

# **2019 19th International Workshop on Junction Technology (IWJT 2019)**

**Kyoto, Japan  
6 – 7 June 2019**



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16:05 S3-4 **Aspects of Highly-channeled MeV Implants of Dopants in Si(100)**  
[Invited] Michael Current / Current Scientific(000000)59

16:35 **Break**

#### **Session 4 Junction Technology for Novel Devices (2)**

16:50 S4-1 **Capacitorless memory devices using virtual junctions**  
[Invited] Francisco Gamiz / University of Granada(000000)65

17:20 S4-2 **NEREID: NanoElectronics Roadmap for Europe: Identification and Dissemination**  
[Invited] Enrico Sangiorgi / University of Bologna(000000)68

17:50 S4-3 **Advanced Printed Electronics -- Materials and Junction Technologies**  
[Invited] Tatsuo Hasegawa / The University of Tokyo(000000)73

18:40 **Banquet**

### **June 7 (Friday)**

#### **Session 5 Doping Technology**

9:30 S5-1 **Doping of GaN grown on silicon via ion implantation**  
[Invited] Frédéric Mazen / LETI(000000)76

10:00 S5-2 **Photoluminescence Studies of Sequentially Mg and H Ion-implanted GaN with Various Implantation Depths and Crystallographic Planes**  
Shigefusa F. Chichibu / Tohoku University(000000)7;

10:20 S5-3 **Acceptors activation of Mg-ion implanted GaN by ultra-high-pressure Annealing**  
[Invited] Hideki Sakurai / Nagoya University(000000)85

10:50 **Break**

#### **Session 6 Silicide and Contact Technology (1)**

11:05 S6-1 **Physics of Gap-state Control at Metal/Semiconductor Junctions; Schottky Barrier and Interface Defects**  
[Invited] Takashi Nakayama / Chiba University(000000)87

11:35 S6-2 **Low Specific Contact Resistivity Measurements using a New Test Structure and its Reduction to  $10^{-9}$  ohm-cm<sup>2</sup> in p-type SiGe/Metal Contacts using Flash Lamp Annealing**  
Hideaki Tanimura / SCREEN Semiconductor Solutions Co., Ltd.(000000)92

11:55 S6-3 **Pre-Amorphization Implants and in-situ Surface Preparation Optimization for Low Co-Silicided Area Density**  
Julien Borrel / STMicroelectronics(000000)96

12:15 **Lunch**

#### **Session 7 Silicide and Contact Technology (2)**

13:35 S7-1 **Ohmic Contacts with low contact resistance for GaN HEMTs**  
[Invited] Edward Yi Chang / National Chiao Tung University(000000)9:

14:05 S7-2 **Metal/P-type GeSn Contacts with Ultra-low Specific Contact Resistivity**  
[Invited] Gong Xiao / National University of Singapore(000000) 2

14:35 S7-3 **Effects of alloying elements (Pt or Co) on nickel-based contact technology for GeSn layers**  
Philippe Rodriguez / University. Grenoble Alpes(0000000) 6

14:55 S7-4 **Further reduction of Schottky barrier height of Hf-germanide/n-Ge(001) contacts by forming epitaxial HfGe<sub>2</sub>**  
Kazuki Senga / Nagoya University(0000000) :

15:15 **Break**

**Session 8 Junction Technology for Novel Devices (3)**

15:35 S8-1 **Fabrication of epitaxial tunnel junction on tunnel field effect transistors**  
[Invited] Yukinori Morita / AIST(0000000) 2

16:05 S8-2 **The Role of Impurities on the Reliability of Cu Interconnects-a Challenge for Advanced Packaging Solutions**  
[Invited] Thomas Beck / Atotech Deutschland GmbH(0000000) 6

16:35 S8-3 **Z<sup>2</sup>-FET: Application in Image Sensing and Self-aligned Structure for Further Scaling Down**  
[Invited] Jing Wan / Fudan University(0000000) 8

17:05 **Preparation for Closing and Award Ceremony**

17:15 **Closing Remarks (Best paper award, Invitation for next workshop)**