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## **Electronic Supplementary Information (ESI)**

## Figure captions:

Figure S1 X-ray diffraction pattern of the fresh 10Ni/Al<sub>2</sub>O<sub>3</sub> catalyst.

Figure S2 (1) Nitrogen adsorption-desorption isotherms and (2) pore size distribution curves of the fresh and 50 h spent  $10Ni/Al_2O_3$  catalysts.

Figure S3 (1)  $H_2$ -TPR and (2) Ni 2p XPS profiles of the fresh 10Ni/Al<sub>2</sub>O<sub>3</sub> catalyst.

Figure S4 Arrhenius plots for CO<sub>2</sub> reaction rate over OMA-10NixMg catalysts.

Figure S5 TEM images of the 50 h spent 10Ni/Al<sub>2</sub>O<sub>3</sub> catalyst.

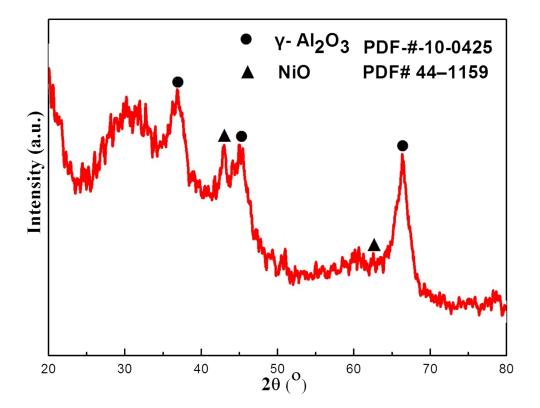


Figure S1

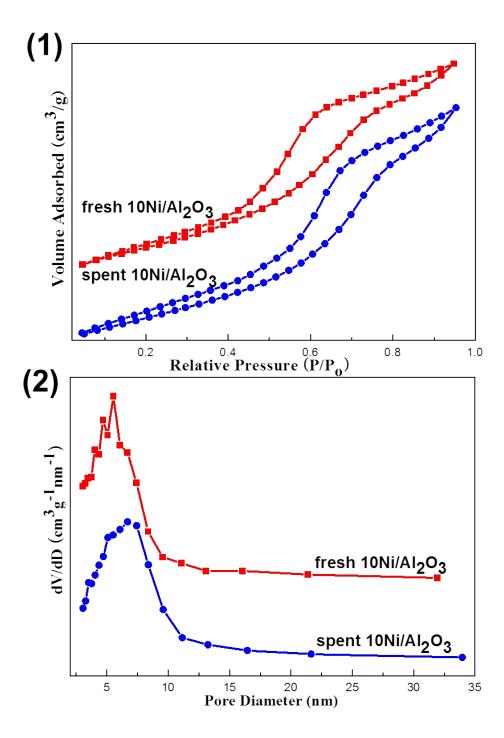


Figure S2

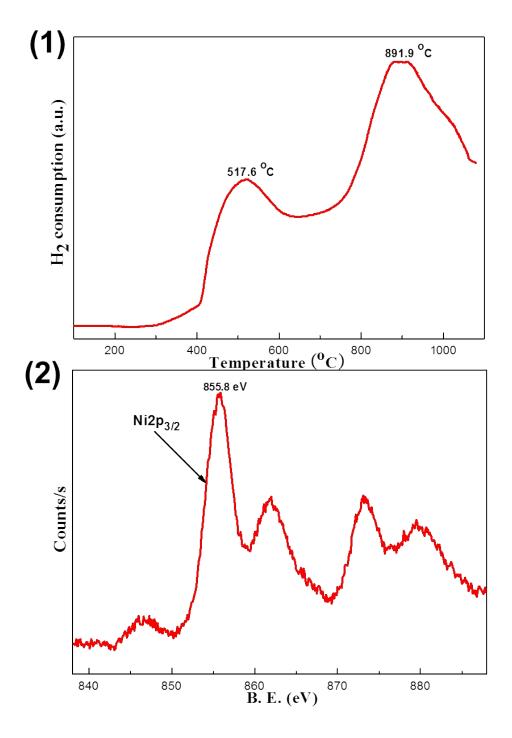


Figure S3

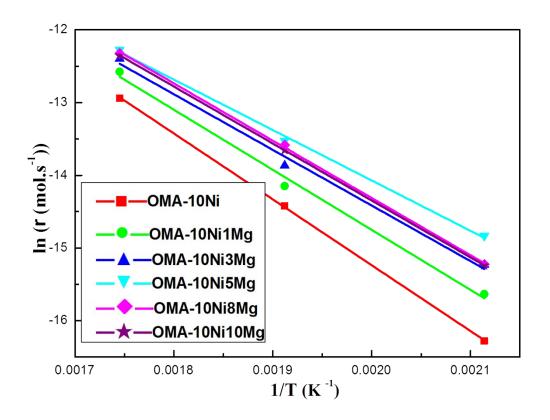


Figure S4

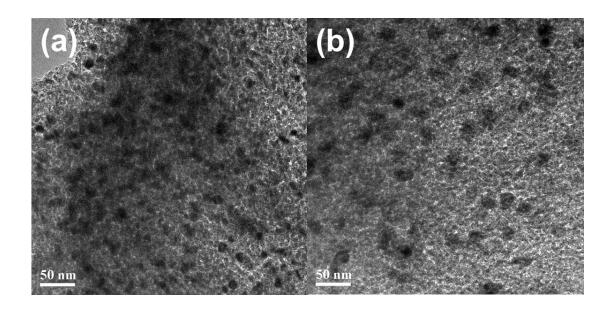


Figure S5