

Optical polarization properties of (11-22) semi-polar InGaN LEDs with a wide spectral range

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Supplementary Information

Figure S1: Typical cross-sectional TEM image of our (11-22) LED overgrown on a micro-rod arrayed template (a) and Typical plane-view TEM image of our (11-22) LED structure, showing that the dislocation density is $2.0 \times 10^8/\text{cm}^2$. For detailed structural characterisation, please refer to Refs.11-13.

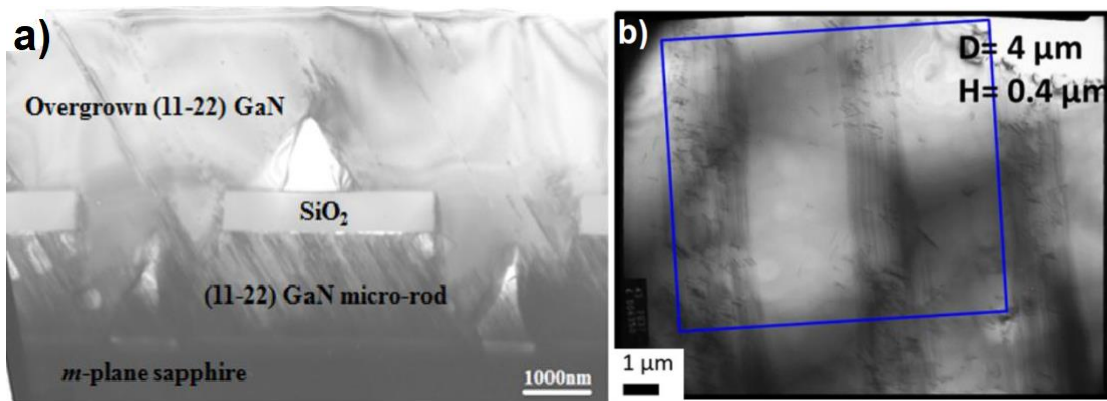


Figure S2: Schematic illustration of our semi-polar (11-22) InGaN LEDs.

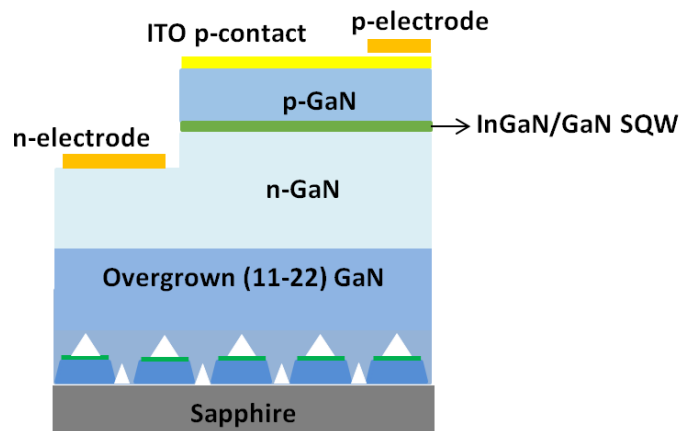


Figure S3: Schematic diagram of our electroluminescence measurement system (A detailed description is given in the “Methods” section in the paper)

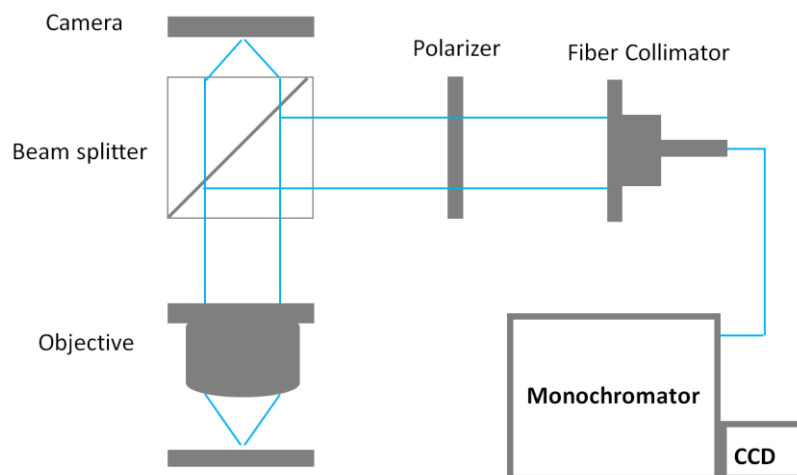


Figure S4 shows the change in polarization degree as a function of emission wavelength, exhibiting that it increases with increasing emission wavelength. This further supports the conclusion explained by using the band-filling effect mentioned in the paper.

