Electronic Supplementary Material (ESI) for Physical Chemistry Chemical Physics

One pot synthesis of reduced graphene oxide-cadmium sulfide nanocomposites and application in photocatalytic hydrogen production.

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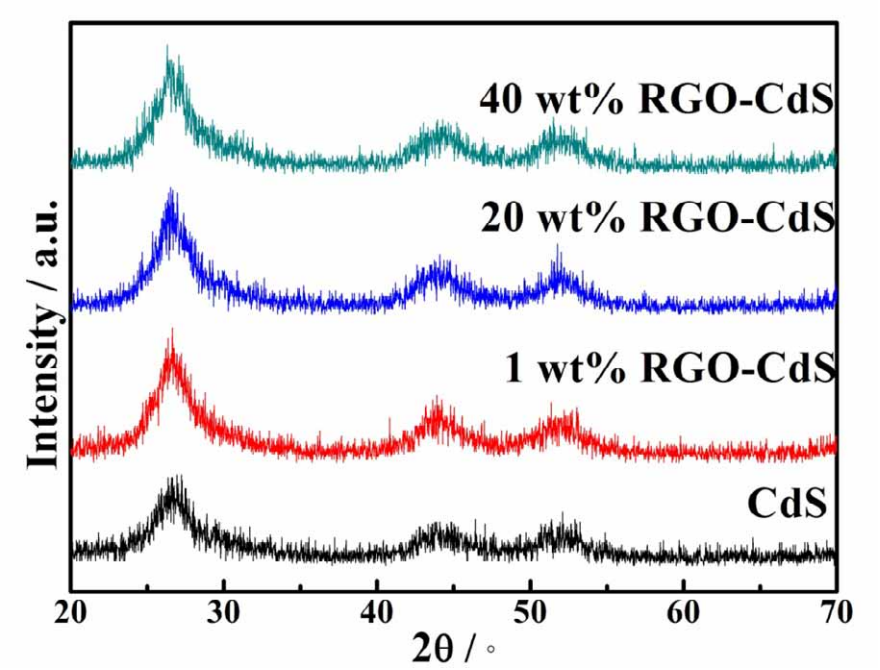

