[TS01W2]

Nanoelectronics 2

Date & Time	July 8(Wed.), 2026 / 15:50-18:05
Place	Room 207
Session Chair(s)	Dr. Jun Woo Choi (KIST)

TS01W2_I_1 ***Invited** 15:50-16:20

On-Device AI: Gaussian-Sigmoid Transistors, Light-Driven Spikes, and Intelligent Risk Sensors

Hocheon Yoo

(Hanyang University)

TS01W2_I_2 ***Invited** 16:20-16:50

Ion-Based Switching Mechanisms in 2D-Material-Based Memristors

Max C. Lemme[1,2]

([1]RWTH Aachen University, [2]AMO GmbH)

TS01W2_O_3 ***YSA Applied** 16:50-17:05

Gaussian Transfer Characteristics in Split-Gate Transistor based on Molybdenum Disulfide

Dong Hyun Lee, Youngmin Han, and Hocheon Yoo

(Hanyang University)

TS01W2_O_4 ***YSA Applied** 17:05-17:20

Interlayer Sliding Driven by Electrical Pulses in α-GeSe Ferroelectric Memristor for Neuromorphic Computing

Dong-Hwi Jang and Hyun-Yong Yu

(Korea University)

TS01W2_O_5 ***YSA Applied** 17:20-17:35

Unveiling the Ultrafast, Multilevel Switching and Synaptic Characteristics in a Planar Quantum Topological Memristor based on Bi_2Te_3 Topological Insulator

Mamoon Ur Rashid[1,2], Hongseok Oh[2], and Yong Soo Kim[1]

([1]University of Ulsan, [2]Soongsil University)

TS01W2_O_6 17:35-17:50

Analysis of Electrical Behavior of Neuromorphic Transistors over a Temperature Range from 300 K to 80 K

Juyeong Chae[1], Hyeonseok Jeong[1], Kangmin Yoo[1], Dongyeop Kim[1], Jineui Park[1], Hyeongjoo Sim[1], and Moongyu Jang[1,2]

([1]Hallym University, [2]Quantum Technology Institute of Gangwon)

TS01W2_O_7 17:50-18:05

Stochastic Switching Dynamics in 2D FeFETs for Neuromorphic Computing

Jae Hyun Kim, Yohan Lee, Jihoon Huh, Jeongyeol Park, Seung Ji Lo, Narae Lee, Jaehyeung Park, and Moonsang Lee

(Inha University)