



# Superior Electrocatalytic Activity of MoS<sub>2</sub>-Graphene as Superlattice

Alejandra Rendón-Patiño <sup>1</sup>, Antonio Domenech-Carbó <sup>2</sup>, Ana Primo <sup>1,\*</sup>, and Hermenegildo García <sup>1,\*</sup>

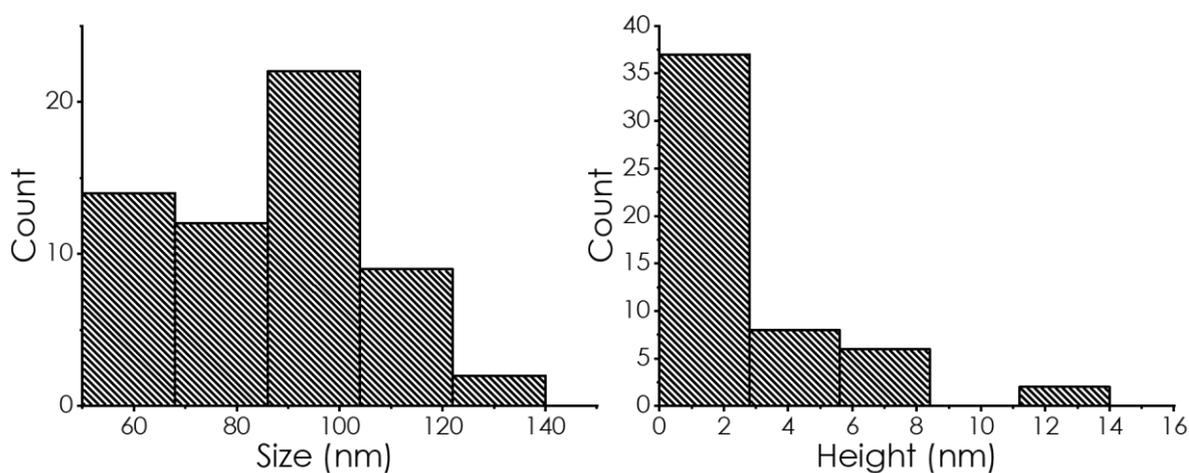


Figure S1. Lateral size (a) and height (b) of MoS<sub>2</sub> nanoparticles present on MoS<sub>2</sub>/G.

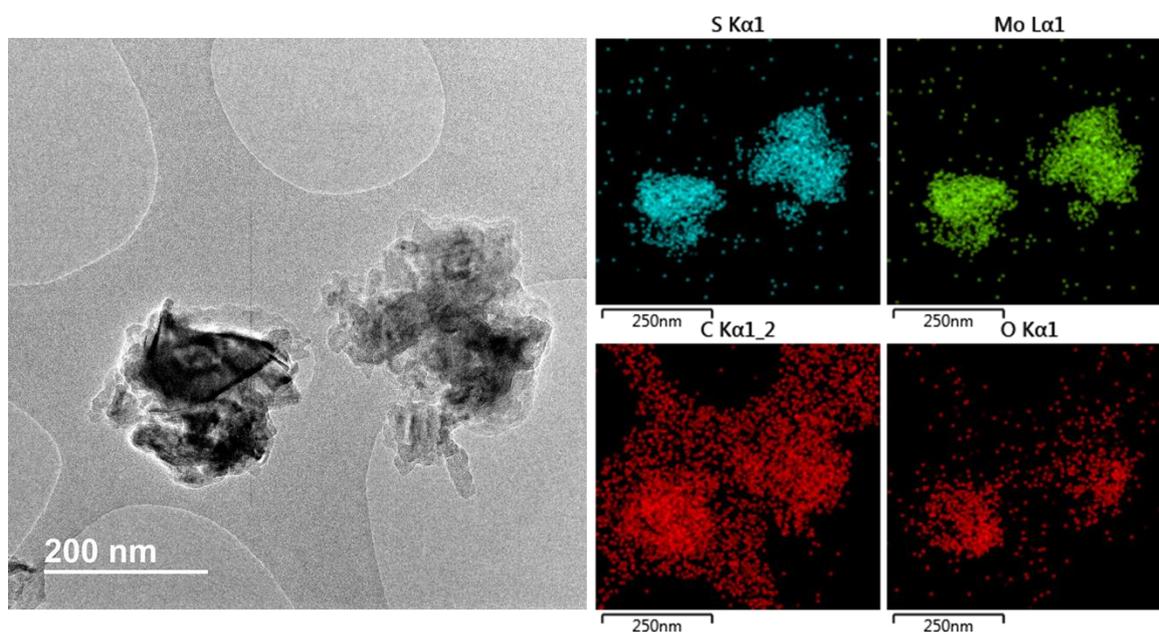


Figure S2. EDX analysis of S, Mo, C and O for the MoS<sub>2</sub>/G particles shown in the TEM image (left frame).

