



## 7<sup>th</sup> IEEE Electron Devices Technology and Manufacturing (EDTM) Conference 2023

March 7 – 10, 2023 / COEX Seoul, Korea

### 30C. Novel Computing Device Technologies 2 (Neuromorphic, Quantum, MVL Computing)

<b>Session Date:</b>	March 9(Thu.), 2023
<b>Session Time:</b>	13:00-14:35
<b>Session Room:</b>	Room C (#307 a)
<b>Session Chair:</b>	Prof. Bongjun Kim (Sookmyung Women's University) Prof. Keun Heo (Jeonbuk National University)

#### [30C-1] [Invited]

13:00-13:25

##### **Bio-Inspired Optoelectronics Based on Flexible and Synaptic Devices**

Changsoon Choi

*Korea Institute of Science and Technology*

#### [30C-2] [Invited]

13:25-13:50

##### **Control Strategies for Negative Differential Transconductance in Heterojunction Transistors**

Hocheon Yoo

*Gachon University*

#### [30C-3]

13:50-14:05

##### **Optimization of Performance Metrics of Charge Trapping Synaptic Device for Neuromorphic Applications**

Md. Hasan Raza Ansari and Nazek El-Atab

*King Abdullah University of Science and Technology*

#### [30C-4]

14:05-14:20

##### **NN Algorithm Aware Alternate Layer Retraining on Computation-In-Memory for Write Variation Compensation of Non-Volatile Memories at Edge AI**

Shinsei Yoshikiyo, Naoko Misawa, Chihiro Matsui and Ken Takeuchi

*The University of Tokyo*

#### [30C-5]

14:20-14:35

##### **Neural Network Quantization is All You Need for Energy Efficient ISP**

Hyunwoo Je, Dongil Ryu, Haechang Lee and Kijeong Kim

*SK hynix Inc.*