

IMiD 2024

The 24th International Meeting on Information Display
August 20-23, 2024 / ICC Jeju, Jeju, Korea

Session Title:	P1. Poster Session 1
Session Date:	August 21 (Wed.), 2024
Session Time:	13:20-14:50
Session Room:	Event Hall (1F)

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Enhancing Flexural Strength Analysis of Ultra-Thin Glass in Foldable Displays through Graph Causal Modeling

Kyongtae Park and Ki-taek Kim (Samsung Display Co., Ltd., Korea)

[P1-002]

Optimizing Durability and Reflectivity in Low-Reflective Films for Flexible Displays: An Approach Using Explainable AI and Local Linear Models

Kyongtae Park and Gilyong Park (Samsung Display Co., Ltd., Korea)

[P1-003]

Auxetic Structured Glass-Cloth Reinforced Elastomer Substrate with Negative Poisson's Ratio for Distortion-Free Stretchable Display

Hyun Seok Kang, Sehun Park, and Byeong-Soo Bae (KAIST, Korea)

[P1-004]

Multi-Pixel Cylindrical Fiber-Based OLEDs for Truly Wearable Displays

Seong Uk Kong and Kyung Cheol Choi (KAIST, Korea)

[P1-005]

Dry Etchable Inorganic/Organic Hybrid Structure of SiO_x-SiN_x-Tincone Deposited by Atomic/Molecular Layer Deposition for Bendable OLED Encapsulation

Ji-Min Kim, Gi-Beom Park, Hyo-Lim Jung, Hae-Lin Yang, and Jin-Seong Park (Hanyang Univ., Korea)

[P1-006]

Depth-Graded Modulus-Engineered Elastomer Composite with 2D/3D Strain Control for Stretchable Displays

Dong Won Lee, Jun-Chan Choi, and Seungjun Chung (Korea Univ., Korea)

[P1-007]

Implementation of Oxide Thin-Film Transistors on Ultra-Thin PET Substrates Utilizing Delamination and Transfer Process

Jong Beom Ko (Hanbat Nat'l Univ., Korea) and Sang-Hee Park (KAIST, Korea)

[P1-008]

Inkjet-Printed Stretchable Thin-Film Transistors with van der Waals Heterostructures

Jiwoo Yang (Korea Univ., & Seoul Nat'l Univ., Korea), Kyungjune Cho (KIST, Korea), Yongtaek Hong (Seoul Nat'l Univ., Korea), and Seungjun Chung (Korea Univ., Korea)

[P1-009]

In-Situ Crystallized Perovskite Nanocrystals for Stretchable Primary-Blue Down Conversion

Jun-Su Yeo, Eun-Ha Cho, Joo Yoon Woo, Joo Hyeong Han, Won Bin Im, and Tae-Hee Han (Hanyang Univ., Korea)

[P1-010]

Real-Time Changes in Electrical Resistance during Torsion Tests of Conductive Flexible Films for Wearable Flexible Display Application

Jeong Ah Lim, Jiho Ahn, Gang Yeol Yoo, and Hyun Min Cho (KETI, Korea)

[P1-011]

Stability Analysis in Slidable Display Using Multilayer Film with Adhesive Layer by Repetitive Sliding Deformation

Taehyeon Kim, Jae Ho Song, Sangwoong Baek, and Chan-Jae Lee (KETI, Korea)

[P1-012]

Direct Coating of Transparent and Wear-Resistant Coating on Ultra-Thin Glass for Flexible Cover Windows

Yong-Cheol Jeong (KITECH, Korea)

[P1-013]

3D Printable Composite Ink Using Self-Alignment for Highly Conductive Stretchable Interconnects

Jonghyun Jeong, Hoon Yeub Jeong, and Seungjun Chung (Korea Univ., Korea)

[P1-014]

Low-Cycle Fatigue Analysis of Stretchable Interconnects Using Finite Element Method Analysis

