Korean International Semiconductor Conference & Exhibition
on Manufacturing Technology 2025

KISM 2025 BUSAN

Re:Innovation of Semiconductor Manufacturing for AI Ecosystem

[TuA2] Nanoscale Thin Film Deposition II	
Session Date	November 11 (Tue.), 2025
Session Time	14:50-16:40
Session Room	Room A (Capri Room, 2F)
Session Chair	Prof. Rong Chen (HUST, China)

[TuA2-1] [Invited] **14:50-15:20**

Ferroelectric Materials for Low Power Electronic Devices and Computing

Min Hyuk Park (Seoul Nat'l Univ., Korea)

[TuA2-2] [Invited] **15:20-15:40**

Parametric Dependence of O(^{1}D) Flux and Density in O_2/Ar Inductively Coupled Plasmas: Effect of Gas Ratio and Pressure

Sanghyun Jo (Hanyang Univ., Korea), Kyoung-Ho Kim (Korea Polytechnics, Korea), and Ho Jun Kim (Hanyang Univ., Korea)

[TuA2-3] **15:40-16:00**

Gate Metal Engineering for Tailoring Ferroelectric Properties of $Hf_xZr_{1-x}O_2$ Thin Films

Yoonseok Lee, Kyung-Soo Park, Sang-Myun Lim, Ji-Hoon Choi, Yeon-Woo Choi, Jin-Yeong Lee, Hyeon-Cheol Jeong, Tae-Suk Kim, and Changhwan Choi (Hanyang Univ., Korea)

[TuA2-4] **16:00-16:20**

Role of Oxygen Incorporation in Ru Electrodes on Phase Stability and Reliability of $Hf_{0.5}Zr_{0.5}O_2$ Ferroelectrics

Hyojun Choi, Kun Yang (Seoul Nat'l Univ., Korea), Ji Sang Ahn, Eun Ji Ju (Seoul Nat'l Univ. of Science and Tech., Korea), Don In Han, Se Hyun Kim, Ju Yong Park, Heejin Hong, Kwan Hyun Park (Seoul Nat'l Univ., Korea), Jeong Hwan Han (Seoul Nat'l Univ. of Science and Tech., Korea), and Min Hyuk Park (Seoul Nat'l Univ., Korea)

[TuA2-5] [Invited] **16:20-16:40**

Reactor-Scale Modeling and AI-Surrogate Approaches for Thin Film and Bulk Crystal Growth: Oxide ALD, Diamond MPCVD and SiC PVT

Seong-Min Jeong (KICET, Korea)