ELECTRONIC SUPPLEMENTARY INFORMATION

Synthesis of Compositionally Graded Nanocast NiO/NiCo$_2$O$_4$/Co$_3$O$_4$ Mesoporous Composites with Tunable Magnetic Properties

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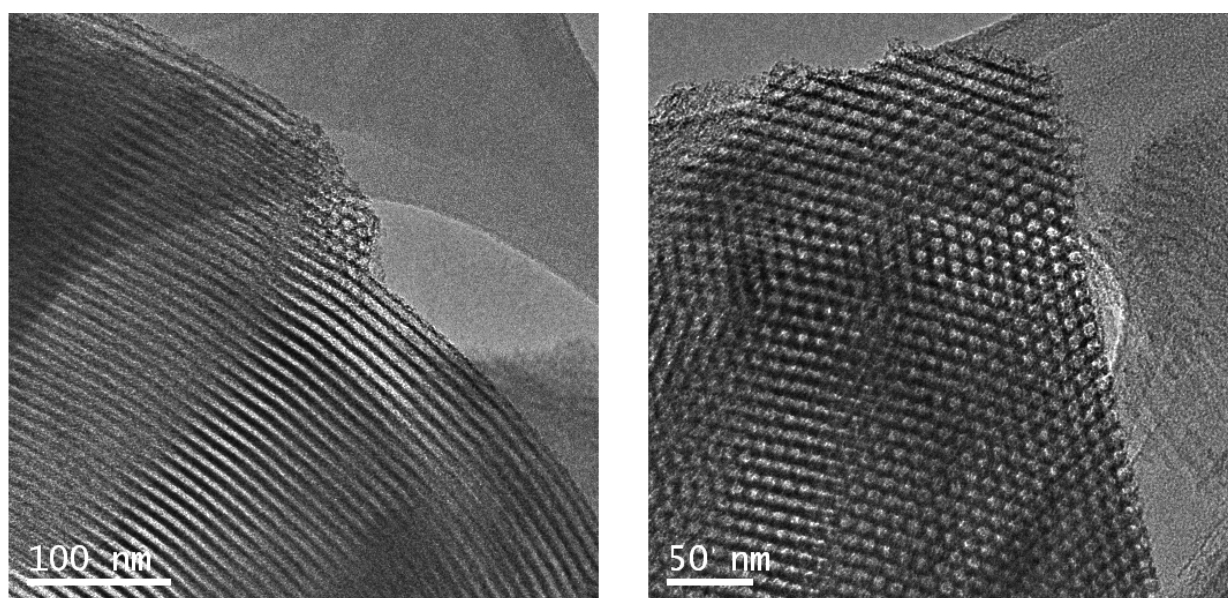

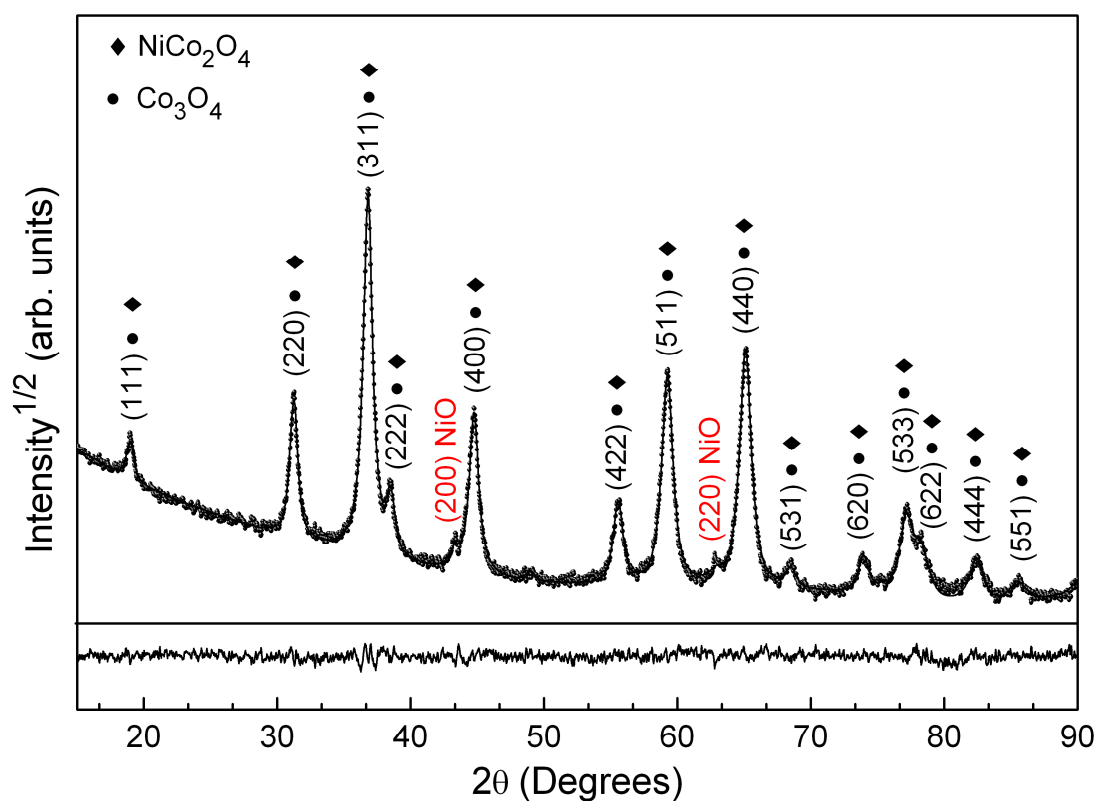**Fig. S1.** TEM images of the SBA-15 silica template.

