

## **Supplementary Materials**

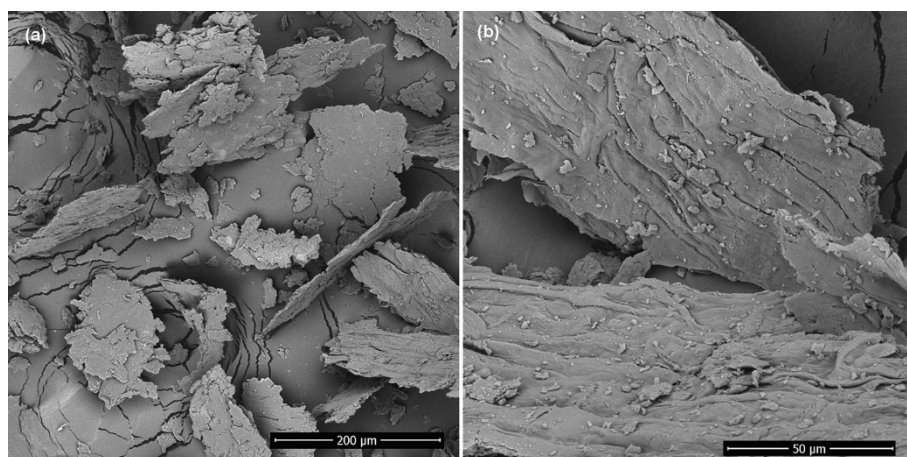
for

### **Biotemplated CdS Nano-aggregate Networks for Highly Effective Visible-light Photocatalytic Hydrogen Production**

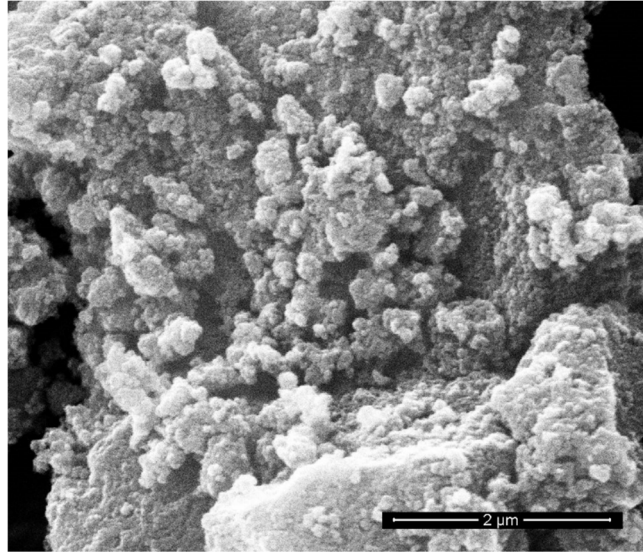
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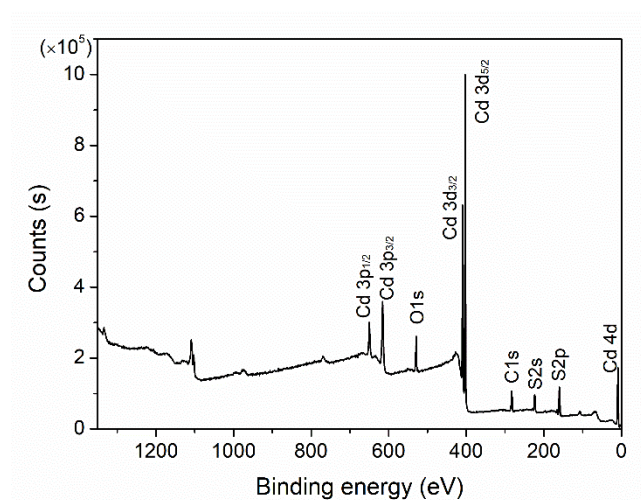
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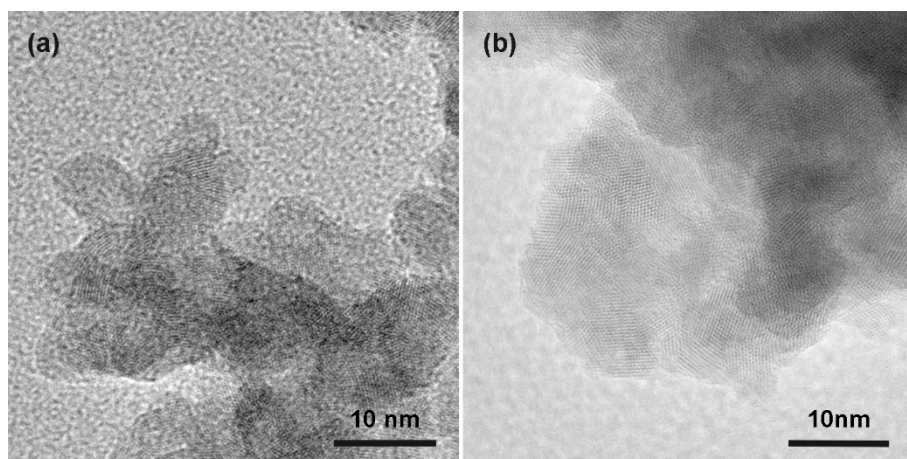
**Figure S1.** SEM images of the biotemplate (*Hydrilla Verticillata* (L. f.) Royle).



**Figure S2.** SEM image of CdS synthesized without biotemplate (CdS(no template)).



**Figure S3.** XPS Survey of Pt and PdS co-loaded biotemplated CdS (Pt-PdS/CdS(HZ)).



**Figure S4.** HR-TEM images of CdS(HZ) (a) before and (b) after photocatalytic reaction.

**Table S1.** Surface areas and textural properties of CdS(HZ) and CdS(no template).

Sample	S <sub>BET</sub> (m <sup>2</sup> /g)	Pore Volume (cm <sup>3</sup> /g)	Average pore size (nm)
CdS(HZ)	139.8	0.35	8.3
CdS(no template)	139.4	0.23	5.0