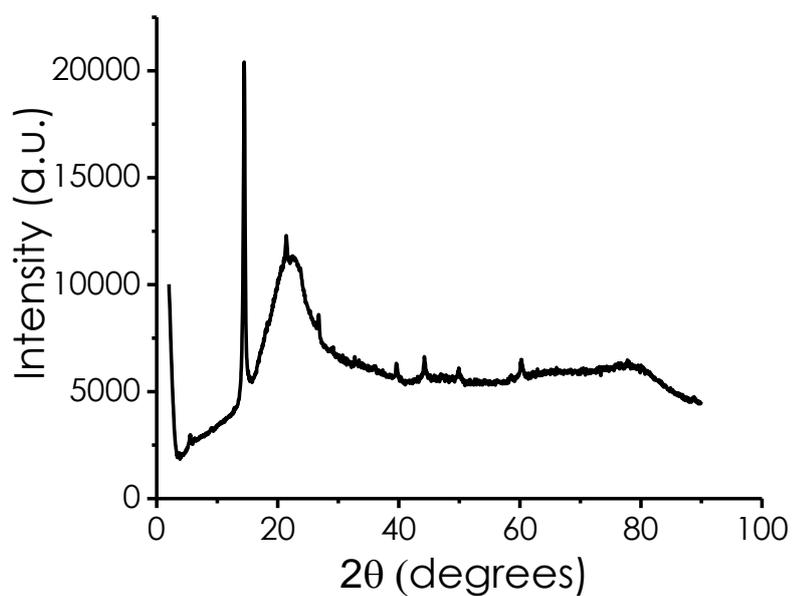


Figure S3. XRD spectrum of MoS<sub>2</sub>/G.

