

Plant derived porous graphene nanosheets with efficient CO₂ capture

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SUPPORTING INFORMATION

(Figures S1-S5)

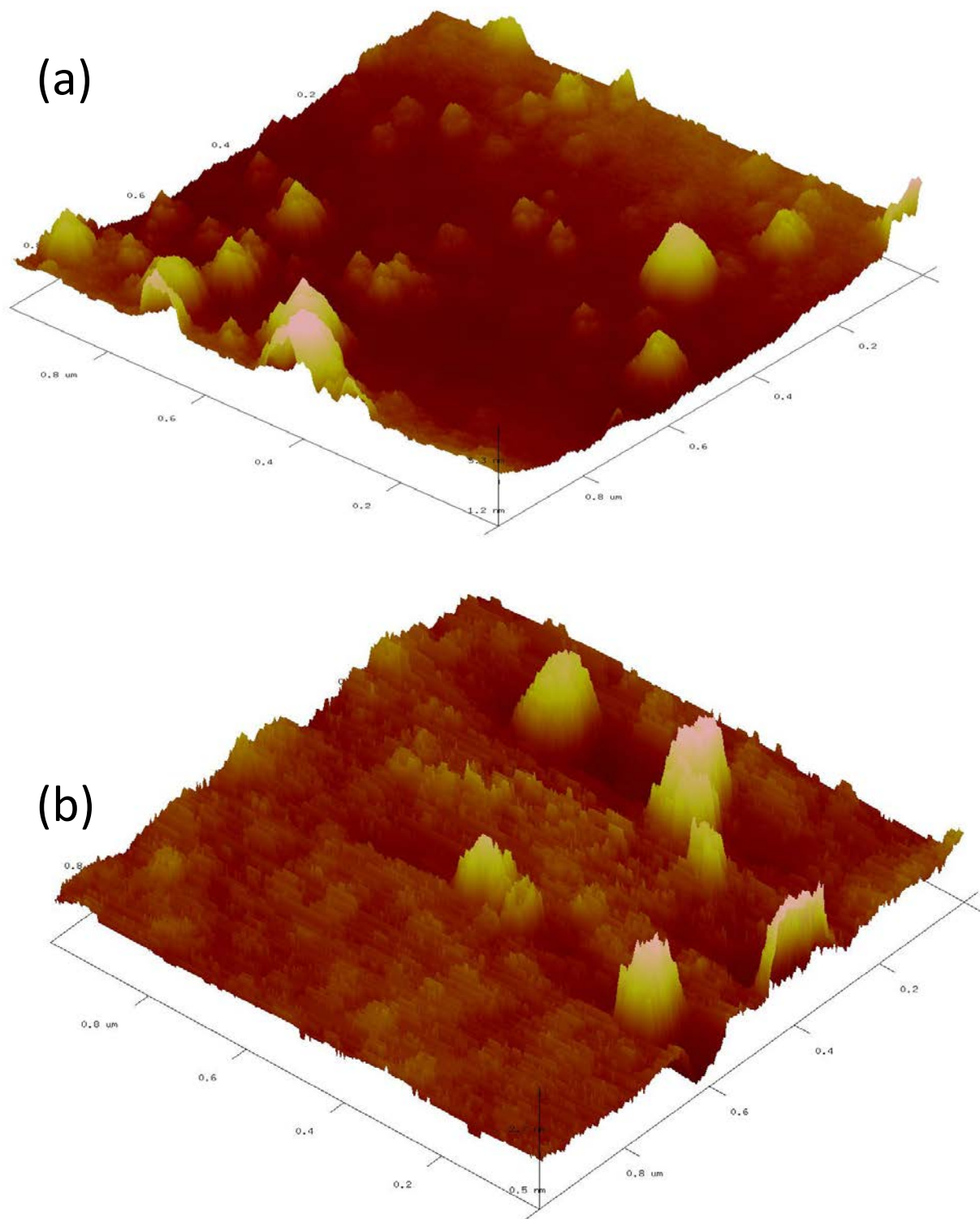


Figure S1. 3-D representation of a $1\ \mu\text{m} \times 1\ \mu\text{m}$ AFM scan of (a) EFBG-800 and (b) EFBG-1000 material overlaid on the Si surface.

