



Session Title:	[PG2] Poster Session II
Session Date:	November 14 (Thu.), 2024
Session Time:	16:35-17:25
Session Room:	Board Room, 5F, Grand Josun Busan

[PG2-01]

Enhancing p-Type Conductivity in Ternary Zinc Tin Nitride: Interstitial Defect Control via Main Group III Elements by Plasma-Enhanced Chemical Vapor Deposition

Ji Woon Choi (KRICT, Korea), Nameun Kim (KRICT and UNIST, Korea), Wooseok Song (KRICT and Sungkyunkwan Univ., Korea), Ki-Seok An (KRICT, Korea), and Taek-Mo Chung (KRICT and Univ. of Science and Tech., Korea)

[PG2-02]

Crystallinity Change of ZrO₂ Thin Film according to Oxygen Radical Density in ICP Remote Plasma ALD

Juni Bak, Woosuk Kim, Heejun Yoon, Jinwoo Oh, and Hyeongtag Jeon (Hanyang Univ., Korea)

[PG2-03]

Synthesis and Structural Analysis of Novel Molybdenum-N-Alkoxy Carbothioamide Complexes

Sung Kwang Lee (KRICT and Sungkyunkwan Univ., Korea), Seung Uk Son (Sungkyunkwan Univ., Korea), and Taek-Mo Chung (KRICT and Univ. of Science and Tech., Korea)

[PG2-04]

Oxime-Containing Ti and Zr Precursors for Metal Oxide Films

Seungjin Song (KRICT, Korea) and Taek-Mo Chung (KRICT and Univ. of Science and Tech., Korea)

[PG2-05]

Deposition Characteristics of SiN Thin Film Deposited by Applying the Chucking Function in a Mono Polar ESC Heater

Baek-Ju Lee, Hyun-Chul Cho, Seon-Hwa Jeon, Min-Ho Cheon, Kwang-Kyu Park, So-Jeong Kim, Hyung Chul Moon, Hyun-ho Lee, and Wan-Sik Kim (Hanwha Corp., Korea)



[PG2-06]

Study on the Formation of High-Quality HfO₂ Oxide Film through PEALD and the Improvement of Interfacial Properties through In-situ Pre-Sputtering

Ji-Sung Lee and Ji-Youn Seo (Pusan Nat'l Univ., Korea)

[PG2-07]

Transient Analysis and Optimization of a Spatial Atomic Layer Deposition Model Utilizing Dynamic Mesh Methods

Yunseok Kim, Seulwon Choi, and Hwanyeol Park (Soonchunhyang Univ., Korea)

[PG2-08]

Low-Temperature Atomic Layer Deposition of High-Quality SiO₂ Films Using Catalyst and In-situ Ozone Treatment

Hyekyung Kim, Seo-Hyun Lee, and Woo-Hee Kim (Hanyang Univ., Korea)

[PG2-09]

Characterization of ICP-Sputtering Plasma Using Two-dimensional Fluid Simulation

Seung-Hyub Lee, Min-U Jang, and Ho-June Lee (Pusan Nat'l Univ., Korea)

[PG2-10]

Enhancing Flash Memory Performance through Metal-Induced In-Gap States in Ti-Doped Silicon Nitride

Hanyeol Ahn, Hyun Su Park, Minseon Gu, Young Hun Khim, Hyun Don Kim, Jaehui Im, Sangwoo Nam, Eunjip Choi, Young Jun Chang, and Moonsup Han (Univ. of Seoul, Korea)

[PG2-11]

Synthesis and Characterization of ALD Precursors for Ni(II), Cu(II), Ge(II), and Sn(II) Using N-Tert-Butylformamide Ligands

Ji Min Seo, Heesun Kim, Yongmin Go (KRICT and Sungkyunkwan Univ., Korea), Seung Uk Son (Sungkyunkwan Univ., Korea), Ji Yeon Ryu (KRICT, Korea), Taek-Mo Chung, and Bo Keun Park (KRICT and Univ. of Science and Tech., Korea)



[PG2-12]

Synthesis and Characterization of Novel ALD Precursors for Ge and Sn Using Aminoketone Ligands

Heesun Kim, Ji Min Seo, Yongmin Go (KRICT and Sungkyunkwan Univ., Korea), Seung Uk Son (Sungkyunkwan Univ., Korea), Ji Yeon Ryu (KRICT, Korea), Taek-Mo Chung, and Bo Keun Park (KRICT and Univ. of Science and Tech., Korea)

[PG2-13]

High Performance of Multi-Stack Heterostructure $\text{In}_2\text{O}_3/\text{Ga}_2\text{O}_3/\text{In}_2\text{O}_3$ Channel TFT

Seungjae Lee, Jiyoung Bang, Hyeonjeong Sun, Seungmin Choi, Youngsoo Noh, Hyowon Kim, Yeo Eun Yun, Kyubin Hwang, and Seung-Beck Lee (Hanyang Univ., Korea)

[PG2-14]

Evaluation of Step Coverage Using Lateral High Aspect Ratio Patterns for Development of Minibatch ALD's Feeding System

