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

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13F. Memory for Computing (I)	
Session Date:	March 8(Wed.), 2023
Session Time:	13:30-15:05
Session Room:	Room F (#317)
Session Chair:	Prof. Tuo-Hung (Alex) Hou (National Yang Ming Chiao Tung University)
	Dr. Seung Jae Baik (Samsung Electronics Co., Ltd.)

[13F-1] [Keynote]　　　　　　　　　　　　　　　　　　　　　　**13:30-13:55**

The Realizing Metaheuristic Functions for Neural Computing by Using Spontaneity of Memristor Devices

Hongsik Jeong

Ulsan National Institute of Science and Technology

[13F-2] [Invited]　　　　　　　　　　　　　　　　　　　　　　**13:55-14:20**

Oxide Memristor Research for Bio-Inspired Computing Applications

Jung Ho Yoon

Korea Institute of Science and Technology

[13F-3]　　　　　　　　　　　　　　　　　　　　　　　　　　**14:20-14:35**

Vector-Matrix-Multiplication Acceleration with Multi-Input $Pr_{0.7}Ca_{0.3}MnO_3$ Based RRAM for Highly Parallel In-Memory Computing

Jayatika Sakhuja, Vivek Saraswat, Sandip Lashkare and Udayan Ganguly

Indian Institute of Technology Bombay

[13F-4]　　　　　　　　　　　　　　　　　　　　　　　　　　**14:35-14:50**

TaOX ReRAM Cell-Level Unidirectional Neural Network Weight Control for Non-Linearity & Variation Robust Transfer Learning of Low Cost Digital eCiM

Ayumu Yamada[1], Naoko Misawa[1], Shunsaku Muraoka[2], Ken Kawai[2], Chihiro Matsui[1] and Ken Takeuchi[1]

[1]The University of Tokyo, [2]Nuvoton Technology Corporation Japan

[13F-5]　　　　　　　　　　　　　　　　　　　　　　　　　　**14:50-15:05**

Neuromodulation-Inspired Stashing System for Energy-Efficient Learning of Spiking Neural Network Using a Self-Rectifying Memristor Array

Woon Hyung Cheong, Jae Bum Jeon and Kyung Min Kim

Korea Advanced Institute of Science and Technology