

## Support Information

### Selective oxidation of 5-hydroxymethylfurfural to 2,5-furandicarboxylic acid over Au/CeO<sub>2</sub> catalysts: the morphology effect of CeO<sub>2</sub>

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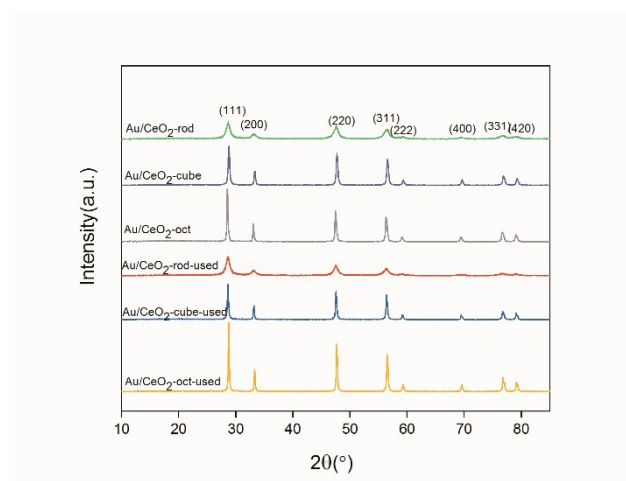
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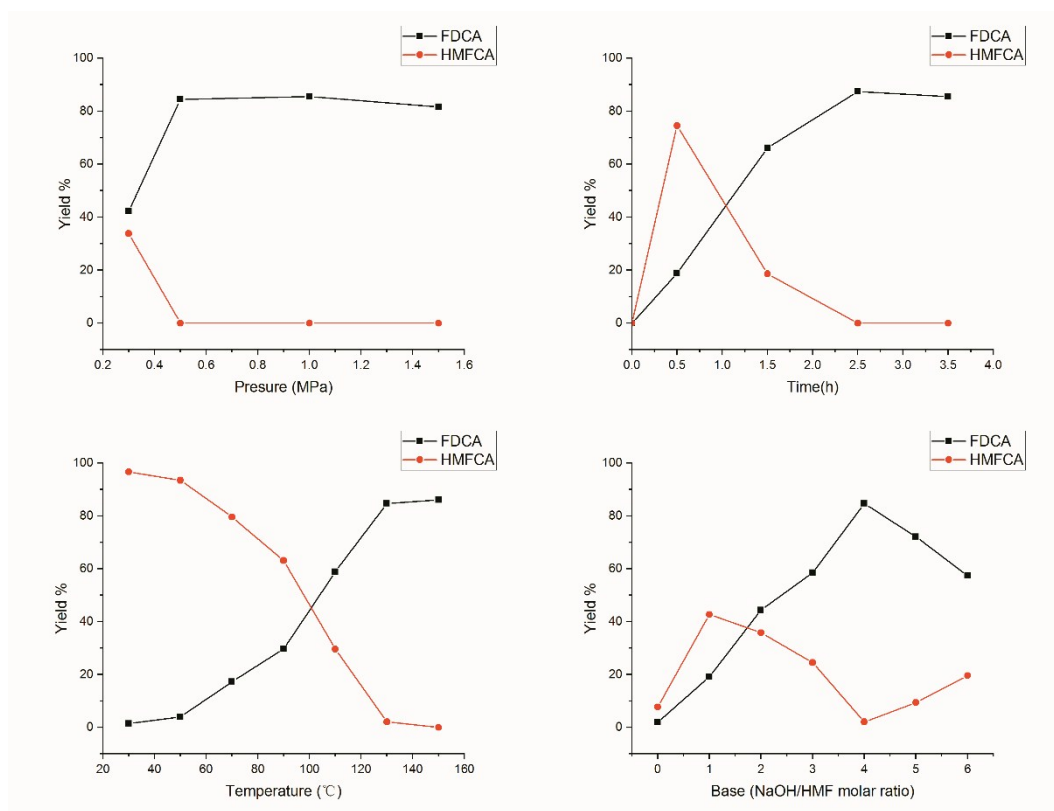
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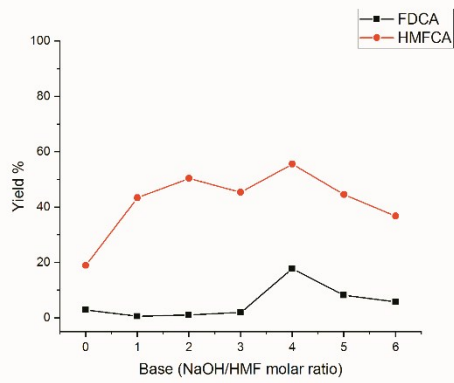
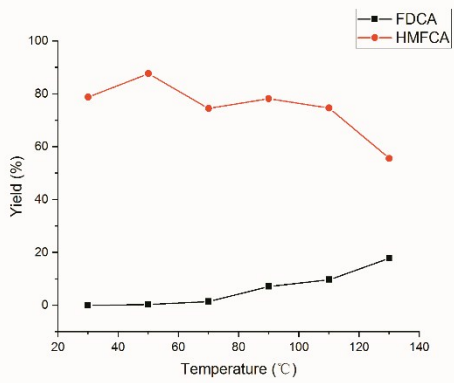
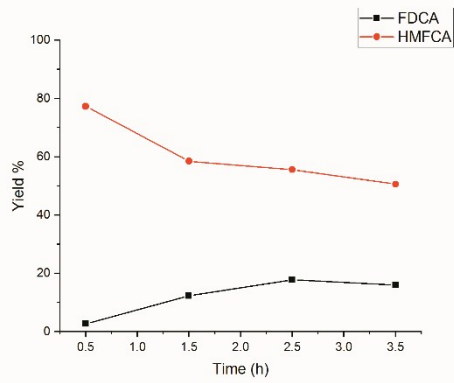
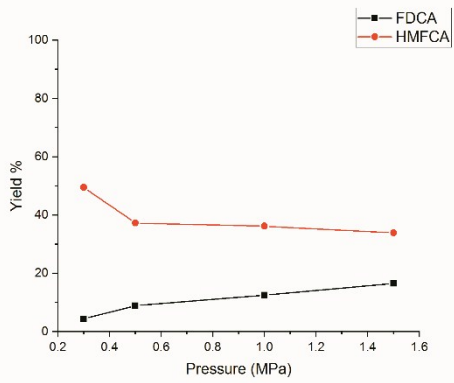


