

Supplementary Information

Large-scale synthesis of NbS₂ nanosheets with controlled orientation on graphene by ambient pressure CVD

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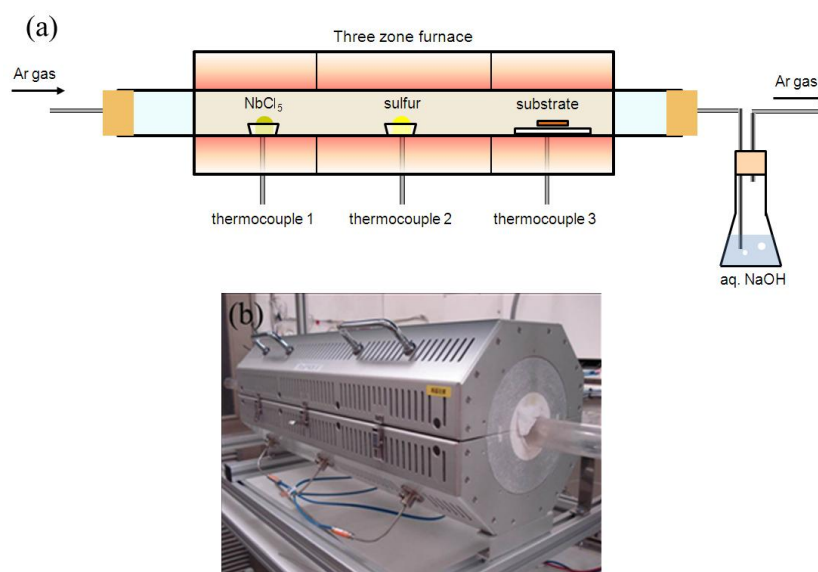


Figure S1. (a) A schematic of the ambient pressure CVD setup. (b) Photograph of the three-zone furnace used for the CVD.

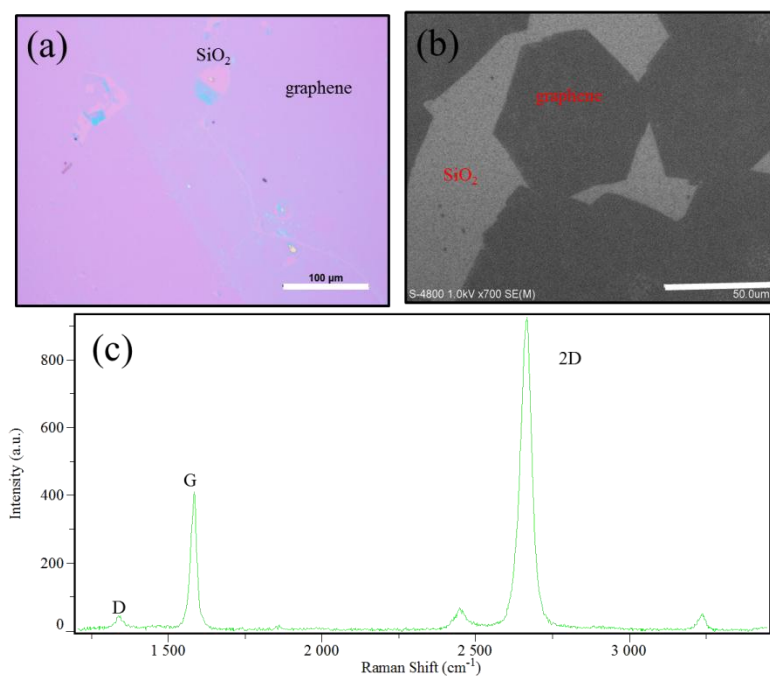


Figure S2 Optical micrograph (a) and SEM (b) images of graphene transferred on SiO₂ substrate. In (b), the graphene growth is terminated before covering the whole Cu surface. This image shows that the domains size is around 50 μm. (c) Raman spectrum of the transferred graphene, indicating the graphene is single layer with a good quality.

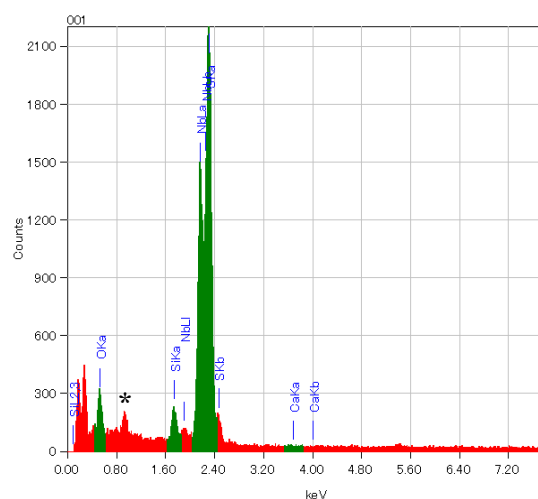


Figure S3. EDX spectrum of the NbS₂ nanosheet measured for the image shown in Figure 1f. Asterisk indicates a peak from Cu grid. Nb:S atomic ratio is estimated to be 1:1.2. Note that no Cl peak was observed in the EDX measurement, thus excluding a possibility of remaining NbCl₅ impurity in the as-grown sample.