

Keynote Speaker

Werner Prost (Univ. Duisburg-Essen)

“Future of III/V Nanowires: Physics or Engineering?” (tentative)

Invited Speakers

1. GaN Devices & Circuits

David Meyer (Naval Research Laboratory)

“Applications of Epitaxial Transition Metal Nitride Electronic Materials”

Masaaki Kuzuhara (Fukui Univ.)

“AlGaIn/GaN HEMTs for High-Voltage and Low-Loss Applications”

Martin Kuball (Univ. Bristol)

“GaN RF FET Ultimate Thermal Management - GaN-on-Diamond Technology”

Tohru Oka (Toyoda Gosei)

“Recent Progress of Vertical GaN Power Devices on GaN Substrates”

Romualdo Ferreyra (Kyoto Inst. of Tech.)

“ n^{++} -GaN Selective Regrowth by Picosecond Pulsed Deposition with HSQ Mask”

Kazuhiko Honjo (Univ. of Electro-Communications)

“Concurrent Dual-Band Amplifier Design Techniques for 5G Wireless Systems”

Umesh Mishra (UCSB)

“N-Polar GaN HEMT” (tentative)

Farid Medjdoub (IEMN)

“GaN-on-Silicon Transistors with Extremely Low Off-State Leakage Current up to 3 kilovots”

Ujwal Radhakrishna (MIT)

“MIT Virtual Source GaN FET (MVSG) Model: Physics-Based Industry-Standard Modelling to Facilitate RF- and HV-Circuit Design”

2. Widegap Devices

Gregg Jessen (Air Force Research Laboratory)

“RF Performance of Sub-Micron Ga₂O₃ FETs”

Srabanti Chowdhury (UC Davis)

“Newly Evolving Wide Bandgap Devices for Power Electronics”

Tomohide Terashima (Mitsubishi Electric)

“Recent Progress and Challenges in SiC MOSFET for Power Applications”

3. High speed and high frequency devices, and their circuits

Yuta Shiratori (NTT)

“InP-Based Double-Heterojunction Bipolar Transistors with Au Subcollector on SiC Substrate Fabricated by Wafer Bonding “

H. Hahn (IBM Zurich)

“III-V and III-N on CMOS for more-Moore and more-than-Moore”

Jae-Hyung Jang (Gwangju Institute of Science and Technology)

“Ultrafast MSM-HEMT Varactors and their Applications on THz Switching”

Tadao Nagatsuma(Osaka Univ.)

“Advances in THz Communications Enabled by Photonics and Electronics”

4. Emerging devices and applications

Dimitris Pavlidis (Boston Univ.)

“Two-Dimensional (2D) Layered Approaches for Materials and Devices”

Yasumitsu Miyata (Tokyo Metropolitan Univ.)

“Semiconductor Heterojunctions Based on 2D Materials”

Lian Mao Peng (Peking Univ.)

“Carbon Nanotube Based CMOS and Optoelectronic Devices and Circuits”

Debdeep Jena (Cornell Univ.)

“New Device Possibilities with van der Waals Heterostructures”

Sayeef Salahuddin (UC Berkeley)

“Negative capacitance FET” (tentative)