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Supporting Information

Removal and complete combustion of 1,4-dioxane in water by a two-step reaction combining adsorption and catalytic combustion

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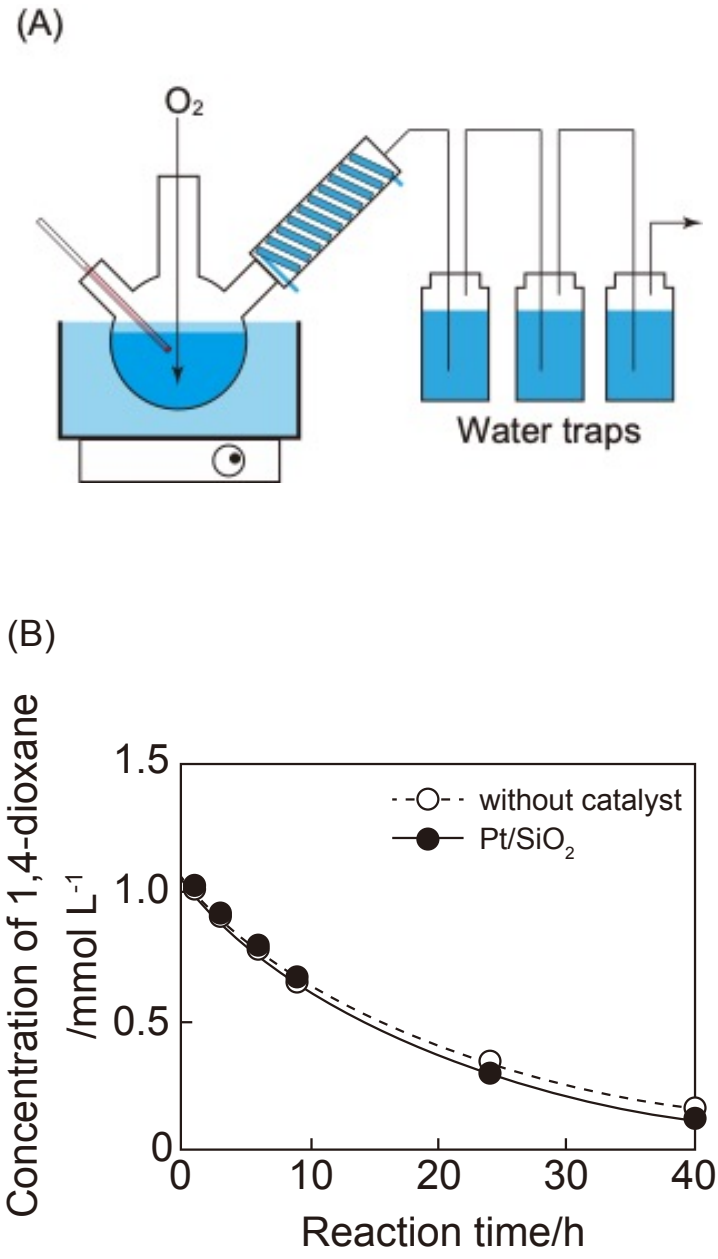
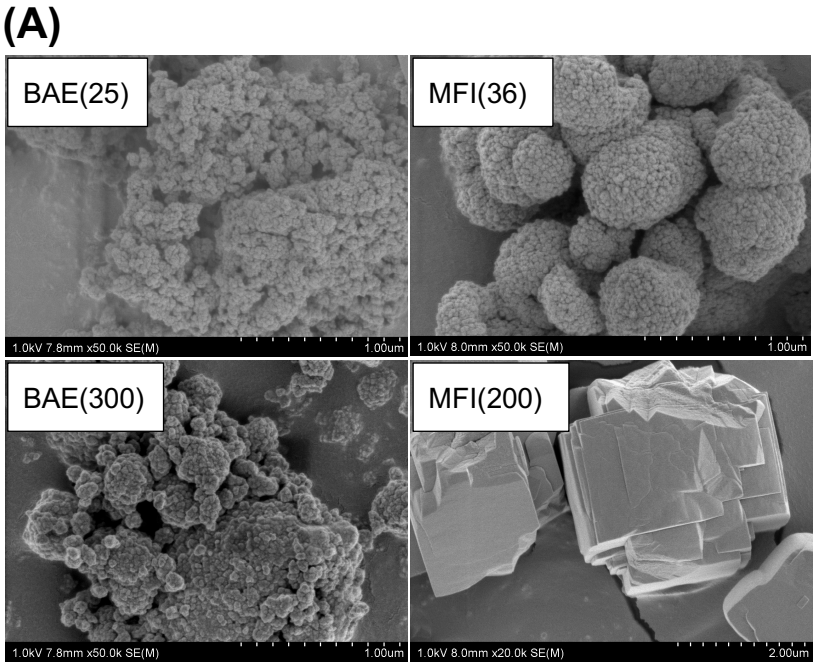