**Figure S1.** XRD patterns of the fresh and used Au/CeO<sub>2</sub> catalysts. Reaction conditions: 2.5 h, 130 °C, 0.5 MPa O<sub>2</sub>, molar ratio of NaOH/HMF = 4, molar ratio of HMF/Au = 400, 0.5 mmol HMF, 20 ml H<sub>2</sub>O.

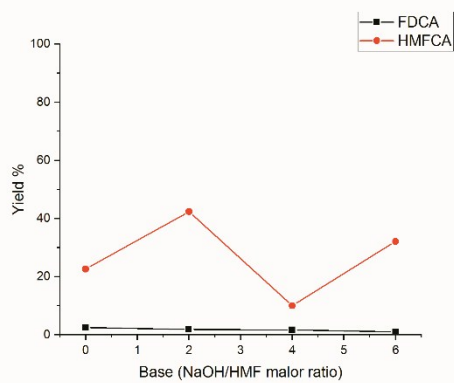
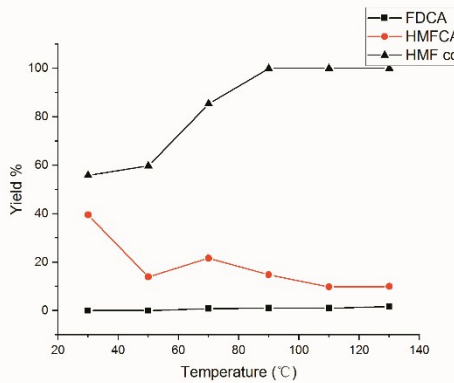
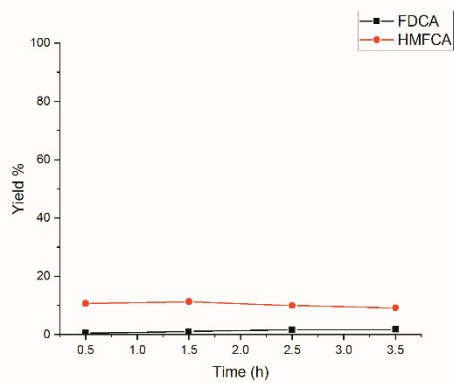
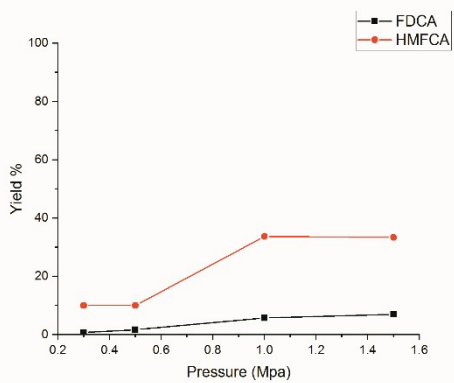
### Au/CeO<sub>2</sub>-rod



### Au/CeO<sub>2</sub>-cube



### Au/CeO<sub>2</sub>-oct



**Figure S2.** Effects of pressure, time, temperature and base on HMF oxidation over three catalysts. Reactions were performed under the conditions (2.5 h, 130 °C, 0.5 MPa O<sub>2</sub>, molar ratio of NaOH/HMF = 4, molar ratio of HMF/Au = 400, 0.5 mmol HMF, 20 ml H<sub>2</sub>O). If one parameter was studied while the others were kept the same.