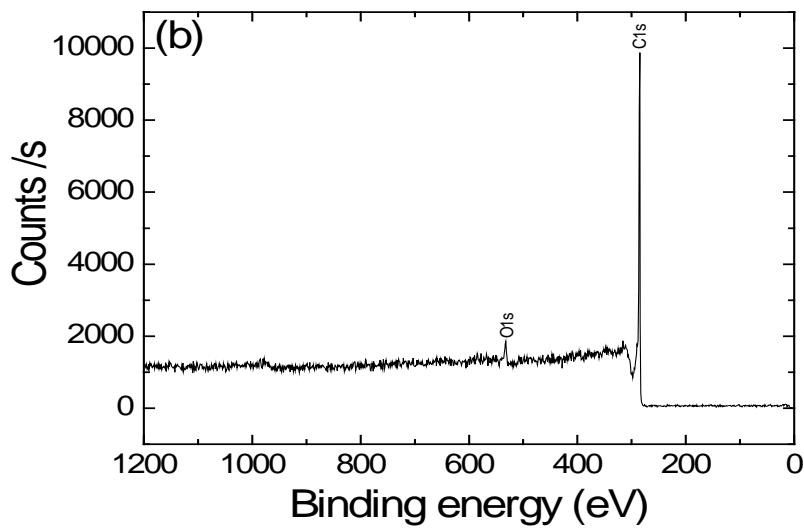
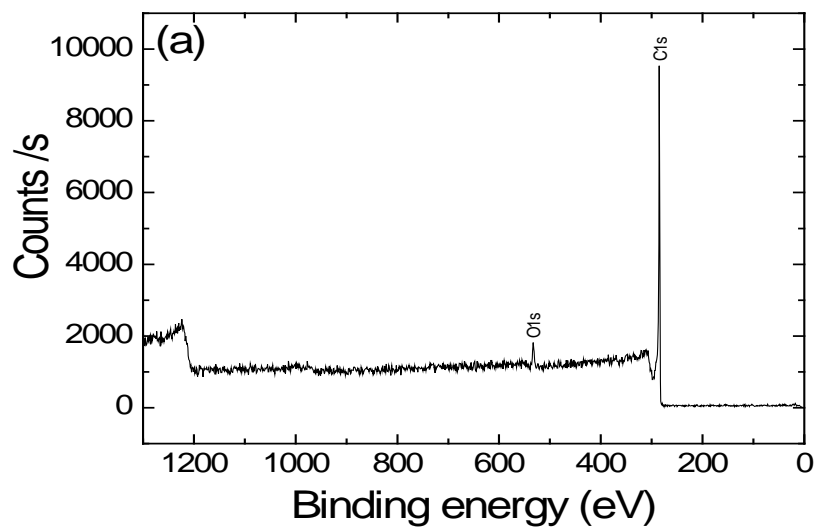


Figure S2. XPS survey spectra of (a) EFBG-800 and (b) EFBG-1000.