Sang Hyun Han, Hak Jun Yang, and Su Seok Choi (POSTECH, Korea)

[P1-015]

A Novel Hidden Pixel Driving Method for Driver IC Reduction in Stretchable Displays

Hye Jin Son (Yonsei Univ., Korea), Yong Min Jeong (Yonsei Univ. & LG Display, Co., Ltd, Korea), Won Kyung Min, Ji Yeong Park, Sun Min Song, Dong Hyun Choi, and Hyun Jae Kim (Yonsei Univ., Korea)

[P1-016]

High-Efficiency and Stability Light-Emitting Diodes Utilizing in-situ Fabricated Perovskite Nanocuboid Emitters

Jeong Wook Jang, Joo Yoon Woo, Min Gyo Kim, Jong Ho Park, Dae Hwan Kim, and Tae-Hee Han (Hanyang Univ., Korea)

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High Performance Metallic Stretchable Electrodes Having Graphite Interconnection Layer

Jhongwoong Park, Juhyeon Lee, and Jaewook Jeong (Chungbuk Nat'l Univ., Korea)

[P1-018]

Investigation of the Influences of Solution Processing Variables on Solution-Processed OLEDs

Eon Ji Cha, Jun Won Jeon, Joo Yoon Woo, and Tae-Hee Han (Hanyang Univ., Korea)

[P1-019]

Micro Patterning in OLED Using Photolithography with Fluorinated Photoresist

Eun Yeong Soh, Seohyeon Lee, Dongjin Shin, Byung Jun Jung (Univ. of Seoul, Korea), Gayoung Kim, Jin-Kyun Lee, Sangmin Yoon, and Myungwoong Kim (Inha Univ., Korea)

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Silicone-Driven Lithography Exceeding 10,000 ppi for Anti-Pixel Crosstalk Micro-OLEDs

Hyukmin Kweon (Hanyang Univ., Korea), Seonkwon Kim (Yonsei Univ., Korea), Borina Ha (Hanyang Univ., Korea), Seunghan Lee (Sogang Univ., Korea), Soyeon Lee, Jiyeon Ha (Hanyang Univ., Korea), Minsu Kang (Yonsei Univ., Korea), Seung Hwan Roh, Moon Sung Kang (Sogang Univ., Korea), Jeong Ho Cho (Yonsei Univ., Korea), and Do Hwan Kim (Hanyang Univ., Korea)

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Blue OLED Patterning Using Photolithography based on Fluorinated Photoresist

Dongjin Shin, Eun Yeong Soh (Univ. of Seoul, Korea), Han-un Park, Jungmin Lee, Hyokyun Ham, Woosam Kim (LT Materials Co., Ltd., Korea), Gayoung Kim, Sangmin Yoon, Myungwoong Kim, Jin-Kyun Lee (Inha Univ., Korea), and Byung Jun Jung (Univ. of Seoul, Korea)

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Analysis of GaN Micro-LEDs for AR/XR Applications

Yanxia Feng, Xiaowei Yue, and Ke Zhang (Sitan Tech., China)

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Vertical Thin-Film Transistor with Parasitic Capacitance Reduction Structure for High-Resolution XR Display

Su Hyun Kim (Hanyang Univ., Korea), Hyoung-Do Kim, Joon Seok Park (Samsung Display Co., Ltd., Korea), and Saeroonter Oh (Hanyang Univ. & Sungkyunkwan Univ., Korea)

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Self-Aligned Top-Gate In-Ga-Zn-O Thin-Film Transistors (IGZO TFTs) with Hydrogen-Free SiO₂ Gate Insulator and Boron Implanted Source and Drain Regions

Motoki Ando and Mamoru Furuta (Kochi Univ. of Tech., Japan)

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Defects Analysis of Ionizing Effect on Low-Temperature Polycrystalline Silicon Thin-Film Transistor and Its Curing Behavior

