

## Supporting Information

# Raman Signature and Phonon Dispersion of Atomically Thin Boron Nitride

*Qiran Cai,<sup>1</sup> Declan Scullion,<sup>2</sup> Aleksey Falin,<sup>1</sup> Kenji Watanabe,<sup>3</sup> Takashi Taniguchi,<sup>3</sup> Ying  
Chen,<sup>1\*</sup> Elton J. G. Santos<sup>2,4\*</sup> and Lu Hua Li<sup>1\*</sup>*

1. Institute for Frontier Materials, Deakin University, Geelong Waurin Ponds Campus, Victoria  
3216, Australia

2. School of Mathematics and Physics, Queen's University Belfast, Belfast BT7 1NN, United  
Kingdom

3. National Institute for Materials Science, Namiki 1-1, Tsukuba, Ibaraki 305-0044, Japan

4. School of Chemistry and Chemical Engineering, Queen's University Belfast, BT9 5AL, United  
Kingdom.

\*Email: [ian.chen@deakin.edu.au](mailto:ian.chen@deakin.edu.au); [e.santos@qub.ac.uk](mailto:e.santos@qub.ac.uk); [luhua.li@deakin.edu.au](mailto:luhua.li@deakin.edu.au)

## 1. Raman G band width of substrate-bound and suspended BN

The G band width seems not to be affected by the strain in atomically thin BN, as substrate-bound and suspended 1-3L BN sheets show very similar G band width (Figure S1).

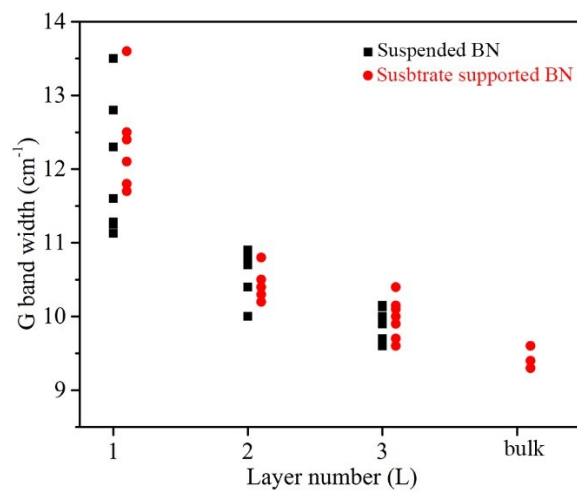


Figure S1. The comparison of the Raman G band width of suspended (red) and substrate-supported (black) BN nanosheets.