

Supporting information

Synthesis of ordered Ca- and Li-doped mesoporous silicas for H₂ and CO₂ adsorption at ambient temperature and pressure

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Figure Caption

- Fig. S1** Wide angle XRD data of all MCM-41 type Ca-doped silica samples. Spectra of the samples (a) CHMS-1, (b) CHMS-2, (c) CHMS-3, and (d) CHMS-5.
- Fig. S2** Wide angle XRD data of all Li-MCM type samples named (a) LHMS-1, (b) LHMS-2, (c) LHMS-3, and (d) LHMS-5.
- Fig. S3** Selective gas uptake of CO₂ calibrated by subtracting N₂ gas uptake for the samples at temperature 120 °C. (a) All CHMS and (b) All LHMS samples.
- Fig. S4** (a) CO₂ and (b) H₂ uptake for CHMS-5 samples depending on temperature up to 900 °C.
- Fig. S5** Reversible H₂ uptake for CHMS-5 sample up to 9 cycles at ambient temperature.

Fig. S1

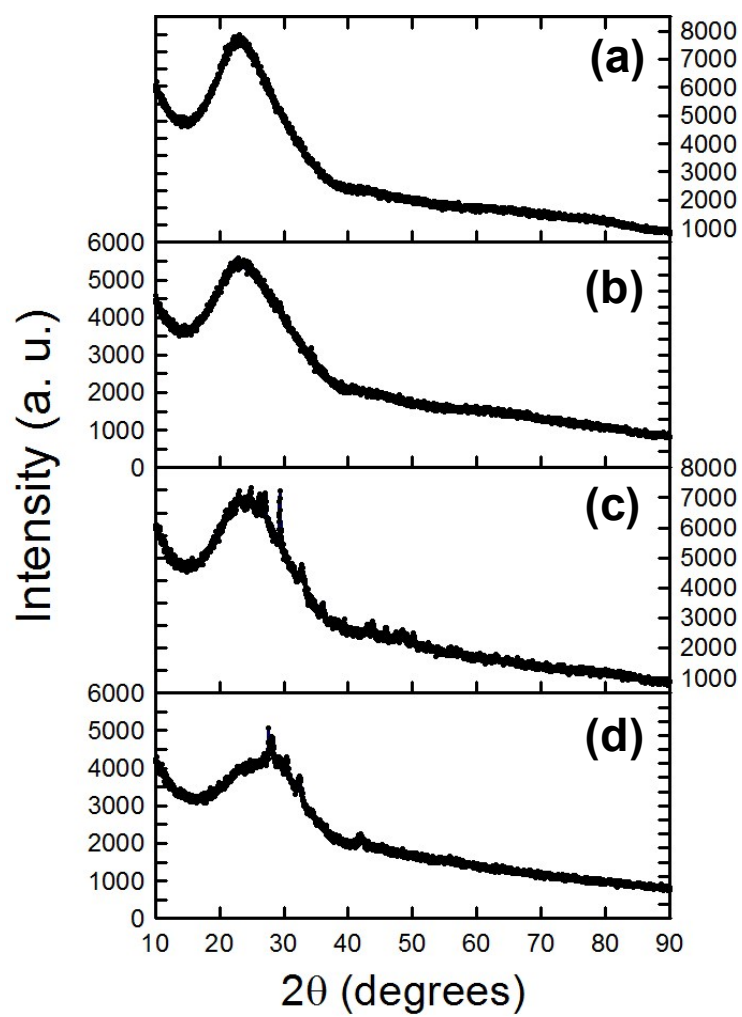


Fig. S2

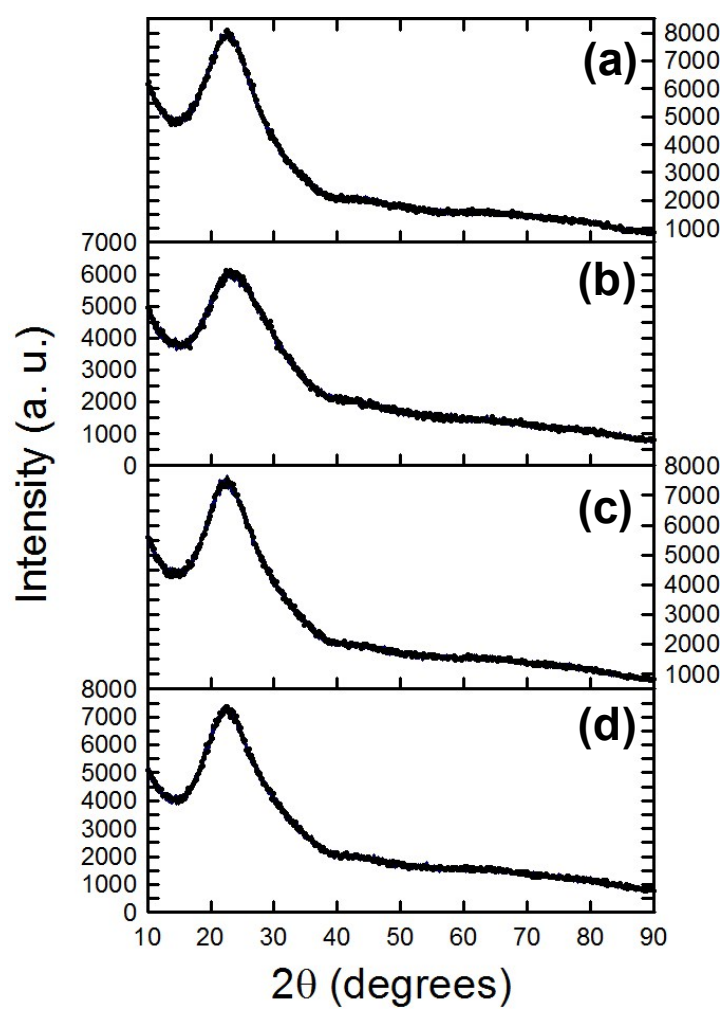


Fig. S3

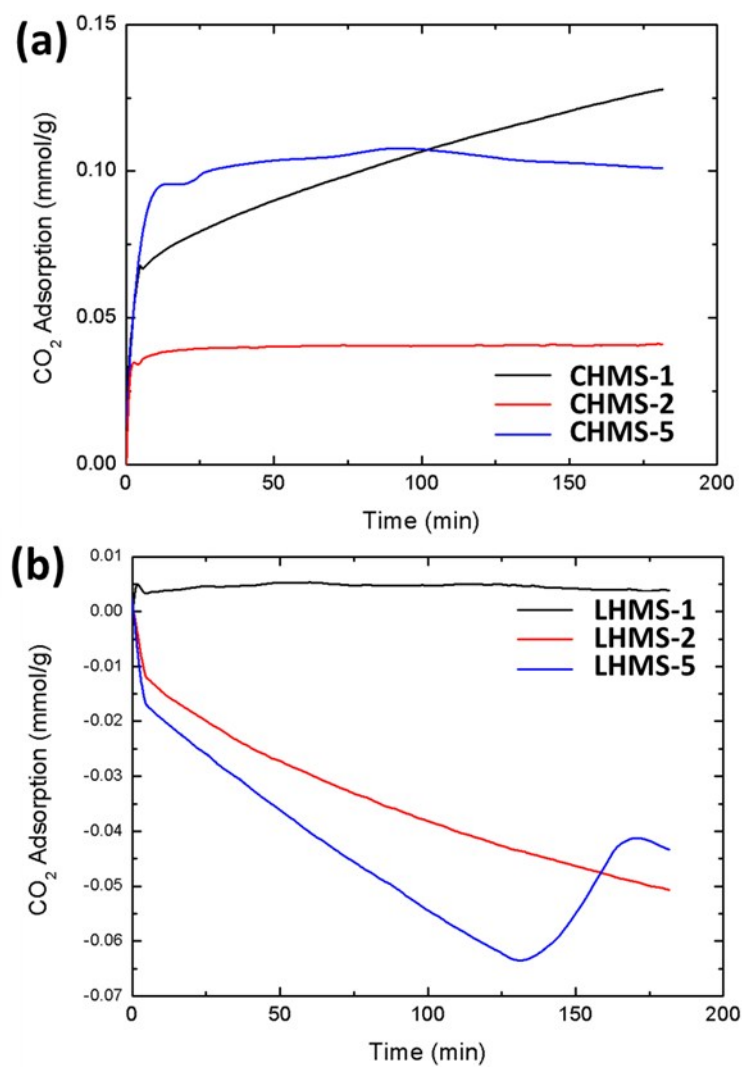


Fig. S4

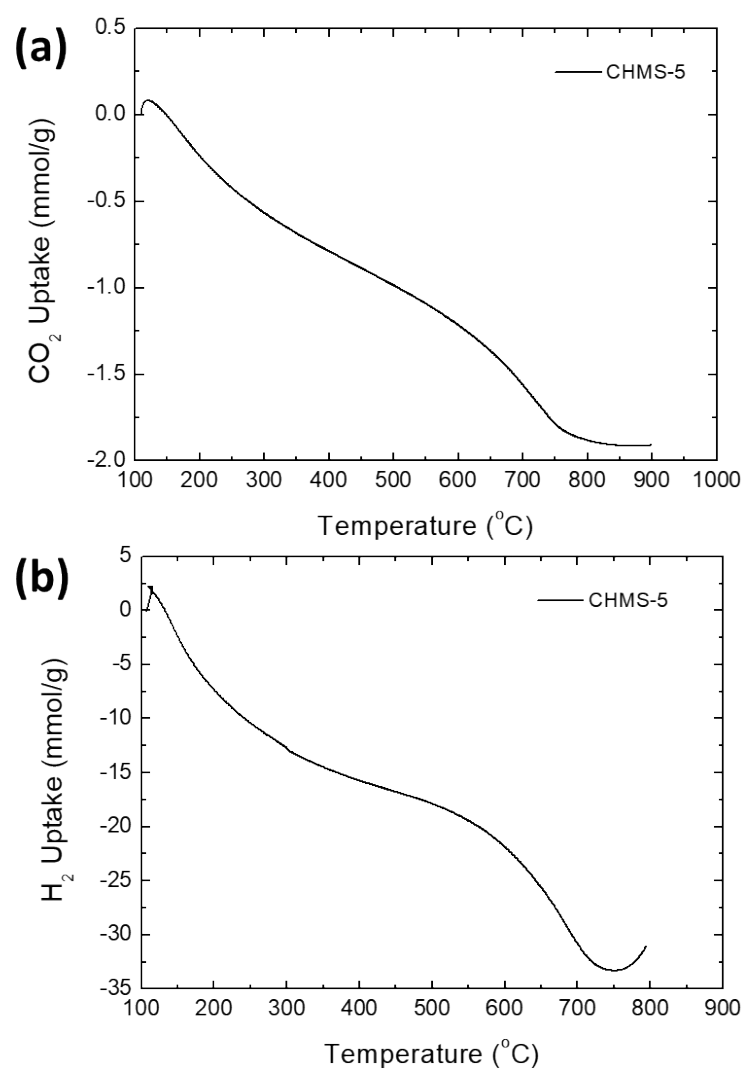


Fig. S5

