

Electronic Supplementary Information (ESI)

Electrochemical properties of CVD grown pristine graphene: monolayer- vs. quasi- graphene

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Figure S1

Raman spectroscopy characterisation of the edge regions (comprising multi-layered/edge plane defect sites) of our monolayer graphene (**A**) and *quasi*-graphene (**B**) materials. Also shown are optical micrographs indicating the probe position utilised. Note that the dark spots indicate the thicker graphene layers/islands.

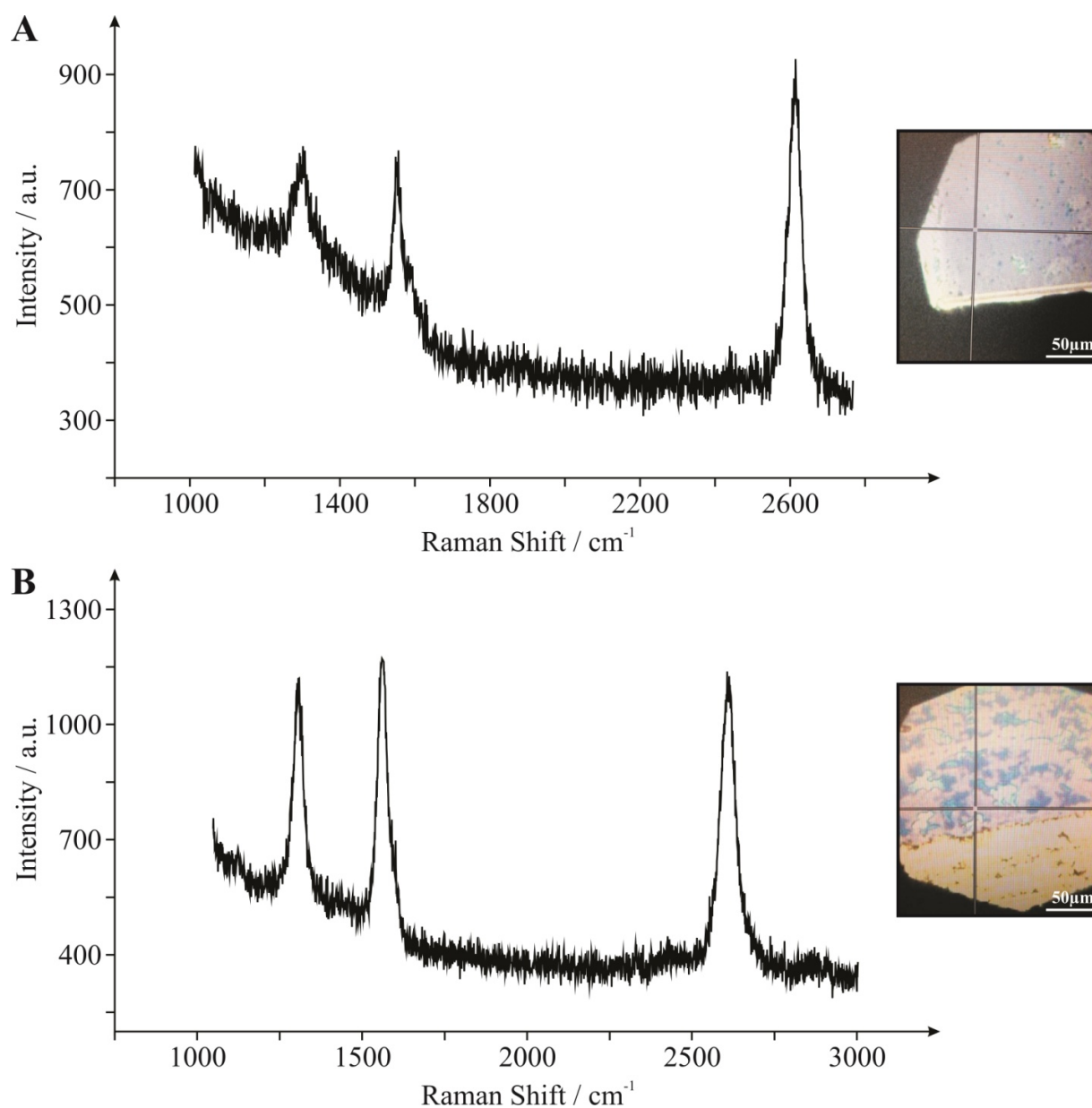


Figure S2

XPS spectra of the monolayer graphene sample. Overall spectrum (A) and de-convoluted C1s (B) and O1s (C) regions.