Junho Noh and Byoungdeog Choi (Sungkyunkwan Univ., Korea)

[P1-026]

Doping Level-Dependent Morphology Changes in Amorphous-Like Conjugated Polymer

Eunsol Ok and Kilwon Cho (POSTECH, Korea)

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Enhancing Reliability in Thin-Film Transistors: The Role of Amorphous InGaSnO/TiO₂ Bilayer Structure under NBIS Conditions

Hwan-Gyu Lee and Byoung-deog Choi (Sungkyunkwan Univ., Korea)

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Wavelength-Dependent Multi-State Programmable Optoelectronic Logic-in-Memory based on Light-Sensitive Floating Gate

Taehyun Park, Youngmin Han (Gachon Univ., Korea), Yun-Hi Kim (Gyeongsang Nat'l Univ., Korea), and Hocheon Yoo (Gachon Univ., Korea)

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Electrical Analysis of Microwave Annealed Amorphous Indium Gallium Tin Oxide Thin Film Transistor

Sungsoo Park and Byoungdeog Choi (Sungkyunkwan Univ., Korea)

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Electrical Properties of Air Spray Coated ZTO Thin-Film Transistor

Young Jik Lee, Yong Jae Kim, and Woon-Seop Choi (Hoseo Univ., Korea)

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Fabrication and Electrical Characteristics of Solution-Based Zinc-Tin Oxide/Carbon Nanotube Hybrid Thin-Film Transistors

Yong-Jae Kim, Young-Jik Lee, and Woon-Seop Choi (Hoseo Univ., Korea)

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Double Gate p-ch Cu-MIC Poly-Ge TFT on a Glass Substrate by Gate-Last Process

Daiki Goshima, Sho Suzuki, and Akito Hara (Tohoku Gakuin Univ., Japan)

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High-Performance Heterojunction IGZO/ITZO Thin-Film Transistors

Zhenyuan Xiao, Jidong Jin, and Jaekyun Kim (Hanyang Univ., Korea)

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Superlattice Channel Structure for High-Performance Oxide Thin-Film Transistors

Dinh Hai Tung Nguyen, Jidong Jin, and Jaekyun Kim (Hanyang Univ., Korea)

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Active Matrix Micro-LED Display based on Resistive Random-Access Memory

Seok Hee Hong, Ho Jin Lee, Sim Hun Yuk, Dong Hyun Kim, Jun Young Choi, and Tae Geun Kim (Korea Univ., Korea)

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High Mobility and Flexible mIZO/IGZO:Hf Thin Film Transistor for OLED Display

Kang Min Lee, Nahyun Kim, Ho Jin Lee, Jin Kyung Lee, Jae Yeon Kim, Sung Keun Choi, and Tae Geun Kim (Kore Univ., Korea)

[P1-037]

Heterostructure Vertical Thin Film Transistor for High-Resolution Display

Jin Kyung Lee, Ho Jin Lee, Kang Min Lee, Jin Suk Oh, Jong Min Joo, and Tae Geun Kim (Korea Univ., Korea)

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Memory-Modulated Interpenetrating Semiconductor Networks based on Ion Doping Physics

Hayoung Lim, Hayoung Oh, Hyukmin Kweon, and Do Hwan Kim (Hanyang Univ., Korea)

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Enhancement of Positive Bias Temperature Stress performance for Gate In Panel based on CMOS of Low Temperature Polycrystalline Si and Oxide TFT

Se-Hwan Na (Yonsei Univ. & LG Display Co., Ltd., Korea), Seok Gyu Hong, Yong Seon Hwang (Yonsei Univ., Korea), Jung-Chul Kim, Joon-Seok Yoo (LG Display Co., Ltd., Korea), and Hyun-Jae Kim (Yonsei Univ., Korea)

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AMOLED Pixel Circuit for AR/VR Application Using Inverted Double Gate Oxide TFT

