Supporting Information

Spectroelectrochemical probing of the strong interaction between platinum nanoparticles and graphitic domains of carbon

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**Figure S1.** Bader charge analysis of Pt atoms, before (a) and after (b) the interaction of Pt$_{38}$ with the graphite surface.

**Figure S2.** CO adsorption on Pt$_{19}$ supported on graphite (top) and in gas phase (bottom). Adsorption energy (eV) is indicated below each figure. Pt-C and C-O distances (Å) are shown for comparison.
Figure S3. TGA curves for (a) Vulcan XC-72 and Pt/Vulcan XC-72, (b) MWCNT-m and Pt/MWCNT-m.

Figure S4. CO stripping in 0.5 M H$_2$SO$_4$ at 25 °C on electrocatalysts for 10 wt% Pt/Vulcan XC-72 and 20 wt% Pt/Vulcan XC-72 synthesized by carbonyl route. Scan rate 5 mV s$^{-1}$. 