

LED & OLED Lighting Technology (LT)

Oral Presentation

Nov. 8, 2011 (Tue.)

LT 1 (LED & OLED Lighting Technology 1)

Udo

Chair: Dr. Sotoudeh Hamed-Hagh (San Jose State University, USA)

10:40-12:10

LTIS1

10:40-11:10

Invited Speech

Recent Technological Progress in LED Light Sources and Luminaires for General Lighting

Takeo Yasuda

Toshiba Lighting & Technology Corporation, Japan

LT1556

11:10-11:30

Developing the Receiving Algorithm for Driving the Daisy Chain Receiver System to Improve the Control System of LED Illumination Adopting DMX-512 Protocol

Keehong Um¹, Sooyeup Yoo²

¹Hansei University, Korea, ²Taesung Eco.Tech. Ltd., Korea

LT1299

11:30-11:50

Wireless Power Transmission to OLED Lighting Panel with Magnetically Coupled Resonator

Yong-Hae Kim, Seung-Youl Kang, Sanghoon Cheon, Myung-Lae Lee, Seong-Deok Ahn, Taehyoung Zyung, Jeong-Ik Lee, Jun-Han Han, Hye Yong Chu

ETRI, Korea

LT861

11:50-12:10

The Luminescent Characterization of (Sr,M)₂SiO₄:Eu²⁺ (M: Ca, Ba) Nanopowders Synthesized by a Co-precipitation Method

Jun Seong Lee, Young Jin Kim

Kyonggi University, Korea

Nov. 8, 2011 (Tue.)

LT 2 (LED & OLED Lighting Technology 2)

Udo

Chair: Dr. Yong-Hae Kim (Electronics and Telecommunications Research Institute, Korea)

15:30-17:00

LTIS2

15:30-16:00

Invited Speech

Applications of Nanowire Transistors for Driving Nanowire LEDs

Sotoudeh Hamed-Hagh¹, Dae-Hee Park²

¹San Jose State University, USA, ²Wonkwang University, Korea

LT74

16:00-16:20

A Study of Thermal Radiation Behavior of LED Lighting Module for Graphene Contained Thermal Coating Materials

Steven Kim¹, Myung-Keun Hwang², Ki-Tae Kwon², Jung-Hyun Kim¹, Jong-Yun Jeong¹, Yun-Jung Kim¹, In-Tae Kim¹, Gwang-Seop Cho¹, Wang-Gun Yu³, Ki-Young Choi³

¹Kwangwoon University, Korea, ²Korea Institute of Lighting Technology(KILT), Korea,

³Green Phoenix Co. Ltd., Korea

LT1558 Designing the Control Circuit for LED Illumination System using Charge Pump

16:20-16:40 Keehong Um¹, Sooyeup Yoo²
¹Hansei University, Korea, ²Taesung Eco.Tech. Ltd., Korea

LT1621 New Approaches with LED Lighting in Sustainable Cities

16:40-17:00 Youngho Baik
 Philips Electronics Korea Ltd, Korea

Poster Presentation

Nov. 8, 2011 (Tue.)

LTP (LED & OLED Lighting Technology) Poster Presentation

Lobby 8F

Chair: Dr. Takeo Yasuda (Toshiba Lighting & Technology, Japan)

14:00-15:30

LT1641 Design and Analysis of LED Light Sources with Improved PPFD Characteristics for Leafy Vegetables

Noh-Joon Park¹, Kyu Han Lee², Jae-Kyu Ko¹, Jin-Hwan Lee¹, Chang-Kyu Park¹, Mee-Ryoung Cho¹, Myung-Keun Hwang¹
¹Korea Institute of Lighting Technology, Korea, ¹Kodenshi AUK Co., Ltd., Korea

LT1639 Estimation of Photosynthetic Photon Flux Density with Various Wavelength LEDs for Plant Factory using Spectroradiometer and Integrating Sphere System