Kook Chul Moon, Hwarim Im, and Yong-Sang Kim (Sungkyunkwan Univ., Korea)

[P1-041]

Strategies for Highly Stress-Reliable InSnZnO Dual-Gate Thin-Film Transistors

Delang Lin (South China Univ., China), Rongsheng Chen, Zhibo Sun, Fion Sze Yan Yeung, and Hoi Sing Kwok (Hong Kong Univ. of Science and Tech., China)

[P1-042]

High-Performance Ferroelectric $\text{Hf}_{0.5}\text{Zr}_{0.5}\text{O}_2$ Field-Effect Transistors with IGZO Channels for Monolithic 3-D Integration

Kyong Jae Kim, Eun Seo Jo, and You Seung Rim (Sejong Univ., Korea)

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A Study of the Enhancement of Mobility through Metal-Induced Crystallization of IGZO TFTs for Display Backplanes at a Low Temperature of 300 °C

Seongkyu Kang, Byongwoo Kim, and Jae Kyeong Jeong (Hanyang Univ., Korea)

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Investigation of Bottom Gate Connection in Double Gate α -IGZO TFTs for Optimizing Compensation Performance of AMOLED Displays

Seung Hee Kang (Yonsei Univ. & LG Display Co., Ltd., Korea), Moon Ho Lee (Yonsei Univ., Korea), Won Ho Son, Do-Kyung Kim, Jeong Woo Jang, Sung Jin So, Sang Yoon Park (LG Display Co., Ltd., Korea), and Hyun Jae Kim (Yonsei Univ., Korea)

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Implementation of a Physically Unclonable Functions Capable of Generating Multiple Keys Using Morphological Characteristics of Small Molecule

Raksan Ko and Hocheon Yoo (Gachon Univ., Korea)

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Optimization of α -ITZO/IGZO Heterojunction TFTs with Drain Offset Structure for High-Voltage Display Applications

Jungha Lee (DGIST, Korea) and Hongki Kang (DGIST & Seoul Nat'l Univ., Korea)

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High-Performance CuI p-Type Thin-Film Transistors with ALD Al_2O_3 -Based Sandwiched Structure

Hyo-Won Jang, Hyun-Ah Lee (Chung-Ang Univ., Korea), Tae In Kim (Inha Univ., Korea), Ick-Joon Park (Joongbu Univ., Korea), and Hyuck-In Kwon (Chung-Ang Univ., Korea)

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Electrical Characteristics of XFLA-Treated IGZO TFT according to Oxygen Injection during IGZO Sputtering

Yun Hyeok Jeong, Won Woo Lee, Joon Hyung Park, Dong Hyun Lee, Yongmin Jeon, Sang Jik Kwon, and Eou-Sik Cho (Gachon Univ., Korea)

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Improvement of Electrical Performances of p-Type Tellurium Thin-Film Transistor Using Strain Modulation Technique

Joon-Young Lee, Jong-Sang Oh (Chung-Ang Univ., Korea), Tae In Kim (Inha Univ., Korea), Ick-Joon Park (Joongbu Univ., Korea), and Hyuck-In Kwon (Chung-Ang Univ., Korea)

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Difference in Hydrogen Behavior Using High Pressure Hydrogen Annealing with Crystallinity Variation in In-Ga-O TFTs

Jin Won Bak, Jae Seok Hur, and Jae Kyeong Jeong (Hanyang Univ., Korea)

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Unraveling the Cation Compositional Influence on Indium Tin Oxide Thin-Film Transistors via Atomic Layer Deposition

Soojin Park, Jae Seok Hur, and Jae Kyeong Jeong (Hanyang Univ., Korea)

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High-Performance p-Type Tellurium Transistor Arrays and Circuits via Vapor Phase Deposited Polymer Passivation

