

## Supplementary material

### Enhancement of CO<sub>2</sub> capture and separation of CO<sub>2</sub>/N<sub>2</sub> using post-synthetic modified MIL-100(Fe)

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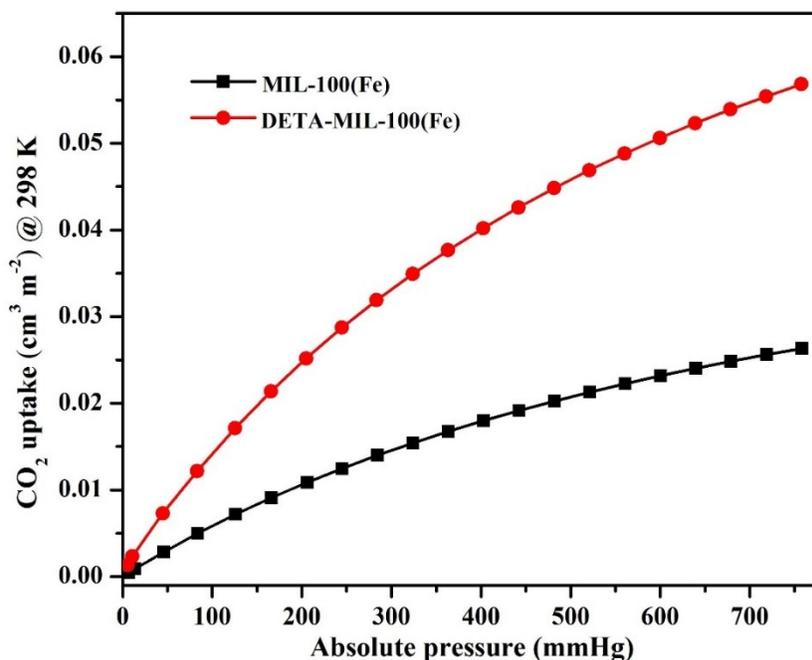
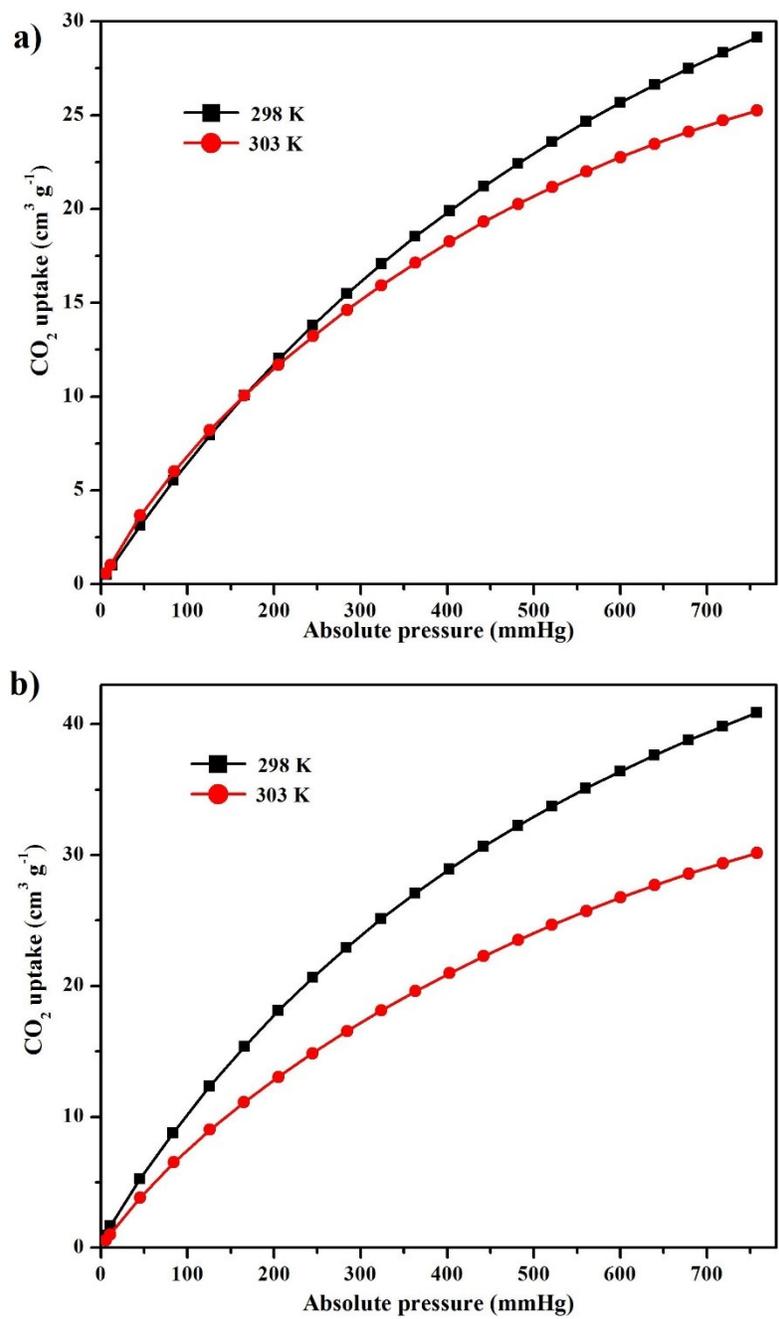


