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The invention relates to the semiconductor device manufacturing technology, in particular to processes for producing crystalline layers of III-N compounds with p-type electrical conduction on heterogeneous substrates.

The process for producing p-GaN layers comprises the deposition on a heterogeneous substrate of ZnO layers from a solution of zinc acetate in ethanol with subsequent thermal treatment at 500°C, subsequent deposition of a ZnO sediment from a solution of zinc nitrate and KOH in distilled water by boiling and thermal treatment also at 500°C, with subsequent introduction into the deposition reactor of GaN layers by the HVPE method, where the GaN layer is first deposited at a temperature of 500°C, and then the GaN layer itself is deposited at a temperature of 800...1050°C.

Claims: 1