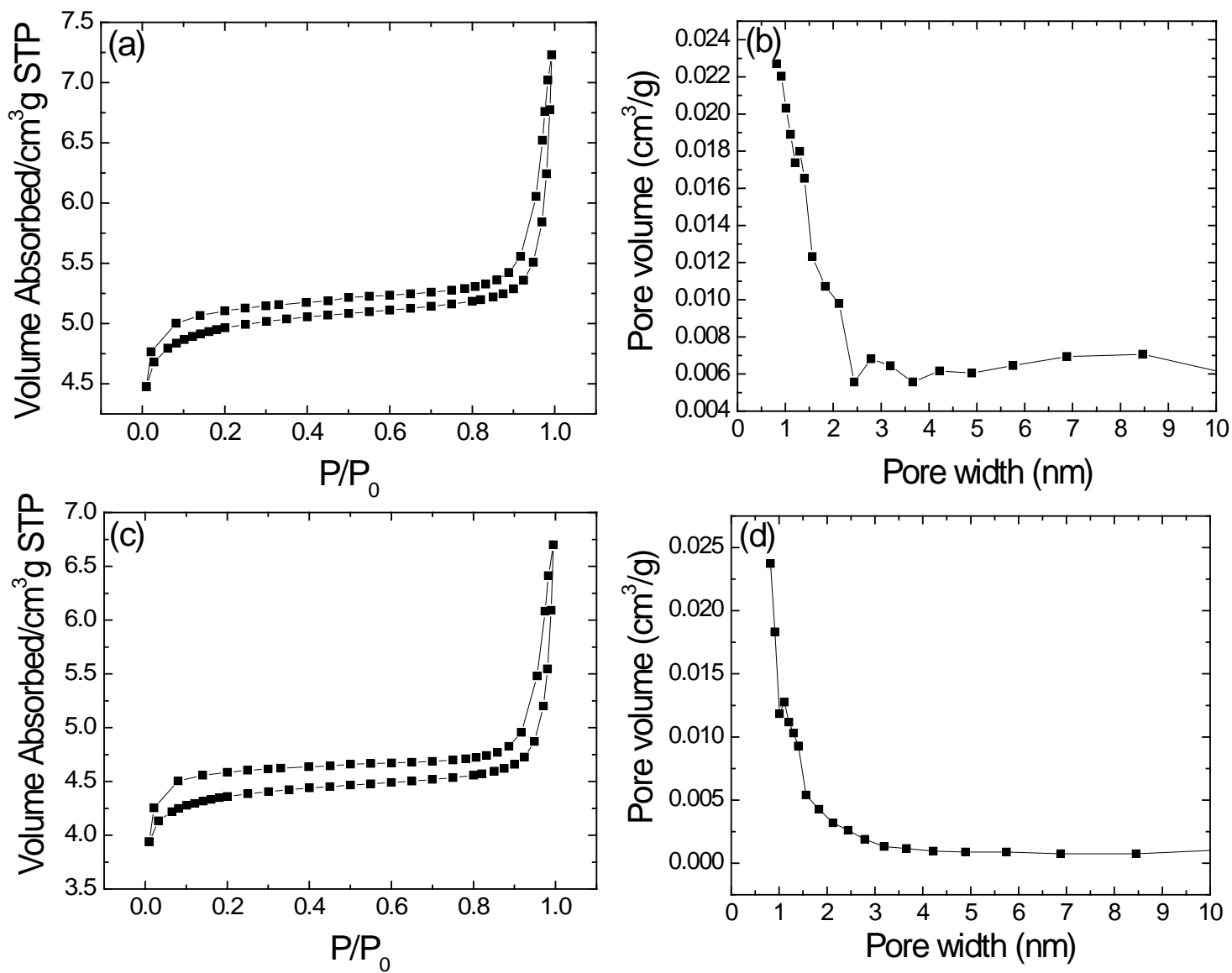


Figure S3. (a) N₂ adsorption-desorption isotherms of EFBG-800 at 77 K. (b) Pore size distribution (PSD) of EFBG-800. (c) N₂ adsorption-desorption isotherms of EFBG-1000 at 77 K. (d) Pore size distribution (PSD) of EFBG-1000.