Noh-Joon Park¹, Kyu Han Lee², Jae-Kyu Ko¹, Jin-Hwan Lee¹, Mee-Ryoung Cho¹, Jong-Min Lim¹, Myung-Keun Hwang¹
¹Korea Institute of Lighting Technology, Korea, ²Kodenshi AUK Co., Ltd., Korea

LT1634 Characteristics of Transparent Multilayer Anode with Transparent Oxide and Silver for OLED Lighting

Chan-Jae Lee, Seo-Yeon Yoo, Min-Gi Kwak, Jeong-No Lee
 Korea Electronics Technology Institute, Korea

LT1625 Optimization of Luminous Intensity Distribution for 75W Outdoor Down Light based on Eco-design

Sung-Hyun Kim¹, Bum-Sik Seo¹, Noh-Joon Park², Dae-Hee Park¹
¹Wonkwang University, Korea, ²Korea Institute of Lighting Technology, Korea

LT1616 Manufacture of OLED Devices without Photolithography Process

Hyo Kyun Ham¹, Jong Woon Park¹, Jong Ho Lee¹, Cheol Young Park¹, Dong Chan Shin²
¹KITCH, Korea, ²Chosun University, Korea

LT1457 The New Structure Design and Analysis of the 400W Class LED Floodlight Module from the View of Efficiency and Long Lighting

Hyo-Jin Kim¹, In-Tae Choi¹, Sung-Suk Park¹, Seung-Myeong Baek²
¹Design Square Co., Ltd, Korea, ²Changwon Munsung University, Korea

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LT1230 **The Prediction and Effect of Phosphor Sedimentation in the High-Power White Light-Emitting Diodes**

Kwang-Cheol Lee¹, Deok Gi Kim¹, Joonmo Park¹, Jong Hyeob Baek¹, Jong-Ha Moon²
¹Korea Photonics Technology Institute, Korea, ²Chonnam National University, Korea

LT1093 **Temperature-dependent Dielectric Relaxation in ITO/Alq3/Al Organic Light-emitting Diodes**

Joonho Ahn¹, Tae-Wan Kim², Won-Jae Lee³
¹Electrical Industry Research Institute of Korea, Korea, ²Hongik Univ., Korea, ³Kyungwon Univ., Korea

LT1030 **Improved Device Performances in Phosphorescent Organic-light Emitting Diodes by Micro-cavity Effects**

Chul Woong Joo, Jaehyun Moon, Joohyun Hwang, Jun-Han Han, Jin-Wook Shin, Doo-Hee Cho, Jin Woo Huh, Hye Yong Chu, Jeong-Ik Lee
Electronics and Telecommunications Research Institute (ETRI), Korea

LT941 **LED Lighting Degradation Characteristics Estimated by Tracing the Illuminance**

Seok-joon Choi¹, Myung-keun Hwang¹, Se-hyun Lee¹, Bung-ju- Lee²
¹Korea Institute of Lighting Technology, Korea, ²Namseoul Univ., Korea

LT867 **Synthesis and Luminescence of Ca₂SiO₄:Eu²⁺ Nanopowders Prepared by a Sol-gel Method**

Jung Hye Park, Jun Seong Lee, Young Jin Kim
Kyonggi University, Korea

LT674 **Preparation of CaS: Ce, Sm films by Sol-gel Method**

Xiaojuan Zhu^{1,2}, Yongping Pu¹, Ning Xu¹, Yongyong Zhuang¹, Bo Wang¹, Haidong Wu¹, Kai Chen¹, Hao Meng²
¹Ministry of Education, China, ²Shaanxi University of Science & Technology, China

LT673 **Electrical and Optical Characteristics of White Organic Light Emitting Diodes with Single Host Layer**

Jong-Chel Jun, Si-yeon Seong, Dae-Gyu Moon
Soonchunhyang University, Korea

LT628 **Electrical Properties of OLEDs with the Oxygen Plasma Power on ITO**

Hyeon-Seok Han¹, Dong-Hoon Oh¹, Jong-Yong Lee¹, Jong-Yeol Shin², Jin-Woong Hong³
¹Kwangwoon University, Korea, ²Sahmyook University, Korea, ³Kwangwoon University, Korea

