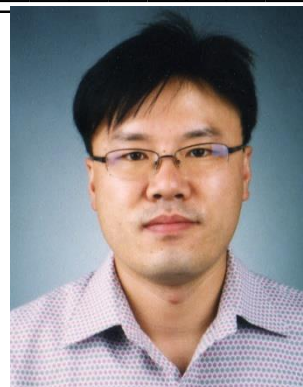


IMiD 2021

The 21st International Meeting on Information Display
August 25-27, 2021 / COEX, Seoul, Korea

Dr. SEONG-DEOK AHN

*Electronics & Telecommunications Research
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Education

M. S.	1987.3 - 1991.2	Hanyang University / Inorganic Materials Engineering
B. S.	1992.3 - 1994.2	KAIST / Electronics Materials Science and Engineering
Ph. D.	1994.3 - 2000.8	KAIST / Materials Science and Engineering

Professional Experience

2000.10 – 2012.02	Electronics & Telecommunications Research Institute /Convergence Components & Materials Research Laboratory	Senior Researcher
2012.03 – Present	Electronics & Telecommunications Research Institute / ICT Creative Research Laboratory	Principal Researcher

Standardization Activity

2020.01 – Present	Convenor IEC TC124 (Wearable electronic devices and technologies) WG3(Materials) PL for 1 Standards : IEC 62303-403-1
2008.01 – Present	Co-Convenor IEC TC110 (Electronic displays) WG14(Durability test methods for electronic displays (DTM)) Technical Expert, Chair of KRNC mirror committee of WG7 & 14 IEC TC110 WG5, WG7, WG8, WG9, WG12, WG13, WG14 PL for 3 Standards : IEC 62679-4-2, IEC 62908-12-10, PWI 110-34 ED1

Research Activity

Skin Electronics, Biometric Devices, Flexible & Stretchable Display, Oxide & Organic Thin Film Transistor

Awards

- [6] IEC 1906 Award (2017)
- [5] Minister of Trade, Industry and Energy Award Awards (2016)
- [4] National R&D Excellence Awards and 100 Best Excellence Awards in 2012 (2013)
- [3] Excellent Poster Award, International Meeting on Information Display (2006)
- [2] Excellent Poster Award, International Meeting on Information Display (2005)

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- [1] Excellent Poster Award, International Meeting on Information Display (2003)

Publications

- [8] "Ultraflexible and transparent electroluminescent skin for real-time and super-resolution imaging of pressure distribution",
Byeongmoon Lee, Ji-Young Oh, Hyeon Cho, Chul Woong Joo, Hyungsoo Yoon, Sujin Jeong, Eunho Oh, Junghwan Byun, Hanul Kim, Seunghwan Lee, Jiseok Seo, Chan Woo Park, Sukyung Choi, Nae-Man Park, Seung-Youl Kang, Chi-Sun Hwang, Seong-Deok Ahn, Jeong-Ik Lee & Yongtaek Hong
Nature Communications, 11, 663 (2020)
- [7] "All-oxide thin-film transistors with channels of mixed InOx-ZnOy formed by plasmaenhanced atomic layer deposition process",
Jeong-Mu Lee, Hwan-Jae Lee, Jae-Eun Pi, Jong-Heon Yang, Jeong Hun Lee, Seong-Deok Ahn, Seung-Youl Kang, and Jaehyun Moon
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- [6] "High-performance fab-compatible processed near-infrared organic thin-film photodiode with 3.3×10^{12} Jones detectivity and 80% external quantum efficiency",
Chul Woong Joo, Juhee Kim, Jaehyun Moon, Kang Me Lee, Jae-Eun Pia, Seung-Youl Kang, Seong-Deok Ahn, Young-Sam Park, Dae Sung Chung
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- [5] "Unraveled Face-dependent Effects of Multi-layered Graphene Embedded in Transparent",
Jong Tae Lim, Jaesu Kim, Hyunkoo Lee, Jaehyun Moon, Byoung-Hwa Kwon, Seongdeok Ahn, Nam Sung Cho, Byung-Wook Ahn, Jeong-Ik Lee, Kyuwook Ihm and Seong Chu Lim
ACS Appl. Mater. Interfaces, 9, 43105 (2017)
- [4] "Freely Deformable Liquid Metal Grids as Stretchable and Transparent Electrodes",
Yu Gyeong Moon, Jae Bon Koo, Nae-Man Park, Ji-Young Oh, Bock Soon Na, Sang Seok Lee, Seong-Deok Ahn, and Chan Woo Park
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- [3] "Low power consumption micro C2H5OH gas sensor based on micro-heater and ink jetting technique",
S.E. Moon, H.-K. Lee, N.-J. Choi, H.T. Kang, J. Lee, S.D. Ahn, S.Y. Kang
Sensors and Actuators B: Chemical, 217, 146 (2015)
- [2] "A thin film encapsulation layer fabricated via initiated chemical vapor deposition and atomic layer deposition",
Bong Jun Kim, Do Heung Kim, Seung Youl Kang, Seong Deok Ahn, Sung Gap Im
Journal of Applied Polymer Science, 131, 40974 (2014)
- [1] "Quantum Confinement Effects in Transferrable Silicon Nanomembranes and Their Applications on Unusual Substrates",
Houk Jang, Wonho Lee, Sang M. Won, Seoung Yoon Ryu, Donghun Lee, Jae Bon Koo, Seong-Deok Ahn, Cheol-Woong Yang, Moon-Ho Jo, Jeong Ho Cho, John A Rogers and Jong-Hyun Ahn
Nano Letters, 13, 5600 (2013)

Patents

- [7] "Random nano pattern and manufacturing method for highly efficient organic light emitting device thru light extraction thereof" USA Patent (2016.05.24)
- [6] "Manufacturing Method of Oxide field-effect transistor device" USA Patent (2015.10.06)
- [5] "Manufacturing method of color e-paper using micro-wall structure" USA Patent (2015.08.18)
- [4] "The Wide-Band Flexible Antena Using Stube" USA Patent (2015.06.16)

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- [3] “Apparatus and Method of Micro Ballpoint Pen Printing” USA Patent (2015.06.02)
- [2] “Method of operating a display device” ㄹ
- [1] “Touch screen and method of operating the same” USA Patent (2013.04.16)