S. S. Kushvaha Govind and M. Senthil Kumar	Electronic Structure of LaserMolecular Beam Epitaxy grown GaN Films studied by X-ray Photoelectron Spectroscopy	ABS - 1626 - ICA
09 - Poster - 10	Abheek Bardhan Srinivasan Raghavan	Optimization of Buffer layer for GaN growth resulting in better quality HEMT.	ABS - Email - ICA
09 - Poster - 11	G R Krishna Yaddanapudi Sabyasachi Saha Srinivasan Raghavan Dipankar Banerjee	Effect of Nitridation Temperature of Sapphire on Microstructural Evolution of LT GaN Nucleation Layers	ABS - Email - ICA
09 - Poster - 12	Arjun Shetty K J Vinoy and S B Krupanidhi	S-parameter analysis of GaN Schottky diode varactor with field plate	ABS - 1116 - ICA
09 - Poster - 13	Pallabi Pramanik Sayantani Sen Chirantan Singha Abhra Shankar Roy S. Dhar, S. Sen and A. Bhattacharyya	Growth of bulk AlGa _x N films and AlN/GaN Quantum Wells by Plasma Assisted Molecular Beam Epitaxy	ABS - Email - ICA
09 - Poster - 14	Raju Ramesh, Ponnusamy Arivazhagan, Mathaiyan Jayasakthi, Ravi Loganathan and Krishnan Baskar	Growth and characterization of AlGa _x N/GaN based HEMT structures on silicon substrate	ABS - Email - ICA
09 - Poster - 15	Ponnusamy Arivazhagan, Raju Ramesh, Mathaiyan Jayasakthi, Ravi Loganathan Kandasamy Prabhakaran, Manavaimaran Balaji and Krishnan Baskar	Structural and electrical characteristics of GaN and Al _x Ga _{1-x} N layers on sapphire substrate	ABS - Email - ICA
09 - Poster - 16	P. Mohanta S. Mohan R. S. Srinivasa and S. S. Major	Study of In _x Ga _{1-x} N Alloy Films Deposited by Reactive Cosputtering of GaAs and Indium	ABS - Email 5 - ICA