## **Supplementary Materials**



Figure S1. SEM image of the sample synthesized in the absence of SDS.



Figure S2. EDX spectra of MoO3-doped MnCo2O4 (0.10) catalysts.



Figure S3. Raman spectrum of the MoO<sub>3</sub>-doped MnCo<sub>2</sub>O<sub>4</sub> (0.12).



**Figure S4.** Hydrogen release from AB neutral solution in the presence of MoO<sub>3</sub>-doped MnCo<sub>2</sub>O<sub>4</sub> (0.10) catalysts.