

Supporting Information

Hollow Structured Micro/Nano MoS₂ Spheres for High Electrocatalytic Activity Hydrogen Evolution Reaction

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ADDITIONAL EXPERIMENTAL DATA

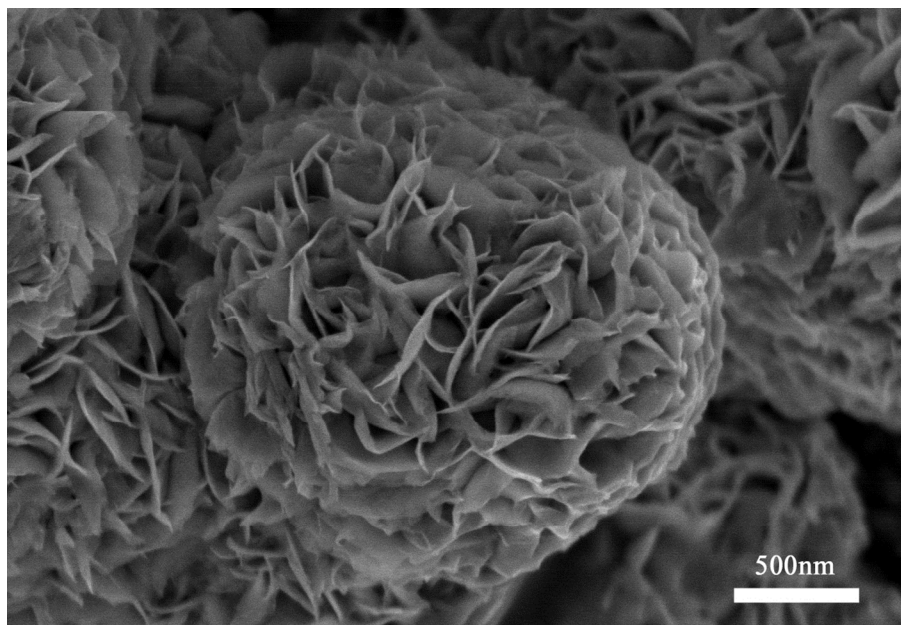


Figure S1. Medium SEM image of F-MoS₂.

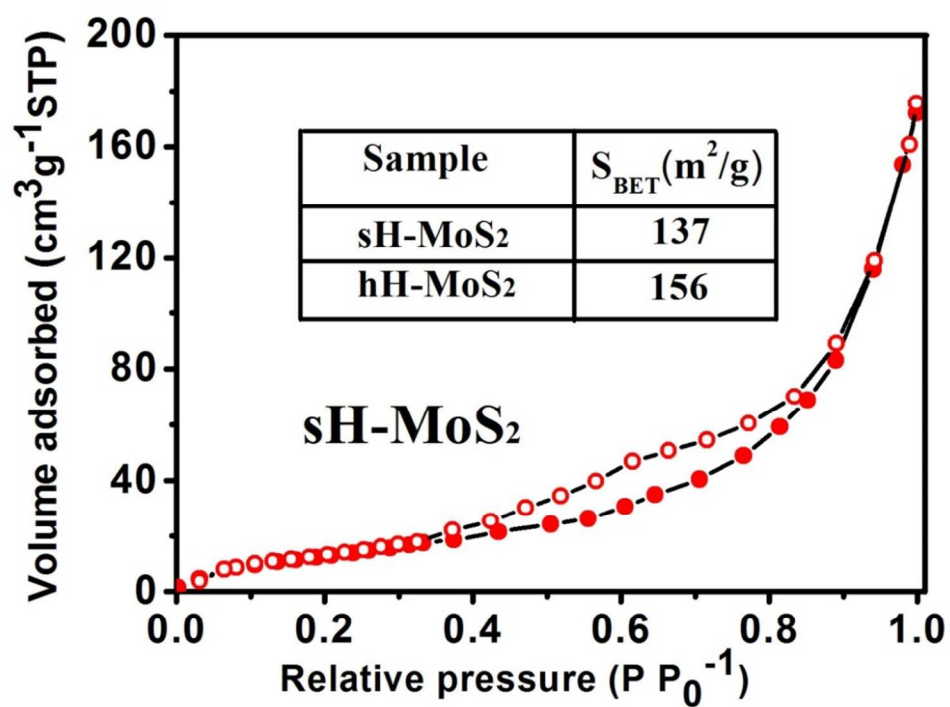


Figure S2. N₂ adsorption–desorption isotherms of sH-MoS₂.

