Growth of GaN layers on Si(111) substrates by plasma-assisted molecular beam epitaxy

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The studies of the growth kinetics of GaN layers grown on nitridated Si(111) substrates by plasma-assisted molecular beam epitaxy are presented. The nucleation and overgrowth of the separate GaN/Si(111) nanocolumns during single growth run is demonstrated. The technique of the *in-situ* control of the GaN Si(111) nanocolumns lateral size is proposed.

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