

## Synthesis of porous Ni@rGO nanocomposite and its synergetic effect on hydrogen sorption properties of MgH<sub>2</sub>

Guang Liu, Yijing Wang,\* Fangyuan Qiu, Li Li, Lifang Jiao and Huatang Yuan

Institute of New Energy Material Chemistry, Key Laboratory of Advanced Energy Materials  
Chemistry (MOE), Tianjin Key Lab on Metal and Molecule-based Material Chemistry, Nankai  
University, Tianjin 300071, P. R. China

\* Corresponding author. E-mail: wangyj@nankai.edu.cn

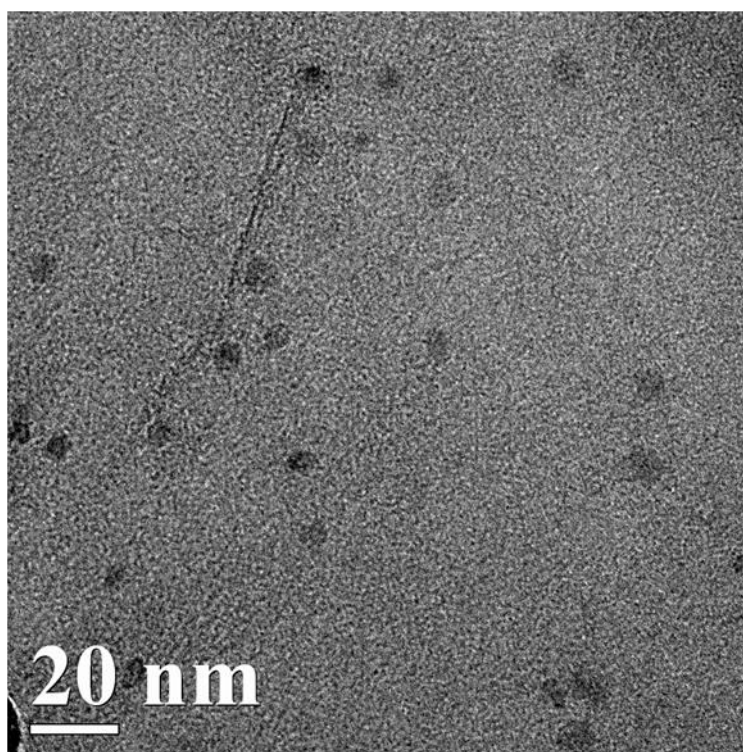


Fig. S1 TEM image of Ni@rGO contains even smaller Ni particles.

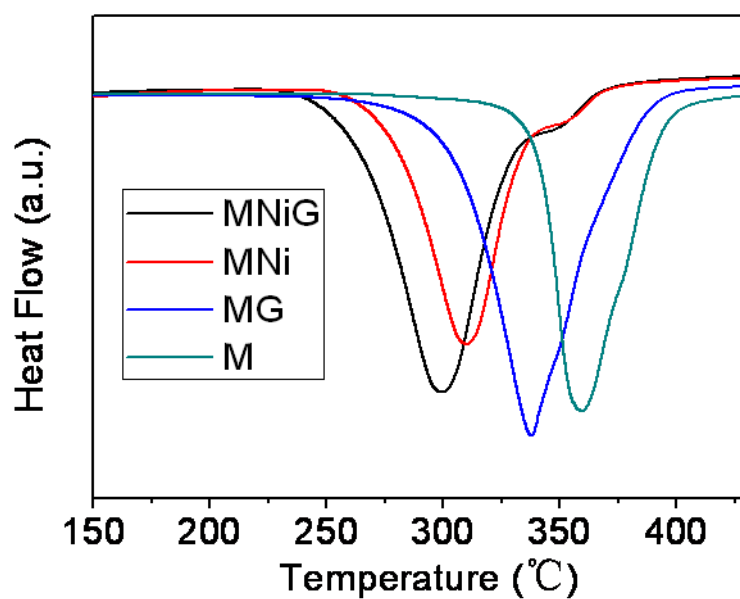


Fig. S2 The representative DSC curves of the different samples. The heating rate was 5 °C/min.

Table S1 Decomposition peak temperature of different samples determined by DSC

Heating rate (°C)	DSC (°C) for different samples			
	MNiG	MNi	MG	MgH <sub>2</sub>
2	283.3	286.7	323	340.7
5	299.8	309.6	338.3	359.3
10	316.8	326.2	350.5	374.5
20	337.3	340.1	365.6	386.3