

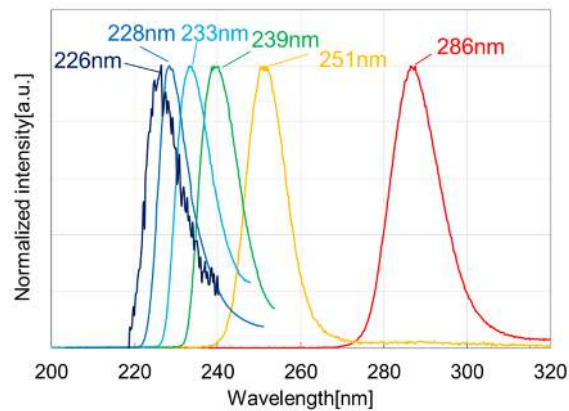


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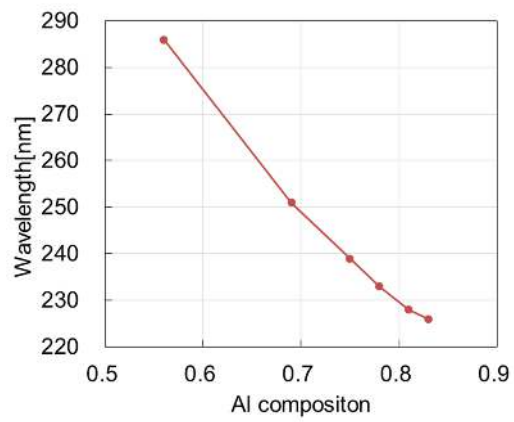
**Taiyo Nippon Sanso and RIKEN demonstrate
MOCVD AlGaIn-based deep ultraviolet LED EL emission at 226nm**

Taiyo Nippon Sanso Corporation (“TNSC”, President: Kenji Nagata) and RIKEN have demonstrated AlGaIn (aluminum gallium nitride) deep ultraviolet LED electroluminescence (EL) at a short wavelength of 226 nm using TNSC’s MOCVD equipment.

AlGaIn-based deep ultraviolet LEDs with emission wavelengths of 220 to 350 nm are applicable in a wide range of fields including sterilization, disinfection, and medicinal applications. TNSC and RIKEN have conducted joint research for epitaxial growth of and device efficiency improvement of the deep ultraviolet LED technology. Previously, 280 nm emission wavelength was demonstrated with the TNSC SR4000HT MOCVD in 4-inch wafer configuration. Here we report EL emission with a short wavelength of 226 nm in with the TNSC SR4000HT in 2-inch x 3 wafers configuration.



【Figure 1】EL emission spectrum of deep ultraviolet LEDs



【Figure 2】Relationship between Al composition and emission wavelength

[Fig. 1] graph showing the EL emission spectrum at each wavelength, shortening from 286 nm, and showing that the EL emission spectrum was obtained even at 226 nm.

[Fig. 2] graph showing the relationship between Al composition and each wavelength, indicating that the emission wavelength changes linearly with respect to Al composition.

Taiyo Nippon Sanso Corporation

Tnsc.Info@tn-sanso.co.jp