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26F. Oxide-Channel Ferroelectric Memories

Session Date:	March 8(Wed.), 2023
Session Time:	17:00-18:15
Session Room:	Room F (#317)
Session Chair	Prof. Jiyong Woo (Kyungpook National University)

[26F-1]

17:00-17:15

3D NAND Memory Operation of Oxide-Semiconductor Channel FeFETs and the Potential Impact of In-Plane Polarization

Junxiang Hao, Xiaoran Mei, Takuya Saraya, Toshiro Hiramoto and Masaharu Kobayashi

The University of Tokyo

[26F-2]

17:15-17:30

Guideline of Device Optimization for Ferroelectric InGaZnO Transistor

Yu-Hao Chen, I-Ting Wang, Yue-Min Zheng and Tuo-Hung Hou

National Yang Ming Chiao Tung University

[26F-3]

17:30-17:45

Back-End-of-Line-Compatible Anneal-Free Ferroelectric Field-Effect Transistor

Shih-Hao Tsai¹, Zhonghua Li¹, Ma Mo Mo Ei Phyu¹, Zihang Fang¹, Sonu Hooda¹, Chun-Kuei Chen¹, Evgeny Zamburg^{1,2} and Aaron Voon-Yew Thean^{1,2}

¹*National University of Singapore*, ²*Singapore Hybrid-Integrated Next-Generation μ -Electronics Centre*

[26F-4]

17:45-18:00

High-Endurance ($>10^{11}$ cycles) and Thermally-Stable Sub-100nm TiO₂ Channel FeFET for Low-Power Memory Centric 3D-LSI Applications

Taro Shiokawa, Reika Ichihara, Takamasa Hamai, Kiwamu Sakuma, Kota Takahashi, Kazuhiro Matsuo and Masumi Saitoh

Kioxia Corporation

[26F-5]

18:00-18:15

Charge-Storage-Based vs. Non-Charge-Storage-Based 1T Non-Volatile Memory through the Interaction between Oxide Semiconductor Channel and Gate Oxide Layer

Jimin Han, Boyoung Jeong, Taeyun Noh and Tae-Sik Yoon

Ulsan National Institute of Science and Technology