SAIP2014

Contribution ID : 282

Reactive DC sputter deposition and charactersation of AlN thin films

Wednesday 09 Jul 2014 at 17:10 (01h50')

Abstract :

Thin films of Aluminium Nitride (AlN) have been deposited on Si wafers using RF reactive sputter deposition in a nitrogen ambient. AlN is a wide bandgap semiconductor suitable for deep ultraviolet optoelectronics. The films have been characterized using Atomic Force Microscopy (AFM), Rutherford Backscattering Spectrometry (RBS), Scanning Electron Microscopy (SEM) and the oxygen content has been profiled using resonant RBS. The films were found to be smooth and uniform and adhere well to the Si substrate.

Award :

No

Level :

N/A

Supervisor :

N/A

Paper :

Yes

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Session classification : Poster2

Track classification : Track A - Division for Physics of Condensed Matter and Materials

Type : Poster Presentation