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Session Contents

Monday 4 June 2012

Tuesday 5 June 2012

15:15 - 17:45 **Poster Session**
Chairs: Sameer Pendharkar (Texas Instruments, USA)
Reinhold Bayerer (Infineon Technologies, Germany)

LOW VOLTAGE

HIGH VOLTAGE

INTEGRATED POWER

PACKAGING

Wednesday 6 June 2012

09:00 - 10:40 **Low Voltage 2 - Reliability Physics**
Chairs: Gary Dolny (Fairchild Semiconductor, USA)
Johnny Sin (Hong Kong University of Science and Technology, Hong Kong)

09:00 - 09:25 **LV2-1 • Linear Drain Current Degradations of FG-pLEDMOS Transistor under different AC Stress Conditions**
Siyang Liu[1], Weifeng Sun[2], Qinsong Qian[2], Longxing Shi[2], Wei Su[3], Zhengxin Xu[3], Shulang Ma[3]
[1]*Yifu Technology Building, China*
[2]*Southeast University, China*
[3]*CSMC Technologies Corporation, China* 303

09:25 - 09:50 **LV2-2 • A Multi-region Trap Characterization Method and Its Reliability Application on STI-based High-Voltage LDMOSFETs**
Yandong He, Ganggang Zhang, Xing Zhang
Institute of Microelectronics, Peking University, China 307

09:50 - 10:15 **LV2-3 • Experimental Analysis of DC and Noise Parameter Degradation in n-Channel Reduced Surface Field (RESURF) LDMOS Transistors**
Zeynep Celik-Butler[1], Iqbal Mahmud[1], Pinghai Hao[2], Xu Cheng[3], Purushothaman Srinivasan[2], Frank Hou[2], Benjamin Amey[2], Weixiao Huang[3], Sameer Pendharkar[2]
[1]*University of Texas Arlington, United States of America*
[2]*Texas Instruments, United States of America*
[3]*Freescale Semiconductor Inc, United States of America* 311

10:15 - 10:40 **LV2-4 • Influence of Drift region on the 1/f noise in LDMOS**
Amit Dikshit[1], Vaidyanathan Subramanian[1], Shrinivas Pandharpure[1], Saurabh Sirohi[1], Theodore Letavic[2]
[1]*IBM India Pvt Ltd, India*
[2]*IBM, United States of America* 315

11:10 - 12:10 **Packaging 2 - Invited Papers**
Chairs: John Shen (University of Central Florida,USA)
Phil Mawby (University of Warwick, UK)

11:10 - 11:40 **Invited presentation • Power SoC (integration of inductors and caps with active semiconductor)**
Cian Ó Mathúna, Ningning Wang, Santosh Kulkarni, Saibal Roy
Tyndall National Institute, Ireland 319

11:40 - 12:10 **Invited presentation • Status and Trend of Automotive Power Packaging**
Zhenxian Liang
Oak Ridge National Laboratory, United States of America 325

13:30 - 15:10 **Wide Bandgap Devices 2 - GaN Devices 2**
Chairs: Nariaki Ikeda (Furukawa Electric, Japan)
Paul Chow (Rensselaer Polytechnic Institute, USA)

13:30 - 13:55 **WBG2-1 • Mechanisms responsible for dynamic ON-resistance in GaN high-voltage HEMTs**
Donghyun Jin, Jesus del Alamo
Massachusetts Institute of Technology, United States of America 333

Thursday 7 June 2012