Seung Min Lee, Taehyun Nam, Chungryeol Lee, Changhyeon Lee (KAIST, Korea), Junhwan Choi (Dankook Univ., Korea), and Sung Gap Im (KAIST, Korea)

[P1-053]

High Field Effect Mobility IGO TFTs Achieved by Tuning Preferential Crystalline Orientation via S/D Electrode Induced Crystallization

Sang Won Chung and Jae Kyeong Jeong (Hanyang Univ., Korea)

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Low Voltage Ferroelectric Polymer Thin-Film Transistors for Capacitorless Pixel Circuits

Eun-Seo Park, Bon-Seong Gu, Jin-Hyuk Kwon, and Min-Hoi Kim (Hanbat Nat'l Univ., Korea)

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Fluorinated Polymeric Tunneling Layer of Thin-Film Transistor Memory for Wearable Electronics

Jeong-In Lee (Hanbat Nat'l Univ., Korea), Yuji Shibasaki (Iwate Univ., Japan), Jin-Hyuk Kwon, Yoonseuk Choi, and Min-Hoi Kim (Hanbat Nat'l Univ., Korea)

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Sheet Resistance Control of Hydrogen-Doped InOx (InO_x:H) via Boron Ion Implantation for Source and Drain Regions of Thin-Film Transistors

Mir Mutakabbir Alom, Motoki Ando, Xiaoqian Wang, and Mamoru Furuta (Kochi Univ. of Tech., Japan)

[P1-057]

Sol-Gel-Based High-k Dielectric Films for Low-Voltage Operating Thin-Film Transistors in Display Backplanes

Chae-Eun Kim, Se-Ryong Park, and Tae-Jun Ha (Kwangwoon Univ., Korea)

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Effects of Metal Ion Doping on the Electrical Characteristics of Metal-Oxide Thin-Film Transistors

Eun-Ha Kim, Se-Ryong Park, and Tae-Jun Ha (Kwangwoon Univ., Korea)

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Solution-Processed Ambipolar Thin Film Transistors-Based Inverters for Circuit Applications

Min Ki Kim, Seungyeon Koh, Hyowon Jang, Swarup Biswas, and Hyeok Kim (Univ. of Seoul, Korea)

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Ambipolar Thin Film Transistors for Logic Circuit

Seungyeon Koh, HwaPyeong Noh, Hyo Won Jang, Swarup Biswas, and Hyeok Kim (Univ. of Seoul, Korea)

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Physically Unclonable Function Using Bismuth Sulfide and Doping of Self-Assembled Monolayer

Heebeen Shin, Dong Hyun Lee, and Hocheon Yoo (Gachon Univ., Korea)

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Enhancing Contact Resistance in α -IGZO TFTs through Geometric Structural Modification between Channel and Electrode

Dongseon Kim and Jae Kyeong Jeong (Hanyang Univ., Korea)

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Interface Engineering for Contact Resistance Reduction in Downscaled Perovskite Thin-Film Transistors

Hyoung-Ha Ryu, Youjin Reo, and Yong-Young Noh (POSTECH, Korea)

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Directly Photopatternable High-k Poly(Para-Xylylene) as Gate Dielectric

Seong Cheol Jang (Dongguk Univ., Korea), Gunoh Lee, Kyung Jin Lee (Chungnam Nat'l Univ., Korea), and Hyun-Suk Kim (Dongguk Univ., Korea)

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Identification of Stable Operation and Charge Transfer Characteristics of n-Type Metal-Oxide and p-Type Organic Anti-Ambipolar Transistor Using CYTOP Trap Separating Layer

Youngmin Han, Subin Lee, Minseo Kim, and Hocheon Yoo (Gachon Univ., Korea)

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Classification of Interface Traps in InGaZnO Thin-Film Transistors by Emission Time Constant Decomposition