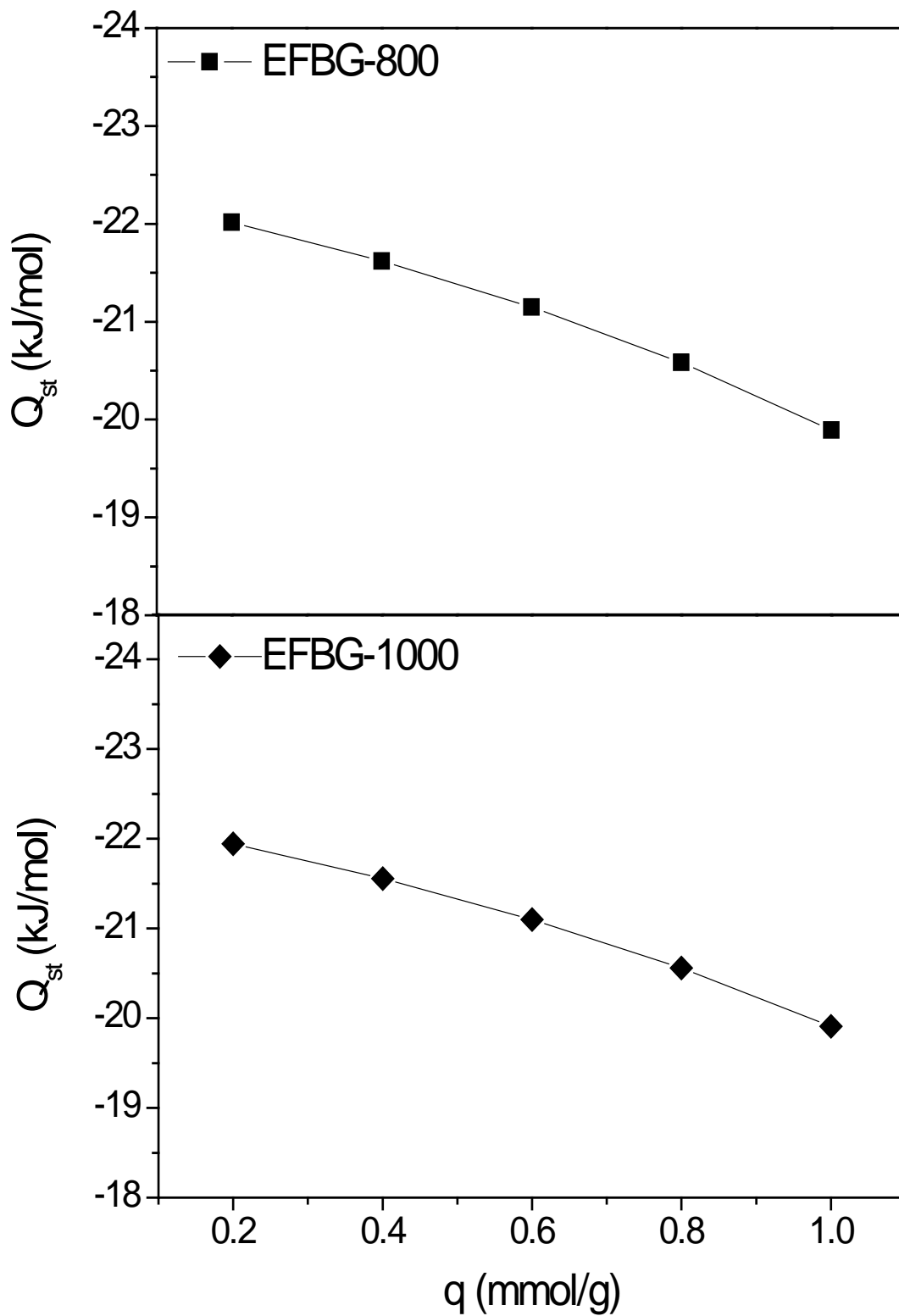


Figure S4. Variation of the isosteric heat of adsorption with the amount of CO₂ adsorbed.

