

## Electronic Supplementary Information for

Metalorganic chemical vapor deposition of aluminum oxynitride from dimethylaluminum  
hydride and oxygen: growth mode dependence and performance optimization

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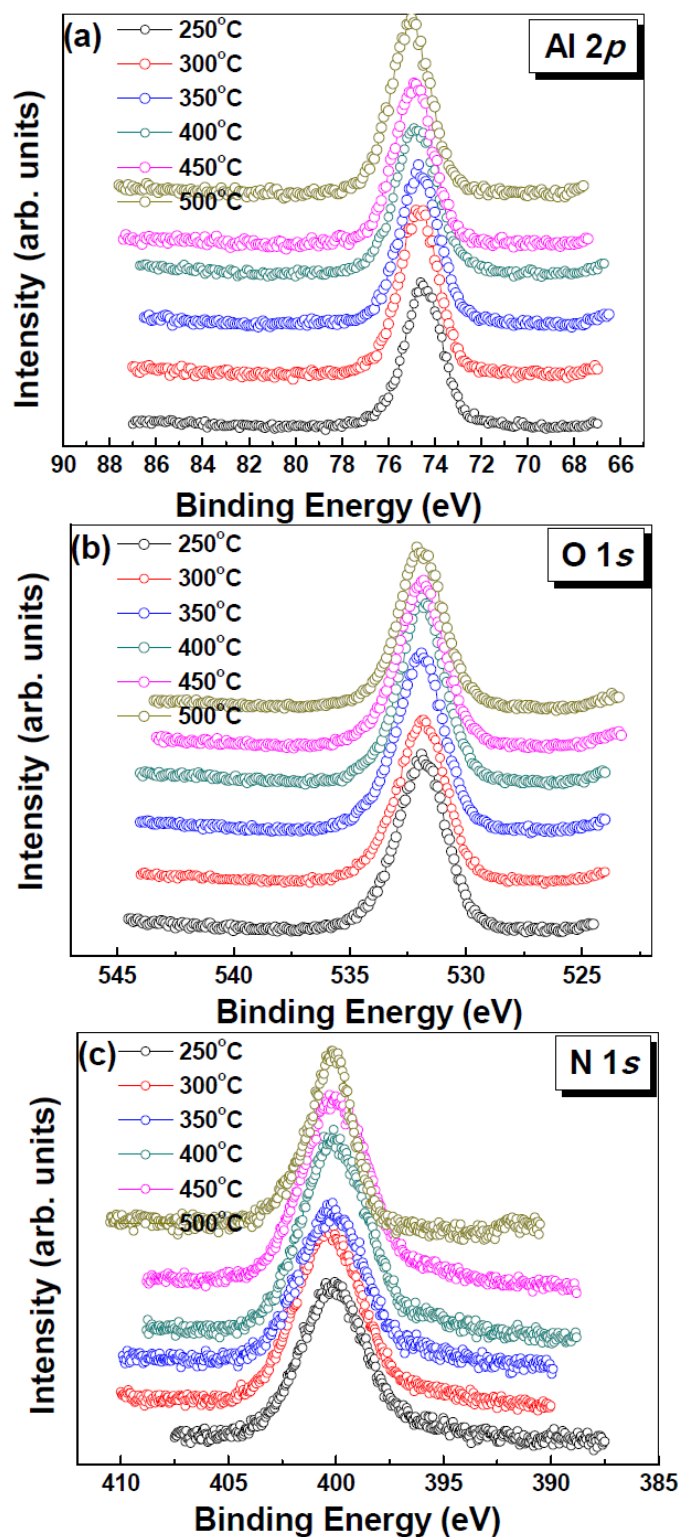
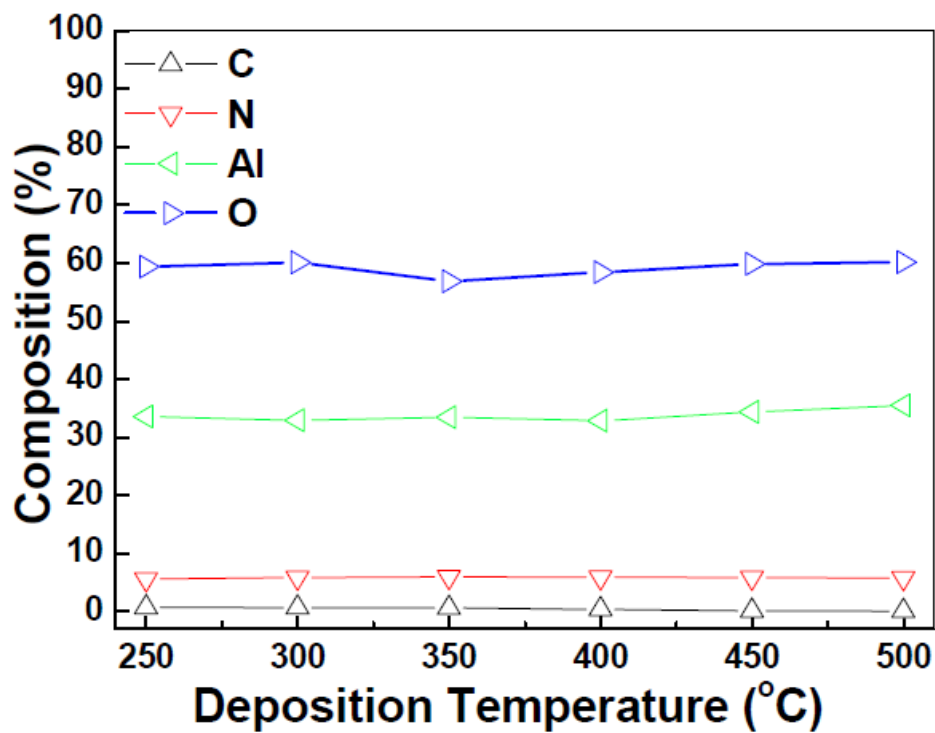


Fig. S1 Deposition temperature dependent Al 2p, O 1s, and N 1s core level

photoemission spectra of as-processed  $\text{AlO}_x\text{N}_y$  films grown on Si. All the samples were sputtered by  $\text{Ar}^+$  for 1min.



**Fig. S2** Deposition temperature dependent composition distribution in as-processed  $\text{AlO}_x\text{N}_y$  films. All the samples were sputtered by  $\text{Ar}^+$  for 1min.