March 7 – 10, 2023 / COEX Seoul, Korea

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.)

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 Sakhija, 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$^3$
$^1$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