Abstract

Light extraction efficiency has become first order design constraint for LEDs and its enhancement has always been a challenge for researchers. This affects the life of LEDs as well as optical output and various techniques for its enhancement have been reported. Methods for maximizing the efficiency of LEDs are typically based on enhancement of internal and external quantum efficiency. In our paper, we report efficiency enhancement based comparative study of LEDs which are grown by different techniques. Firstly the techniques dealing with improvement of internal quantum efficiency and secondly the techniques for increasing ratio of photons leaving the LED to those created in active region (enhancement of external quantum efficiency) are reviewed.

References

A Study of Enhancement Techniques for Light Extraction Efficiency of Light Emitting Diodes

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