

## Supporting information

### **Photoassist-phosphorylated TiO<sub>2</sub> as a catalyst for direct formation of 5-(hydroxymethyl)furfural from glucose**

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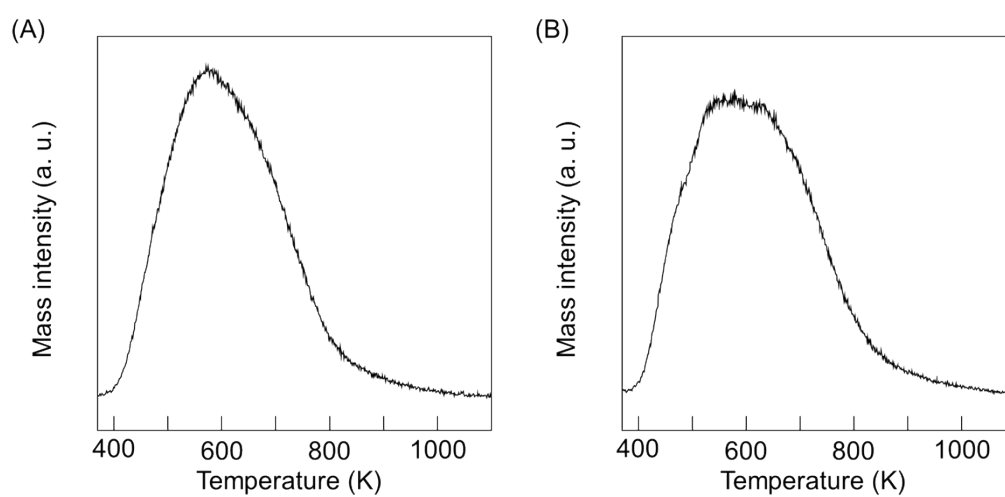
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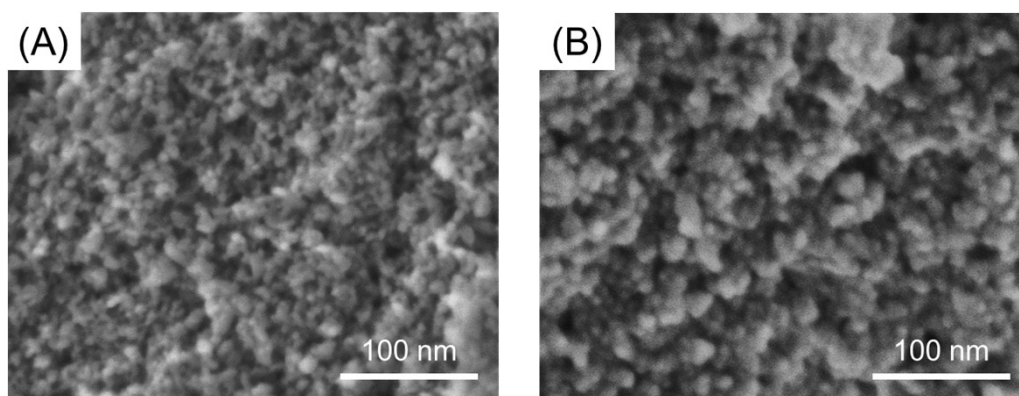
Corresponding author

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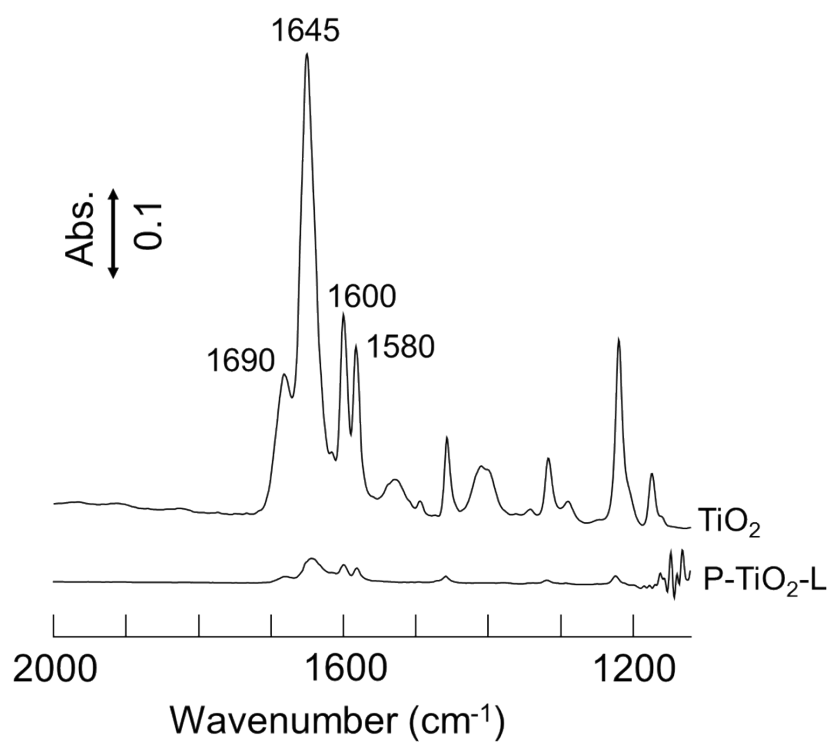
## Supplementary Figures



**Fig. S1**  $\text{NH}_3$ -TPD profiles for (A)  $\text{TiO}_2$  and (B)  $\text{P-TiO}_2$  prepared by immersing 5 days in 1 M  $\text{H}_3\text{PO}_4$  solution.



**Fig. S2** SEM images of (A)  $\text{TiO}_2$  and (B)  $\text{P-TiO}_2$  prepared by immersing 5 days in 1 M  $\text{H}_3\text{PO}_4$  solution.



**Fig. S3** Difference FT-IR spectra of benzaldehyde-adsorbed catalysts at room temperature.