



<b>Session Title:</b>	<b>[PG1] Poster Session I</b>
<b>Session Date:</b>	<b>November 12 (Tue.), 2024</b>
<b>Session Time:</b>	<b>16:50–17:40</b>
<b>Session Room:</b>	<b>Board Room, 5F, Grand Josun Busan</b>

**[PG1-01]**

**Possibility of Improving Electrical Properties by Using  $\text{TiO}_2$  Deposited by Atomic Layer Deposition as an Electrode**

Yoonchul Shin and Ji-Hoon Ahn (Hanyang Univ., Korea)

**[PG1-02]**

**A Study of the Molybdenum Film by Thermal Atomic Layer Deposition**

Jinil Son and Hyeongtag Jeon (Hanyang Univ., Korea)

**[PG1-03]**

**Enhanced Crystallinity of 2D Tin Sulfide Using Discrete Feeding Method by Atomic Layer Deposition**

Sowon Park and Hyeongtag Jeon (Hanyang Univ., Korea)

**[PG1-04]**

**Compositional Dependence of Ferroelectric Properties in  $\text{Hf}_{1-x}\text{Zr}_x\text{O}_2$  Thin Films Using a Thermally Stabilized Novel Precursor**

Hye-Won Cho, Hyo-Bae Kim (Hanyang Univ., Korea), Seung-Eon Ahn (Tech Univ. of Korea, Korea), and Ji-Hoon Ahn (Hanyang Univ., Korea)

**[PG1-05]**

**Stable Ferroelectric Properties of Sub-5nm Hafnium-Zirconium-Oxide Thin Films Deposited via Atomic Layer Deposition**

Gunho Kim, Hyo-Bae Kim (Hanyang Univ., Korea), Wonwoo Kho, Yoomi Kang, Seung-Eon Ahn (Tech Univ. of Korea, Korea), and Ji-Hoon Ahn (Hanyang Univ., Korea)



[PG1-06]

**Conformal Atomic Layer Deposition of Titanium Nitride Thin Film Using Noble Small Molecule Inhibitor**

Jiyeon Han, Jaemin Kim, Hana Kim, Duckhyeon Seo, Juhwan Jeong, Hyunju Jung, Hanbin Lee, Kunhee Kim, and Kyuho Cho (EGTM Co., Korea)

[PG1-07]

**Enhanced Electrical Properties of ZrO<sub>2</sub> Thin Films Using Atomic Layer Deposition with a Novel Precursor**

Ji Hwan Kim, Seung Won Lee, Yoonchul Shin, Yeon-Ji Jeon, and Ji-Hoon Ahn (Hanyang Univ., Korea)

[PG1-08]

**Study on the Improvement of Resistivity and Step Coverage of TiN Thin Films Deposited by Atomic Layer Deposition Using H<sub>2</sub>**

Kihye Kim, Wanjae Lee, Sewhan Jin, Jungseop Shin, Sangyeop Kim, Dongwon Seo, and Wansik Kim (Hanwha Precision Machinery, Korea)

[PG1-09]

**Liquid Ta Precursors with High Thermal Stability for ALD Ta<sub>2</sub>O<sub>5</sub>/TaN Thin Films at High Temperatures >460°C**

Woongjin Choi, Shinbeom Kim, Taeyoung Lee, Hyunju Jung, Hanbin Lee, Juhwan Jeong, Sunyoung Baik, and Kyuho Cho (EGTM Co., Korea)

[PG1-10]

**Investigation on Ar Plasma Treatment for Amorphous Si-In-Zn-O Thin-Film Transistors**

Tae Ho Kim, Hyeon Dong Kim, Sang Ji Kim, and Sang Yeol Lee (Gachon Univ., Korea)

[PG1-11]

**Characteristics of Deposited Film Using a New Ru Precursor**

Yoon-A Park, Jin-Sik Kim, Hyun-Kyu Ryu, and Won-Yong Koh (UP Chemical, Korea)



[PG1-12]

**Influence of Precursor Oxidation State on MoO<sub>2</sub> Film Properties Using the Novel Mo Precursors**

Yun-Gyeong Yi, Myeong-Ho Kim, Jin Sik Kim, Hyunkyu Ryu, and Wonyong Koh (UP Chemical, Korea)

[PG1-13]

**Flexible and Highly Transparent Conductive Oxide of Amorphous Oxide/Metal/Oxide Multilayer Film**

Jin Young Hwang (Kore Univ. and Gachon Univ., Korea), Hyeon Dong Kim, Tae Ho Kim, Sang Ji Kim (Gachon Univ. and Gachon Advanced Inst. Of Semiconductor Tech., Korea), Sangsik Kim (Kore Univ., Korea), and Sang Yeol Lee (Gachon Univ. and Gachon Advanced Inst. Of Semiconductor Tech., Korea)

[PG1-14]

**Performance by Silver Thickness on Transparent Electrodes Made with OMO Structure of HZTO(HfZnSnO)/Ag/HZTO**

Hyeon Dong Kim, Sunjin Lee, Tae Ho Kim, Sang Ji Kim, and Sang Yeol Lee (Gachon Univ. and Gachon Advanced Inst. Of Semiconductor Tech., Korea)

[PG1-15]

