



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), 이용규 교수(숭실대학교)

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| <p>TB1-D-1 09:00-09:15</p> | <p>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></p> |
| <p>TB1-D-2 09:15-09:30</p> | <p>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} <i>¹Department of Materials Science and Engineering, Seoul National University, ²Inter-university Semiconductor Research Center, Seoul National University</i></p> |
| <p>TB1-D-3 09:30-09:45</p> | <p>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 Hsain², Shelby S. Fields³, Samantha T. Jaszewski³, Jon F. Ihlefeld³, Gregory N. Parsons⁴, and Jacob L. Jones² <i>¹Department of Materials Science and Engineering, North Carolina State University, ²Research Institute of Advanced Materials, Seoul National University, ³Department of Materials Science and Engineering, University of Virginia, ⁴Department of Chemical and Biomolecular Engineering, North Carolina State University</i></p> |
| <p>TB1-D-4 09:45-10:00</p> | <p>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 Park¹, Se Hyun Kim¹, Dong Hyun Lee¹, Kun Yang¹, Geun Hyeong Park¹, Younghwan Lee², and Min Hyuk Park^{1,2} <i>¹Department of Materials Science and Engineering, College of Engineering, Seoul National University, ²Research Institute of Advanced Materials, Seoul National University</i></p> |
| <p>TB1-D-5 10:00-10:15</p> | <p>Ferroelectric Crystallization of Atomic Layer Deposited Ultrathin HfZrO Thin Films through Rapid Cooling Process Yeon Je Yu¹, Geun Ha Oh¹, Ae Rim Choi¹, Ja-Yong Kim², Dohee Kim², and Il Kwon Oh¹ <i>¹Department of Electrical and Computer Engineering, Ajou University, ²Revolutionary Technology Center, R&D Division, SK Hynix</i></p> |
| <p>TB1-D-6 10:15-10:30</p> | <p>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 Choi¹ <i>¹Electronic Materials Research Center, KIST, ²Department of Materials Science and Engineering, Seoul National University, ³Inter-university Semiconductor Research Center, Seoul National University</i></p> |
| <p>TB1-D-7 10:30-10:45</p> | <p>IGZO Epitaxial Layer를 통한 $\text{Hf}_x\text{Zr}_{1-x}\text{O}_2$ 박막의 저온 결정화 유도 김성호¹, 고운산², 이가원², 이희덕², 조병진¹ <i>¹한국과학기술원 전기 및 전자공학부, ²충남대학교 전자공학과</i></p> |