EXALOS to Present Invited Paper on Gallium Nitride-based Superluminescent Light Emitting Diodes (SLEDs) at Photonics West 2018

Schlieren, Switzerland, January 22nd, 2018. EXALOS, the world's leading developer of visible Superluminescent Light Emitting Diodes (SLEDs), will present an invited paper at the OPTO conference held during the SPIE Photonics West event at the Moscone Center, San Francisco, CA, from January 27th to February 1st, 2018.

The paper [10532-67] entitled, "Recent progress on GaN-based superluminescent light-emitting diodes in the visible range" and authored by Antonino Castiglia, Marco Rossetti, Marco Malinverni, Christian Mounir, Nicolai Matuschek, Marcus Duelk, and Christian Velez, will be presented by Dr. Antonino Castiglia at 2.00 pm on Thursday, February 1st, 2018, in room 216 (south level 2, Moscone Center). It will be part of the Optoelectronic Materials and Devices session and included in the Gallium Nitride Materials and Device XIII conference (10352).

Dr. Castiliga will review the current status of Exalos' GaN-based SLED technology in the violet-blue spectral range and report on the recent progress for devices with output in 440-460 nm range. In addition, he will review the challenges in achieving light output at even longer wavelengths and share the latest breakthroughs in realizing the company's first cyano-green device (495 nm).

With the current wave of excitement surrounding the potential of augmented and virtual reality (AR/VR) applications, there is significant interest in high luminance displays for near-to-eye and pico-projector systems that are compact and offer a wide color gamut with high overall efficiency. While LDs and LEDs have been the preferred illumination sources for such displays, their shortcomings have been well documented. LDs have a narrowband output which can comprise image quality through unwanted coherent artifacts and speckle. LEDs, on the other hand, are broad area emitters which result in low efficiency when coupling into waveguide architectures. SLEDs, however, are directional light sources offering efficient coupling to micro-optical elements with a broader spectral bandwidth that leads to strongly reduced speckle noise and improved image quality when used as illumination sources in holographic and MEMS-based scanning micro-displays. In addition, visible SLEDs can also provide benefits in applications such as broad area illumination, sensing, microscopy, spectroscopy, or machine vision.

Exalos will be exhibiting its cyan-green SLEDs for the first time, along with its latest red and blue devices, at BIOS and PW in San Francisco from January 27th to February 1st. Please stop by our booth at either BioS (8335) or Photonics West (1941) to discuss how these sources can benefit your application and learn more about our latest developments.

For more information about our SLEDs please visit our website at www.exalos.com or email us at sales@exalos.com.

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About EXALOS

EXALOS AG, an ISO 9001:2015 certified company, is developing and selling near-IR SLEDs and Swept Source, with wavelengths ranging from 650 nm to 1650 nm, for the medical imaging, fiber optic gyroscope, test equipment and sensor industries and visible SLEDS and Laser Diodes, with wavelengths ranging from 405 nm to 650 nm, novel displays, machine vision, broad area illumination. Etc. EXALOS has its headquarters in Schlieren, Switzerland.