Fig. S1. CO<sub>2</sub> adsorption on the unit surface area of MIL-100(Fe) and DETA-MIL-100(Fe)



**Fig. S2.** CO<sub>2</sub> adsorption of a) MIL-100(Fe) and b) DETA-MIL-100(Fe) at different temperatures

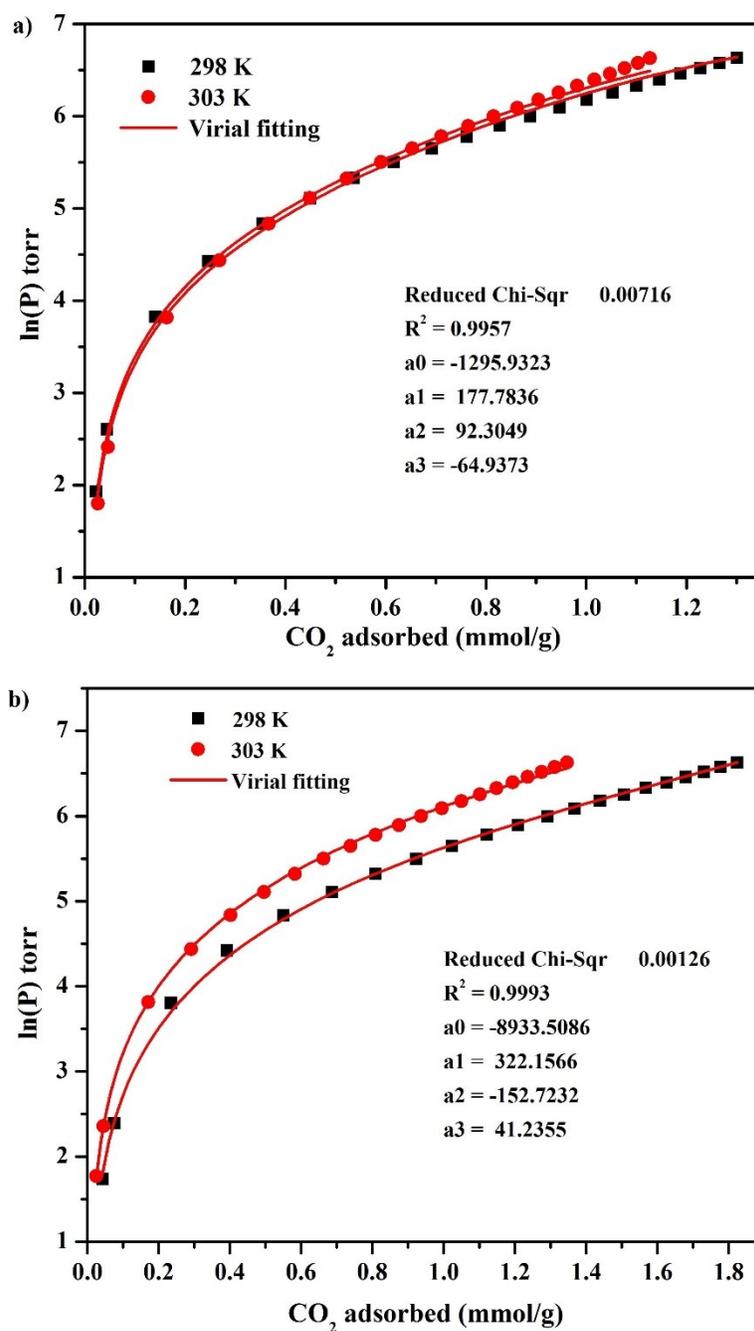


Fig. S3. Virial fitting of CO<sub>2</sub> adsorption isotherms of a) MIL-100(Fe) and b) DETA-MIL-100(Fe)