Seok Jun Han, Seung Han Kim, Hong Deok Lee, Seok Nam Koh, Kyong Min Kim, Jin Tae Noh, and Tae Wan Lee (Wonik IPS, Korea)

[PG2-15]

Computational Analysis of Flow Characteristics in Line Charge Volume for ALD Process

Seulwon Choi, Yunseok Kim, and Hwanyeol Park (Soonchunhyang Univ., Korea)

[PG2-16]

Computational Fluid Dynamics Analysis for Optimizing HfAlO_x Thin Film Deposition via Spatial ALD with Moving Wafer

Huichan Kang, Yunseok Kim, and Hwanyeol Park (Soonchunhyang Univ., Korea)

[PG2-17]

Thermal Decomposition Properties of TEMAHf in Vacuum Environment and Its Correlation with ALD Thin Film Properties

Jieun Lee (KRISS and Univ. of Science and Tech., Korea), Seonjeong Maeng (KRISS, Korea), Jaeuk Lim (KRISS and Hanyang Univ., Korea), and Ju-Young Yun (KRISS and Univ. of Science and Tech., Korea)



[PG2-18]

High-Performance In-Ga-Sn-O Thin-Film Transistors Deposited via Thermal Atomic Layer Deposition

Kang Choi, Dong-Geun Kim, Su-Jin Sim, and Ji Hoon Ahn (Hanyang Univ., Korea)

[PG2-19]

New Dynamic Assessment Method of Organic Light Emitting Diodes Reflecting Non-Linear Transient Circuit Responses

Yun Jae Choi, Jin Woo Ahn, and Gyu-Tae Kim (Korea Univ., Korea)

[PG2-20]

Fault Detection and Classification for SiH₄ MFC using a New Diagnostic Ratio in Plasma-Enhanced Chemical Vapor Deposition

Hye Eun Sim and Sang Jeon Hong (Myongji Univ., Korea)

[PG2-21]

Effects of Oxygen PDA on High-k Dielectric Properties of HfO₂-ZrO₂ Nanolaminate Layer in MOS Capacitor

Beomho Won, Junmo Kim, Sangmin Lee, Suwan Lee, Hayoung Park, and Hyungtak Seo (Ajou Univ., Korea)

[PG2-22]

Improved Ferroelectricity of HfZrO_x Nanolayer with Al₂O₃ Capping Layer and Oxygen Annealing

Minwoo Kim, Sangmin Lee, Beomho Won, Hyunmin Dang, Seunghyun Kim, and Hyungtak Seo (Ajou Univ., Korea)

[PG2-23]

Insulator Metal Transition Triggering of the PEALD-Grown NbO₂ Selector by Engineering Device Structure

Seunghyun Kim, Sangmin Lee, Suwan Lee, Minwoo Kim, and Hyungtak Seo (Ajou Univ., Korea)



[PG2-24]

Enhancing Nonvolatile Memory Performance in $\text{Hf}_{0.5}\text{Zr}_{0.5}\text{O}_2$ Resistive Tunneling Diodes Using an Al_2O_3 Capping Layer

Hyunmin Dang, Kumar Mohit, Hayoung Park, Suwan Lee, and Hyungtak Seo (Ajou Univ., Korea)

[PG2-25]

Effects of Heat During Soldering on Leakage Current of MLCCs in Power Switching Circuits

Min-Woo Ha, Hyun Jin Kim, Jin Hyeok Jeong, So-Jeong Kong, Jun-Young Lee (Myongji Univ., Korea), and Ogyun Seok (Pusan Nat'l Univ., Korea)

[PG2-26]

ShapeMaster: Advanced 3D RCWA Modeling Software for Precision Optical Design and Analysis

Mita Park, Shinyoung Ryu, Jiwon Lee, Seojin Park (Auros Tech. Inc., Korea), Kwangwoo Kim, Jongjeong Kim (Haedosa Inc., Korea), and Junje Seong (Auros Tech. Inc., Korea)

[PG2-28]

Radiation Induced Changes in Chemical and Electronic Properties of Few-Layer MoS_2 and MoTe_2 Films

Seungwook Choi (KRISS and Univ. of Science & Tech., Korea), Guen Hyung Oh (Jeonbuk Nat'l Univ., Korea), Taewan Kim (Univ. of Seoul, Korea), Songwoung Hong (KRISS, Korea), and Ansoon Kim (KRISS and Univ. of Science & Tech., Korea)

[PG2-29]

Computational Modeling of Halide Vapor Phase Epitaxy for Optimizing Ga_2O_3 Thin Film Growth

Hyeon Woo Kim and Sung Beom Cho (Ajou Univ., Korea)

[PG2-30]

Enhancing Mobility in 3D MOSFET Structures through Residual Strain Optimization via Nanoscale Heat Transfer

Ji Hoon Hong, Jun Hyuk Kang (Ajou Univ., Korea), Su Yeon Jang (Konkuk Univ., Korea), and Sung Beom Cho (Ajou Univ., Korea)