Jae Hyeong Park, Min Geun Yun (Hanyang Univ., Korea), Ki Hwan Kim (Hanyang Univ & LG Display Co., Ltd., Korea), Ning Li (Hanyang Univ., Korea), Jae Man Jang, Ju Heyuck Baek, Won Sang Ryu, Jiyong Noh, Kwon Shik Park (LG Display Co., Ltd., Korea), and Saeroonter Oh (Hanyang Univ. & Sungkyunkwan Univ., Korea)

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Oxide Semiconductor-Based Negative Capacitance Field Effect Transistors for Low Power Consumption

Jihyeon Min, Hojeong Jo (Dongguk Univ., Korea), Kyong Jae Kim, You Seung Rim (Sejong Univ., Korea), and Hyun-Suk Kim (Dongguk Univ., Korea)

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Broadband Organic Phototransistor based on Bulk Heterojunction

Dong Hyun Nam, Jae Won Park, Yongju Lee, Swarup Biswas, and Hyeok Kim (Univ. of Seoul, Korea)

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Low-Voltage Organic Thin Film Transistors based on Eco-Friendly Gate Dielectric

HuiCheol Shin, MiRiNae Lee, Swarup Biswas, and Hyeok Kim (Univ. of Seoul, Korea)

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A Study on 3-D Field-Effect-Transistors with Indium-Gallium-Zinc-Oxide Channel by TCAD Simulation

Yena Kim, Seon Woong Bang, Minjae Kim, and Jae Kyeong Jeong (Hanyang Univ., Korea)

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Enhanced Stretching Performance of Wavy Structure TFTs Compared to Planar Structure TFTs

Jeong Eun Oh and Jae Kyeong Jeong (Hanyang Univ., Korea)

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A Study on the Improvement of Subthreshold Swing of α -IGZO Transistor: Conversion Mechanism by the Deposition Sequence

SeongHun Yoon, MinGyeong Jo, and Jae Kyeong Jeong (Hanyang Univ., Korea)

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The Effect of Hf/Zr Ratio on the MW of IGZO Based FeTFT

He Young Kang and Jae Kyeong Jeong (Hanyang Univ., Korea)

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Dipole Polarization-Charge Capture Based Unipolar Transistor for Artificial Sensory System

Sukwon Jang, Chungryeol Lee, and Sung Gap Im (KAIST, Korea)

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A Study on the Drain Induced Barrier Lowering of IGO TFT Using TCAD Simulation

Seon Woong Bang and Jae Kyeong Jeong (Hanyang Univ., Korea)

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Monolithically Integrated p-Type CCTS RRAM and Photodetectors with Solid-Doped NMOS Technology for Low Power Image Sensor Applications

Seo-young Jo, Gyu-been Kim, In-hyeok Hong, Song-i Cheon, Myeong-ju Park, and Sung Hun Jin (Incheon Nat'l Univ., Korea)

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Next-Generation Display Power Optimization: Memory-in-Pixel Application with Amorphous Oxide Semiconductor Charge Trapping TFTs

Seoungmin Park, Teahyeon Noh (Hanyang Univ., Korea), Youngyeong Lee (HANA Optronics Inc., Korea), and Younghyun Kim (Hanyang Univ., Korea)

[P1-078]

Impact of Drain Induced Barrier Lowering on Indium Gallium Oxide Thin-Film Transistors according to Crystallographic Structure

Gwang-Bok Kim (Hanyang Univ., Korea), Taikyuu Kim (KIST, Korea), Seon Woong Bang, and Jae Kyeong Jeong (Hanyang Univ., Korea)

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Scaled Indium Oxide Thin Film Transistors with Plasma Enhanced Atomic Layer Deposition

Jaewon Park, Seong-Cheol Jang, Dong-Bin Lee, and Hyun-Suk Kim (Dongguk Univ., Korea)

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Investigation of Trap Density Effects on Electrical Characteristics in α -IGZO Thin-Film Transistor

Dong-Ho Kim, Swarup Biswas, and Hyeok Kim (Univ. of Seoul, Korea)

