7th IEEE Electron Devices Technology and Manufacturing (EDTM) Conference 2023

March 7 – 10, 2023 / COEX Seoul, Korea

24C. Novel Computing Device Technologies 1 (Neuromorphic, Quantum, MVL Computing)	
Session Date:	March 8(Wed.), 2023
Session Time:	17:00-18:35
Session Room:	Room C (#307 a)
Session Chair:	Prof. Myungsoo Kim (Ulsan National Institute of Science & Technology)
	Prof. Byung Chul Jang (Kyungpook National University)

[24C-1] [Invited]   17:00-17:25

Partial Reset for Analog Phase Change Memory and Improved Resistance Drift

Eilam Yalon

Technion - Israel Institute of Technology

[24C-2] [Invited]   17:25-17:50

Pseudo-Magnetic Fields in Strained Graphene for Building Optical Quantum Computing Systems

Dong-Ho Kang[1], Hao Sun[2], Manlin Luo[2] and Donguk Nam[2]

[1]Gwangju Institute of Science and Technology, [2]Nanyang Technological University

[24C-3]   18:20-18:35... 17:50-18:05

Stochastic Resonance Effects of Floating Gate Technology-Based Leaky Integrate-and-Fire (FG LIF) Neurons in Summing Network

Akira Goda, Chihiro Matsui and Ken Takeuchi

The University of Tokyo

[24C-4]   18:05-18:20

Ferroelectric FET Based Signed Synapses of Excitatory and Inhibitory Connection for Stochastic Spiking Neural Network Based Optimizer

Jin Luo[1], Tianyi Liu[1], Zhiyuan Fu[1], Xinming Wei[1], Qianqian Huang[1,2,3] and Ru Huang[1,2,3]

[1]Peking University, [2]Beijing Advanced Innovation Center for Integrated Circuits, [3]Chinese Institute for Brain Research

[24C-5]   18:20-18:35

IGZO Photonic-Synaptic Transistors with Outstanding Linearity by Controlling Oxygen Vacancy for Neuromorphic Computing

Taewon Seo, Juyoung Yun and Yoonyoung Chung

Pohang University of Science and Technology