



제 30회 한국반도체학술대회

The 30th Korean Conference on Semiconductors

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

2023년 2월 14일(화), 09:00-10:45

Room B (에메랄드 II+III, 5층)

D. Thin Film Process Technology 분과

[TB1-D] Ferroelectrics

좌장: 안지훈 교수(한양대학교), 이응규 교수(숭실대학교)

TB1-D-1 09:00-09:15	Improvement in Memory Performance of Dual-Switching Memory FET Introducing Gate Charge-Injection and Ferroelectric Layers Yun-Ju Cho and Sung-Min Yoon <i>Department of Advanced Materials Engineering for Information and Electronics, Kyung Hee University</i>
TB1-D-2 09:15-09:30	Dynamics of Domain Wall Motion and Polarization Switching Kinetics of Ferroelectric $\text{Hf}_{0.5}\text{Zr}_{0.5}\text{O}_2$ Thin Film on Different Electrode Materials Dong Hyun Lee ^{1,2} , Geun Hyeong Park ^{1,2} , Jaewook Lee ^{1,2} , Se Hyun Kim ^{1,2} , and Min Hyuk Park ^{1,2} ¹ Department of Materials Science and Engineering, Seoul National University, ² Inter-university Semiconductor Research Center, Seoul National University
TB1-D-3 09:30-09:45	Study of Ferroelectric $\text{TiN}/\text{Hf}_{0.5}\text{Zr}_{0.5}\text{O}_2/\text{TiN}$ Capacitor Fabricated without Breaking Vacuum Younghwan Lee ^{1,2} , H. Alex Hsain ² , Shelby S. Fields ³ , Samantha T. Jaszewski ³ , Jon F. Ihlefeld ³ , Gregory N. Parsons ⁴ , and Jacob L. Jones ² ¹ Department of Materials Science and Engineering, North Carolina State University, ² Research Institute of Advanced Materials, Seoul National University, ³ Department of Materials Science and Engineering, University of Virginia, ⁴ Department of Chemical and Biomolecular Engineering, North Carolina State University
TB1-D-4 09:45-10:00	Investigation of the Ferroelectric Characteristics of $\text{Hf}_{1-x}\text{Zr}_x\text{O}_2$ Films Grown on Mo Electrodes with Various Thicknesses and Compositions Ju Yong Park ¹ , Se Hyun Kim ¹ , Dong Hyun Lee ¹ , Kun Yang ¹ , Geun Hyeong Park ¹ , Younghwan Lee ² , and Min Hyuk Park ^{1,2} ¹ Department of Materials Science and Engineering, College of Engineering, Seoul National University, ² Research Institute of Advanced Materials, Seoul National University
TB1-D-5 10:00-10:15	Ferroelectric Crystallization of Atomic Layer Deposited Ultrathin HfZrO Thin Films through Rapid Cooling Process Yeon Je Yu ¹ , Geun Ha Oh ¹ , Ae Rim Choi ¹ , Ja-Yong Kim ² , Dohee Kim ² , and Il Kwon Oh ¹ ¹ Department of Electrical and Computer Engineering, Ajou University, ² Revolutionary Technology Center, R&D Division, SK Hynix
TB1-D-6 10:15-10:30	First Principles-derived Process Optimization to Control the Phase Fractions of Ferroelectric and Antiferroelectric $\text{Hf}_{1-x}\text{Zr}_x\text{O}_2$ Kun Hee Ye ^{1,2,3} , Taeyoung Jeoung ^{1,2,3} , Seungjae Yoon ^{1,2,3} , Cheol Seong Hwang ^{2,3} , and Jung-Hae Choi ¹ ¹ Electronic Materials Research Center, KIST, ² Department of Materials Science and Engineering, Seoul National University, ³ Inter-university Semiconductor Research Center, Seoul National University
TB1-D-7 10:30-10:45	IGZO Epitaxial Layer를 통한 $\text{Hf}_x\text{Zr}_{1-x}\text{O}_2$ 박막의 저온 결정화 유도 김성호 ¹ , 고운산 ² , 이가원 ² , 이희덕 ² , 조병진 ¹ ¹ 한국과학기술원 전기 및 전자공학부, ² 충남대학교 전자공학과