Supporting Information for:

Non-Isothermal Synthesis of AB-Stacked Bilayer

Graphene on Cu foils by Atmospheric Pressure

Chemical Vapor Deposition

Hai-Bin Sun, Jun Wu, Yan Han, Jun-Yong Wang, Feng-Qi Song and Jian-Guo Wan*

National Laboratory of Solid State Microstructures, Collaborative Innovation Center for Advanced

Microstructures, and Department of Physics, Nanjing University, Nanjing 210093, P. R. China

*Corresponding Author.

E-mail: wanjg@nju.edu.cn

S1

Setup for preparing the samples.

In this work, a precise sheathed thermocouple with a precision of 0.5 °C was used to monitor the temperature change of the sample. A fuzzy–PID controller was applied in temperature control. The thermocouple was placed outside the quartz tube and its end vertically touched the surface of the quartz tube. The sample was placed in the center of the quartz tube, exactly corresponding to the position of the thermocouple. So the distance between the sample and the end of the thermocouple is only about 10 mm, and the temperature difference between the sample and the thermocouple is less than 1 °C. Such configuration is sufficient to ensure the measurement precision of the sample. The setup for preparing the samples is drawn in Figure S1. We have prepared the samples many times on this setup and make sure that the experiment is reproducible.

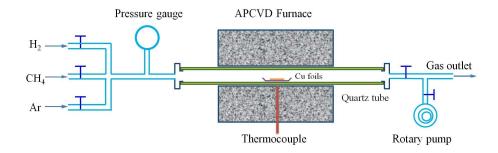


Figure S1 Schematic illustration of the setup for preparing the graphene.

Figure S2

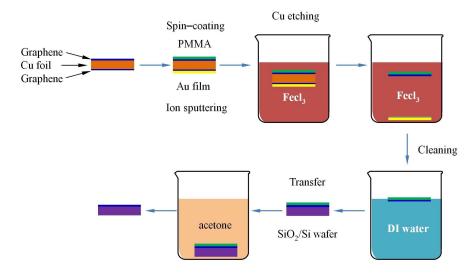


Figure S2 Schematic drawing of the transfer process of the graphene.