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Author Correction: Stacking stability of C₂N bilayer nanosheet

Klichchupong Dabsamut, Jiraroj T-Thienprasert, Sirichok Jungthawan & Adisak Boonchun Correction to: *Scientific Reports* <https://doi.org/10.1038/s41598-019-43363-8>, published online 02 May 2019

Published online: 03 March 2020

This Article contains errors.

The paper does not discuss the related work of R. Longuinhos and J. Ribeiro-Soares¹; as a result the Introduction should also include the following:

“Recently for bilayer C₂N, R. Longuinhos and J. Ribeiro-Soares¹ proposed several lower-symmetry stacking configurations which are AB’₂, AB’₃, AB’₄ and AB’₅. They suggested that among these lower-symmetry stackings, AB’₅ is the most stable position in equilibrium under standard conditions... According to energy landscape, our most stable stacking configuration named Min-stacking is accidentally the same structure as AB’₅ in the previous study by R. Longuinhos and J. Ribeiro-Soares¹”

In addition, the Results and Discussion reads:

“The energy differences of the symmetric AA, AB, AB’ and Min point stacking with respect to the energy of AB-stacking are shown in Table 1. The calculated energy difference confirmed that the AB stacking configuration is not the most favourable structure for bilayer C₂N. The local structure of one of the minimum energy points (Min) is shown in Figure 2(d)... The forbidden gap is still the direct-gap with a band gap of 1.444 eV.”

and should instead read:

“The energy differences of the symmetric AA, AB, AB’ and Min point stacking with respect to the energy of AB-stacking are shown in Table 1. The calculated energy difference confirmed that the AB stacking configuration is not the most favourable structure for bilayer C₂N. The local structure of one of the minimum energy points (Min) is shown in Figure 2(d), which is the same structure as AB’₅ stacking of the previous study¹... The forbidden gap is still the direct-gap with a band gap of 1.444 eV, which is higher than that of 1.3 eV in previous work with DFT-LDA.¹”

Reference

1. Longuinhos, R. & Ribeiro-Soares, J. Stable holey two-dimensional c₂n structures with tunable electronic structure. *Phys.Rev B*. **97**, 195119 (2018).



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