



제 30회 한국반도체학술대회

The 30th Korean Conference on Semiconductors

2023년 2월 13일(월)~ 15일(수) | 강원도 하이원리조트(그랜드호텔 컨벤션타워)

2023년 2월 15일(수), 16:00-17:45

Room K (다이아몬드 I, 6층)

F. Silicon and Group-IV Devices and Integration Technology 분과 [WK3-F] Neuromorphic Devices and Reliability

좌장: 구민석 교수(인천대학교), 권지민 교수(UNIST)

WK3-F-1 16:00-16:15	Ultra-Low-Power Neuromorphic Computing based on Fully Si-Compatible Chip Technology and Application for Convolutional Neural Network Kannan Udaya Mohanan ¹ , Min-Kyu Park ² , Jong-Ho Lee ² , and Seongjae Cho ¹ ¹ Department of Electronic Engineering, Gachon University, ² Department of Electrical and Computer Engineering, Seoul National University
WK3-F-2 16:15-16:30	Analysis of the Current Mirroring Method for Accurate AND-Type Hardware-Based Neural Network Systems Yeonwoo Kim ^{1,2} , Donghyun Ryu ^{1,2} , and Woo Young Choi ^{1,2} ¹ Department of Electrical and Computer Engineering, Seoul National University, ² Inter-university Semiconductor Research Center, Seoul National University
WK3-F-3 16:30-16:45	Compensation-Circuit-Added Current Mirrors for SNN Accuracy Improvement Jonghyuk Park ^{1,2} , Kyungchul Park ^{1,2} , and Woo Young Choi ^{1,2} ¹ Department of Electrical and Computer Engineering, Seoul National University, ² Inter-university Semiconductor Research Center, Seoul National University
WK3-F-4 16:45-17:00	Influence of Weight Transfer Error on Vector-Matrix Multiplication Operation Junsu Yu ^{1,2} , Sungmin Hwang ^{1,2} , Taejin Jang ^{1,2} , and Woo Young Choi ^{1,2} ¹ Department of Electrical and Computer Engineering, Seoul National University, ² Inter-university Semiconductor Research Center, Seoul National University
WK3-F-5 17:00-17:15	The Effect of Fluorine Implantation on NBTI and Off Current in PMOS Chang-Hun Han, Jong-Min Kim, Hyeon-Jeong Kang, Tae-Wook Kang, and Man-Lyun Ha DB HiTek
WK3-F-6 17:15-17:30	Performance Enhancement Method of Line Tunnel Field-Effect (TFET) Using Hot Carrier Degradation Jae Seung Woo ^{1,2} and Woo Young Choi ^{1,2} ¹ Department of Electrical and Computer Engineering, Seoul National University, ² Inter-university Semiconductor Research Center, Seoul National University
WK3-F-7 17:30-17:45	Low-Temperature Deuterium Annealing to Recover Total Ionizing Dose-Induced Gate Dielectric Damage in MOSFETs Dong-Hyun Wang, Sung-Su Yoon, Dae-Han Jung, Ja-Yun Ku, Khwang-Sun Lee, Jae-Hun Kim, Tae-Hyun Kil, and Jun-Young Park Chungbuk National University