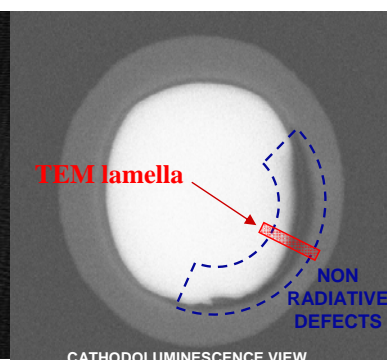
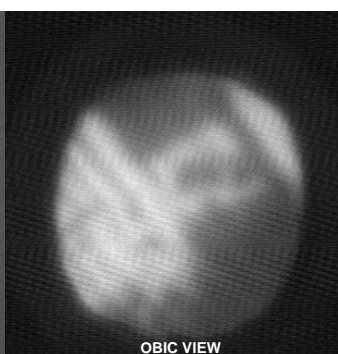
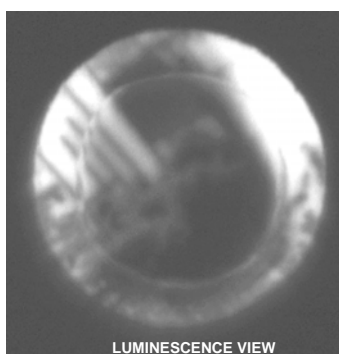
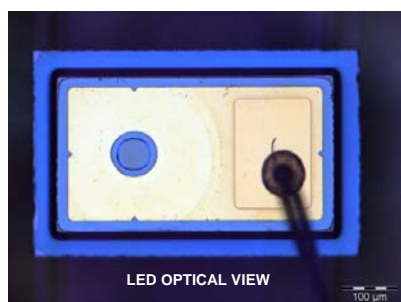
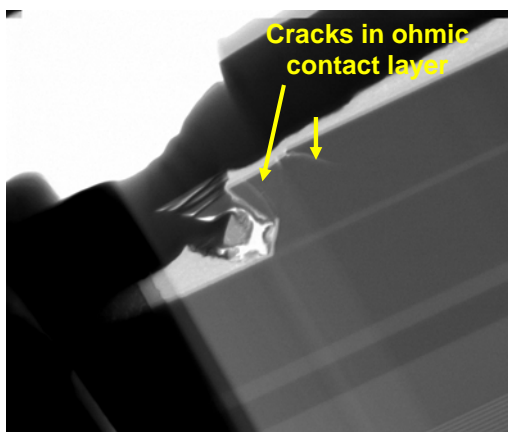


# FIB FOR OPTOELECTRONICS FAILURE ANALYSIS

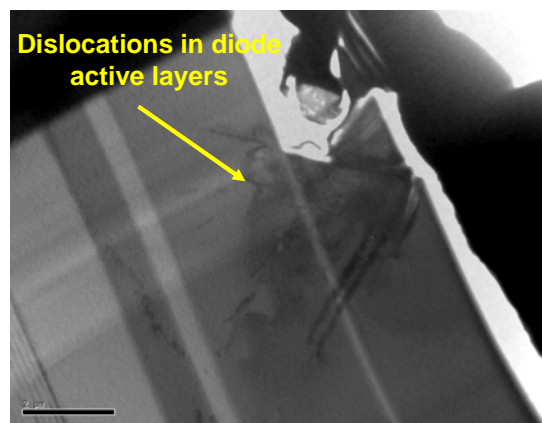
## Light Emitting Diode



1. LUMINESCENCE + OBIC + CATHODOLUMINESCENCE ⇒ reveal recombination center defect in LEDs active zone

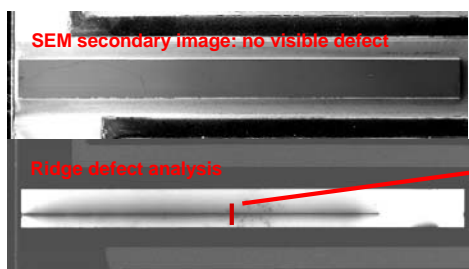


2. STEM ⇒ FIB in situ LR observation of the defect

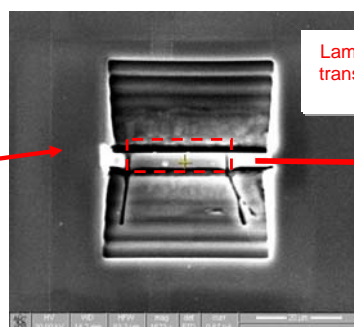


3. TEM ⇒ HR observation of the defect

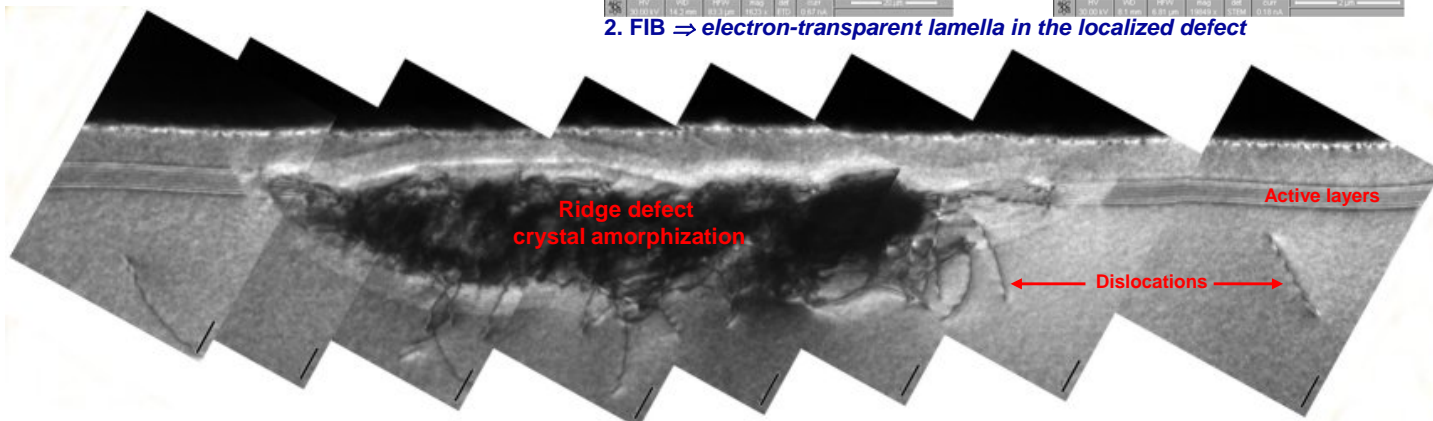
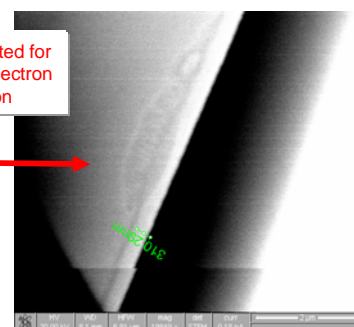
## Laser Diode



1. SEM/Cathodoluminescence ⇒ defect localization



2. FIB ⇒ electron-transparent lamella in the localized defect



3. TEM ⇒ HR observation of the defect, active layers and dislocations. Diffraction analysis can determine the local structure of the substrate (crystalline/amorphous)