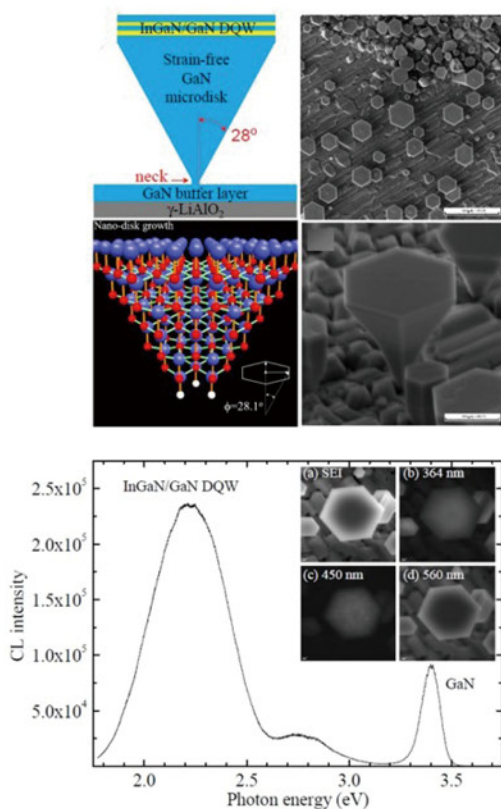


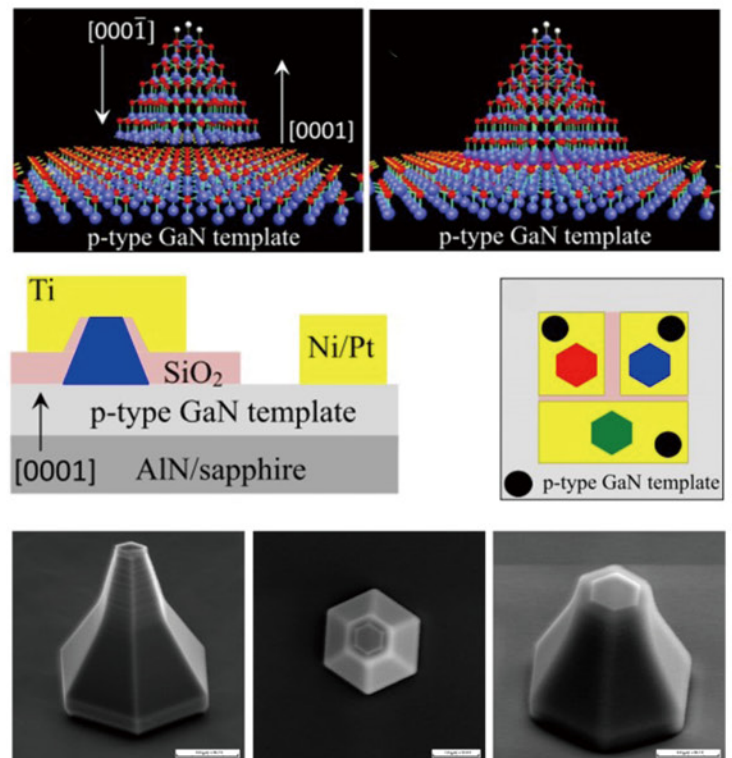
Cold light LED made of III-Nitride Microdisks

GaN microdisks have been grown on γ -LiAlO₂ by molecular beam epitaxy. We developed a self-assembling mechanism for the growth of microdisk, in which the divergent awl-shaped growth has oblique faces tilted 28 degree-angle off its c-axis. The InGaN/GaN quantum wells growing atop yielded a light with wavelength of 566 nm emitted indicates that microdisks can be utilized as a strain-free substrate for application of cold white-LEDs by engineer the bandgap of InGaN alloys. These technologies have been granted by the US patent. (US PATENT: US 8,728,235 B2 (2014), US 8,728,235 B2 (2014), US 9,147,808 B2 (2015), US 9,312,440 B2 (2016), US 20160141453 A1 (2016))

InGaN/GaN Quantum Wells on Microdisks



Processing for GaN-based Micro-LED



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