**Enhanced Electrical Properties of ZrO<sub>2</sub>-MoN-Based Capacitors with Ultrathin Buffer Layer**

Yeon-Ji Jeon and Ji-Hoon Ahn (Hanyang Univ., Korea)

[PG1-16]

**Optimization of a-Si-Zn-Sn-O Thin Film Transistor Performance via O<sub>2</sub> Plasma Treatment**

HyeonDong Kim, SangJi Kim, TaeHo Kim, and SangYeol Lee (Gachon Univ. and Gachon Advanced Inst. Of Semiconductor Tech., Korea)

[PG1-17]

**Augmenting Electrical Properties and Stability of Amorphous Si-Zn-Sn-O Thin Film Transistor through Structural Modifications and Surface Treatments**

JuYoung Lee, HyeonDong Kim, SangJi Kim, TaeHo Kim, and SangYeol Lee (Gachon Univ. and Gachon Advanced Inst. Of Semiconductor Tech., Korea)



[PG1-18]

**Enhanced Field Effect Mobility in Amorphous – HfInZnO TFT with Metal Capping Layer**

Hyeon Dong Kim, Tae Ho Kim, Sang Ji Kim, and Sang Yeol Lee (Gachon Univ. and Gachon Advanced Inst. Of Semiconductor Tech., Korea)

[PG1-19]

**Evaluation of High-Temperature SiO<sub>2</sub> Film Using a Novel Si Precursor**

Byung-Kwan Kim, Seung-Gyun Hong, Jin-Sik Kim, Hyun-KyuRyu, and Won-Yong Koh (UP Chemical, Korea)

[PG1-20]

**High Performance of Full Swing Logic Circuits Using All n-Types Amorphous Si-In-Zn-O Thin Film Transistors**

Sang Ji Kim, Hyeon Dong Kim, Tae Ho Kim, and Sang Yeol Lee (Gachon Univ. and Gachon Advanced Inst. Of Semiconductor Tech., Korea)

[PG1-21]

**Multi-Stack Capacitor based on Ferroelectric Materials for Neuromorphic Computing**

Hyo-Bae Kim and Ji-Hoon Ahn (Hanyang Univ., Korea)

[PG1-22]

**Molecular Layer Deposition of a Tin-Based Organic-Inorganic Hybrid Thin Films for Photoresist**

Dong Geun Kim, Kyungryul Ha, Hyekyung Kim, Woo-Hee Kim, Tae Joo Park, and Ji-Hoon Ahn (Hanyang Univ., Korea)

[PG1-23]

**Design of Gas Flow Field for a Slip Flow Regime ALD Processing Chamber**

Kyung-Hoon Yoo (KITECH, Korea), Geun-Soo Song (KUMYOUNG ENG Inc., Korea), Chun-Sik Kim (TNG Co., Korea), Jun-Young Hwang, Sang-Ho Lee, Hye-Jin Lee, Yeong Cheol Kim, Ju-Young Woo, Shin-Ae Song (KITECH, Korea), and Kun-Hyung Lee (Samsung Display Co., Ltd., Korea)



[PG1-24]

**Various Photoluminescence Properties of Si-ZnO Core-Shell Nanowires**

Sangwoo Kim (KITECH, Korea), Myung Sik Choi (Kyungpook Nat'l Univ., Korea), and Changhyun Jin (Yonsei Univ., Korea)

[PG1-25]

**Effect of Gas Injection Velocity on TiN Films in Thermal Atomic Layer Deposition Process**

Ji Won Jang, Nu Ri Kim, and Sang Jeon Hong (Myongji Univ., Korea)

[PG1-26]

**Catalytic Synthesis of  $\beta$ -Ga<sub>2</sub>O<sub>3</sub> Nanowires on c-Sapphire Substrates by PLD**

Jung-Bok Lee, Min-Seok Jang, Sung-Hyeon Jung, and Ho-Jun Lee (Pusan Nat'l Univ., Korea)

[PG1-27]

**Novel Antimony (III) Precursors with Modifiable Alkoxy Carboxamide for Thin Films Deposition**

Ji-Seoung Jeong (KRICT and Sungkyunkwan Univ., Korea), Sunyoung Shin (KRICT, Korea), Bo Keun Park (KRICT and Univ. of Science and Tech., Korea), Seung Uk Son (Sungkyunkwan Univ., Korea), Taek-Mo Chung (KRICT and Univ. of Science and Tech., Korea), and Ji Yeon Ryu (KRICT, Korea)

[PG1-28]

**A Study on Ar/O<sub>2</sub> Capacitively Coupled Plasma Using Fluid Simulation**

Min-U Jang, Sang-Woo Kim (Pusan Nat'l Univ., Korea), Ju-Hong Cha (Gyeongsang Nat'l Univ., Korea), and Ho-Jun Lee (Pusan Nat'l Univ., Korea)

[PG1-29]

**Simultaneous Realization of Neuron and Synapse Functionalities under Optical Stimulation Using a Single Transistor**

Jaehee Lee and Jung Wook Lim (ETRI and Univ. of Science and Tech., Korea)

[PG1-30]

**Characteristics of SiO<sub>2</sub> Films Deposited by PEALD with Applying DC Bias**

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