

Physics Nobel Prize 2014 – LayTec congratulates!

On October 7th the Royal Swedish Academy of Sciences has decided to award the Nobel Prize in Physics for 2014 to Isamu Akasaki, Hiroshi Amano and Shuji Nakamura. LayTec is congratulating!

We take the opportunity to refer to one of the first papers published by Shuji Nakamura regarding the III-Nitride buffer layer optimization: "In-situ Monitoring of GaN growth using interference effects". Even today, 23 years later, it is highly educating on how in-situ metrology can be used for studying in real-time the evolving surface morphology in advanced thin-film processes (Fig.1).

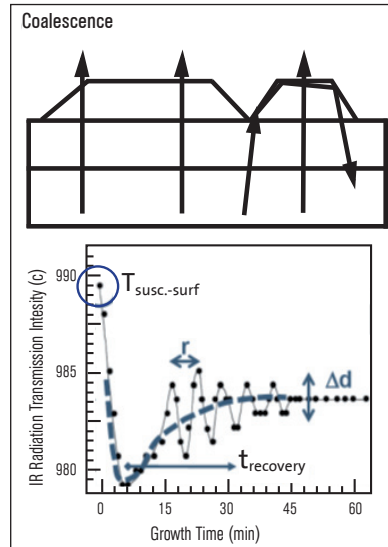
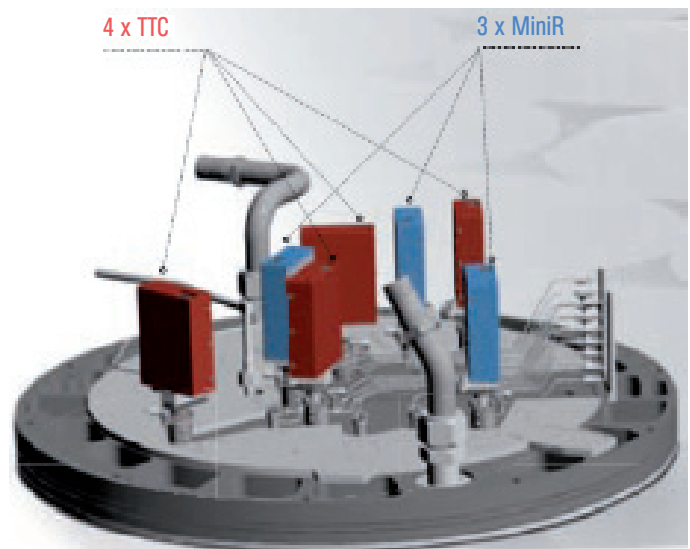


Fig.1: Optimum buffer growth (growth rate r and waviness Δd) is correlated to recovery time (t_{recovery}) until 3D-2D coalescence. Source: Japanese Journal of Applied Physics Vol. 30, No. 8, August, 1991, pp. 1620-1627

LayTec in-situ metrology in AIXTRON's latest AIX R6 HB-LED reactor

On November 6th AIXTRON presented its latest generation of MOCVD reactors for HB-LED manufacturing at the SSL China conference. The advanced feed-back control capabilities of these reactors are based on two fully integrated LayTec OEM metrology sub-systems (Inside MiniR and Inside TTC) with typically seven metrology heads in total. Emissivity corrected susceptor surface temperature and double wavelength reflectance is provided by the industry proven LayTec in-situ metrology. As additional options also wafer bow and GaN surface temperature can be measured by Inside MiniRC and Inside P400 (OEM version of LayTec's Pyro 400). Aixtron's and LayTec's engineering teams worked closely together in order to provide this market leading in-situ metrology solution for both our customers in the LED industry.



Translucent: EpiCurve® TT supports novel III-N/Si structures

Translucent of Palo Alto, CA, has recently published its latest results on novel insulating, single-crystal rare-earth-oxide (REO) sub-buffers that allow for extremely low-defect growth of GaN on silicon. LayTec's EpiCurve® TT was used for optimizing this complex MOCVD process targeting power electronics applications. We refer to [1] for further reading ([1] Compound Semiconductor, Oct. 2014, p. 28).

You can meet us at the following workshops, conferences and trade fairs:

11 – 12 December 2014 | DGKK Workshop 2014 | Magdeburg, Europe | Booth 9 | www.dgkk2014.de

24 – 27 November 2014 | C-Touch 2014 | Shenzhen, China | Booth D332 | <http://sz.quanchu.com.cn/index.php/en/>

11 – 12 March 2015 | CS International 2015 | Frankfurt, Europe | www.cs-international.net