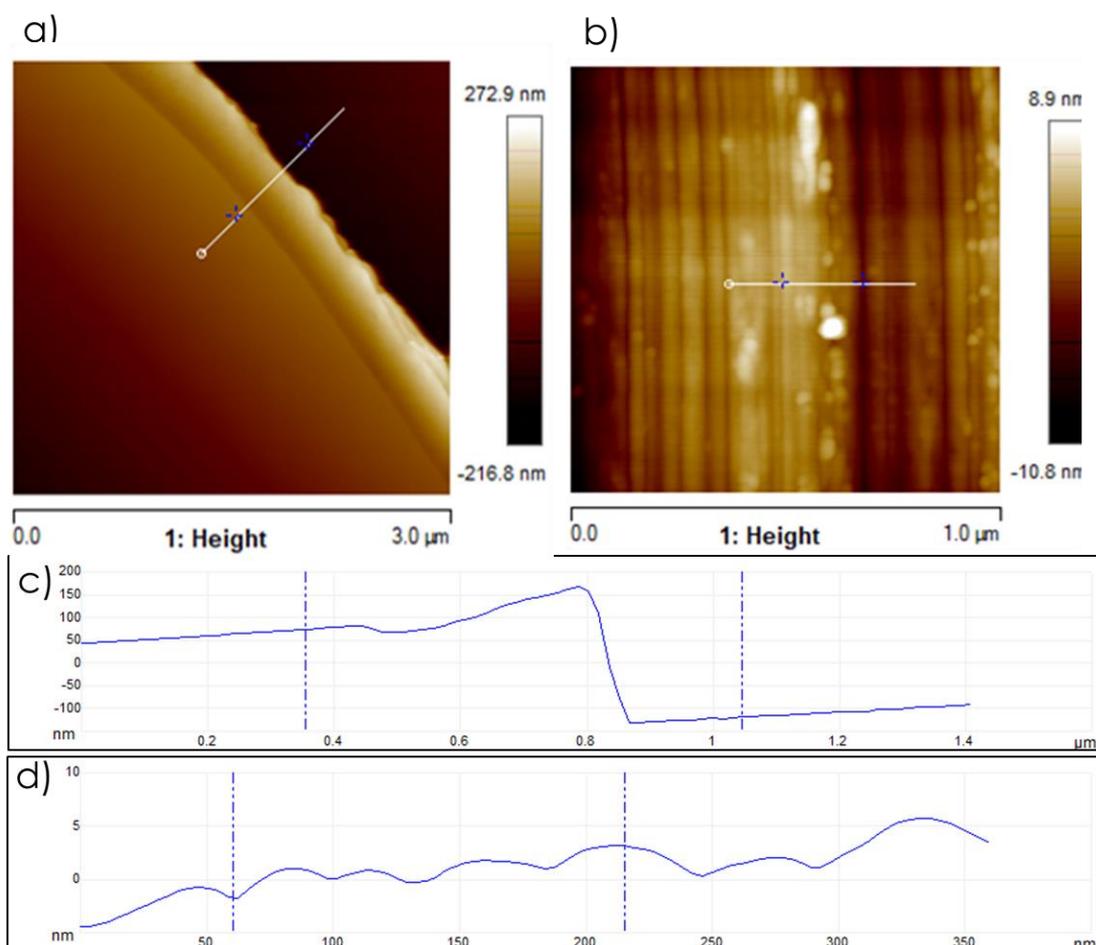
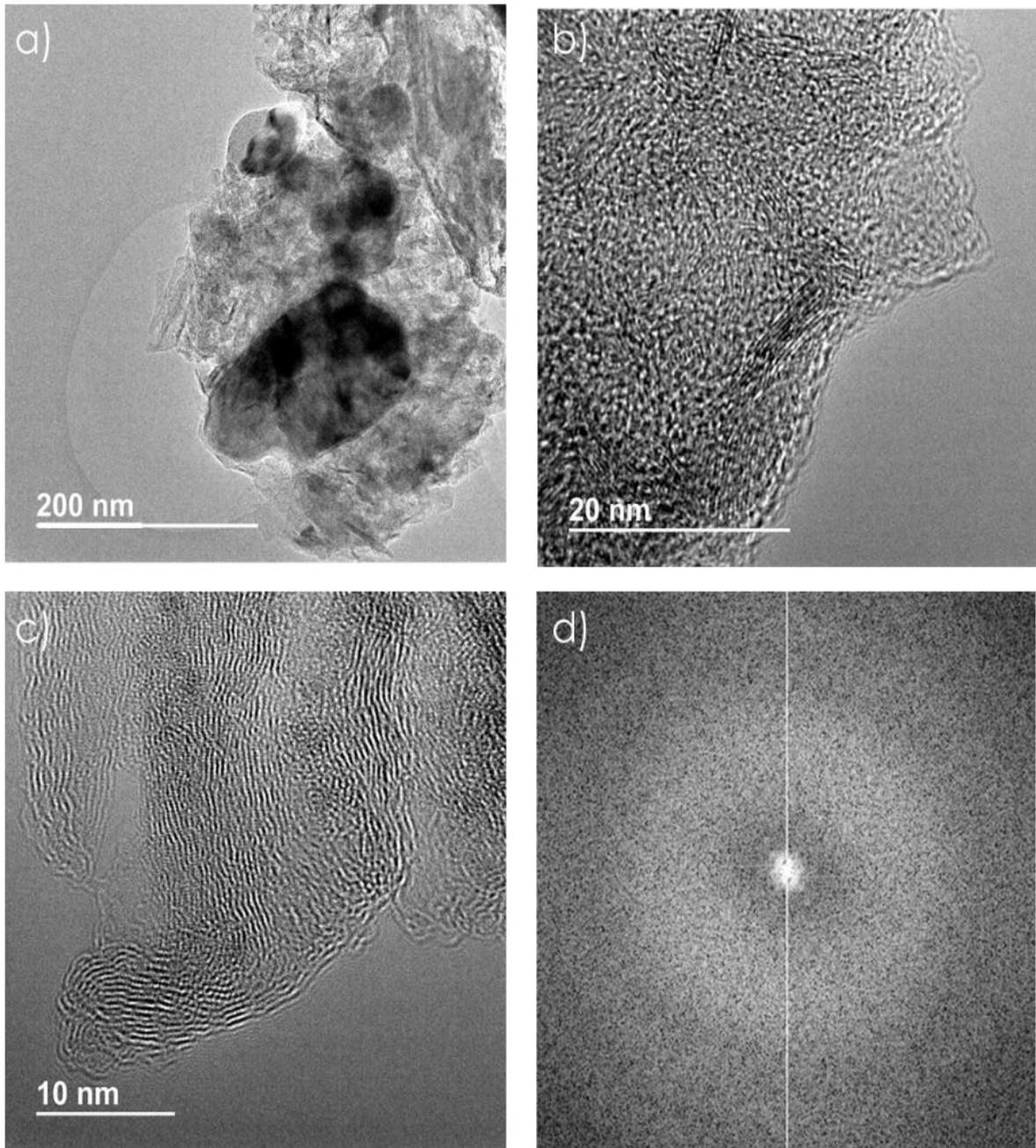