Fig. S1 (A) Reaction apparatus for CWAO of 1,4-dioxane in the presence of Pt/TiO_2 and (B) change in the concentration of 1,4-dioxane in the reaction solution with time in the presence and absence of Pt/SiO_2. Reaction conditions: initial concentration of 1,4-dioxane, 1.1 mmol L^{-1}; volume of the reaction solution, 100 mL; amount of 3 wt% Pt/TiO_2, 0.3 g; and reaction temperature, 80 °C.



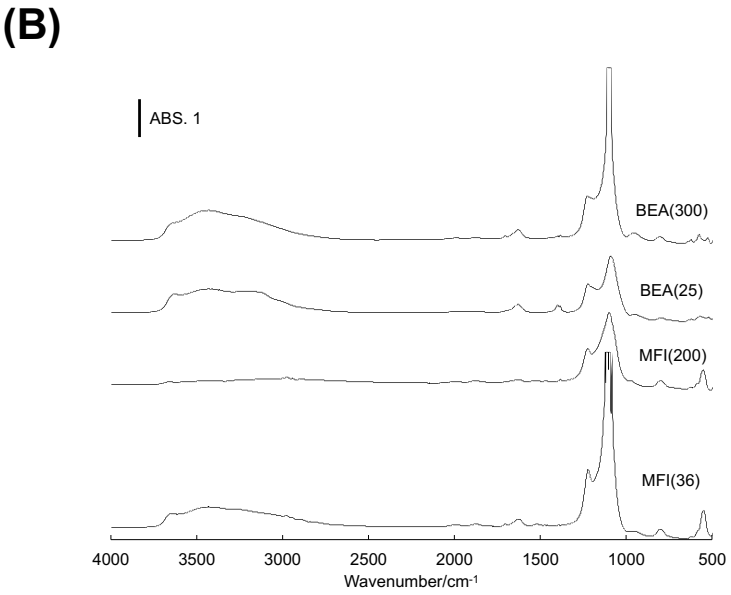


Fig. S2 (A) SEM images and (B) IR spectra of BEA(25), BEA(300), MFI(36), and MFI(200). IR spectra were taken by a KBr method.

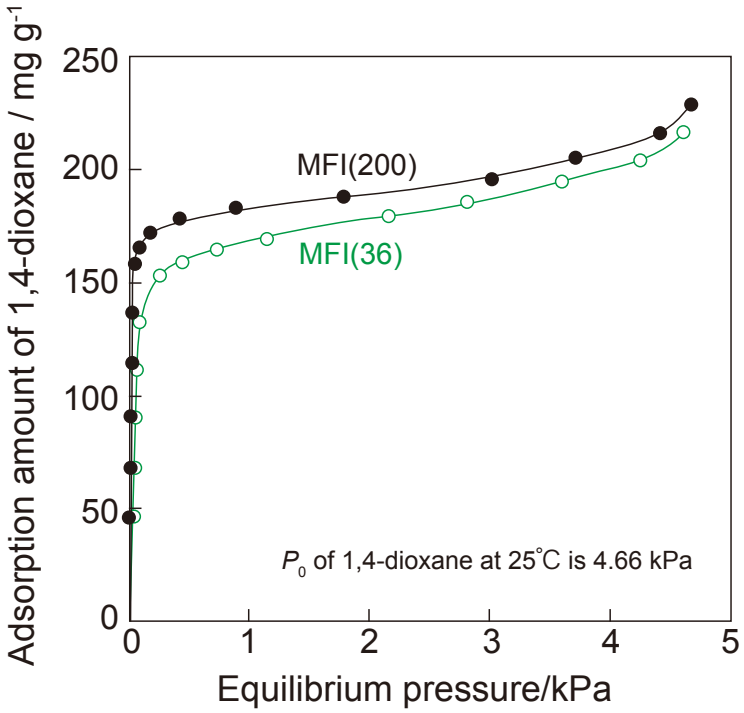


Fig. S3 Adsorption isotherms for 1,4-dioxane in gas phase over MFI(200) and MFI(36) taken at 25 ℃. The samples were pretreated in vacuo at 200 ℃.