

## 2024년 1월 24일(수)-26일(금) | 경주화백컨벤션센터(HICO)

2024년 1월 26일(금), 09:00-10:45 Room D(104),1층

F. Silicon and Group-IV Devices and Integration Technology 분과 [FD1-F] Advanced Integration Technology

## 좌장: 백명현 교수(강릉원주대학교), 우성윤 교수(경북대학교)

| FD1-F-1<br>09:00-09:15 | Heterogeneous 3D Vertical Inverter of MoS <sub>2</sub> nFET on Si pMOSFET<br>Using Sequential Fabrication Process<br>Boncheol Ku <sup>1</sup> , Shanmukh Kutagulla <sup>2</sup> , Deji Akinwande <sup>2</sup> , and Changhwan Choi <sup>1</sup><br><sup>1</sup> Division of Materials Science and Engineering, Hanyang University, <sup>2</sup> The<br>Department of Electrical and Computer Engineering, The University of Texas at<br>Austin |
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| FD1-F-2<br>09:15-09:30 | Impact of Low-temperature Deuterium Annealing for Poly-Si Channel<br>Thin-Film Transistors<br>Tae-Hyun Kil, Ju-Won Yeon, Hyo-Jun Park, and Jun-Young Park<br>Chungbuk National University  |
| FD1-F-3<br>09:30-09:45 | 그린 레이저를 이용한 모놀리식 3D 소자 제작 공정에서 상부 게이트 버퍼층<br>삽입을 통한 MOSFET 성능 개선<br>박영근, 정재중, 김희태, 김성호, 김동빈, 추준홍, 강창연, 조병진<br>한국과학기술원 전기 및 전자공학부   |
| FD1-F-4<br>09:45-10:00 | Simulation of Monolithic CFET Using In-house TCAD Process Emulator<br>Seung-Woo Jung, In Ki Kim, Kwang-Woon Lee, and Sung-Min Hong<br>School of Electrical Engineering and Computer Science, GIST  |
| FD1-F-5<br>10:00-10:15 | Numerical Simulation of Bottom Dielectric Isolated (BDI) Forksheet<br>Field Effect Transistor (FSFET) with In-House TCAD Process Emulator<br>and Device Simulator<br>In Ki Kim and Sung-Min Hong<br>School of Electrical Engineering and Computer Science, Gwangju Institute of<br>Science and Technology  |
| FD1-F-6<br>10:15-10:30 | Monolithic 3-dimensional Static Random Access Memory Array Cell<br>Consisting of Feedback Field-effect Transistor for Memory System<br>Jong Hyeok Oh and Yun Seop Yu<br>Major of ICT & Robotics Eng., Hankyong National University   |

## 제 31회 한국반도체학술대회 The 31st Korean Conference on Semiconductors

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| FD1-F-7<br>10:30-10:45<br>Germanium Substrate<br>Jai-Youn Jeong <sup>1,2</sup> , Changh<br><sup>1</sup> Center for Opto-electror | Thickness Scaling of Ferroelectric $HfZrO_2$ and Its Reliability on                                  |
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|  | Germanium Substrate  |
|  | Jai-Youn Jeong <sup>1,2</sup> , Changhwan Shin <sup>2</sup> , and Jae-Hoon Han <sup>1</sup>          |
|  | <sup>1</sup> Center for Opto-electronic Materials and Devices, KIST, <sup>2</sup> Device and Circuit |
|  | Laboratory, Korea University   |