Secondary ion mass spectrometry investigation of carbon grains formation in boron nitride epitaxial layers with atomic depth resolution

Electronic Supplementary Information

The following figures presents an example of a lateral distribution of carbon, boron and nitrogen (a, b and c, respectively) for BN layers (counting from the surface) for a sample grown under high and low reactor pressure (Self-terminated and 3D mode respectively). For 3D mode only 6 out of 68 layers are presented.



Figure 1: Self-terminated, layer 1



Figure 2: Self-terminated, layer 2



Figure 3: Self-terminated, layer 3







Figure 5: Self-terminated, layer 5



Figure 6: Self-terminated, layer 6





6 24 Position (μm)

Figure 7: 3D mode, layer 1





Figure 8: 3D mode, layer 12

32 (Lun (hun) 24

40

40

32 -

(m²⁴-

16 -

l6 24 Position (μm)

32

40

2



Figure 9: 3D mode, layer 23



Figure 10: 3D mode, layer 34



Figure 11: 3D mode, layer 45



Figure 12: 3D mode, layer 56