



F. Silicon and Group-IV Devices and Integration Technology **분과**

2019년 2월 15일(금), 09:00-10:45

Room C (가람홀, 2층)

[FC1-F] Neuromorphic Devices and Application

좌장: 김경록 교수(UNIST), 김상완 교수(아주대학교)

<p>FC1-F-1 09:00-09:15</p>	<p>Initial Synaptic Weight Distribution for Fast Learning Speed and High Recognition Rate in STDP-Based Spiking Neural Network</p> <p>Jangsaeng Kim^{1,2}, Chul-Heung Kim^{1,2}, Sung Yun Woo^{1,2}, Won-Mook Kang^{1,2}, Young-Tak Seo^{1,2}, Soochang Lee^{1,2}, Seongbin Oh^{1,2}, Jong-Ho Bae^{1,2}, Byung-Gook Park^{1,2}, and Jong-Ho Lee^{1,2}</p> <p>¹Department of Electrical and Computer Engineering, Seoul National University, ²Inter-University Semiconductor Research Center, Seoul National University</p>
<p>FC1-F-2 09:15-09:30</p>	<p>Excitatory and Inhibitory Synaptic Behavior of Analog Synapses Using TFT-Type NOR Flash Memory Cells</p> <p>Soochang Lee^{1,2}, Chul-Heung Kim^{1,2}, Seongbin Oh^{1,2}, Byung-Gook Park^{1,2}, and Jong-Ho Lee^{1,2}</p> <p>¹Department of Electrical and Computer Engineering, Seoul National University, ²Inter-University Semiconductor Research Center, Seoul National University</p>
<p>FC1-F-3 09:30-09:45</p>	<p>Implementation of Synaptic Device Using Various High-k Gate Dielectric Stack</p> <p>Young-Tak Seo^{1,2}, Min-Kyu Park^{1,2}, Jong-Ho Bae^{1,2}, Byung-Gook Park^{1,2}, and Jong-Ho Lee^{1,2}</p> <p>¹Department of Electrical and Computer Engineering, Seoul National University, ²Inter-University Semiconductor Research Center, Seoul National University</p>
<p>FC1-F-4 09:45-10:00</p>	<p>A Spiking Neural Network with a Global Self-Controller for Unsupervised Learning based on Spike-Timing-Dependent Plasticity Using Flash Memory Synaptic Devices</p> <p>Won-Mook Kang^{1,2}, Chul-Heung Kim^{1,2}, Soochang Lee^{1,2}, Sung Yun Woo^{1,2}, Jong-Ho Bae^{1,2}, Byung-Gook Park^{1,2}, and Jong-Ho Lee^{1,2}</p> <p>¹Department of Electrical and Computer Engineering, Seoul National University, ²Inter-University Semiconductor Research Center, Seoul National University</p>
<p>FC1-F-5 10:00-10:15</p>	<p>Investigation on Gated Schottky Diode Synaptic Device With Field-Plate Structure</p> <p>Jong-Ho Bae^{1,2}, Suhwan Lim^{1,2}, Sung-Tae Lee^{1,2}, Dongseok Kwon^{1,2}, Hyoungsu Kim^{1,2}, and Jong-Ho Lee^{1,2}</p> <p>¹Department of Electrical and Computer Engineering, Seoul National University, ²Inter-University Semiconductor Research Center, Seoul National University</p>
<p>FC1-F-6 10:15-10:30</p>	<p>Implementation of Homeostasis Functionality in Neuron Circuit Using Split-Gate Device for Spiking Neural Network</p> <p>Sung Yun Woo^{1,2}, Kyu-Bong Choi^{1,2}, Jangsaeng Kim^{1,2}, Won-Mook Kang^{1,2}, Chul-Heung Kim^{1,2}, Young-Tak Seo^{1,2}, Jong-Ho Bae^{1,2}, Byung-Gook Park^{1,2}, and Jong-Ho Lee^{1,2}</p> <p>¹Department of Electrical and Computer Engineering, Seoul National University, ²Inter-University Semiconductor Research Center, Seoul National University</p>
<p>FC1-F-7 10:30-10:45</p>	<p>3D Integrated CBRAM and SOI-MOSFET for Neuromorphic Device System</p> <p>Yu-Rim Jeon, Donghwan Lim, Andrey S. Sokolov, and Changhwan Choi</p> <p>Division of Materials Science and Engineering, Hanyang University</p>