Figure S4. Frontal view (a and b) and height profiles (c and d) along the white lines of r-MoS<sub>2</sub>/polystyrene (a and c) and r-MoS<sub>2</sub>/G (b and d).



**Figure S5.** TEM at different magnifications and selected area electron diffraction of r-MoS<sub>2</sub>/G.

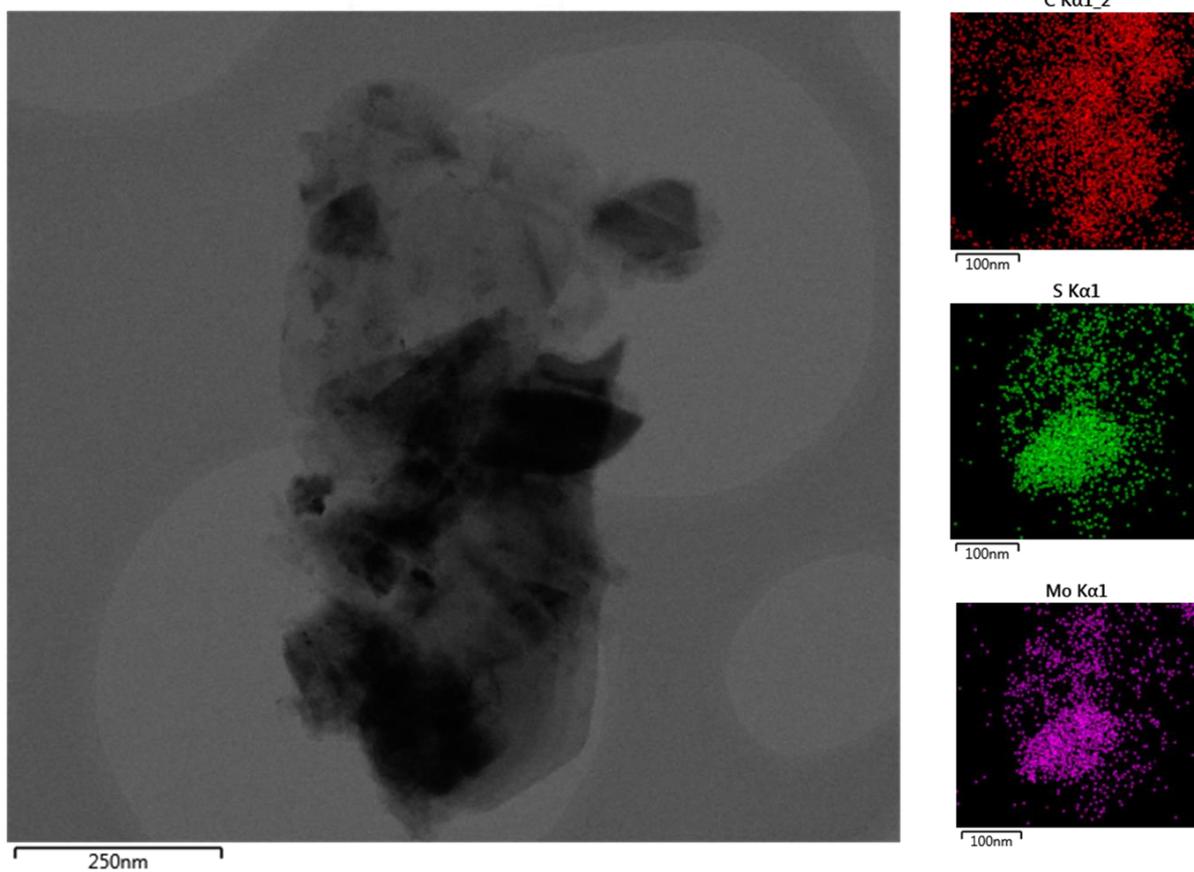


Figure S6. TEM image (left) and EDS analysis of C, S and Mo for r-MoS<sub>2</sub>/G.