LT519 **Solution-processed Light-Emitting Diode Utilizing Hybrid Polymer and Red-Green-Blue Quantum Dots**

Dong Ick Son, Byoung Wook Kwon, Dong Hee Park, Jeong-Do Yang, Won Kook Choi
Korea Institute of Science and Technology, Korea

- LT451** **Color Stability of Blue Phosphorescent Organic Light Emitting Diode by Undoped Layer in Emission Layer**
Chan-Jae Lee, Min-Gi Kwak, Jeong-No Lee
Korea Electronics Technology Institute, Korea
- LT445** **Energy Recycling using a Solar Cell and OLEDs**
Young-mo Kim¹, Do-hyun Kim^{1,2}, Hye-jin Gong^{1,2}, Jongho Lee¹, Jongwoon Park¹
¹KITECH, Korea, ²Chonnam National University, Korea
- LT356** **Luminescence Enhancement and Local Crystal Environment in Eu-doped Cristobalite and Quartz Type Phosphors**
Jeong Seog Kim, Kyoung-Ho Lee, Ki Woong Chae, Chae Il Cheon
Hoseo University, Korea
- LT302** **Microstructure and Photoluminescence Properties of Nd³⁺-doped Bi₄Ti₃O₁₂ Nanocrystalline**
Dan Liu, Yongping Pu, Xuan Shi
Shaanxi University of Science and Technology, China
- LT232** **Fabrication of Random Nano-structures for Optical Devices**
Jin-Wook Shin, Doo-Hee Cho, Seongwoo Choi, Jaehyun Moon, Jun-Han Han, Jin Woo Huh, Chul Woong Joo, Joohyun Hwang, Hye Yong Chu, Jeong-Ik Lee
ETRI, Korea
- LT222** **Simulation of Organic Layer and Auxiliary Electrode for Large Area OLEDs Lighting Devices**
Keon-Ung Lee, Bo-Ra Koo, Yong-Taeg Oh, Dong-Chan Shin
Chosun University, Korea
- LT193** **Uniformity Illuminance Distribution and Photosynthetic Photon Flux Density Characteristics of LED Packages with Various 2D Layouts**
Hee-Jae Jeon, Hyun-Kyeun Kim, Kang-Sig Ju, Jai-Hwang Joo
HAN'A ESSES Co., Ltd., Korea
- LT130** **Effect of UVA-LED on the Sterilization**
Young Seon Jeon¹, Bo-An Kang¹, Young-Hwan Lee², Ju-Hyun Jeong³, Seung Hwangbo⁴, Kyu-Seog Hwang¹
¹Nambu Univ., SunTech, Korea, ²Chunnam Techno College, Korea, ³Konyang Univ., Korea, ⁴Honam Univ., Korea
- LT88** **Heat Transfer Property of Thin-Film Encapsulation for OLEDs**
In Ha Seo^{1,2}, Hyo kyun Ham², Jong Ho Lee¹, Yong Taeg Oh¹, Jong woon Park², Dong Chan Shin¹
¹Chosun University, Korea, ²KITCH, Korea
- LT85** **Enhanced Photoluminescence in SnO₂-core/V₂O₅-shell Nanorods**
Hyunsu Kim, Changhyun Jin, Chanseok Hong, Jungkeun Lee, Chongmu Lee
Inha University, Korea

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LT62 Reliability Enhancement of Ceramic Package LEDs by Improvement of Thermal Property

Byungjin Ma, Jemin Kim, Sungsun Choi
Korea Electronics Technology Institute, Korea

LT671 White Organic Light Emitting Diode with New Electron Transport Layer

Dong-Jun Won¹, Jae-Hoon Jung¹, No-Gill Park², Dae-Gyu Moon¹
¹Soonchunhyang University, Korea, ²CS Elsolar Co.,Lt, Korea