Solution-Processed Indium-Gallium-Nitride (InGaN) Blue Light-Emitting Diodes (LEDs)
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A soluble form of InGaN was synthesized, producing a solution that exhibited blue photo-luminescence (PL) upon UV light exposure. This solution was used in the fabrication of a blue light-emitting diode (LED) that was produced using solution processable methods, a world first for an InGaN-base LED. The PL properties of the solution and the electro-luminescence (EL) and device characteristics of the LED are presented.