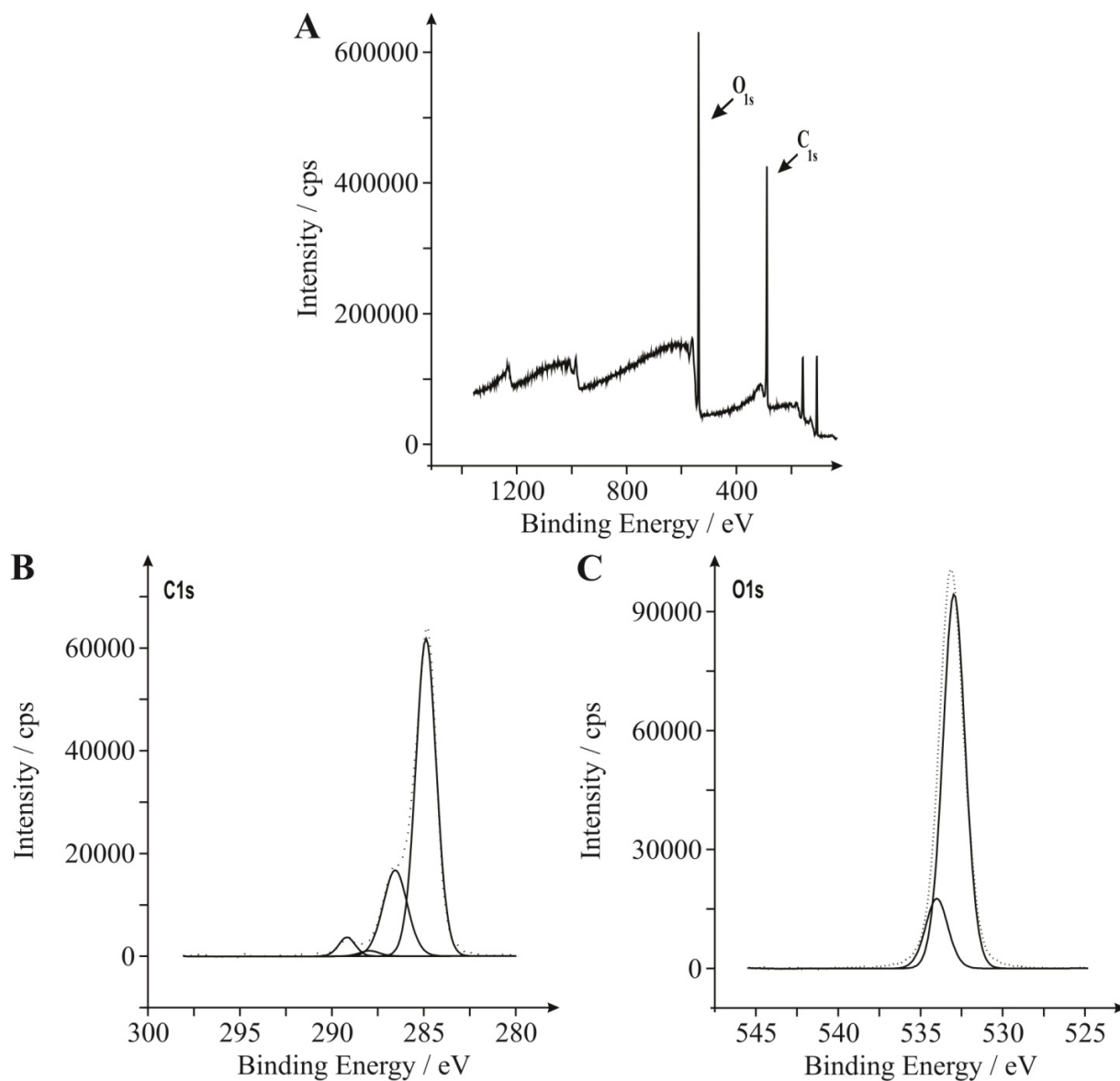


Figure S3

XPS spectra of the *quasi*-graphene sample. Overall spectrum (A) and de-convoluted C1s (B) and O1s (C) regions.

