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45D. Advanced CMOS Technology	
Session Date:	March 9(Thu.), 2023
Session Time:	16:30-17:55
Session Room:	Room D (#308 bc)
Session Chair:	Prof. Sanghyeon Kim (Korea Advanced Institute of Science and Technology)

[45D-1] [Invited]

16:30-16:55

Substrate and Device Engineering for Extending Moore's Law

Bich-Yen Nguyen, Guillaume Besnard, Walter Schwarzenbach, Hankel Chang, Ionut Radu and Christophe Maleville

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[45D-2]

16:55-17:10

A New Insight into the Saturation Phenomenon in Nanosheet Transistor: A Device Optimization Perspective

Shashank Banchhor¹, Navjeet Bagga², Nitanshu Chauhan^{1,3}, Manikandan S¹, Avirup Dasgupta¹, S. Dasgupta¹ and Anand Bulusu¹

¹Indian Institute of Technology Roorkee, ²Indian Institute of Technology Bhubaneswar, ³National Institute of Technology, Uttarakhand

[45D-3]

17:10-17:25

Heat Dissipation Improvement by MgO Interlayer Dielectric in CMOS Technology

Ye-Eun Hong¹, Gyoungsoon Oh², Anh-Duy Nguyen¹, Si-Un Song¹, Jongyeon Baek¹, Dongseok Suh² and Rino Choi¹

¹Inha University, ²Sungkyunkwan University

[45D-4]

17:25-17:40

Performance Evaluation of Strain Effectiveness of Sub-5 nm GAA FETs with Compact Modeling Based on Neural Networks

Ji Hwan Lee¹, Kihwan Kim¹, Kyungjin Rim², Soogine Chong², Hyunbo Cho² and Saeroonter Oh¹

¹Hanyang University, ²Alsemy Inc.

[45D-5]

17:40-17:55

Negative-Thermal-Expansion Gate Electrode to Introduce Tensile Strain into the Channel of MOSFETs for Mobility Enhancement

Hisashi Kino, Takafumi Fukushima and Tetsu Tanaka

Tohoku University