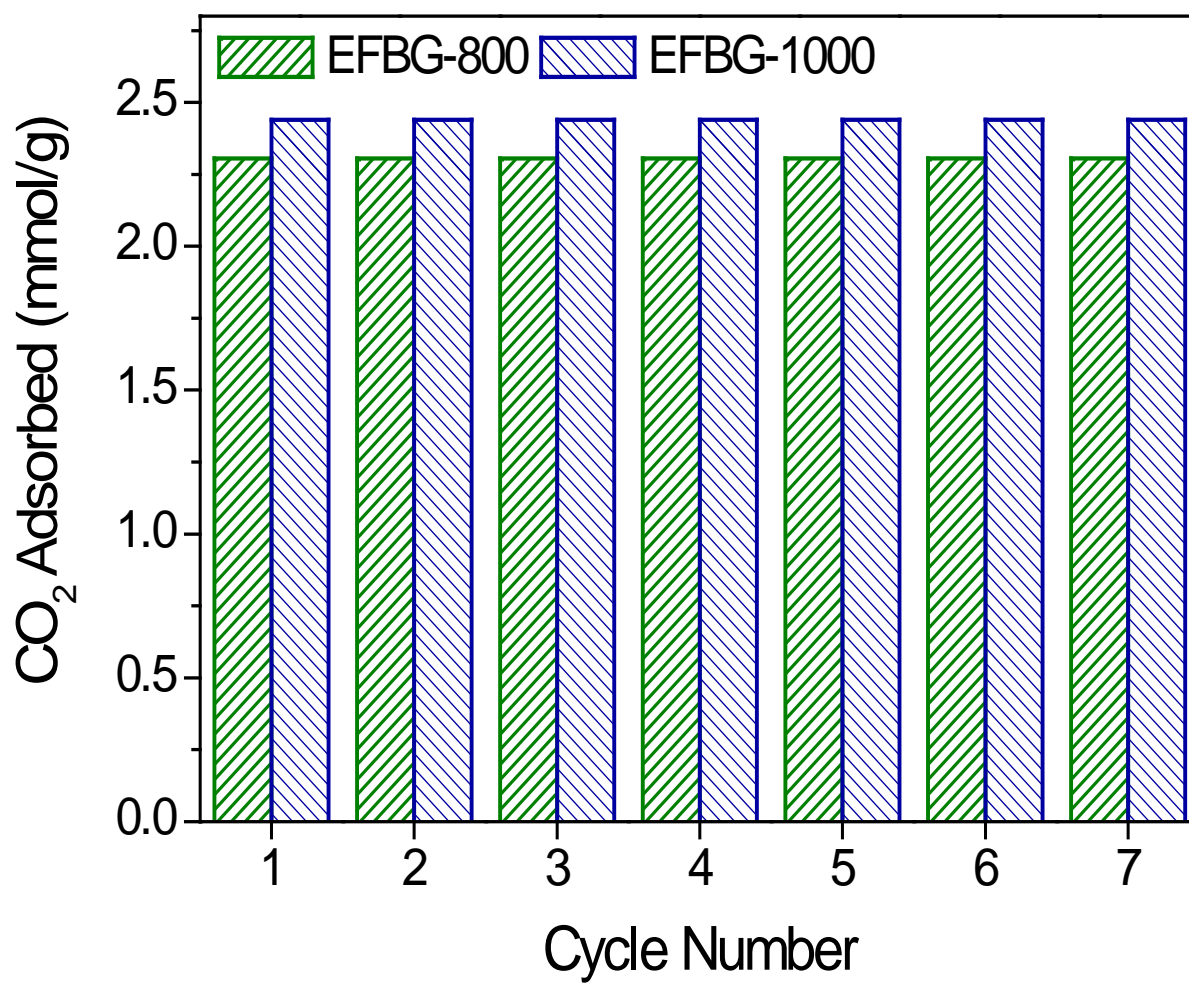


Figure S5. CO₂ adsorption cycles for EFBG-800 and EFBG-1000 at 25 °C.