Fig S1 XRD patterns of RGO-CdS samples with different RGO content

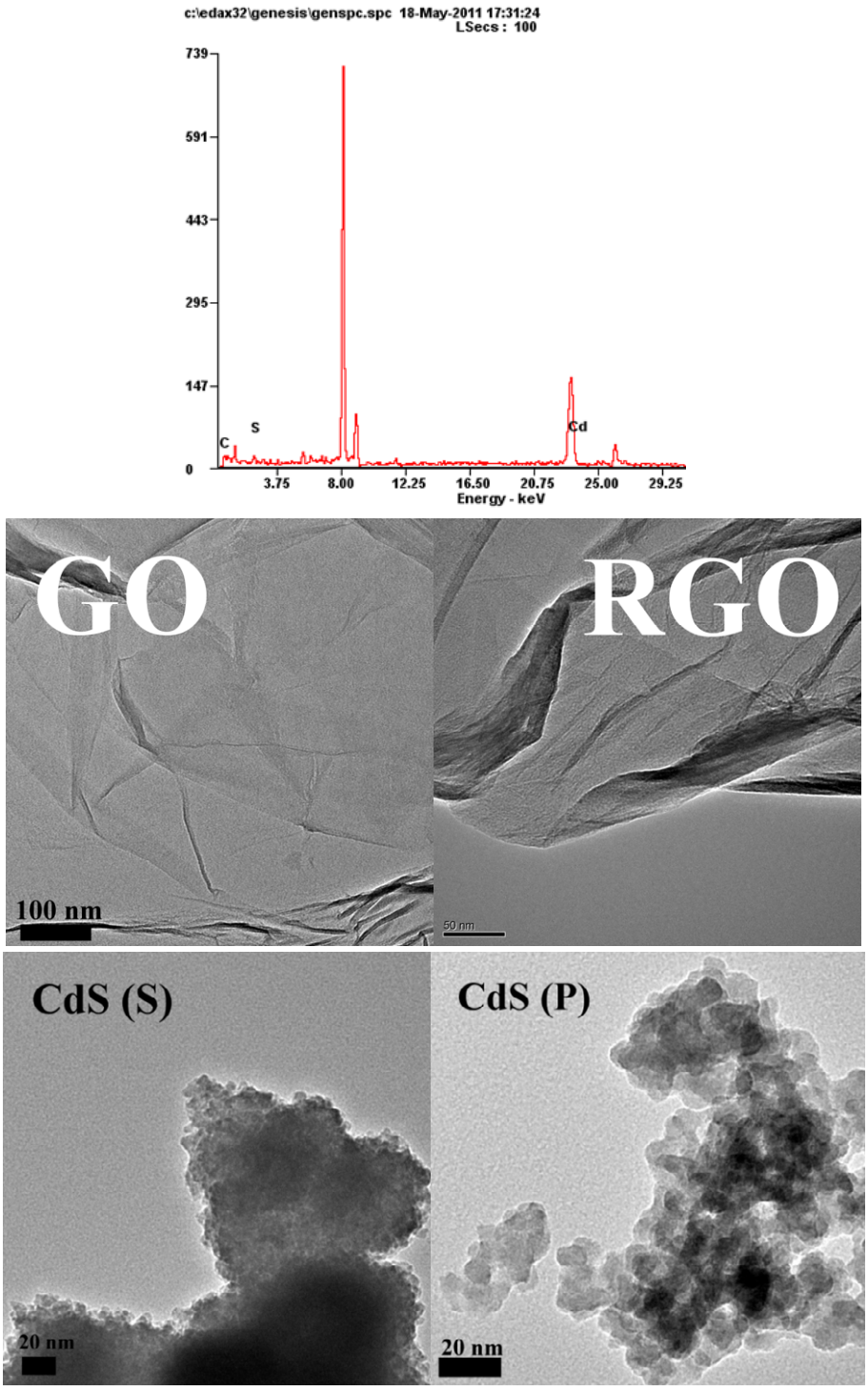

Fig S2 EDS spectrum obtained in the rectangle area inset Figure 2b, TEM of GO, RGO and CdS prepared by different method

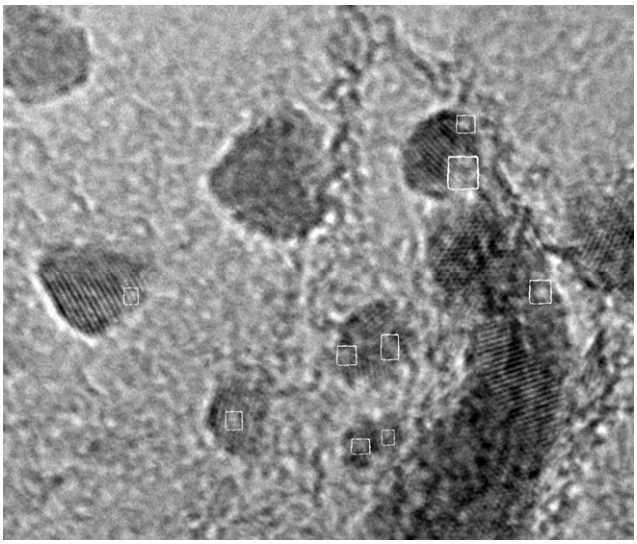

Fig S3 TEM of RGO-CdS (P) with defects.

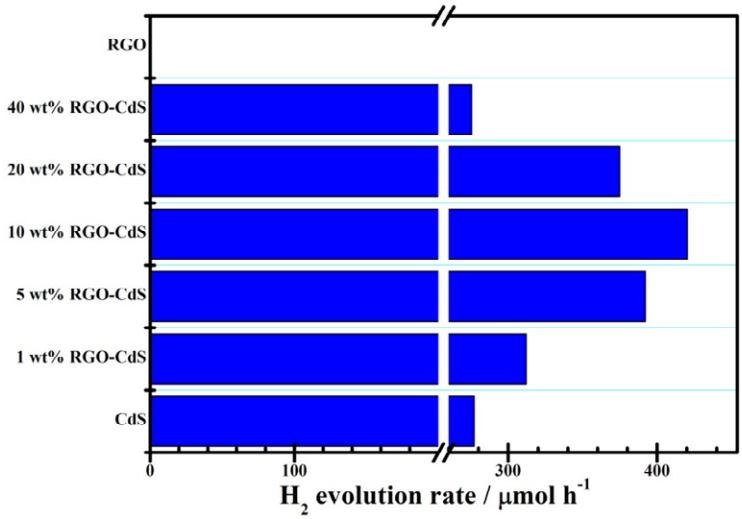

Fig S4 hydrogen evolution over photocatalyts, 100 mg photocatalysts were added in 100 mL Na_2S (0.35 M) -Na_2SO_3 (0.25 M) solution, 300 W Xe-lamp equipped with cut-off filter (λ ≥ 420 nm), irradiation 2 hours.

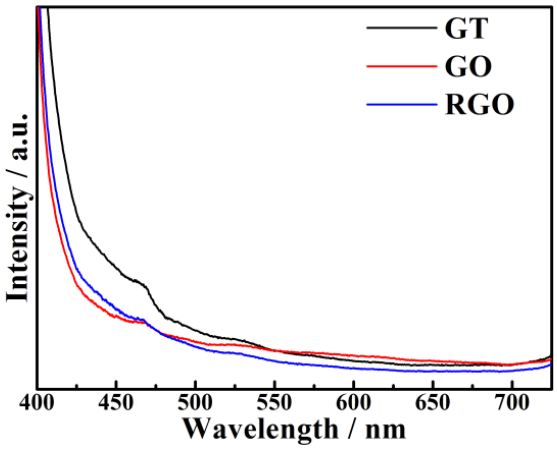

Fig S5 PL of graphite, graphene oxide and reduced graphene oxide