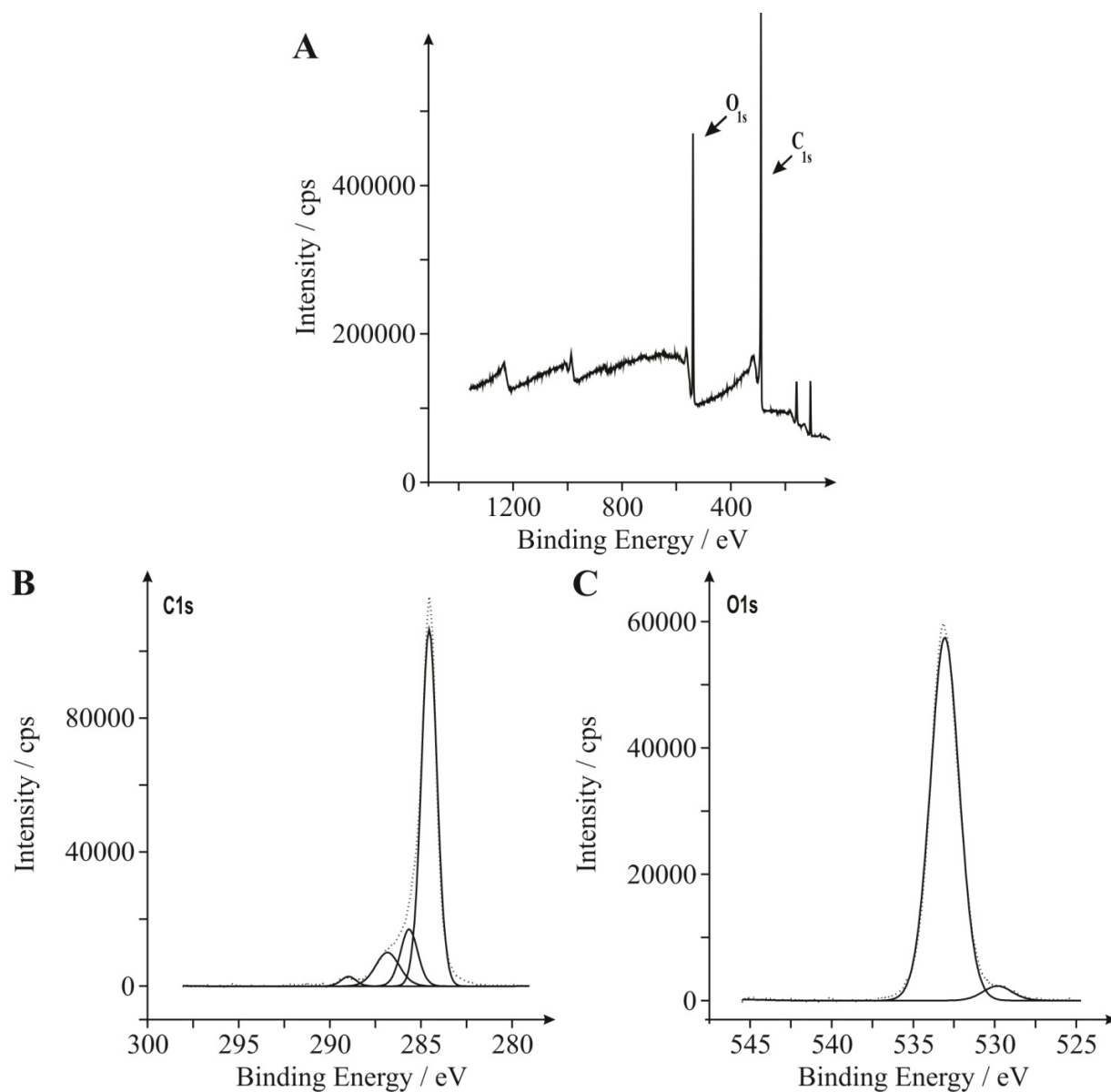


Figure S4

An optical micrograph of the double-layer defect-graphene macrostructure.