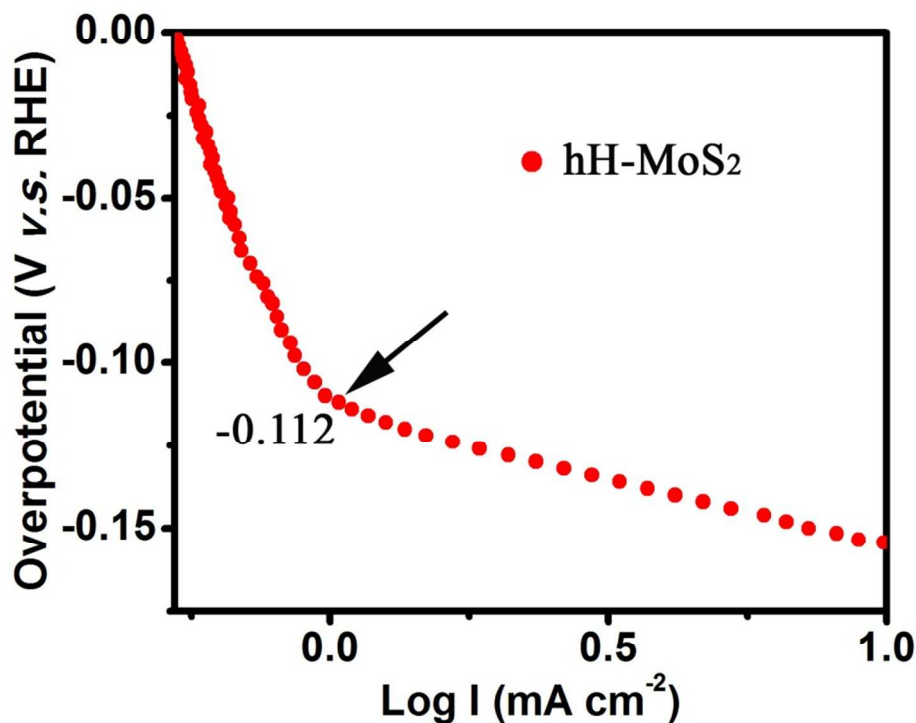


Figure S3. The semi-log Tafel plot of the hH-MoS₂ in the region of low current densities.

The onset potential for HER was calculated from the semi-log (Tafel) plot. As can be seen from Figure S3, the semi-log plot of hH-MoS₂ nanomaterials showed a linear relationship below -0.112 V but started to deviate above -0.112 V in the region of low current densities. Therefore, -0.112 V was chosen as the onset overpotential for the unique hH-MoS₂ nanomaterial. The same method was also applied on determining the onset overpotential for other two samples.

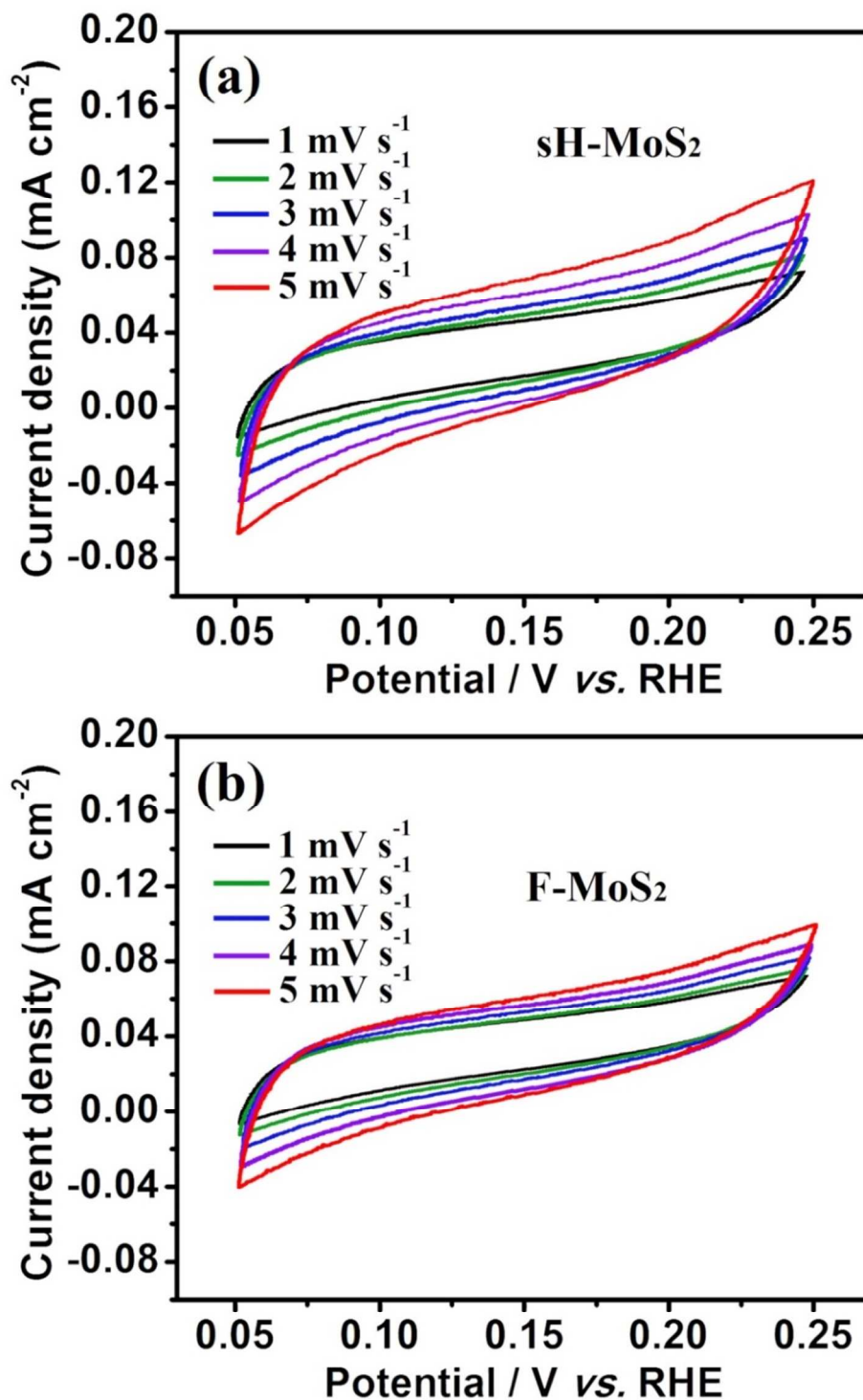


Figure S4. (a) Cyclic voltammetry curves of sH-MoS₂ at various scan rates in the region of 0.05-0.25 V vs. RHE. (b) Cyclic voltammetry curves of F-MoS₂ at various scan rates in the region of 0.05-0.25 V vs. RHE.