

# Supporting information for

## *In situ* Synthesis of Large Area Boron Nitride/Graphene Monolayer/Boron Nitride Film by Chemical Vapor Deposition

*Qinke Wu*<sup>1</sup>, *Sungkyu Jang*<sup>1</sup>, *Sangwoo Park*<sup>1</sup>, *Seong Jun Jung*<sup>1</sup>, *Hwansoo Suh*<sup>2</sup>, *Young Hee Lee*<sup>4\*</sup>,  
*Sungjoo Lee*<sup>1,5,6\*</sup> and *Young Jae Song*<sup>1,4,7\*</sup>

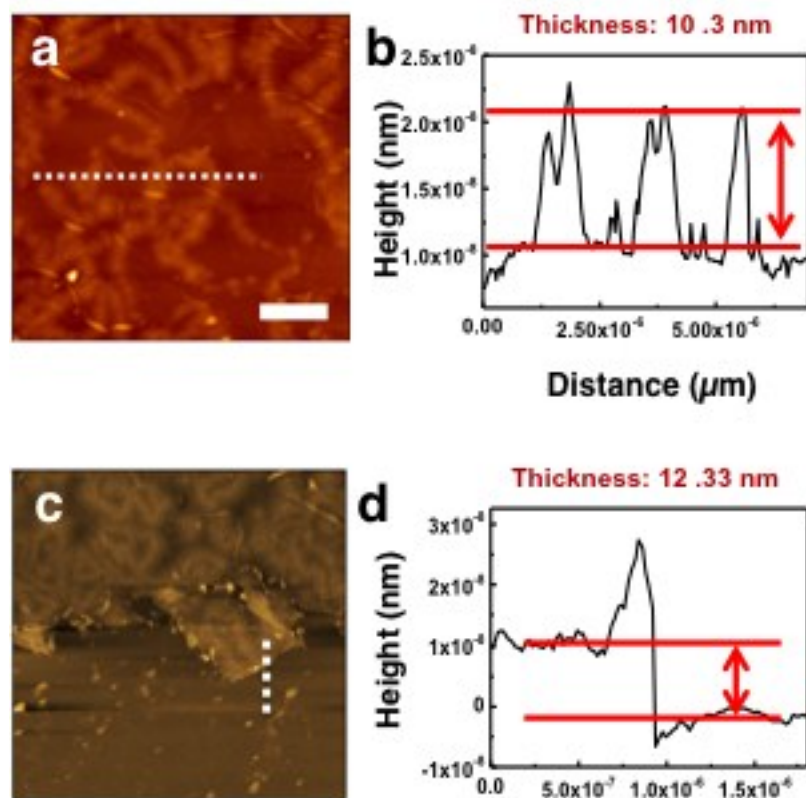


Figure S1. AFM film thickness measurements: (a)–(b) BN (40 min)/graphene/h-BN, and (c)–(d) BN (60 min)/graphene/h-BN.

**Thickness Measurements:** As the top h-BN layer grew on the graphene monolayer/h-BN/Cu structure, a thick line structure formed and filled the entire surface, yielding a BGB film. The thickness of the thick line structure was measured to be 10.3 nm using AFM techniques, as shown in Figure S1(a)–(b). The thickness of the entire BGB film, after the full growth of the top BN over 60 min, was typically 12.33 nm, consistent with our previous results revealing that the graphene/h-BN structure was about 2 nm thick.