Fig. S2. Experimental pattern ($\bullet$), Rietveld fitting (solid line) and Rietveld difference between the original and computed spectra (at the bottom) of the powder obtained from 0.25:1 Ni(II):Co(II) molar ratio of the metal precursors. The peaks at $2\theta = 43.4^{\circ}$ and 63.0° correspond to the (200) and (220) reflections, respectively of the NiO phase (JCPDF 73-1519). Goodness of fitting, $R_w = 9.27$.
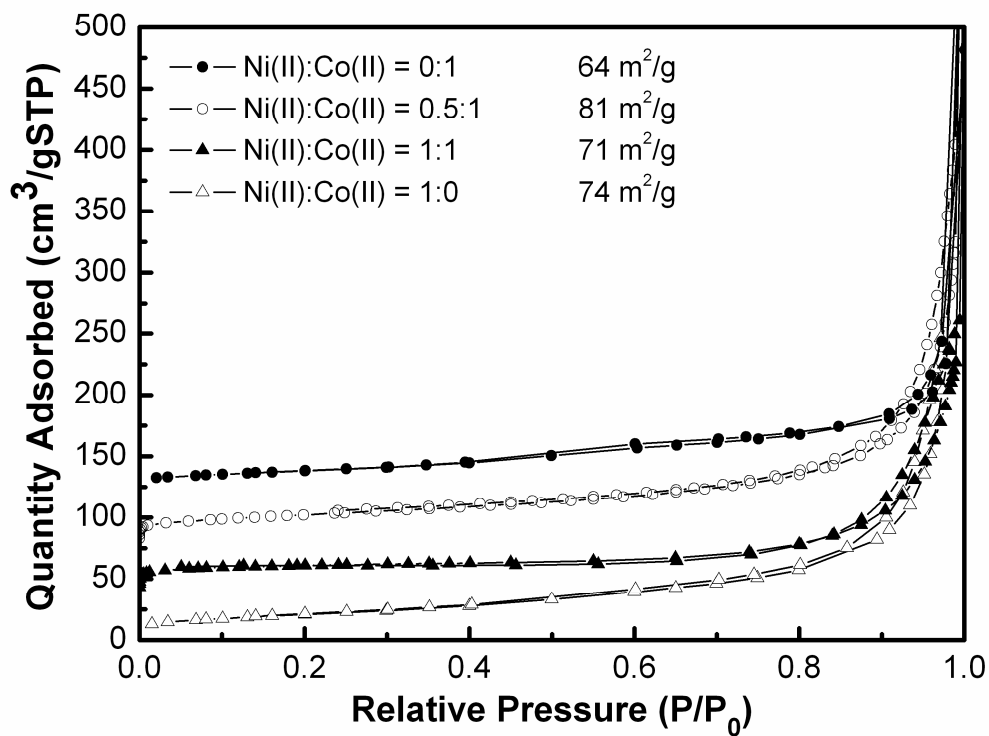
Fig. S3. Typical N_2 adsoption-desorption isotherms and corresponding BET areas of the powders obtained from the indicated Ni(II):Co(II) molar ratios.