Supporting Information

Ultraclean and Large-area Monolayer Hexagonal Boron Nitride on Cu Foil Using Chemical Vapor Deposition

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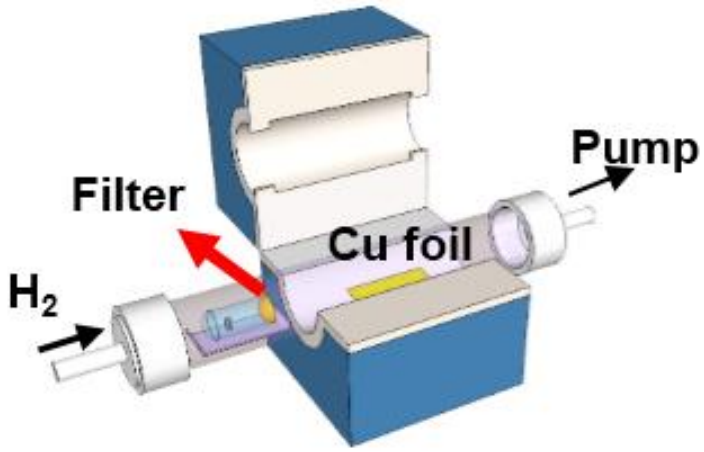

Figure S1. Schematic diagram of LPCVD system.

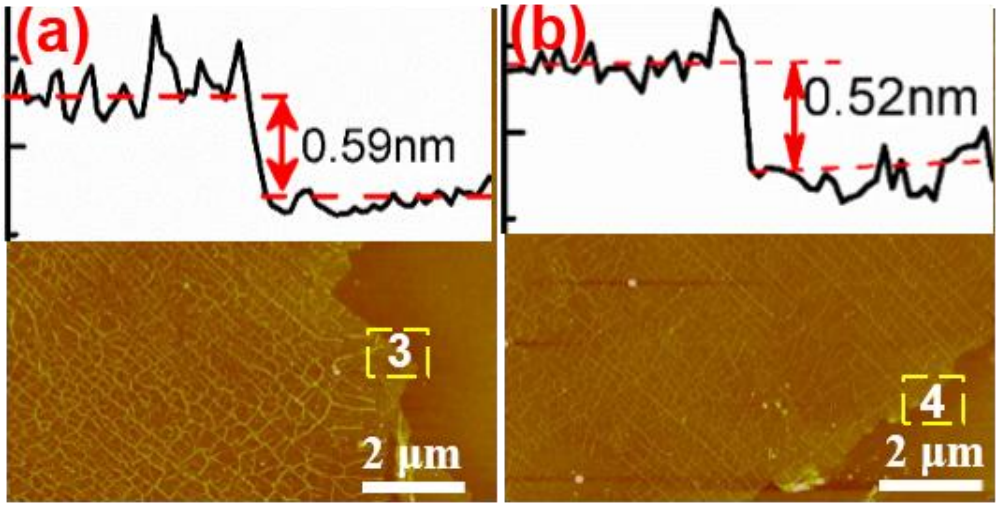

Figure S2. (a-b) AFM images of h-BN on the SiO_2/Si substrate, and the height profile within the yellow dashed line shown in Figure 1b.

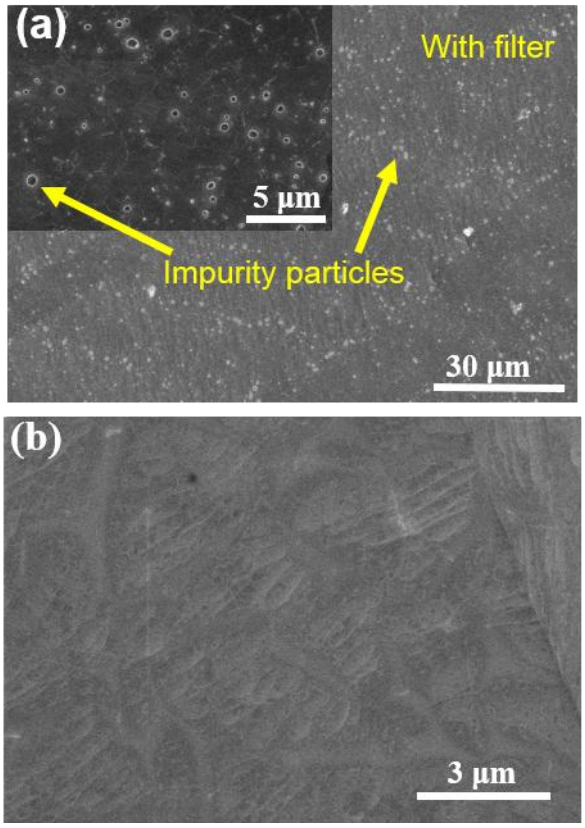

Figure S3 (a) SEM image of the annealed copper. (b) SEM image of the annealed copperpretreated with acetic acid and electrochemical polishing.

SiO_2/Si (%)			
Etch time /s	**C 1s**	**O 1S**	**Si2p**
0	**9.677**	**53.792**	**36.531**
50	**0.627**	**59.771**	**39.602**
100	**0.565**	**59.838**	**39.596**

Table S4. XPS analysis of the atomic percentage ratio on the SiO_2/Si substrate at different etching time: 0 s, 50 s, 100 s.

h-BN/Cu (%)			
Etch time /s	**C 1s**	**O 1S**	**Cu2p3**
0	**51.581**	**30.395**	**18.024**
50	**1.012**	**0.687**	**98.302**
100	**1.561**	**0.443**	**97.997**

Table S5. XPS analysis of the atomic percentage ratio on the h-BN/Cu foil at different etching time: 0 s, 50 s, 100 s.