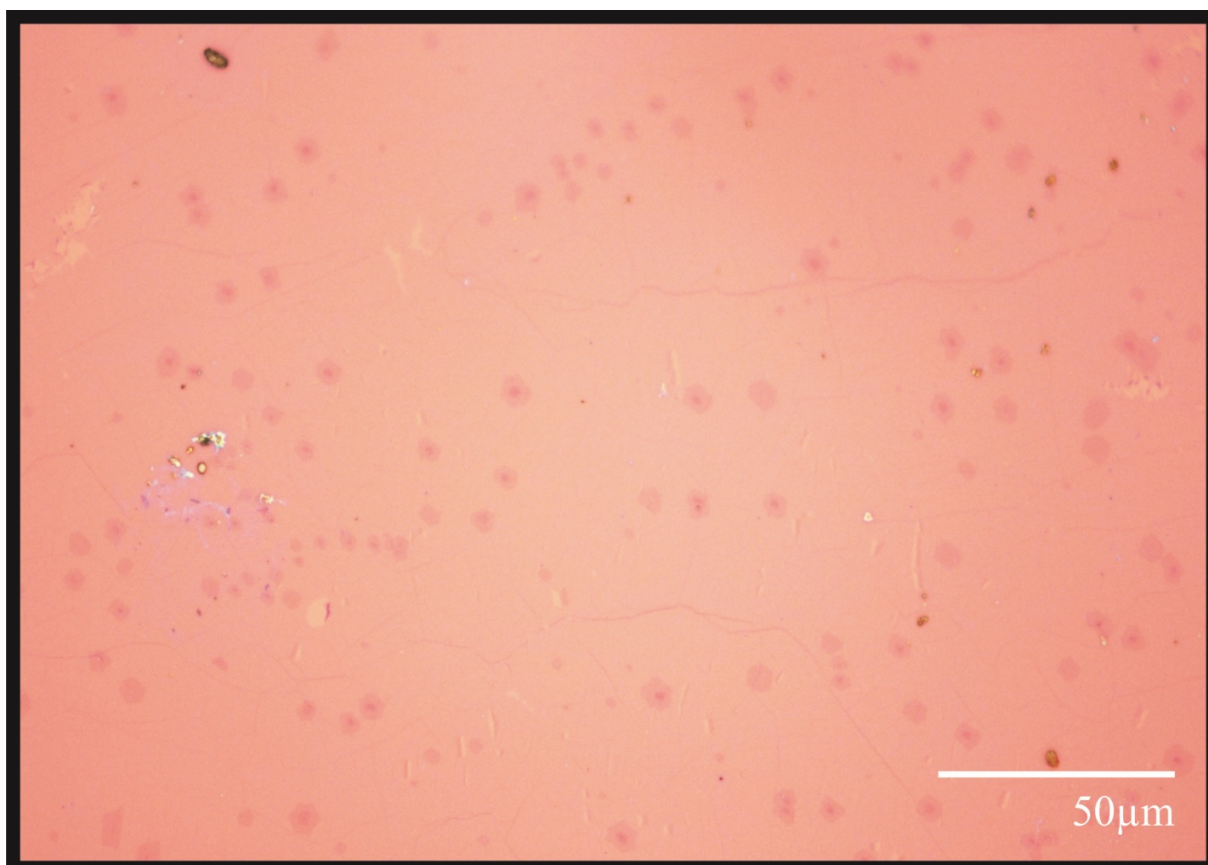


Figure S5

XPS spectra of the double-layer defect-graphene sample. Overall spectrum (A) and de-convoluted C1s (B) and O1s (C) regions.