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Investigation on Ferroelectric Memory with Complementary Organic-Inorganic Hybrid Insulator

Hyowon Jang (Univ. of Seoul, Korea), Yongju Lee (Univ. of Seoul, Korea & Univ. of Paris, France), Swarup Biswas, and Hyeok Kim (Univ. of Seoul, Korea)

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Non-Degenerate Semiconductor Polycrystalline InOx:H Film for Thin-Film Transistors Formed by Solid-Phase Crystallization

Xiaoqian Wang and Mamoru Furuta (Kochi Univ. of Tech., Japan)

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Y6-Based Phototransistor Using NIR Light Detection

Jae Won Park, HwaPyeong Noh, Dong Hyun Nam, Swarup Biswas, and Hyeok Kim (Univ. of Seoul, Korea)

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Monolithic 3D Integration of Full-Swing Logic Gates via Solid-Doped NMOS Drivers and Pseudo-Depletion Cu/IGZO Loads for Enhanced Cyber Security

Hanmin Kim, Hogeon Jeon, Dongwook Lee, Geonho Bang, Jongjoon Park, and Sung Hun Jin (Incheon Nat'l Univ., Korea)

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Monolithically Integrated Broad-Band CuI Photodetectors and Solid-Doped NMOSFETs Stacked with Al₂O₃ RRAMs for Smart Image Sensors

Hanmin Kim, Hyeonbin Jo, Yunsung Lee, Geonho Bang, Jongjoon Park, Hogeon Jeon, Dongwook Lee, and Sung Hun Jin (Incheon Nat'l Univ., Korea)

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A Study of Erasable Characteristics in Oxide Semiconductor Hybrid Channel for 3D NAND Flash Memory Application

Ji-Hwan Choi and Jae Kyeong Jeong (Hanyang Univ., Korea)

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High-Performance Metal Oxide TFTs: Moving from Materials to Structure

John S. Brewer, Jr (Amorphyx, Inc., USA)

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Impact of Hf/Zr Ratio and Oxygen Content on FTJ for High TER

Hyeon Seong Kang, Tae Gue Yang, He Young Kang, and Jae Kyeong Jeong (Hanyang Univ., Korea)

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Improvement of High Temperature Reliability through Optimizing Oxygen-Related Defect on Oxide TFT by Control of Fabrication Process

Wan-Ho Choi, HeeSung Han, Sueon Lee, Hyunwook So, Chan-Yong Jeong, Changjun Lee, DaeHwan Kim, JungWoong Baek, JaeHoon Bae, Jiyong Noh, and SungChun Kang (LG Display Co., Ltd., Korea)

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Ion Implantation Technique Application for Short Channel Oxide Semiconductor TFT

Feng Guan, Chaolu Wang, Yang Lv, Meng Zhao, Jianhua Du, Hao Wu, Yicheng Wang, Ce Ning, and Guangcai Yuan (BOE Tech. Group Co., Ltd., China)

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A Novel Method for Fabricating High Performance IGZO FeFET Using Multi-Layered Stressor for HZO Crystallization

Jae Seong Han, Ju Hyun Lee, Kyungmoon Kwak, Kyungho Park, Subi Choi, and Hyun Jae Kim (Yonsei Univ., Korea)

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A Study of Anti-Ambipolar Transistor based on Heterojunction Structure Combining n-Type Oxide and p-Type TMDC Materials

Chanwoo Jung, Junho Lee, and Jae Kyeong Jeong (Hanyang Univ., Korea)

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A Study of Enhancing Pattern Quality in Short-Channel α -IGZO TFTs : Optimized Photoresist Material and Processing

Min Gyeong Jo, Seong Hun Yoon, and Jae Kyeong Jeong (Hanyang Univ., Korea)

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Improving Performance of PbS QDs/IGZO Phototransistor through Introduction of Ga_2O_3 Passivation Layer for Broadband Sensor

Yongjun Jeong and JaeKyeong Jeong (Hanyang Univ., Korea)

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Study on Multi-Layer Stacking Effects of Oxide-Based Thin Films

Jinyeong Lee, Sungbin Jo, and Jaewook Jeong (Chungbuk Nat'l Univ., Korea)

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Integration of Zn-ON and Te Thin-Film Transistors for Low Temperature Processed, Highly-Stable CMOS Inverter

Jimin Kim, Muhammad Naqi, Yongin Cho, Joo On Oh, and Sunkook Kim (Sungkyunkwan Univ., Korea)

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Analysis of Energy Band Well Formation and Interface States between Active Channel and Interlayer Using Electrical Characterization

Moonsoo Kim and Byoungdeog Choi (Sungkyunkwan Univ., Korea)

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Characterization of Trap States in Indium-Gallium-Oxide Transistors Using Low Frequency Noise Measurement and Photo-Excited Charge Collection Spectroscopy

Sang Yeon Kim and Jae Kyeong Jeong (Hanyang Univ., Korea)

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Cost-Effective Designs of Power Network in Slim Sized PCB

Min-woo kim, Deokho Kang, Kyunghwan Moon, and Jiwon Kim (Samsung Display Co., Ltd., Korea)

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High Dynamic Contrast Display Technology

Xiao-tong Xu, Li-mei Jiang, Ya-qin Xu, Hui-long Zheng, Peter Liao, and Smart Chung (InfoVision Optoelectronics (Kunshan) Co., Ltd., China)

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TFT-Based Neuromorphic Circuits Enabling Computer Haptics Applications

Kai Wang (Sun Yat-sen Univ., China)

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Automatic Routing Algorithm of Multiple Nets in PCB Design

Sung-kwon Kim, Yong-sang Cho, Ji-won Kim, and Seung-in Ba (Samsung Display Co., Ltd., Korea)

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A Novel Circuit for SNR Improvement in OPD-Integrated OLED Display

Wonjun LEE, Cholho Kim, Haeryeong Park, Jewon Yoo, and Seungin Baek (Samsung Display Co., Ltd., Korea)

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Image Quality Enhancement in Variable Refresh Rate LTPO Applied AMOLED Displays Using A Variable GIP Voltage Scheme

Li Jin Kim (Yonsei Univ. & LG Display Co., Ltd., Korea), Sujin Jung (Yonsei Univ., Korea), I Sak Lee (LG Display Co., Ltd., Korea), Chang Hoon Jeon (LG Display Co., Ltd., Korea), and Hyun Jae Kim (Yonsei Univ., Korea)

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Emission Driver Circuit based on Depletion-Mode Metal Oxide Thin-Film Transistors Using Double Gate Structure

Eun Kyo Jung, Hwarim Im, and Yong-Sang Kim (Sungkyunkwan Univ., Korea)

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Efficient Powering in Display Subsystem Using GaN-Based Ultra-Low-Profile LED Driver

Satoshi Ikeda, Natsuki Maeda (Panasonic Corp., Japan), and Kimihiro Nishijima (Sojo Univ., Japan)

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Amorphous Indium-Gallium Zinc Oxide Thin-Film Transistor MicroLED Pixel Circuit with Zero-VGS Inverter for Short Falling Time

Ji-Hwan Park, Kyeong-Soo Kang, and Soo-Yeon Lee (Seoul Nat'l Univ., Korea)

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Aerial Walk-through Projection Display Using Diffusion Screen Made from Soapy Water Micro Bubbles for Aero Signage Which is Floating in the Air

Kunio Sakamoto and Hironari Yashik (Konan Univ., Japan)

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Integrated Emission Driver Circuit based on LTPO TFTs without Capacitors

Han Cheol Lee, Eun Kyo Jung, Hwarim Im, and Yong-Sang Kim (Sungkyunkwan Univ., Korea)

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